

JAERI-M

8417

BIBLIOGRAPHY FOR THERMAL NEUTRON SCATTERING

(SIXTH EDITION, 1979)

September, 1979

M. SAKAMOTO, J. CHIHARA, H. KADOTANI*, T. SEKIYA**,
Y. GOTOH, K. INOUE***, K. KURIYAMA**** and O. YODA

日本原子力研究所
Japan Atomic Energy Research Institute

この報告書は、日本原子力研究所が JAERI-M レポートとして、不定期に刊行している
研究報告書です。入手、複製などのお問い合わせは、日本原子力研究所技術情報部（茨城県
那珂郡東海村）あて、お申しこしください。

JAERI-M reports, issued irregularly, describe the results of research works carried out
in JAERI. Inquiries about the availability of reports and their reproduction should be
addressed to Division of Technical Information, Japan Atomic Energy Research Institute,
Tokai-mura, Naka-gun, Ibaraki-ken, Japan.

JAERI-M 8417

BIBLIOGRAPHY FOR THERMAL NEUTRON SCATTERING (SIXTH EDITION, 1979)

Masanobu SAKAMOTO, Junzo CHIHARA, Hiroyuki KADOTANI,^{*} Tamotsu SEKIYA,^{**} Yorio GOTOH,
Kazuhiko INOUE,^{***} Kazuo KURIYAMA^{****} and Osamu YODA.
Japanese Nuclear Data Committee,
Japan Atomic Energy Research Institute.

(Received August 13, 1979)

Bibliographic references are given for measurements, calculations, reviews and basic studies of thermal neutron scattering and dynamical properties of condensed matter. This is the sixth edition covering 3,326 articles collected up to 1978.

The edition being the final issue of the present bibliography series, a forthcoming edition will be published in a new form of bibliography.

Key Words: Bibliography, Thermal Neutron Scattering, Neutron Spectroscopy, Solid State Physics, Condensed Matters, Crystal Structures, Lattice Dynamics, Fluids, Solutions, Adsorptions, Structural Transitions

* Century Research Center Co., Ltd, ** Osaka University,

*** Hokkaido University, **** Hosei University

熱中性子散乱文献集 (改定第6版, 1979)

坂本 正誠・千原 順三・角谷 浩亨^{*}・関谷 全^{**}
後藤 頼男・井上 和彦^{***}・栗山 一男^{****}・依田 修

(1979年8月13日受理)

熱中性子散乱と、それに関連する凝縮系の動力学的性質についての測定、計算、論評や基礎的研究についての文献を集めた。1978年までに収集した 3,326 件を含む。これをこの一連の改定版の最終版とし、次の出版は新しい編集方式で行う予定である。

* センチュリー・リサーチ・センター

** 大阪大学, *** 北海道大学, **** 法政大学

BIBLIOGRAPHY FOR THERMAL NEUTRON SCATTERING (SIXTH EDITION, 1979)

M. Sakamoto, J. Chihara, H. Kadotani, T. Sekiya, Y. Gotoh, K. Inoue, K. Kuriyama and O. Yoda.
Japanese Nuclear Data Committee,
Japan Atomic Energy Research Institute.
Tokai-mura, Ibaraki-ken, Japan.

INTRODUCTION

In the last two decades there has been a rapid expansion in the use of thermal neutron scattering techniques to investigate the properties of solids, liquids and gases. Since about ten years before, we have continued the compilation and publication of the bibliography for thermal neutron scattering, as one of the activities of Japanese Nuclear Data Committee, and published the first edition in 1968. They have provided useful materials for an up-to-date survey of the literatures on the investigations of condensed matters in the use of thermal neutron spectroscopy.

It contains bibliographical references to the literatures not only on the measurements

and calculations of thermal neutron scattering cross sections, but also on the basic studies of lattice, fluid and molecular dynamics in so far as they are concerned with thermal neutron scattering. It covers literatures published on journals, conference proceedings, report series and books.

However, as concerns the literatures on the magnetic scattering of thermal neutrons and the structure analysis by the neutron diffraction, the collections are only subsidiary in this bibliography.

This is the sixth edition of the bibliography which contains 3,326 literatures, including the literatures in the earlier edition and all additions collected up to 1978. They are ordered and classified by the computer system.

The earlier editions of the bibliography are as follows.

- (1) Bibliography for Thermal Neutron Scattering, JAERI-4043 (1968).
- (2) *ibid.* (Second Edition), JAERI-4043 (1969).
- (3) *ibid.* (Third Edition, 1971), JAERI-M-4043 (Third Edition) (1971).
- (4) *ibid.* (Fourth editions 1973), JAERI-M-5395 (1973).
- (5) *ibid.* (Fifth Edition, 1976), JAERI-M-6857 (1976).

This issue is the last edition of this bibliography series, and a forthcoming edition will be published in the new version of the bibliography, in which the computer processing of

the data is carried out by the new program system.

ARRANGEMENT

The overall arrangement of the bibliography is divided into two parts indicated by the table of contents.

Part 1. List of Reference Numbers and Key Words:

In this part, every literature is listed under each kind of materials and special items for which it contains relevant informations. Thus, when any one article reports on a number of materials and items, it is listed for each material and item respectively. The material names are ordered alphabetically in each of five groups which are MONATOMIC ELEMENTS, ALLOYS, INORGANIC COMPOUNDS, ORGANIC COMPOUNDS and ADSORPTIONS AND SOLUTIONS, and the special items are listed in GENERAL ARTICLES. Each entry contains a reference number (70BR15 for example) which identifies the literature in the List of References of Part 2, the names of the first two authors and the key words.

Part 2. List of References:

This is a bibliography of all literatures, ordered by the year of publication and the

last name of the first author (the reference number). Each entry contains names of authors, title, reference and key words.

ACKNOWLEDGEMENT

The compilers would like to express their thanks to Dr. K. Asai and the other staffs in computing center at JAERI, where the compilation was carried out on the FACOM 230-75 computer system.

CONTENTS

PART 1. LIST OF REFERENCE NUMBERS AND KEY WORDS, CLASSIFIED BY MATERIAL NAMES

1.	GENERAL ARTICLES	
1.	1. REVIEW-ARTICLES	1
1.	2. NEUTRON-SCATTERING-IN-SOLIDS	2
1.	3. NEUTRON-SCATTERING-IN-FLUIDS	5
1.	4. THEORY-OF-SOLIDS	7
1.	5. THEORY-OF-FLUIDS	12
1.	6. SCATTERING-THEORIES	15
1.	7. COMPUTER-CODES	16
1.	8. INSTRUMENTS-AND-METHODS	17

2.	MONATOMIC ELEMENTS	
2.	1. ALUMINIUM	18
2.	2. ANTIMONY	19
2.	3. ARGON	19
2.	4. ARSENIC	21
2.	5. BARIUM	21
2.	6. BERYLLIUM	22
2.	7. BISMUTH	23
2.	8. BORON	23
2.	9. BROMINE	23

2.	10.	BROMINE	.....	BR2	.....	23.
2.	11.	CADMIUM	.....	CD	.....	24.
2.	12.	CALCIUM	.....	CA	.....	24.
2.	13.	CARBON	.....	C	.....	24.
2.	14.	CERIUM	.....	CE	.....	24.
2.	15.	CESIUM	.....	CS	.....	24.
2.	16.	CHLORINE	.....	CL	.....	25.
2.	17.	CHROMIUM	.....	CR	.....	25.
2.	18.	COBALT	.....	CO	.....	25.
2.	19.	COPPER	.....	CU	.....	25.
2.	20.	DEUTERIUM	.....	D	.....	26.
2.	21.	DEUTERIUM	.....	D2	.....	26.
2.	22.	DIAMOND	.....	DIAMOND	.....	27.
2.	23.	ERBIUM	.....	ER	.....	27.
2.	24.	EUROPIUM	.....	EU	.....	27.
2.	25.	GADOLINIUM	.....	GD	.....	27.
2.	26.	GALLIUM	.....	GA	.....	27.
2.	27.	GERMANIUM	.....	GE	.....	28.
2.	28.	GOLD	.....	AU	.....	28.
2.	29.	GRAPHITE	.....	GRAPHITE	.....	29.
2.	30.	HAFNIUM	.....	HF	.....	30.
2.	31.	HELIUM	.....	HE	.....	30.
2.	32.	HOLMIUM	.....	HO	.....	32.
2.	33.	HYDROGEN	.....	H	.....	33.
2.	34.	HYDROGEN	.....	H2	.....	33.
2.	35.	INDIUM	.....	IN	.....	34.
2.	36.	IODINE	.....	I	.....	34.
2.	37.	IRON	.....	FE	.....	34.
2.	38.	KRYPTON	.....	KR	.....	35.
2.	39.	LEAD	.....	PB	.....	35.
2.	40.	LITHIUM	.....	LI	.....	36.
2.	41.	MAGNESIUM	.....	MG	.....	37.
2.	42.	MERCURY	.....	HG	.....	38.
2.	43.	MOLYBDENUM	.....	MO	.....	38.
2.	44.	NEON	.....	NE	.....	39.
2.	45.	NICKEL	.....	NI	.....	39.

2, 46.	NIOBIUM	.....	NB	.....	40
2, 47.	NITROGEN	.....	N	.....	4Q
2, 48.	NITROGEN	.....	N2	.....	41
2, 49.	OXYGEN	.....	O	.....	41
2, 50.	OXYGEN	.....	O2	.....	41
2, 51.	PALLADIUM	.....	PD	.....	41
2, 52.	PLATINUM	.....	PT	.....	42
2, 53.	POTASSIUM	.....	K	.....	42
2, 54.	RHENIUM	.....	RH	.....	43
2, 55.	RUBIDIUM	.....	RB	.....	43
2, 56.	SCANDIUM	.....	SC	.....	44
2, 57.	SELENIUM	.....	SE	.....	44
2, 58.	SILICON	.....	SI	.....	44
2, 59.	SILVER	.....	AG	.....	45
2, 60.	SODIUM	.....	NA	.....	45
2, 61.	STRONTIUM	.....	SR	.....	47
2, 62.	SULPHUR	.....	S	.....	47
2, 63.	TANTALUM	.....	TA	.....	47
2, 64.	TECHNETIUM	.....	TC	.....	48
2, 65.	TELLURIUM	.....	TE	.....	48
2, 66.	TERBIUM	.....	TB	.....	48
2, 67.	THALLIUM	.....	TL	.....	48
2, 68.	THORIUM	.....	TH	.....	48
2, 69.	TIN	.....	SN	.....	49
2, 70.	TITANIUM	.....	TI	.....	49
2, 71.	TUNGSTEN	.....	W	.....	50
2, 72.	URANIUM	.....	U	.....	50
2, 73.	VANADIUM	.....	V	.....	50
2, 74.	XENON	.....	XE	.....	51
2, 75.	YTTRIUM	.....	Y	.....	51
2, 76.	ZINC	.....	ZN	.....	51
2, 77.	ZIRCONIUM	.....	ZR	.....	52

3. ALLOYS

3,	1,	ALUMINIUM-GOLD	.....	AL-AU	.....	53
3,	2,	ALUMINIUM-MAGNESIUM-ZINC	.....	AL-MG-ZN	.....	53
3,	3,	ALUMINIUM-SILICON	.....	AL-SI	.....	53
3,	4,	ALUMINIUM-THORIUM HYDRIDE	.....	AL-TH-H	.....	53
3,	5,	ALUMINIUM-ZINC	.....	AL-ZN	.....	53
3,	6,	ANTIMONY-ZINC	.....	SB-ZN	.....	53
3,	7,	BARIUM HYDRIDE	.....	BA-H	.....	53
3,	8,	BARIUM-LITHIUM HYDRIDE	.....	BA-LI-H	.....	53
3,	9,	BISMUTH-GALLIUM	.....	BI-GA	.....	53
3,	10,	BISMUTH-LEAD	.....	BI-PB	.....	54
3,	11,	BISMUTH-LEAD-THALLIUM	.....	BI-PB-TL	.....	54
3,	12,	BISMUTH-THALLIUM	.....	BI-TL	.....	54
3,	13,	BISMUTH-ZINC	.....	BI-ZN	.....	54
3,	14,	CALCIUM HYDRIDE	.....	CA-H	.....	54
3,	15,	CERIUM HYDRIDE	.....	CE-H	.....	54
3,	16,	CERIUM-THORIUM	.....	CE-TH	.....	54
3,	17,	CESIUM HYDRIDE	.....	CS-H	.....	54
3,	18,	CHROMIUM-ALUMINIUM	.....	CR-AL	.....	55
3,	19,	CHROMIUM-IRON	.....	CR-FE	.....	55
3,	20,	CHROMIUM-TUNGSTEN	.....	CR-W	.....	55
3,	21,	COBALT-GALLIUM	.....	CO-GA	.....	55
3,	22,	COBALT-IRON	.....	CO-FE	.....	55
3,	23,	COBALT-NICKEL	.....	CO-NI	.....	55
3,	24,	COPPER-ALUMINIUM	.....	CU-AL	.....	55
3,	25,	COPPER-ANTIMONY	.....	CU-SB	.....	55
3,	26,	COPPER-BERYLLIUM	.....	CU-BE	.....	55
3,	27,	COPPER-COBALT	.....	CU-CO	.....	56
3,	28,	COPPER-GERMANIUM	.....	CU-GE	.....	56
3,	29,	COPPER-GOLD	.....	CU-AU	.....	56
3,	30,	COPPER-IRON	.....	CU-FE	.....	56
3,	31,	COPPER-MAGNESIUM	.....	CU-MG	.....	56
3,	32,	COPPER-MANGANESE-ALUMINIUM	.....	CU-MN-AL	.....	56
3,	33,	COPPER-NICKEL	.....	CU-NI	.....	56
3,	34,	COPPER-ZINC	.....	CU-ZN	.....	56
3,	35,	ERBIUM-YTTRIUM-ALUMINIUM	.....	ER-Y-AL	.....	57
3,	36,	FE-NI-P-O-AL	.....	FE-NI-P-O-AL	.....	57

3, 37,	FE-NI-P-B-AL	.....	FE-NI-P-B-AL	.....	57
3, 38,	GERMANIUM-SILICON	.....	GE-SI	.....	57
3, 39,	GOLD-COPPER-ZINC	.....	AU-CU-ZN	.....	57
3, 40,	GOLD-IRON	.....	AU-FE	.....	57
3, 41,	GOLD-VANADIUM	.....	AU-V	.....	57
3, 42,	HOLMIUM-RHODIUM	.....	HO-RH	.....	57
3, 43,	INDIUM-CADMIUM	.....	IN-CD	.....	57
3, 44,	INDIUM-THALLIUM	.....	IN-TL	.....	58
3, 45,	IRON-ALUMINIUM	.....	FE-AL	.....	58
3, 46,	IRON-MANGANESE	.....	FE-MN	.....	58
3, 47,	IRON-NICKEL	.....	FE-NI	.....	58
3, 48,	IRON-MANGANESE-NICKEL	.....	FE-MN-NI	.....	58
3, 49,	IRON-NICKEL-CHROMIUM	.....	FE-NI-CR	.....	58
3, 50,	IRON-VANADIUM	.....	FE-V	.....	58
3, 51,	LANTHANUM HYDRIDE	.....	LA-H	.....	58
3, 52,	LEAD-MAGNESIUM	.....	PB-MG	.....	58
3, 53,	LEAD-SODIUM	.....	PB-NA	.....	59
3, 54,	LEAD-THALLIUM	.....	PB-TL	.....	59
3, 55,	LITHIUM-ALUMINIUM HYDRIDE	.....	LI-AL-H	.....	59
3, 56,	LITHIUM-LEAD	.....	LI-PB	.....	59
3, 57,	MAGNESIUM HYDRIDE	.....	MG-H	.....	59
3, 58,	MAGNESIUM-LEAD	.....	MG-PB	.....	59
3, 59,	MAGNESIUM-LITHIUM	.....	MG-LI	.....	59
3, 60,	MAGNESIUM-ZINC	.....	MG-ZN	.....	59
3, 61,	MANGANESE-COBALT	.....	MN-CO	.....	59
3, 62,	MANGANESE-COPPER	.....	MN-CU	.....	59
3, 63,	MANGANESE-NICKEL	.....	MN-NI	.....	60
3, 64,	MANGANESE-PALLADIUM	.....	MN-PD	.....	60
3, 65,	MANGANESE-PLATINUM	.....	MN-PT	.....	60
3, 66,	NICKEL-BERYLLIUM	.....	NI-BE	.....	60
3, 67,	NICKEL-CHROMIUM	.....	NI-CR	.....	60
3, 68,	NICKEL-IRON	.....	NI-FE	.....	60
3, 69,	NICKEL-MANGANESE	.....	NI-MN	.....	60
3, 70,	NICKEL-PALLADIUM	.....	NI-PD	.....	60
3, 71,	NICKEL-PLATINUM	.....	NI-PT	.....	60
3, 72,	NICKEL-RHENIUM	.....	NI-RH	.....	61

3. 73.	NICKEL-SILICON	.....	NI-SI	.....	61
3. 74.	NICKEL-VANADIUM	.....	NI-V	.....	61
3. 75.	NIOBIUM HYDRIDE	.....	NB-H	.....	61
3. 76.	NIOBIUM-MOLYBDENUM	.....	NB-MO	.....	61
3. 77.	(NIOBIUM-MOLYBDENUM)-HYDROGEN	.....	(NB-MO)-H	.....	61
3. 78.	NIOBIUM-TANTALUM	.....	NB-TA	.....	62
3. 79.	PALLADIUM HYDRIDE	.....	PD-H	.....	62
3. 80.	PALLADIUM-IRON	.....	PD-FE	.....	62
3. 81.	PALLADIUM-LEAD	.....	PD-PB	.....	62
3. 82.	PALLADIUM-MANGANESE	.....	PD-MN	.....	62
3. 83.	PALLADIUM-MANGANESE-TIN	.....	PD-MN-SN	.....	62
3. 84.	PALLADIUM-SILVER HYDRIDE	.....	PD-AG-H	.....	62
3. 85.	PALLADIUM-PLATINUM	.....	PD-PT	.....	63
3. 86.	PLUTONIUM-IRON	.....	PU-FE	.....	63
3. 87.	RUBIDIUM-POTASSIUM	.....	RB-K	.....	63
3. 88.	SODIUM-ALUMINIUM HYDRIDE	.....	NA-AL-H	.....	63
3. 89.	SODIUM-POTASSIUM	.....	NA-K	.....	63
3. 90.	STRONTIUM HYDRIDE	.....	SR-H	.....	63
3. 91.	STRONTIUM-LITHIUM HYDRIDE	.....	SR-LI-H	.....	63
3. 92.	TANTALUM HYDRIDE	.....	TA-H	.....	63
3. 93.	TANTALUM-NIOBIUM	.....	TA-NB	.....	63
3. 94.	TERBIUM HYDRIDE	.....	TB-H	.....	64
3. 95.	TERBIUM-YTTRIUM	.....	TB-Y	.....	64
3. 96.	THORIUM HYDRIDE	.....	TH-H	.....	64
3. 97.	TITANIUM HYDRIDE	.....	TI-H	.....	64
3. 98.	TITANIUM-NICKEL	.....	TI-NI	.....	64
3. 99.	TITANIUM-URANIUM	.....	TI-U	.....	64
3. 100.	TITANIUM-ZIRCONIUM	.....	TI-ZR	.....	64
3. 101.	TITANIUM-ZIRCONIUM-OXYGEN	.....	TI-ZR-O	.....	64
3. 102.	URANIUM HYDRIDE	.....	U-H	.....	64
3. 103.	VANADIUM-BERYLLIUM	.....	V-BE	.....	65
3. 104.	VANADIUM HYDRIDE	.....	V-H	.....	65
3. 105.	VANADIUM-NICKEL	.....	V-NI	.....	65
3. 106.	VANADIUM-PLATINUM	.....	V-PT	.....	65
3. 107.	YTTERBIUM HYDRIDE	.....	YB-H	.....	65
3. 108.	YTTRIUM-HOLMIUM	.....	Y-HO	.....	65

3,109.	YTTRIUM HYDRIDE	.....	Y-H	.....	65
3,110.	YTTRIUM-TERBIUM	.....	Y-TB	.....	65
3,111.	YTTRIUM-ZINC	.....	Y-ZN	.....	66
3,112.	ZIRCONIUM HYDRIDE	.....	ZR-H	.....	66
3,113.	ZIRCONIUM-NIOBIUM	.....	ZR-NB	.....	66

4. INORGANIC COMPOUNDS

4.	1.	ALUMINA	.....	AL ₂ O ₃	.....	68
4.	2.	ALUMINIUM CHLORIDE	.....	AL·CL ₃	.....	68
4.	3.	ALUMINIUM NITRIDE	.....	AL·N	.....	68
4.	4.	ALUMINIUM PHOSPHATE	.....	AL·P·O ₄	.....	68
4.	5.	AMMONIA	.....	N·H ₃	.....	68
4.	6.	AMMONIUM AZIDE	.....	N·H ₄ ·N ₃	.....	68
4.	7.	AMMONIUM BROMIDE	.....	N·H ₄ ·BR	.....	69
4.	8.	AMMONIUM BROMOSTANNATE	.....	(N·H ₄) ₂ ·SN·BR ₆	.....	69
4.	9.	AMMONIUM CHLORIDE	.....	N·H ₄ ·CL	.....	69
4.	10.	AMMONIUM CHLORIDE-POTASSIUM CHLORIDE	.....	N·H ₄ ·CL-K·CL	.....	70
4.	11.	AMMONIUM CHLOROSTANNATE	.....	(N·H ₄) ₂ ·SN·CL ₆	.....	70
4.	12.	AMMONIUM CHROMATE	.....	(N·H ₄) ₂ ·CR·O ₄	.....	70
4.	13.	AMMONIUM DICHROMATE	.....	(N·H ₄) ₂ ·CR ₂ ·O ₇	.....	70
4.	14.	AMMONIUM DIHYDROGEN ORTHOARSENATE	.....	N·H ₄ ·H ₂ ·AS·O ₄	.....	70
4.	15.	AMMONIUM DIHYDROGEN ORTHOPHOSPHATE	.....	N·H ₄ ·H ₂ ·P·O ₄	.....	70
4.	16.	AMMONIUM DISULFATE	.....	(N·H ₄) ₂ ·S ₂ ·O ₈	.....	70
4.	17.	AMMONIUM FLUOBERYLLATE	.....	(N·H ₄) ₂ ·BE·F ₄	.....	70
4.	18.	AMMONIUM FLUORIDE	.....	N·H ₄ ·F	.....	70
4.	19.	AMMONIUM FLUOSILICATE	.....	(N·H ₄) ₂ ·SI·F ₆	.....	71
4.	20.	AMMONIUM FLUOSULFONATE	.....	N·H ₄ ·S·O ₃ ·F	.....	71
4.	21.	AMMONIUM HEXAFLUOPHOSPHATE	.....	N·H ₄ ·P·F ₆	.....	71
4.	22.	AMMONIUM HYDROGEN SULFATE	.....	N·H ₄ ·H·S·O ₄	.....	71
4.	23.	AMMONIUM IODIDE	.....	N·H ₄ ·I	.....	71
4.	24.	AMMONIUM NITRATE	.....	N·H ₄ ·N·O ₃	.....	71
4.	25.	AMMONIUM PERCHLORATE	.....	N·H ₄ ·CL·O ₄	.....	72

4.	26.	AMMONIUM-POTASSIUM SULFATE	.....	(N,H4)-K)2,S,O4	.....	72
4.	27.	AMMONIUM SULFATE	.....	(N,H4)2,S,O4	.....	72
4.	28.	AMMONIUM THIOCYANATE	.....	N,H4,C,N,S	.....	72
4.	29.	AMMONIUM TRIHYDROGEN PARAPERIODATE	.....	(N,H4)2,H3,I,O6	.....	72
4.	30.	ANALCITE	.....	.....	.....	72
4.	31.	ANTIMONY IODOSULFIDE	.....	SB,S,I	.....	72
4.	32.	APOPHYLLITE	.....	.....	.....	73
4.	33.	ARSENIC SULFIDE	.....	AS2,S3	.....	73
4.	34.	BARIUM CHLORIDE	.....	BA,CL2	.....	73
4.	35.	BARIUM CHLORATE HYDRATE	.....	BA,(CL,O3)2*H2,O	.....	73
4.	36.	BARIUM FLUOMANGANATE	.....	BA,MN,F4	.....	73
4.	37.	BARIUM FLUORIDE	.....	BA,F2	.....	73
4.	38.	BARIUM LEAD-BISMUTH OXIDE	.....	BA,(PB-BI),O3	.....	73
4.	39.	BARIUM MANGANESE FLUORIDE	.....	BA,MN,F4	.....	73
4.	40.	BARIUM NITRATE	.....	BA,(N,O3)2	.....	73
4.	41.	BARIUM OXIDE	.....	BA,O	.....	73
4.	42.	BARIUM TITANATE	.....	BA,TI,O3	.....	74
4.	43.	BERYLLIUM FLUORIDE	.....	BE,F2	.....	74
4.	44.	BERYLLIUM OXIDE	.....	BE,O	.....	74
4.	45.	CADMIUM FLUORIDE	.....	CD,F2	.....	75
4.	46.	CADMIUM IODIDE	.....	CD,I2	.....	75
4.	47.	CADMIUM SULFIDE	.....	CD,S	.....	75
4.	48.	CALCITE	.....	CA,C,O3	.....	75
4.	49.	CALCIUM FLUORIDE	.....	CA,F2	.....	75
4.	50.	CALCIUM HYDROXIDE	.....	CA,(O,H)2	.....	75
4.	51.	CALCIUM OXIDE	.....	CA,O	.....	75
4.	52.	CALCIUM SULFATE DIHYDRATE	.....	CA,S,O4*2(H2,O)	.....	76
4.	53.	CARBON DIOXIDE	.....	C,O2	.....	76
4.	54.	CARBON DISULFIDE	.....	C,S2	.....	76
4.	55.	CARBON OXIDE	.....	C,O	.....	76
4.	56.	CARBON SUBOXIDE	.....	C3,O2	.....	76
4.	57.	CARBON TETRACHLORIDE	.....	C,CL4	.....	76
4.	58.	CARBON TETRAFLUORIDE	.....	C,F4	.....	76
4.	59.	CESIUM AZIDE	.....	CS,N3	.....	77
4.	60.	CESIUM CHLORIDE	.....	CS,CL	.....	77
4.	61.	CESIUM BROMIDE	.....	CS,BR	.....	77

4. 62.	CESIUM DIHYDROGEN PHOSPHATE	.....	CS,H2,P,O4	.....	77
4. 63.	CESIUM FLUOMANGANATE	.....	CS2,MN,F6	.....	77
4. 64.	CESIUM FLUORIDE	.....	CS,F	.....	77
4. 65.	CESIUM FLUOSILICATE	.....	CS2,SI,F6	.....	78
4. 66.	CESIUM HYDROGEN BROMIDE	.....	CS,H,BR2	.....	78
4. 67.	CESIUM HYDROGEN CHLORIDE	.....	CS,H,CL2	.....	78
4. 68.	CESIUM HYDROSULFIDE	.....	CS,S,H	.....	78
4. 69.	CESIUM IODIDE	.....	CS,I	.....	78
4. 70.	CESIUM LEAD CHLORIDE	.....	CS,PB,CL3	.....	78
4. 71.	CESIUM NICKEL FLUORIDE	.....	CS,NI,F3	.....	78
4. 72.	CESIUM URANIUM BROMIDE	.....	CS2,U,BR6	.....	79
4. 73.	CHABAZITE	.....	CHABAZITE	.....	79
4. 74.	CHALCOPYRITE	.....	CU,FE,S2	.....	79
4. 75.	CHROMIUM(3) ACID	.....	H,CR,O2	.....	79
4. 76.	CHROMIUM SESQUIOXIDE	.....	CR2,O3	.....	79
4. 77.	CINNABAR	.....	HG,S	.....	79
4. 78.	COBALT(3) ACID	.....	H,CO,O2	.....	79
4. 79.	COBALT CHLORIDE	.....	CO,CL2	.....	79
4. 80.	COBALT CHLORIDE DIHYDRATE	.....	CO,CL2*2(H2,O)	.....	79
4. 81.	COBALT FLUORIDE	.....	CO,F2	.....	79
4. 82.	COBALT HYDROGEN CARBONYL	.....	H,CO,(C,O)4	.....	79
4. 83.	COBALT OXIDE	.....	CO,O	.....	80
4. 84.	COBALT PHOSPHIDE	.....	CO,P	.....	80
4. 85.	COBALT PHOSPHIDE	.....	CO4,P	.....	80
4. 86.	COBALT SULFIDE	.....	CO,S2	.....	80
4. 87.	COPPER BROMIDE	.....	CU,BR	.....	80
4. 88.	COPPER CHLORIDE DIHYDRATE	.....	CU,CL2*2(H2,O)	.....	80
4. 89.	COPPER IODIDE	.....	CU,I	.....	80
4. 90.	COPPER MANGANESE OXIDE	.....	CU,MN2,O4	.....	80
4. 91.	COPPER SULFATE	.....	CU,S,O4	.....	81
4. 92.	CORUNDUM	.....	AL2,O3	.....	81
4. 93.	CRISTOBALITE	.....	SI,O2	.....	81
4. 94.	CUPRITE	.....	CU2,O	.....	81
4. 95.	CUPROUS CHLORIDE	.....	CU,CL	.....	81
4. 96.	DEUTERIUM PEROXIDE	.....	D2,O2	.....	81
4. 97.	DICARBON HEXAFLUORIDE	.....	C2,F6	.....	81

4. 98.	DYSPROSIUM PHOSPHATE	.....	DY,P,O4	.....	82
4. 99.	DYSPROSIUM VANADATE	.....	DY,V,O4	.....	82
4.100.	ERBIUM CHROMIUM OXIDE	.....	ER,CR,O3	.....	82
4.101.	ERBIUM IRON OXIDE	.....	ER,FE,O3	.....	82
4.102.	EUROPIUM OXIDE	.....	EU,O	.....	82
4.103.	EUROPIUM SULFIDE	.....	EU,S	.....	82
4.104.	GADOLINIUM MOLYBDATE	.....	.....	.....	82
4.105.	GALLIUM PHOSPHIDE	.....	GA,P	.....	82
4.106.	GALLIUM PHOSPHIDE-ARSENIDE	.....	GA,(P-AS)	.....	82
4.107.	GALLIUM SESQUISULFIDE	.....	GA2,S3	.....	82
4.108.	GERMANIUM SULFIDE	.....	GE,S	.....	83
4.109.	GERMANIUM TETRABROMIDE	.....	GE,BR4	.....	83
4.110.	GERMANIUM TETRACHLORIDE	.....	GE,CL4	.....	83
4.111.	HAFNIUM CARBIDE	.....	HF,C	.....	83
4.112.	HEAVY WATER	.....	D2,O	.....	83
4.113.	HEXAMMINECOBALT IODIDE	.....	CO,(N,H3)6,I2	.....	84
4.114.	HEXAMMINE-NICKEL CHLORATE	.....	(NI,(N,H3)6),(CL,O4)2	.....	85
4.115.	HEXAMMINE-NICKEL CHLORIDE	.....	NI,(N,H3)6,CL2	.....	85
4.116.	HEXAMMINE-NICKEL IODIDE	.....	NI,(N,H3)6,I2	.....	85
4.117.	HOLMIUM CHROMIUM OXIDE	.....	HO,CR,O3	.....	85
4.118.	HYDROGEN BROMIDE	.....	H,BR	.....	85
4.119.	HYDROGEN CHLORIDE	.....	H,CL	.....	85
4.120.	HYDROGEN CYANIDE	.....	H,C,N	.....	85
4.121.	HYDROGEN FLUORIDE	.....	H,F	.....	85
4.122.	HYDROGEN SULFIDE	.....	H2,S	.....	86
4.123.	HYDRONIUM NITRATE	.....	H3,O,N,O3	.....	86
4.124.	INDIUM PHOSPHIDE	.....	IN,P	.....	86
4.125.	IRON BROMIDE	.....	FE,BR2	.....	86
4.126.	IRON CHLORIDE	.....	FE,CL2	.....	86
4.127.	IRON FLUORIDE	.....	FE,F2	.....	86
4.128.	IRON HYDROGEN CARBONYL	.....	H2,FE,(C,O)4	.....	86
4.129.	IRON-LITHIUM OXIDE	.....	(FE-LI),O4	.....	86
4.130.	IRON-MOLIBDENUM BORIC PHOSPHIDE	.....	(FE-MO),B,P	.....	87
4.131.	IRON SESQUIOXIDE	.....	FE2,O3	.....	87
4.132.	KCP	.....	K2,PT,(C,N)4,BR0,3	.....	87
4.133.	K(DEF)TCP	.....	K1,75,PT,(C,N)4*1,5(H2,O	.....	87

4,134.	LANTHANUM ALUMINATE	.....	LA,AL,O3	.....	87
4,135.	LANTHANUM CHLORIDE	.....	LA,CL3	.....	87
4,136.	LANTHANUM TRIFLUORIDE	.....	LA,F3	.....	87
4,137.	LEAD DIIODIDE	.....	PB,I2	.....	87
4,138.	LEAD FLUORIDE	.....	PB,F2	.....	88
4,139.	LEAD GERMANATE	.....	PB5,GE3,O11	.....	88
4,140.	LEAD METATITANATE	.....	PB,Ti,O3	.....	88
4,141.	LEAD MOLYBDENUM SULFIDE	.....	PB,MO6,S8	.....	88
4,142.	LEAD PHOSPHATE	.....	PB3,(P,O4)2	.....	88
4,143.	LEAD SULFIDE	.....	PB,S	.....	88
4,144.	LEAD-TIN TELLURIDE	.....	(PB-SN),TE	.....	88
4,145.	LEAD ZIRCONATE	.....	PB,ZR,O3	.....	88
4,146.	LIGHT WATER	.....	H2,O	.....	88
4,147.	LITHIUM BROMIDE	.....	LI,BR	.....	92
4,148.	LITHIUM CHLORIDE	.....	LI,CL	.....	92
4,149.	LITHIUM FLUORIDE	.....	LI,F	.....	92
4,150.	LITHIUM HYDRIDE	.....	LI,H	.....	92
4,151.	LITHIUM HYDROXIDE	.....	LI,O,H	.....	93
4,152.	LITHIUM IODINE	.....	LI,I	.....	93
4,153.	LITHIUM NITRIDE	.....	LI3,N	.....	93
4,154.	LITHIUM NIOBATE	.....	LI,NB,O3	.....	93
4,155.	LITHIUM SULFATE	.....	LI2,S,O4,H2,O	.....	93
4,156.	LITHIUM SULFATE MONOHYDRATE	.....	LI2,S,O4*H2,O	.....	93
4,157.	LITHIUM YTTRIUM TETRAFLUORIDE	.....	LI,Y,F4	.....	93
4,158.	MAGNESIUM FLUORIDE	.....	MG,F2	.....	93
4,159.	MAGNESIUM HYDROXIDE	.....	MG,(O,H)2	.....	93
4,160.	MAGNESIUM OXIDE	.....	MG,O	.....	94
4,161.	MAGNETITE	.....	FE3,O4	.....	94
4,162.	MANGANESE FERRITE	.....	MN,FE2,O4	.....	94
4,163.	MANGANESE FLUORIDE	.....	MN,F2	.....	94
4,164.	MANGANESE HYDROGEN CARBONYL (1)	.....	H,MN,(C,O)5	.....	94
4,165.	MANGANESE HYDROGEN CARBONYL (2)	.....	H3,MN3,(C,O)12	.....	94
4,166.	MANGANESE MONOXIDE	.....	MN,O	.....	95
4,167.	MOLYBDENUM DISULFIDE	.....	MO,S2	.....	95
4,168.	MOLYBDENUM SULFIDE	.....	MO6,S8	.....	95
4,169.	NEODYMIUM CHROMIUM OXIDE	.....	ND,CR,O3	.....	95

4.170.	NICKEL CHLORIDE	.....	NI,CL2	.....	95
4.171.	NICKEL MONOSULFIDE	.....	NI,S	.....	95
4.172.	NICKEL OXIDE	.....	NI,O	.....	95
4.173.	NIObIUM CARBIDE	.....	NB,C	.....	95
4.174.	NIObIUM OXIDE	.....	NB,O2	.....	96
4.175.	NIObIUM SULFIDE	.....	NB,S2	.....	96
4.176.	PLUTONIUM PHOSPHIDE	.....	PU,P	.....	96
4.177.	POTASSIUM ACID FLUORIDE	.....	K,H,F2	.....	96
4.178.	POTASSIUM AMMONIUM CHLORIDE	.....	K,N,H4,CL	.....	96
4.179.	POTASSIUM AZIDE	.....	K,N3	.....	96
4.180.	POTASSIUM BROMIDE	.....	K,BR	.....	96
4.181.	POTASSIUM CHLORIDE	.....	K,CL	.....	97
4.182.	POTASSIUM CHLOROSTANNATE	.....	K2,SN,CL6	.....	97
4.183.	POTASSIUM(2) COBALT FLUORIDE	.....	K2,CO,F4	.....	97
4.184.	POTASSIUM COBALT TRIFLUORIDE	.....	K,CO,F3	.....	97
4.185.	POTASSIUM COPPER FLUORIDE	.....	K,CU,F3	.....	97
4.186.	POTASSIUM(2) COPPER FLUORIDE	.....	K2,CU,F4	.....	98
4.187.	POTASSIUM CYANIDE	.....	K,C,N	.....	98
4.188.	POTASSIUM DIHYDROGEN FLUORIDE	.....	K,H2,F3	.....	98
4.189.	POTASSIUM DIHYDROGEN PHOSPHATE	.....	K,H2,P,O4	.....	98
4.190.	POTASSIUM FERROCYANIDE	.....	K4,FE,(C,N)6	.....	98
4.191.	POTASSIUM FLUOGERMANATE	.....	K2,GE,F6	.....	98
4.192.	POTASSIUM FLUORIDE	.....	K,F	.....	99
4.193.	POTASSIUM FLUOSILICATE	.....	K2,Si,F6	.....	99
4.194.	POTASSIUM HYDROGEN IRON CARBONYL	.....	K,H,FE,(C,O)4	.....	99
4.195.	POTASSIUM HYDROGEN TRICHLOROACETATE	.....	K,H,(C,CL3,C,O2)2	.....	99
4.196.	POTASSIUM IODIDE	.....	K,I	.....	99
4.197.	POTASSIUM MANGANESE-IRON FLUORIDE	.....	K2,(MN-FE),F4	.....	99
4.198.	POTASSIUM(2) MANGANESE FLUORIDE	.....	K2,MN,F4	.....	99
4.199.	POTASSIUM MANGANESE TRIFLUORIDE	.....	K,MN,F3	.....	99
4.200.	POTASSIUM MANGANESE-ZINC FLUORIDE	.....	K,(MN-ZN),F3	.....	100
4.201.	POTASSIUM MONOHYDROGEN PHOSPHATE	.....	K2,H,P,O4	.....	100
4.202.	POTASSIUM(2) NICKEL FLUORIDE	.....	K2,NI,F4	.....	100
4.203.	POTASSIUM NIOBATE	.....	K,NB,O3	.....	100
4.204.	POTASSIUM OXALATE HYDRATE	.....	K2,C2,O4*H2,O	.....	100
4.205.	POTASSIUM PHOSPHATE	.....	K3,P,O4	.....	100

4.206.	POTASSIUM RHENIUM CHLORIDE	.....	K2,RE,CL6	.....	100
4.207.	POTASSIUM RHENIUM HYDRIDE	.....	K2,RE,H9	.....	100
4.208.	POTASSIUM-RUBIDIUM IODIDE	.....	(K-RB),I	.....	100
4.209.	POTASSIUM SELENATE	.....	K2,SE,O4	.....	100
4.210.	POTASSIUM TANTALATE	.....	K,TA,O3	.....	101
4.211.	PRASEODYMIUM ALUMINATE	.....	PR,AL,O3	.....	101
4.212.	PRASEODYMIUM CHROMIUM OXIDE	.....	PR,CR,O3	.....	101
4.213.	PRASEODYMIUM FLUORIDE	.....	PR,F3	.....	101
4.214.	PRASEODYMIUM GALLIUM OXIDE	.....	PR,GA,O3	.....	101
4.215.	PRASEODYMIUM IRON OXIDE	.....	PR,FE,O3	.....	101
4.216.	QUARTZ	.....	SI,O2	.....	101
4.217.	RUBIDIUM AZIDE	.....	RB,N3	.....	101
4.218.	RUBIDIUM BROMIDE	.....	RB,BR	.....	101
4.219.	RUBIDIUM CALCIUM TRIFLUORIDE	.....	RB,CA,F3	.....	102
4.220.	RUBIDIUM CHLORIDE	.....	RB,CL	.....	102
4.221.	RUBIDIUM CHROMIUM CHLORIDE	.....	RB2,CR,CL4	.....	102
4.222.	RUBIDIUM FLUOMANGANATE	.....	RB,MN,F3	.....	102
4.223.	RUBIDIUM FLUORIDE	.....	RB,F	.....	102
4.224.	RUBIDIUM FLUOSILICATE	.....	RB2,SI,F6	.....	102
4.225.	RUBIDIUM HYDROSULFIDE	.....	RB,S,H	.....	103
4.226.	RUBIDIUM IODIDE	.....	RB,I	.....	103
4.227.	RUBIDIUM MANGANESE CHLORIDE	.....	RB2,MN,CL4	.....	103
4.228.	RUBIDIUM MANGANESE-MAGNESIUM FLUORIDE	.....	RB2,MNO,5,MGO,5,F4	.....	103
4.229.	RUBIDIUM MANGANESE-NICKEL FLUORIDE	.....	RB2,MNO,5,NIO,5,F4	.....	103
4.230.	RUTILE	.....	TI,O2	.....	103
4.231.	RUTHENIUM TETROXIDE	.....	RU,O4	.....	103
4.232.	SILANE	.....	SI,H4	.....	103
4.233.	SILICA	.....	SI,O2	.....	104
4.234.	SILICON CARBIDE	.....	SI,C	.....	104
4.235.	SILICON NITRIDE	.....	SI3,N4	.....	104
4.236.	SILICON TETRACHLORIDE	.....	SI,CL4	.....	104
4.237.	SILVER BROMIDE	.....	AG,BR	.....	104
4.238.	SILVER CHLORIDE	.....	AG,CL	.....	104
4.239.	SILVER GALLIUM SULFIDE	.....	AG,GA,S2	.....	104
4.240.	SILVER IODIDE	.....	AG,I	.....	105
4.241.	SILVER TRIHYDROGEN PARAPERIODATE	.....	AG2,H3,I,O6	.....	105

4,242.	SODAMIDE	.....	NA,N,H2	.....	105
4,243.	SODIUM AZIDE	.....	NA,N3	.....	105
4,244.	SODIUM BROMIDE	.....	NA,BR	.....	105
4,245.	SODIUM CHLORIDE	.....	NA,CL	.....	105
4,246.	SODIUM CYANIDE	.....	NA,C,N	.....	106
4,247.	SODIUM DIHYDROGEN FLUORIDE	.....	NA,H2,F3	.....	106
4,248.	SODIUM FLUORIDE	.....	NA,F	.....	106
4,249.	SODIUM HYDROGEN CARBONATE	.....	NA,H,C,O3	.....	106
4,250.	SODIUM HYDROGEN FLUORIDE	.....	NA,H,F2	.....	106
4,251.	SODIUM HYDROSULFIDE	.....	NA,S,H	.....	107
4,252.	SODIUM HYPEROXIDE	.....	NA,O2	.....	107
4,253.	SODIUM IODIDE	.....	NA,I	.....	107
4,254.	SODIUM NITRATE	.....	NA,N,O3	.....	107
4,255.	SODIUM NITRITE	.....	NA,N,O2	.....	107
4,256.	SODIUM NIOBATE	.....	NA,NB,O3	.....	107
4,257.	SODIUM RHENIUM HYDRIDE	.....	NA2,RE,H9	.....	107
4,258.	STRONTIUM CHLORIDE	.....	SR,CL2	.....	108
4,259.	STRONTIUM FLUORIDE	.....	SR,F2	.....	108
4,260.	STRONTIUM OXIDE	.....	SR,O	.....	108
4,261.	STRONTIUM TITANATE	.....	SR,TI,O3	.....	108
4,262.	SULFUR NITRIDE	.....	S,N	.....	109
4,263.	TANTALUM CARBIDE	.....	TA,C	.....	109
4,264.	TANTALUM SULFIDE	.....	TA,S2	.....	109
4,265.	TELLURIUM DIOXIDE	.....	TE,O2	.....	109
4,266.	TERBIUM CHROMIUM OXIDE	.....	TB,CR,O3	.....	109
4,267.	TERBIUM VANADATE	.....	TB,V,O4	.....	109
4,268.	THALLOUS CHLORIDE	.....	TL,CL	.....	109
4,269.	THALLOUS BROMIDE	.....	TL,BR	.....	109
4,270.	THIOUREA	.....	S,C,(N,H2)2	.....	110
4,271.	THORIUM DIOXIDE	.....	TH,O2	.....	110
4,272.	THULIUM IRON OXIDE	.....	TM,FE,O3	.....	110
4,273.	TIN DIOXIDE	.....	SN,O2	.....	110
4,274.	TIN MOLYBDENUM SULFIDE	.....	SN,MO6,S8	.....	110
4,275.	TIN SULFIDE	.....	SN,S2	.....	110
4,276.	TIN TETRACHLORIDE	.....	SN,CL4	.....	110
4,277.	TITANIUM CARBIDE	.....	TI,C	.....	110

4,278.	TITANIUM OXIDE	.....	Ti ₂ O	.....	110
4,279.	TITANIUM SELENIDE	.....	Ti ₂ Se ₂	.....	111
4,280.	TITANIUM TETRACHLORIDE	.....	Ti ₂ Cl ₄	.....	111
4,281.	TMMC	.....	(C,H ₃) ₄ N,MN,CL ₃	.....	111
4,282.	TUNGSTATE	.....	CA,W,O ₄	.....	111
4,283.	URANIUM CARBIDE	.....	U,C	.....	111
4,284.	URANIUM DIOXIDE	.....	U,O ₂	.....	111
4,285.	UREA	.....	C,O,(N,H ₂) ₂	.....	111
4,286.	VANADIUM CARBIDE	.....	V,C	.....	112
4,287.	VANADIUM HEPTOXIDE	.....	V ₄ O ₇	.....	112
4,288.	VANADIUM OXIDE	.....	V,O ₂	.....	112
4,289.	VANADIUM PENTOXIDE	.....	V ₃ O ₅	.....	112
4,290.	VANADIUM SILICIDE	.....	V ₃ Si	.....	112
4,291.	VANADIUM TRIOXIDE	.....	V ₂ O ₃	.....	112
4,292.	XENON TETROXIDE	.....	Xe,O ₄	.....	112
4,293.	YTTERBIUM IRON OXIDE	.....	YB,Fe,O ₃	.....	112
4,294.	YTTRIUM ALUMINUM GARNET	.....	Y ₃ Al ₅ O ₁₂	.....	112
4,295.	YTTRIUM VANADATE	.....	Y,V,O ₄	.....	113
4,296.	ZINC-MANGANESE FERRITE	.....	(ZN-MN),Fe ₂ O ₄	.....	113
4,297.	ZINC OXIDE	.....	ZN,O	.....	113
4,298.	ZINC SILICON PHOSPHIDE	.....	ZN,Si,P ₂	.....	113
4,299.	ZINC SULFIDE	.....	ZN,S	.....	113
4,300.	ZINC SULFIDE-SELENIDE	.....	ZN,(S-SE)	.....	113
4,301.	ZIRCONIUM CARBIDE	.....	ZR,C	.....	113

5, INTERMETALLIC COMPOUNDS

5, 1.	ALUMINIUM ANTIMONIDE	.....	AL,SB	.....	115
5, 2.	ARSENIC SELENIDE	.....	AS ₂ Se ₃	.....	115
5, 3.	CADMIUM TELLURIDE	.....	CD,TE	.....	115
5, 4.	CALCIUM,MAGNESIUM ₂	.....	CA,MG ₂	.....	115
5, 5.	CERIUM,ALUMINIUM ₃	.....	CE,AL ₃	.....	115
5, 6.	CESIUM RUBIDIUM	.....	CS,RB	.....	115

5,	7,	(CHROMIUM-IRON), ANTIMONIDE	.....	(CR-Fe), SB	.....	115
5,	8,	COPPER2, MANGANESE, ALUMINIUM	.....	CU2, MN, AL	.....	115
5,	9,	DYSPROSIUM ANTIMONIDE	.....	DY, SB	.....	115
5,	10,	ERBIUM, ALUMINIUM3	.....	ER, AL3	.....	116
5,	11,	ERBIUM, IRON2	.....	ER, FE2	.....	116
5,	12,	GALLIUM ANTIMONIDE	.....	GA, SB	.....	116
5,	13,	GALLIUM ARSENIDE	.....	GA, AS	.....	116
5,	14,	GALLIUM MONOSELENIDE	.....	GA, SE	.....	116
5,	15,	GALLIUM SESQUISELENIDE	.....	GA2, SE3	.....	116
5,	16,	HOLMIUM, ALUMINIUM2	.....	HO, AL2	.....	116
5,	17,	HOLMIUM ANTIMONIDE	.....	HO, SB	.....	116
5,	18,	HOLMIUM, COBALT2	.....	HO, CO2	.....	116
5,	19,	(HOLMIUM-TERBIUM), IRON2	.....	(HO-TB), FE2	.....	117
5,	20,	HOLMIUM, ZINC	.....	HO, ZN	.....	117
5,	21,	INDIUM ANTIMONIDE	.....	IN, SB	.....	117
5,	22,	INDIUM TELLURIDE	.....	IN2, TE3	.....	117
5,	23,	IRON3, ALUMINIUM	.....	FE3, AL	.....	117
5,	24,	LANTHANUM, COBALT5	.....	LA, CO5	.....	117
5,	25,	LANTHANUM, COBALT13	.....	LA, CO13	.....	117
5,	26,	LEAD SELENIDE	.....	PB, SE	.....	117
5,	27,	LEAD TELLURIDE	.....	PB, TE	.....	117
5,	28,	(MANGANESE-COPPER) ANTIMONIDE	.....	(MN-CU), SB	.....	117
5,	29,	MAGNESIUM2, LEAD	.....	MG2, PB	.....	118
5,	30,	MAGNESIUM2, TIN	.....	MG2, SN	.....	118
5,	31,	MAGNESIUM, ZINC2	.....	MG, ZN2	.....	118
5,	32,	MOLYBDENUM SELENIDE	.....	MO, SE8	.....	118
5,	33,	NEODYMIUM ANTIMONIDE	.....	ND, SB	.....	118
5,	34,	NICKEL2, MANGANESE, TIN	.....	NI2, MN, SN	.....	118
5,	35,	NIObIUM3, ALUMINIUM	.....	NB3, AL	.....	118
5,	36,	NIObIUM SELENIDE	.....	NB, SE2	.....	118
5,	37,	NIObIUM3, TIN	.....	NB3, SN	.....	118
5,	38,	PALLADIUM3, IRON	.....	PD3, FE	.....	119
5,	39,	PALLADIUM2, MANGANESE, TIN	.....	PD2, MN, SN	.....	119
5,	40,	PRASEODYMIUM3, ALUMINIUM	.....	PR3, AL	.....	119
5,	41,	PRASEODYMIUM, ALUMINIUM2	.....	PR, AL2	.....	119
5,	42,	SELENIUM TELLURIDE	.....	SE, TE	.....	119

5.	43.	TANTALUM SELENIDE	.....	TA, SE2	.....	119
5.	44.	THORIUM, COBALT5	.....	TH, CO5	.....	119
5.	45.	TIN SELENIDE	.....	SN, SE2	.....	119
5.	46.	TIN TELLURIDE	.....	SN, TE	.....	119
5.	47.	VANDDIUM3, GALLIUM	.....	V3, GA	.....	120
5.	48.	VANADIUM3, GERMANIUM	.....	V3, GE	.....	120
5.	49.	YTTRIUM, COBALT5	.....	Y, CO5	.....	120
5.	50.	ZINC SELENIDE	.....	ZN, SE	.....	120
5.	51.	ZINC TELLURIDE	.....	ZN, TE	.....	120

6, ORGANIC COMPOUNDS

6.	1.	ACENAPHTHENE	.....	C12, H10	.....	121
6.	2.	ACETIC ACID	.....	C2, H4, O2	.....	121
6.	3.	ACETONITRILE	.....	C, H3, C, N	.....	121
6.	4.	ACETYLENE	.....	C2, H2	.....	121
6.	5.	ADAMANTANE	.....	C10, H16	.....	121
6.	6.	ALCOHOL	.....	.....	.....	121
6.	7.	ALPHA-AMINO-ISOBUTYRIC-ACID	.....	AAIA	.....	121
6.	8.	ANILINE	.....	C6, H7, N	.....	122
6.	9.	ANNULENE	.....	ANNULENE	.....	122
6.	10.	ANTHRACENE	.....	C14, H10	.....	122
6.	11.	ANTHRAQUINONE	.....	ANTHRAQUINONE	.....	122
6.	12.	BENZENE	.....	C6, H6	.....	122
6.	13.	BIPHENYL	.....	C12, H10	.....	123
6.	14.	BIPHYLE	.....	.....	.....	123
6.	15.	BROMOPENTANE	.....	BROMOPENTANE	.....	123
6.	16.	BUTANE	.....	C4, H10	.....	123
6.	17.	BUTANOANNULENE	.....	BUTANOANNULENE	.....	124
6.	18.	BUTANOL	.....	C4, H10, O	.....	124
6.	19.	BUTYL CHLORIDE	.....	.....	.....	124
6.	20.	BUTYRIC ACID	.....	BUTYRIC ACID	.....	124
6.	21.	C5, H5, N, H, AG5, I6	.....	C5, H5, N, H, AG5, I6	.....	124

6, 22,	CARBONYL SULPHIDE	.....	C.O.S	.....	124
6, 23,	CARBOXYLIC ACID	.....	CARBOXYLIC ACID	.....	124
6, 24,	CELLULOSE	.....	(C6,H10,O5)N	.....	124
6, 25,	CHLOROBENZENE	.....	C6,H5,CL	.....	124
6, 26,	CHLOROETHANE	.....	C2,H5,CL	.....	124
6, 27,	CHLORONAPHTHALENE	.....	C10,H7,CL	.....	125
6, 28,	CYANAMIDE	.....	C,H2,N2	.....	125
6, 29,	CYCLOHEXANE	.....	C6,H12	.....	125
6, 30,	CYCLOHEXANOL	.....	C6,H12,O	.....	125
6, 31,	DIAMINETETRACHLORODIMETHYLCADMIUM	.....	(C,H3,N,H3)2,CD,CL4	.....	125
6, 32,	DIAMINETETRACHLORODIMETHYLCOPPER	.....	(C,H3,N,H3)2,CU,CL4	.....	125
6, 33,	DIAMINETETRACHLORODIMETHYLMANGANESE	.....	(C,H3,N,H3)2,MN,CL4	.....	125
6, 34,	DIAZOBI-CYCLOOCTANE	.....	.....	.....	125
6, 35,	DIBROMOBENZENE	.....	C6,H4,BR2	.....	126
6, 36,	DICALCIUM LEAD PROPIONATE	.....	(C3,H5,O2)6,CA2,PB	.....	126
6, 37,	DICALCIUM STRONTIUM PROPIONATE	.....	CA2,SR,(C3,H5,O2)6	.....	126
6, 38,	DICHLOROETHANE	.....	DICHLOROETHANE	.....	126
6, 39,	DICHLOROBENZENE	.....	C6,H4,CL2	.....	126
6, 40,	DIMETHYLACETYLENE	.....	DNA	.....	126
6, 41,	DIMETHYLBUTANE	.....	.....	.....	126
6, 42,	DIMETHYLSULPHONE	.....	.....	.....	126
6, 43,	DIMETHYLSULPHOXIDE	.....	.....	.....	126
6, 44,	DIPULMITOYL PHOSPHATIDYL CHOLINE	.....	DPPC	.....	127
6, 45,	DNA	.....	DNA	.....	127
6, 46,	DODECANE	.....	C12,H26	.....	127
6, 47,	DTPO SUBERATE	.....	C26,H46,N2,O6	.....	127
6, 48,	EABAC	.....	EABAC	.....	127
6, 49,	EICOSANE	.....	C20,H42	.....	127
6, 50,	ETHANE	.....	C2,H6	.....	127
6, 51,	ETHANEDIOL	.....	.....	.....	127
6, 52,	ETHANOL	.....	C2,H5,O	.....	127
6, 53,	ETHYL CHLORIDE	.....	C2,H5,CL	.....	128
6, 54,	ETHYL ETHER	.....	(C2,H5)2,O	.....	128
6, 55,	ETHYLENE	.....	C2,H4	.....	128
6, 56,	ETHYLENE GLYCOL	.....	C2,H6,O2	.....	128
6, 57,	FIBRINOGEN	.....	FIBRINOGEN	.....	128

6. 58.	FLUORINATED CYCLOHEXANE	.....	128
6. 59.	FORMIC ACID	.....	128
6. 60.	GLYCELINE	.....	128
6. 61.	GLYCINE	.....	129
6. 62.	HEPTANE	.....	129
6. 63.	HEXAMETHYLBENZENE	.....	129
6. 64.	HEXAMETHYLENETETRAMINE	.....	129
6. 65.	HEXANE	.....	129
6. 66.	IODOFORM	.....	129
6. 67.	LYSOZYME	.....	129
6. 68.	MALONIC ACID	.....	129
6. 69.	MDIG	.....	130
6. 70.	MERCAPTAN	.....	130
6. 71.	MESITYLEN	.....	130
6. 72.	METHANE	.....	130
6. 73.	METHANETELLUROL	.....	132
6. 74.	METHANOL	.....	132
6. 75.	METHOXYBENZYLIDENE-BUTYLANILINE	.....	132
6. 76.	METHYL CHLORIDE	.....	132
6. 77.	METHYLCHLOROFORM	.....	132
6. 78.	METHYL FLUORIDE	.....	132
6. 79.	METHYL IODIDE	.....	132
6. 80.	METHYLMERCAPTAN	.....	132
6. 81.	METHYLENE	.....	133
6. 82.	METHYLENE CHLORIDE	.....	133
6. 83.	METHYLZINC BOROHYDRIDE	.....	133
6. 84.	MYOGLOBIN	.....	133
6. 85.	NAPHTHALENE	.....	133
6. 86.	NONADECANE	.....	133
6. 87.	NYLON	.....	133
6. 88.	OCTANE	.....	134
6. 89.	OXALIC ACID	.....	134
6. 90.	PARAFFINE	.....	134
6. 91.	PENTANE	.....	134
6. 92.	PENTANOL	.....	134
6. 93.	PHENANTHRENE	.....	134
	C,H2,O2	.....	128
	C3,H8,O3	.....	128
	GLYCINE	.....	129
	C7,H16	.....	129
	C12,H18	.....	129
	C6,H12,N4	.....	129
	C6,H14	.....	129
	C,H,I3	.....	129
	LYSOZYME	.....	129
	C3,H4,O4	.....	129
	C13,H22,O6	.....	130
	C2,H6,S	.....	130
	C6,H3,(C,H3)3	.....	130
	C,H4	.....	130
	C,H4,TE	.....	132
	C,H4,O	.....	132
	MBBA	.....	132
	C,H3,CL	.....	132
	METHYLCHLOROFORM	.....	132
	C,H3,F	.....	132
	C,H3,I	.....	132
	C,H3,S,H	.....	132
	C,H2	.....	133
	C,H2,CL2	.....	133
	C,H3,ZN,B,H4	.....	133
	MYOGLOBIN	.....	133
	ClO,H8	.....	133
	Cl9,H40	.....	133
	C8,H18	.....	134
	C2,H2,O4	.....	134
	C5,H12	.....	134
	C5,H12,O	.....	134
	C14,H10	.....	134

6. 94.	PHENANTHRENE	.....	134
6. 95.	PHENYL	.....	135
6. 96.	P-AZOXYANISOLE	 PAA	135
6. 97.	POLYACETALDEHYDE	.....	135
6. 98.	POLYACRYLONITRILE	.....	135
6. 99.	POLYALANINE	 POLYALANINE	135
6.100.	POLYDIMETHYLSILOXANE	.....	135
6.101.	POLYETHYLENE	.....	135
6.102.	POLYETHYLENEOXIDE	.....	137
6.103.	POLYETHYLENE TEREPHTHALATE	.....	137
6.104.	POLYGLUTAMIC ACID	.....	137
6.105.	POLYGLYCINE	.....	137
6.106.	POLYISOBUTYLENE	.....	137
6.107.	POLYMETHYLPHENYLSILOXANE	.....	137
6.108.	POLYOXYMETHYLENE	.....	138
6.109.	POLYPEPTIDE	.....	138
6.110.	POLYPROPYLENE	 POLYPROPYLENE	138
6.111.	POLYPROPYLENE OXIDE	.....	138
6.112.	POLYSTYRENE	.....	138
6.113.	POLYTETRAHYDROFURAN	 (C4,H8,O)N	138
6.114.	POLYTETRAFLUOROETHYLENE	 TEFLON	138
6.115.	POLYTRIFLUOROACETALDEHYDE	.....	139
6.116.	POLYVINYL CHLORIDE	.....	139
6.117.	POTASSIUM TRICHLOROACETATE	 K,C2,CL3,O2	139
6.118.	POTASSIUM TRIFLUOROACETATE	 K,C2,F3,O2	139
6.119.	PROPANE	 C3,H8	139
6.120.	PROPANOL	 C3,H8,O	139
6.121.	PROPIONIC ACID	 C3,H6,O2	139
6.122.	PROTEIN	 PROTEIN	139
6.123.	PYRAZINE	 C4,H4,N2	139
6.124.	PYRENE	 C16,H10	139
6.125.	PYRIDINE	 PYRIDINE	140
6.126.	RESIN	.....	140
6.127.	RUBBER	.....	140
6.128.	TAURINE	 TAURINE	140
6.129.	TEREPHTHAL-BIS-P-BUTYLANILINE	 TBBA	140

6.130.	TERPHENYL	.....	C18,H14	.....	140
6.131.	TETRAMETHYLLEAD	.....	TML	.....	140
6.132.	TETRATHIAFULVALENE-TETRACYANOQUINODIMETHANE	.....	TTF-TCNQ	.....	140
6.133.	TOLUENE	.....	C7,H8	.....	141
6.134.	TRICHLOROMETHANE	.....	C,H,CL3	.....	141
6.135.	TRIFLUOROETHANE	.....	C,H3,C,F3	.....	141
6.136.	TRIMETHYLAMMONIUM CHLORIDE	.....	(C,H3)3,N,H,CL	.....	141
6.137.	XYLENE	.....	C6,H4,(C,H3)2	.....	141

7. ADSORPTIONS AND SOLUTIONS

7.	1.	ACETYLENE-CHARCOAL	.....	C2,H2-CHARCOAL	.....	142
7.	2.	ALCOHOL-WATER	.....		.....	142
7.	3.	AMMONIA-ZEOLITE	.....		.....	142
7.	4.	AMMONIUM FLUORIDE-WATER	.....	N,H4,F-H2,O	.....	142
7.	5.	ARGON-GRAPHITE	.....	AR-GRAPHITE	.....	142
7.	6.	CAESIUM CHLORIDE-WATER	.....	CS,CL-H2,O	.....	142
7.	7.	CHROMIUM CHLORIDE-WATER	.....	CR,CL3-H2,O	.....	142
7.	8.	DIETHYL DIETHYLENE GLYCOL-CARBON DISULFIDE	.....		.....	142
7.	9.	ETHYL ETHER-CARBON DISULFIDE	.....	(C2,H5)2,O-C,S2	.....	142
7.	10.	ETHYLENE-CHARCOAL	.....	C2,H4-CHARCOAL	.....	142
7.	11.	ETHYLENE OXIDE-CLATHRATE	.....	(C,H2)2-CLATHRATE	.....	143
7.	12.	HYDROGEN-ALUMINA	.....	H2-ALUMINA	.....	143
7.	13.	HYDROGEN-CHARCOAL	.....	H2-CHARCOAL	.....	143
7.	14.	HYDROGEN FLUORIDE-WATER	.....	H,F-H2,O	.....	143
7.	15.	HYDROGEN-NICKEL	.....	H-NI	.....	143
7.	16.	HYDROGEN-NITROGEN-NIOBIUM	.....	H-N-NB	.....	143
7.	17.	HYDROGEN-PLATINUM	.....	H-PT	.....	143
7.	18.	KRIPTON-GRAPHITE	.....	KR-GRAPHITE	.....	143
7.	19.	LANTHANUM CHLORIDE-WATER	.....	LA,CL3-H2,O	.....	143
7.	20.	LANTHANUM NITRATE-WATER	.....	LA,(N,O3)3-H2,O	.....	143
7.	21.	LITHIUM CHLORIDE-WATER	.....	LI,CL-H2,O	.....	144
7.	22.	MAGNESIUM CHLORIDE-WATER	.....	MG,CL2-H2,O	.....	144

7. 23.	METHANE-CHARCOAL	.....	C, H4=CHARCOAL	.....	144
7. 24.	METHANE-QUINOL	.....	C, H4-C6, H4, (O, H)2	.....	144
7. 25.	METHANOL-QUINOL	.....	C, H4, O=C6, H4, (O, H)2	.....	144
7. 26.	METHYL CYANIDE-QUINOL	.....	C, H3, C, N-C6, H4, (O, H)2	.....	144
7. 27.	NITROGEN-GRAPHITE	.....	N-GRAPHITE	.....	144
7. 28.	POLYSTYRENE-CARBON DISULFIDE	.....	POLYSTYRENE-C, S2	.....	144
7. 29.	POLYTETRAHYDROFURANE-CARBON DISULFIDE	.....	(C4, H8, O)N-C, S2	.....	144
7. 30.	POTASSIUM CHLORIDE-WATER	.....	K, CL-H2, O	.....	144
7. 31.	SODIUM CHLORIDE-WATER	.....	NA, CL-H2, O	.....	145
7. 32.	TETRAHYDROFURAN-CLATHRATE	.....	C4, H8, O-CLATHRATE	.....	145
7. 33.	WATER-ALUMINA	.....	H2, O-AL2, O3	.....	145
7. 34.	WATER-BERYL	.....	H2, O-BE3, AL2, SI6, O18	.....	145
7. 35.	WATER-POTASSIUM FERROCYANIDE TRIHYDRATE	.....	.....	.....	145
7. 36.	WATER-QUINOL	.....	H2, O-C6, H4, (O, H)2	.....	145
7. 37.	WATER-SILICA	.....	H2, O-SI, O2	.....	145

PART 2. LIST OF REFERENCES, ORDERED BY THE PUBLISHED YEAR AND THE FIRST AUTHOR NAME

1 GENERAL ARTICLES

1, 1 REVIEW-ARTICLES

- 54-EG-02 EGELSTAFF, SCHOFIELD REVIEW-ARTICLES ..REVIEW/ LIQUID DYNAMICS/ EXPERIMENTAL PRINCIPLES
 59-EG-01 EGELSTAFF REVIEW-ARTICLES ..NEUTRON SPECTROSCOPY
 60-EG-01 EGELSTAFF REVIEW-ARTICLES ..EXPERIMENTAL ARRANGEMENTS AND METHOD/ SCATTERING LAW MEASUREMENTS
 61-NE-01 NELKIN REVIEW-ARTICLES ..SCATTERING THEORY ..NEUTRON THERMALIZATION
 62-FU-01 FURUKAWA REVIEW-ARTICLES ..LIQUID/ EXPERIMENT/ NEUTRON SCATTERING ..RADIAL DISTRIBUTION/ X-RAY SCATTERING
 63-SI-02 SINGWI REVIEW-ARTICLES ..THEORY ..MOESSBAUER EFFECT
 63-WO-03 WOODS REVIEW-ARTICLES ..LATTICE DYNAMICS/ SOLID/ EXPERIMENT ..NEUTRON SPECTROMETRY
 64-BR-01 BROCKHOUSE, WOODS+ REVIEW-ARTICLES ..EXPERIMENT/ SOLID/ LIQUID
 64-BR-02 BROCKHOUSE, HAUTECLER+ REVIEW-ARTICLES ..EXPERIMENT/ LATTICE DYNAMICS ..NEUTRON SPECTROSCOPY
 64-BR-03 BROCKHOUSE REVIEW-ARTICLES ..EXPERIMENT/ LATTICE DYNAMICS ..NEUTRON SPECTROSCOPY
 64-NI-02 NIJBORE, KOKKEDEE REVIEW-ARTICLES ..SCATTERING THEORY/ SOLID/ LIQUID ..THIS IS TRANSLATED FROM NED. TIJDS
 64-SJ-01 SJOELANDER REVIEW-ARTICLES ..SCATTERING THEORY
 65-EG-01 EGELSTAFF REVIEW-ARTICLES ..THEORY/ EXPERIMENT ..BOOK
 65-EG-02 EGELSTAFF REVIEW-ARTICLES ..LIQUID
 65-EG-03 EGELSTAFF, SCHOFIELD REVIEW-ARTICLES ..LIQUID/ THEORY/ FREQUENCY SPECTRUM/ CORRELATION FUNCTION/ SCATTERING
 65-EG-04 EGELSTAFF, SCHOFIELD REVIEW-ARTICLES ..REVIEW/ PHYSICAL PROPERTY/ TIME-DEPENDENT DISTRIBUTION/ NEUTRON EXP
 65-LA-02 LARSSON REVIEW-ARTICLES ..LIQUID/ MOLECULAR DYNAMICS
 65-LO-01 LOMER REVIEW-ARTICLES ..REVIEW/ NEUTRON SCATTERING/ LATTICE DYNAMICS
 65-PA-03 PALEVSKY REVIEW-ARTICLES ..EXPERIMENT/ MOLECULAR DYNAMICS
 65-TU-02 TURCHIN REVIEW-ARTICLES ..BOOK
 65-ZY-01 JAPANESE NUCLEAR DATA COMMITTEE + REVIEW-ARTICLES ..CROSS SECTION EVALUATION
 65-ZY-02 JAPANESE NUCLEAR DATA COMMITTEE + REVIEW-ARTICLES ..EVALUATION/ SCATTERING LAW
 66-EG-02 EGELSTAFF REVIEW-ARTICLES ..LIQUID/ CORRELATION FUNCTION/ TRANSPORT PHENOMENA
 66-LO-01 LOMER REVIEW-ARTICLES ..REVIEW/ MAGNETIC SCATTERING/ SPIN WAVES/ CRITICAL SCATTERING/ DEFECT SCATTERING
 66-PA-01 PALEVSKI REVIEW-ARTICLES ..FILTER-CHOPPER METHOD/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION FUNCTION/
 66-PA-03 PASKIN REVIEW-ARTICLES/ AR/ NA/ CE/ RB ..LIQUID/ THEORY/ STRUCTURE FACTOR/ VELOCITY AUTOCORRELATION FU
 66-VE-02 VENKATARAMAN REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID DYNAMICS
 66-WI-01 WILLIAMS REVIEW-ARTICLES ..BOOK
 66-ZY-02 JAPAN ATOMIC ENERGY RESEARCH INSTITUTE + REVIEW-ARTICLES ..DYNAMICS OF SOLIDS AND LIQUIDS
 67-BE-04 BEYSTER, NEIL REVIEW-ARTICLES
 67-CU-02 CUSACK REVIEW-ARTICLES ..LIQUID METAL/ PHYSICAL PROPERTIES
 67-DU-01 DOLLING REVIEW-ARTICLES ..MOLECULAR DYNAMICS/ ANTHRACENE/ BENZENE/ CARBON DIOXIDE/ HEXAMETHYLENETETRAM
 67-EG-02 EGELSTAFF REVIEW-ARTICLES ..LIQUID
 67-EG-04 EGELSTAFF REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING FUNCTION/ TRANSPORT PROPERTIES
 67-EG-05 EGELSTAFF REVIEW-ARTICLES ..LIQUID/ STRUCTURE/ TRANSPORT PROPERTIES/ NEUTRON SCATTERING
 67-EG-06 EGELSTAFF REVIEW-ARTICLES ..THEORETICAL BACKGROUND
 67-GL-01 GLAESER REVIEW-ARTICLES/ H2/O/ ZR-H/ GRAPHITE/ D2/O/ BE/ BE.O ..INCOHERENT APPROXIMATION/ MULTIPLE SCATT
 67-NG-02 NG, BROCKHOUSE BI-PB-TL/ ..PHONON DISPERSION/ ALLOY SYSTEM
 67-PA-03 PALEVSKY REVIEW-ARTICLES ..EXPLANATION ON NEUTRON INELASTIC SCATTERING
 67-SA-01 SAFORD, NAUMANN REVIEW-ARTICLES ..EXPERIMENTAL REVIEW/ POLYMER/ TOF SPECTRUM/ FREQUENCY SPECTRUM
 68-BO-05 BOUTIN, PRASK REVIEW-ARTICLES ..WATER ADSORBED/ WATER IN BIOLOGICAL SYSTEMS
 68-DA-03 DASANNACHARYA REVIEW-ARTICLES ..MOLECULAR LIQUID/ MOLECULAR MOTION/ NEUTRON SCATTERING
 68-PO-03 POWLES REVIEW-ARTICLES ..TO COMPARE NMR WITH THAT OF NEUTRON SCATTERING
 68-ZY-01 JAPAN ATOMIC ENERGY RESEARCH INSTITUTE + REVIEW-ARTICLES ..DYNAMICS OF SOLIDS AND LIQUIDS
 69-BO-02 BOFFI, CAGLIOTI REVIEW-ARTICLES ..LATTICE DYNAMICS

- 69-BU-03 BOFFI, CAGLIOTI REVIEW-ARTICLES ..LATTICE DYNAMICS/ EXPERIMENT/ TOF
69-BU-04 BOFFI, CAGLIOTI REVIEW-ARTICLES ..LATTICE DYNAMICS/ IONIC CRYSTAL/ METAL/ FERROELECTRIC MATERIAL
69-BU-05 BOFFI, CAGLIOTI REVIEW-ARTICLES ..NEUTRON SPECTROSCOPY/ LATTICE DYNAMICS
70-PA-04 PARKS, NELKIN+ REVIEW-ARTICLES ..BOOK/ THEORY/ EXPERIMENT/ NEUTRON SCATTERING/ REACTOR PHYSICS
70-SA-06 RAO REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-FLUIDS ..ATOMIC CORRELATION/ LIQUID
70-SI-04 SINGH, PRAKASH LI/ PB/ K/ CS/ ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION ..ALKALI METAL
70-VE-01 VENKATARAMAN, SAHNI THEORY-OF-SOLIDS/ REVIEW-ARTICLES ..FORMAL THEORY/ MOLECULAR CRYSTAL/ COMPLEX IONIC CR
70-ZY-01 JAPAN ATOMIC ENERGY RESEARCH INSTITUTE + REVIEW-ARTICLES ..DYNAMICS OF SPIN SYSTEM AND POLYMER
71-HA-06 HARRYMAN, REYNOLDS+ REVIEW-ARTICLES ..DENSITY OF STATES/ PHONON/ AROMATIC CRYSTAL
71-MU-02 MUSIMOVICI REVIEW-ARTICLES ..PROCEEDING OF THE INTERNATIONAL CONFERENCE, RENNES, FRANCE, 1971
72-AL-04 ALLEN REVIEW-ARTICLES ..POLYMER CHAIN/ DYNAMICS
72-BA-09 BAUR REVIEW-ARTICLES ..POLYMER-CRYSTAL/ PHONON/ DISPERSION CURVE/ THERMAL PROPERTIES
72-GH-01 GHATAK, KOTHARI REVIEW-ARTICLES ..BOOK/ LATTICE DYNAMICS/ NEUTRON SCATTERING
72-HA-01 HANKE, BILZ THEORY-OF-SOLIDS/ REVIEW-ARTICLES ..MICROSCOPIC THEORY/ PHONON/ METAL/ REVIEW
72-JA-03 JACROT, KROO+ REVIEW-ARTICLES ..SUMMARY OF THE SYMPOSIUM
72-LA-05 LARSSON REVIEW-ARTICLES ..MOLECULAR DYNAMICS/ SIMPLE LIQUID
72-PA-05 PAWLEY REVIEW-ARTICLES ..MOLECULAR CRYSTAL/ DYNAMICS
72-SP-01 SPRINGER REVIEW-ARTICLES ..NEUTRON SCATTERING/ ORGANIC MOLECULAR CRYSTAL/ PHONON
72-WH-01 WHITE REVIEW-ARTICLES ..NEUTRON SPECTROSCOPY/ SURFACE CHEMISTRY/ CATALYSIS
73-LA-01 LAROSE, VANDEWAL REVIEW-ARTICLES ..STRUCTURE ANALYSIS/ MAGNETIC STRUCTURE/ PHONON/ MAGNON/ POLARIZED NEUTR
73-NA-01 NAKAHARA GRAPHITE/ REVIEW-ARTICLES ..THEORY. SCATTERING LAW/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION/ D
73-PO-02 POWLES REVIEW-ARTICLES ..STRUCTURE/ MOLECULAR LIQUID/ EXPERIMENT/ THEORY
73-RE-02 REISSLAND REVIEW-ARTICLES ..BOOK
73-WI-01 WILLIS REVIEW-ARTICLES ..BOOK/ CHEMICAL APPLICATION/ THERMAL NEUTRON SCATTERING
73-ZE-01 ZELLER REVIEW-ARTICLES/ KCP/ TTF-TCN0 ..ONE-DIMENSIONAL CONDUCTOR/ KOHN-PEIERLS INSTABILITY
74-BE-02 BERTONI, BOKTOLANI+ LI/ NA/ AL/ PB/ ..THEORY/ PHONON DISPERSION/ THIRD ORDER PERTURBATION THEORY
74-BO-01 BOETTGER REVIEW-ARTICLES ..VIBRATIONAL PROPERTIES/ NON-CRYSTALLINE SOLIDS/ IR, RAMAN SPECTRA/ NEUTRON SC
74-GL-01 GLAESER REVIEW-ARTICLES/ KCP/ TTF-TCN0 ..ONE-DIMENSIONAL CONDUCTOR/ KOHN-PEIERLS INSTABILITY
74-SC-07 SCOTT REVIEW-ARTICLES ..THEORY/ EXPERIMENT/ SOLID/ STRUCTURAL PHASE TRANSITION/ NEUTRON SCATTERING/ I
75-BU-03 BURAS REVIEW-ARTICLES ..T-O-F NEUTRON DIFFRACTION
75-IB-02 IBEL REVIEW-ARTICLES/ INSTRUMENTS-AND-METHODS ..SMALL ANGLE SCATTERING/ ILL, GRENOBLE
75-WI-01 WILLIAMS REVIEW-ARTICLES ..POLARIZATION ANALYSIS
76-AX-01 AXE REVIEW-ARTICLES ..INCOMMENSURATE PHASE TRANSITION
76-CO-06 COOKE REVIEW-ARTICLES ..MAGNETIC EXCITATION/ SPIN WAVE
76-DA-01 DAUD REVIEW-ARTICLES ..POLYMER SOLUTION/ SMALL ANGLE SCATTERING
76-EG-01 EGELSTAFF REVIEW-ARTICLES ..LIQUID DYNAMICS/ SIMPLE FLUIDS/ NEUTRON SCATTERING
76-HO-04 HOUMANN, MOELLER REVIEW-ARTICLES ..BIOLOGICAL STRUCTURE/ SOLUTION/ NEUTRON SCATTERING
76-JA-02 JACROT REVIEW-ARTICLES/ CR/ V/ SC/ PD/ TI/ Y/ NB/ ..MAGNETIC FORM FACTOR
76-MO-02 MOON, KOEHLER+ REVIEW-ARTICLES ..STRUCTURE OF LIQUID/ MONATOMIC/ MOLECULAR FLUIDS
76-NA-01 NARTEN REVIEW-ARTICLES ..PHONON/ DEFECTS/ IRRADIATED CU/ CN IN KCL
76-NI-02 NICKLOW REVIEW-ARTICLES ..PHONON/ DEFECTS/ IRRADIATED CU/ CN IN KCL
76-PE-04 PETERSON, REIS-JR REVIEW-ARTICLES ..PARTIALLY OXIDIZED PT CHAIN/ ONE DIMENSIONAL COMPOUND
76-RO-02 ROWE REVIEW-ARTICLES ..HYDROGEN IN METALS/ DIFFUSION/ PHONON DISPERSION/ STRUCTURE
76-SQ-01 SQUIRES REVIEW-ARTICLES ..THERMAL NEUTRON SCATTERING/ SOLIDS/ CRYSTAL
77-SC-02 SCHELLEN REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-SOLIDS ..SMALL ANGLE SCATTERING/ DIFFRACTION FROM FLUX L

1, 2 NEUTRON-SCATTERING-IN-SOLIDS

- 44-WE-01 WEINSTOCK NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS ..INELASTIC SCATTERING
50-CA-01 CASSELS NEUTRON-SCATTERING-IN-SOLIDS ..THEORY
50-FR-01 FROEMAN NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLIDS ..NEUTRON DIFFRACTION

50-WA-01	WALLER, FROEMAN	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLIDS ..NEUTRON DIFFRACTION
54-PL-01	PLACZEK, VAN-HOVE	NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ SOLID/ LATTICE VIBRATION
55-GL-01	GLAUBER	NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ SOLID
55-KO-02	KOTHARI, SINGWI	NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ SOLID
55-PL-01	PLACZEK, VAN-HOVE	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY
56-SO-01	SJØTRES	NEUTRON-SCATTERING-IN-SOLIDS/ AL ..THEORY/ LATTICE VIBRATION/ FREQUENCY DISTRIBUTION ..ENERGY D
57-SJ-01	SJØELANDER	NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ SOLIDS/ LATTICE VIBRATION
57-TU-01	TURCHIN	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID
59-BU-01	BURAS, O-CONNER	NEUTRON-SCATTERING-IN-SOLIDS ..REVIEW/ NEUTRON SPECTROSCOPY
59-KO-01	KOTHARI, SINGWI	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS/ SIGMA
61-BA-01	BAYM	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ LATTICE DYNAMICS/ SCATTERING FUNCTION
61-EL-01	ELLIOTT, STERN	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID ..PHONON LIFE-TIME
61-KR-01	KRIEGER	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY
61-MA-01	MARSHALL, STUART	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SIGMA(E) ..PLACZEK-S INCOHERENT APPROXIMATION
61-SC-01	SCALETTAR	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SCATTERING FUNCTION
62-KO-01	KOKKEDDEE	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ ELECTRON-PHONON INTERACTIONS
62-KO-02	KOKKEDDEE	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY, CRYSTAL, COHERENT SCATTERING, ANHARMONICITY
62-MA-03	MARADUDIN, FEIN	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY, ANHARMONICITY ..ONE PHONON COHERENT SCATTERING/ PHONO
62-PU-03	PURCHIT	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ NEUTRON SPECTRUM ..CRYSTAL
63-HA-02	HAHN	NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ THEORY
63-KO-01	KOKKEDDEE	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY ..PHONON-PHONON INTERACTION/ ELECTRON-PHONON INTERACTION
63-TH-01	THOMSON	NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ SOLID/ LATTICE DYNAMICS/ SCATTERING THEORY
64-MA-01	MARADUDIN, ANBEGAOKAR	NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ SCATTERING FUNCTION/ LATTICE DYNAMICS/
64-MA-02	MARTIN	NEUTRON-SCATTERING-IN-SOLIDS ..SOLID/ THEORY
64-PE-01	PERETTI, JOUANIN	NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY ..POINT DEFECT
64-PE-02	PERETTI, JOUANIN	NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING FORMULA/ CRYSTAL/ POINT DEFECT
65-AK-01	AKASU, OSBORN	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ ANHARMONICITY
65-CO-02	COCHRAN	NEUTRON-SCATTERING-IN-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..METAL
65-CO-05	COWLEY	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS/ SCATTERING THEORY
65-EL-01	ELLIOTT, MARADUDIN	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ DISPERSION RELATION/ SOLID/ LATTICE DYNAMICS ..I
65-HA-01	HAHN	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MOLECULAR CRYSTAL DYNAMICS/ SCATTERING FUNCTION
65-SJ-01	SJØELANDER, JOHNSON	NEUTRON-SCATTERING-IN-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
65-SL-01	SLATER	V/ SI/ CU/ NEUTRON-SCATTERING-IN-SOLIDS ..HARMONIC APPROXIMATION/ DEBYE APPROXIMATION
65-TO-02	TOYA	NEUTRON-SCATTERING-IN-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..ELECTRON-
65-WA-01	WALLER	NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ THEORY/ SOLID ..IMPURITY/ NEUTRON/ CRYSTAL/ MOESS
66-BR-01	BREDOV, KOTOVA	NEUTRON-SCATTERING-IN-SOLIDS ..FREQUENCY SPECTRUM/ SCATTERING THEORY
66-GI-03	GINZBURG, MALEEV	NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY ..NEUTRON SCATTERING BY CONDUCTION ELECT
66-KR-01	KRIVOGLAZ, TIKHONOVA	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY
67-EL-03	ELLIOTT, TAYLOR	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ LATTICE DYNAMICS ..IMPURITY EFFECT
67-EL-05	ELLIOTT, THORPE	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY ..PHONON/ MAGNON/ GROUP THEORY
67-EN-01	ENGLMAN, RUPPIN	NEUTRON-SCATTERING-IN-SOLIDS ..LATTICE DYNAMICS
67-KR-01	KREBS, HOELZL	NEUTRON-SCATTERING-IN-SOLIDS ..LATTICE DYNAMICS/ THEORY/ DISPERSION RELATION ..METAL
67-LA-01	LAKATOS	NEUTRON-SCATTERING-IN-SOLIDS/ AL ..LATTICE DYNAMICS/ THEORY/ FREQUENCY DISTRIBUTION
67-MA-03	MARTIN	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID ..DEFECT SCATTERING
67-O'-01	O'CONNER	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ DYNAMICAL THEORY
68-BO-04	BOUITIN, YIP	NEUTRON-SCATTERING-IN-SOLIDS/ NEUTRON-SCATTERING-IN-FLUIDS ..BOOK/ MOLECULAR DYNAMICS/ NEUTRON
68-BU-08	BULANO, DEMICHELIS	NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ GAS/ FREQUENCY DISTRIBUTION/ ..DIFFE
68-CO-01	COCHRAN	NEUTRON-SCATTERING-IN-SOLIDS ..LECTURE NOTE/ CORRELATION FUNCTION
68-CO-02	COCHRAN	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ CORRELATION FUNCTION
68-CO-10	COWLEY	NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ LATTICE DYNAMICS ..MAGNETIC FIELD
68-DE-01	DE-WETTE, RAHMAN	NEUTRON-SCATTERING-IN-SOLIDS ..FREQUENCY DISTRIBUTION/ THEORY/ SOLID ..ONE-PHONON/ COHERE
68-JA-03	JANIK	NEUTRON-SCATTERING-IN-SOLIDS/ NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING BY MOLECULES/ LECTURES

68-KO-01 KOHLER NEUTRON-SCATTERING-IN-SOLIDS ..LATTICE DYNAMICS/ THEORY
 68-KO-04 KOTHARI, GOYAL NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
 68-MA-06 MARTIN NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY ..SCATTERING CROSS SECTION BY INTERSTITIAL ATOM
 69-BL-01 BLASSER, PERETTI+ NEUTRON-SCATTERING-IN-SOLIDS/ V ..THEORY/ HYDROGEN/ INTERSTITIAL ..NUMERICALS
 69-CO-01 COCHRAN NEUTRON-SCATTERING-IN-SOLIDS/ BA.TI.O3/ K.H2.P.O4/ NA.N.O2 ..THEORY/ DIELECTRIC/ CRITICAL SCATT
 69-CO-08 COWLEY, SVENSSON+ NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY
 69-JA-01 JAISWAL, SHARMA NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ ONE-PHONON COHERENT CROSS SECTION ..DOUBLE-TIME GRE
 69-KR-02 KRIVOGLAZ NEUTRON-SCATTERING-IN-SOLIDS ..BOOK
 69-LA-01 LAKATOS, KRUMHANS NEUTRON-SCATTERING-IN-SOLIDS ..POINT-DEFECTS/ THEORY
 69-RU-01 RUIJGROK, DE WETTE+ NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ PAIR CORRELATION
 70-AU-01 AUGST NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ IMPURITY EFFECT/ CUBIC CRYSTAL/ PHONON
 70-TA-01 TANI NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ LATTICE VIBRATION/ GENERALIZED THEORY OF NEUTRON SCATTER
 71-DZ-01 DZYUB, KOCHMARSKY NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ LOCALIZED VIBRATION/ NUMERICAL CALCULATION
 71-LE-02 LENK, SOLBRIG NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MULTIPLE SCATTERING/ PERFECT CRYSTAL
 71-MU-01 MURTAZIN THEORY-OF-SOLIDS/ NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ INTERSTITIAL IMPURITIES/ TWO-TIME GREE
 71-PL-01 PLAKIDA NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLIDS/ LATTICE DYNAMICS/ ANHARMONICITY/ SCATTERING LAW
 71-SO-03 SOLBRIG NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MULTIPLE SCATTERING/ PERFECT CRYSTAL
 71-ST-01 STAMENKOVIC NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ FERROELECTRICS
 71-ST-02 STAMENKOVIC NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ FERROELECTRICS
 71-ST-04 STILLER, SPRINGER NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ QUASI-ELASTIC SCATTERING/ RANDOM MOTION
 72-DZ-02 DZYUB, KOCHMARSKY NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ RESONANCE MODE/ FORCE CONSTANT CHANGE
 72-GI-02 GISSLER NEUTRON-SCATTERING-IN-SOLIDS ..HYDROGEN IN METAL
 72-PL-01 PLAKIDA NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONIC CRYSTAL/ ONE PHONON COHERENT CROSS SECTION
 72-PU-01 PUSTOVOIT THEORY-OF-SOLIDS/ NEUTRON-SCATTERING-IN-SOLIDS ..SEMICONDUCTOR/ SOUND-INSTABILITY CONDITION/ X-
 72-SO-02 SOLBRIG NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MULTIPLE SCATTERING/ PERFECT CRYSTAL
 72-TA-04 TANI NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ NEUTRON SCATTERING BY PHONON/ PHASE TRANSITION
 73-AM-01 AMARAL, VINHAS+ RB/ NEUTRON-SCATTERING-IN-SOLIDS/ POLYDIMETHYLSILOXANE ..EXPERIMENT/ SOLID/ T-O-F/ SIGMA (E)
 73-CO-05 COPLEY NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ DISPERSION CURVE
 73-GI-01 GISSLER, STUMP NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ DIFFUSION OF HYDROGEN IN METAL/ SCATTERING FUNCTION
 73-KI-01 KIM, NELLIN NEUTRON-SCATTERING-IN-SOLIDS ..DYNAMIC STRUCTURE FACTOR/ DISORDERED SOLID/ THEORY
 73-SA-04 SARMA, TEWARI NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ SIGMA (E-E-PRIME,THETA)/ INCOHERENT APPROXIMAT
 73-SC-02 SCHUSTER NEUTRON-SCATTERING-IN-SOLIDS ..SUPERCONDUCTOR
 74-AX-01 AXE NEUTRON-SCATTERING-IN-SOLIDS ..INELASTIC COHERENT SCATTERING/ PHONON/ AMORPHOUS SOLIDS
 74-TA-01 TANI NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ STRUCTURAL PHASE TRANSITION/ MAGNETIC SYSTEM/ ANHARMONIC
 75-AG-01 AGRANOVICH, LALOV NEUTRON-SCATTERING-IN-SOLIDS ..NEUTRON-PHOTON INTERACTION/ CRYSTAL LATTICE
 75-CA-02 CARPENTER, PELIZZARI NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING LAW/ AMORPHOUS SOLID/ THEORY
 75-CA-03 CARPENTER, PELIZZARI NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING LAW/ THEORY
 75-ST-01 STAMENKOVIC NEUTRON-SCATTERING-IN-SOLIDS ..SLOW NEUTRON SCATTERING/ HYDROGEN BOUNDED FERROELECTRICS/ THEORY
 76-AK-01 AKCASU, GUROL NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SCATTERING LAW/ QUASIELASTIC
 76-BL-02 BLUME NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MAGNETIC SCATTERING/ POLARIZATION DEPENDENCE
 76-HA-04 HANSEN, KLEIN NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ SIGMA(THETA,E)/ MOLECULAR DYNAMICS
 76-SA-01 SACCHETTI, SELLONI NEUTRON-SCATTERING-IN-SOLIDS/ MG.O ..THEORY/ SOLID/ FREQUENCY DISTRIBUTION
 76-ST-08 STOCKMYER NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ DIFFUSION/ ADSORBED HYDROCARBON
 77-GA-01 GAIROLA, SEMWAL NEUTRON-SCATTERING-IN-SOLIDS ..DISPLACIVE FERROELECTRICS/ LATTICE DYNAMICS
 77-GA-02 GAIROLA, SEMWAL NEUTRON-SCATTERING-IN-SOLIDS ..DISPLACIVE FERROELECTRICS/ WELL ABOVE CURIE TEMP.
 77-GU-01 GUROL NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SCATTERING LAW/ POLYMER SOLUTION
 77-HU-01 HUELLER NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ FOUR PROTON GROUP (C.H4, N.H4)/ LIBRATIONAL STATE
 77-KU-04 KUTNER, SOSNOWSKA NEUTRON-SCATTERING-IN-SOLIDS ..H-METAL SYSTEM/ THEORY/ JUMP DIFFUSION
 77-SC-02 SCHELTEN REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-SOLIDS ..SMALL ANGLE SCATTERING/ DIFFRACTION FROM FLUX L
 77-TE-01 TEMME NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ CRYSTAL MESOPHASE
 77-WO-01 WOLF NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ DIFFUSION

1. 3 NEUTRON-SCATTERING-IN-FLUIDS

41-SA-01 SACHS, TELLER NEUTRON-SCATTERING-IN-FLUIDS/ H2/ C.H4/ N.H3/ H2.O ..SCATTERING THEORY ..MOLECULAR GASES
 51-PL-01 PLACZEK, NIJBOER+ NEUTRON-SCATTERING-IN-FLUIDS/ HG ..THEORY/ SIGMA(E,E-PRIME,THETA)/ SOLID/ LIQUID/ SCATT
 54-VA-01 WICK NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
 54-WI-01 WICK NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ MOLECULAR DYNAMICS
 56-KO-01 KOTHARI, SINGWI+ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID METAL/ QUASI-CRYSTALLINE MODEL
 56-ZE-01 ZEMACH, GLAUBER NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS/ SCATTERING THEORY
 57-KR-01 KRIEGER, NELKIN NEUTRON-SCATTERING-IN-FLUIDS/ C.H2/ H2.O ..SCATTERING THEORY ..MOLECULE
 58-VA-01 VINEYARD NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ LIQUID/ GAS
 58-VI-01 VINEYARD NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID DYNAMICS ..CONVOLUTION APPROXIMATION
 59-DE-01 DE-GENNES NEUTRON-SCATTERING-IN-FLUIDS/ AR ..SCATTERING THEORY/ ..LIQUID DYNAMICS/ MOMENTS METHOD
 59-VO-01 VOLKIN, C. NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ GAS/ MOLECULAR ROTATIONS/ SCATTERING THEORY
 60-NE-02 NELKIN NEUTRON-SCATTERING-IN-FLUIDS/ H2.O ..THEORY/ MOLECULAR DYNAMICS ..DIFFERENTIAL AND TOTAL CROSS
 60-VI-01 VINEYARD NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
 61-CH-01 CHUDLEY, ELLIOTT NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS/ JUMP DIFFUSION MODEL
 61-DE-01 DE-GENNES NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ NORMAL LIQUIDS
 61-MO-01 MORALES-AMADO, OSBORN NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
 61-RA-01 RAHMAN, SINGWI+ NEUTRON-SCATTERING-IN-FLUIDS/ PB ..THEORY ..LIQUID DYNAMICS
 61-RA-02 RAHMAN NEUTRON-SCATTERING-IN-FLUIDS/ METHANE ..THEORY/ SCATTERING FUNCTION
 61-RA-03 RAHMAN NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ MOLECULAR DYNAMICS/ C.H4
 62-CO-02 COLE NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ ELASTIC CROSS SECTION
 62-EG-01 EGELSTAFF NEUTRON-SCATTERING-IN-FLUIDS/ H2.O ..THEORY/ LIQUID DYNAMICS
 62-GL-01 GLAUBER NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
 62-MC-02 MCMURRY NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ GAS/ SCATTERING FUNCTION
 62-PA-02 PARRY, TURNER HE/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ SCATTERING LAW/ CORRELATION FUNCTION ..LI
 62-RA-01 RAHMAN, SINGWI+ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS
 62-RA-02 RAHMAN, SINGWI+ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS
 62-YI-01 YIP, OSBORN NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ LIQUID
 63-AK-01 AKHIEZER, AKHIEZER+ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID ..FERMI LIQUID/ ZERO-SOUND/ SPIN
 63-CO-06 COLE NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
 63-OS-01 OSALSKI NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS/ QUASI-CRYSTALLINE MODEL
 63-SI-03 SINGWI, SJOELANDER+ NEUTRON-SCATTERING-IN-FLUIDS/ H2.O/ PB ..THEORY/ LIQUID/ FREQUENCY DISTRIBUTION/ SCATT
 64-EG-01 EGELSTAFF NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING LAW/ MEAN SQUARE DISPLACEMENT/ DIFFUSION PARAMETER/ L
 64-FU-01 FULINSKI NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY
 64-NE-01 NELKIN, GHATAK NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING FUNCTION ..DILUTE FLUID
 64-SI-01 SINGWI NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID DYNAMICS ..COHERENT SCATTERING/ WIDTH FUNCTION/ @
 64-YI-01 YIP, NELKIN NEUTRON-SCATTERING-IN-FLUIDS ..CORRELATION FUNCTION/ LIQUID
 64-ZW-01 ZWANZIG NEUTRON-SCATTERING-IN-FLUIDS ..INCOHERENT APPROXIMATION/ SCATTERING THEORY/ SCATTERING LAW ..GE
 65-DE-01 DE-GENNES NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ QUASI-ELASTIC/ DILUTE POLYMER SOLUTIONS
 65-FU-01 FULINSKI NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY ..INCOHERENT SCATTERING FUNCTION
 65-GI-01 GIBBS, FERZIGER NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ MOLECULAR DYNAMICS ..KINETIC MODEL/ CORRELA
 65-NE-01 NELKIN, VAN-LEEUEWEN+ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..KINETIC THEORY
 65-RA-01 RAHMAN NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID
 65-SE-01 SEARS NEUTRON-SCATTERING-IN-FLUIDS/ AR ..LIQUID/ CORRELATION FUNCTION
 65-SI-01 SINGAR NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ GAS ..SELF-CORRELATION FUNCTION
 65-SI-05 SINGWI, ANDERSON NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY ..KOHN EFFECT
 65-TU-03 TURCHIN, TARASOV NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY ..(ENGLISH TRANSLATION FOR THIS PAPER IS
 65-YI-01 YIP, RANGANATHAN NEUTRON-SCATTERING-IN-FLUIDS ..DILUTE GAS/ SCATTERING FUNCTION
 66-AR-01 ARDENTE, NARDELLI+ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ CORRELATION FUNCTION/ SCATTERING FUNCTION ..HIND
 66-AR-02 ARDENTE, NARDELLI+ NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS/ LIQUID/ THEORY/ FREQUENCY DISTRIBUTI

66-DE-04	DESAI, NELKIN	NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ GAS/ CORRELATION FUNCTION ..NEUTRON DIFFUSION
66-DO-03	DORRER	NEUTRON-SCATTERING-IN-FLUIDS ..EXPERIMENT/ LATTICE DYNAMICS/ MOLECULAR DYNAMICS/ DISPERSION RELATION
66-IV-01	IVANOV	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ MOLECULAR DYNAMICS ..QUASI-ELASTIC SCATTERING
66-IV-02	IVANOV	NEUTRON-SCATTERING-IN-FLUIDS ..GENERAL-THEORIES
66-KU-02	KURI, SAUER	NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS ..LINEAR MOLECULES
66-NA-01	NAKAHARA, TAKAHASHI	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS
66-NA-02	NAKAHARA, TAKAHASHI	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS
66-NE-01	NELKIN, YIP	NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING-LAW
66-PU-01	PURCHITT	NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING LAW/ THEORY/ LIQUID/ INCOHERENT APPROXIMATION ..QUASI-ELASTIC
66-RA-01	RAHMAN	NEUTRON-SCATTERING-IN-FLUIDS/ AR ..LIQUID/ FREQUENCY DISTRIBUTION ..COMPUTER EXPERIMENT/ 85.5DK
66-SE-01	SEARS	NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ MOLECULAR ROTATIONS/ LIQUID/ THEORY ..HOMONUCLEAR
66-SE-02	SEARS	NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ MOLECULAR ROTATION/ LIQUID/ THEORY ..HOMONUCLEAR
66-SE-03	SEARS	NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ LIQUID/ THEORY ..LAW OF CORRESPONDING STATES
66-SI-03	SINHA, VENKATARAMAN	NEUTRON-SCATTERING-IN-FLUIDS/ METHANE ..MOLECULAR DYNAMICS ..DIFFERENTIAL CROSS SECTION
66-VE-02	VENKATARAMAN	REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID DYNAMICS
67-DE-02	DESAI, YIP	NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID/ THEORY ..SUM RULE
67-EG-04	EGELSTAFF	REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ GAS/ LIQUID/
67-FE-01	FERZIGER, FEINSTEIN	NEUTRON-SCATTERING-IN-FLUIDS/ NA ..SCATTERING THEORY/ LIQUID DYNAMICS
67-FE-02	FERZIGER, FEINSTEIN	NA/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID DYNAMICS
67-LU-01	LURIE	NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS/ GAS/ THEORY/ CROSS SECTION EVALUATION
67-RA-01	RAHMAN	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
67-SI-02	STECKI	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ SCATTERING FUNCTION ..G(R,T)
68-AG-02	AGRAWAL, DESAI+	NEUTRON-SCATTERING-IN-FLUIDS/ AR/ NA/ PB/ METHANE ..THEORY ..MODEL CALCULATION
68-BU-04	BOUTIN, YIP	NEUTRON-SCATTERING-IN-SOLIDS/ NEUTRON-SCATTERING-IN-FLUIDS ..BOOK/ MOLECULAR DYNAMICS/ NEUTRON
68-BU-07	BUZANO, RASETTI	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SCATTERING BY MOLECULE
68-CO-12	COWLEY	NEUTRON-SCATTERING-IN-FLUIDS ..TIME-OF-FLIGHT/ COLLECTIVE MODE
68-FR-02	FRANCHETTI	THEORY-OF-FLUIDS/ NEUTRON-SCATTERING-IN-FLUIDS ..MONATOMIC LIQUIDS/ RADIAL DENSITY/ SCATTERING
68-GL-03	GLASS, RICE	NEUTRON-SCATTERING-IN-FLUIDS/ AR ..THEORY/ LIQUID/ CORRELATION FUNCTION ..COHERENT-SCATTERING
68-GL-04	GLASS, RICE	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ CORRELATION FUNCTION/ DIFFERENTIAL SCATTERING CROSS SECTION
68-JA-01	JACROT	NEUTRON-SCATTERING-IN-FLUIDS ..PHASE TRANSITION/ CRITICAL SCATTERING/ LECTURES
68-JA-03	JANIK	NEUTRON-SCATTERING-IN-SOLIDS/ NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING BY MOLECULES/ LECTURES
68-LA-02	LARSSON	NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID DYNAMICS/ REVIEW
68-LA-03	LARSSON	NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID/ DIFFUSION PARAMETER ..ROTATIONAL DIFFUSION/ TRANSLATIONAL
68-NE-02	NELKIN, ORTOLEVA	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID ..KINETIC THEORY/ COLLECTIVE MODES
68-NO-02	NORTH, ENDERBY+	NEUTRON-SCATTERING-IN-FLUIDS ..STRUCTURE FACTOR/ LIQUID ..NEUTRON DIFFRACTION/ LIQUID META
68-NO-04	NOSSAL	NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID/ THEORY
68-PU-02	PURCHITT	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ QUASI ELASTIC/ INCOHERENT
68-RA-01	RAHMAN	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION
68-RI-01	RICHTER, VOSS	AR/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LINEARIZED VLASOV-BOLTZMAN EQUATION
68-SC-07	SCHOFIELD	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SCATTERING FUNCTION
68-SH-03	SHIMIZU	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ FREQUENCY DISTRIBUTION/ CORRELATION FUNCTION/ LIQUID/ MO
68-SI-02	SINGWI, SKOELD+	NEUTRON-SCATTERING-IN-FLUIDS/ AR ..THEORY/ LIQUID/ MOLECULAR DYNAMICS
68-SI-03	SINGWI	NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID DYNAMICS/ LECTURE NOTE
68-SY-01	SYKES	NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID/ SCATTERING LAW/ DISPERSION RELATION/ THEORY
69-AG-01	AGRAWAL, YIP	NEUTRON-SCATTERING-IN-FLUIDS ..CROSS SECTION EVALUATION/ LIQUID ..MOLECULAR LIQUID
69-CH-03	CHUNG, YIP	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ CORRELATION FUNCTION/ LIQUID
69-GY-01	GYORFFY, MARCH	NEUTRON-SCATTERING-IN-FLUIDS/ THEORY-OF-FLUIDS ..INTERMEDIATE SCATTERING FUNCTION/ LIQUID
69-HU-01	HUBBARD, BEERY	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID
69-NE-01	NELKIN	NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID/ THEORY/ CORRELATION FUNCTION/ STATISTICAL MECHANICS ..RPA
69-NE-02	NELKIN	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
69-OR-01	ORTOLEVA, NELKIN	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID ..AUTO-CORRELATION FUNCTION/ SINGLE PARTICLE
69-SC-01	SCHNEIDER, STOLL+	NEUTRON-SCATTERING-IN-FLUIDS/ AR ..DISPERSION

70-LA-01	LADO	NEUTRON-SCATTERING-IN-FLUIDS ..VLASOV EQUATION1 THEORY ..TIME-DEPENDENT DIRECT CORRELATION FUNCT
70-OR-01	ORTOLEVA-JR	NEUTRON-SCATTERING-IN-FLUIDS ..VLASOV EQUATION/ THEORY
70-OR-02	ORTOLEVA, NELKIN	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ VLASOV EQUATION/ COLLECTIVE MODES
70-RA-06	RAO	REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-FLUIDS ..ATOMIC CORRELATION/ LIQUID
71-AI-01	AILAWADI, RAHMAN+	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ CURRENT-CORRELATION-FUNCTION ..GAUSSIAN-DECAY-MEM
71-BA-01	BAIJAL, CHATURVEDI	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SCATTERING CROSS SECTION/ CLASSICAL LIQUID/ NON-
71-HA-02	HAMA, NAKAMURA	NEUTRON-SCATTERING-IN-FLUIDS/ METHANE ..THEORY/ MOLECULE/ GAS/ ROTATIONAL CORRELATION/ CROS
71-KI-01	KIM, NELKIN	NEUTRON-SCATTERING-IN-FLUIDS ..MORI-METHOD
71-LA-01	LARSSON	NEUTRON-SCATTERING-IN-FLUIDS ..QUASI-ELASTIC-PEAK/ THEORY ..UNCORRELATED TRANSLATIONAL AND ROTA
71-NA-01	NAKAHARA	NEUTRON-SCATTERING-IN-FLUIDS/ NA ..THEORY/ SCATTERING SIGMA/ LIQUID METAL
71-NI-06	NISHIGORI, SEKIYA	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SCATTERING SIGMA/ MEAN-SQUARE DISPLACEMENT
71-NI-07	NISHIGORI, SEKIYA	NEUTRON-SCATTERING-IN-FLUIDS/ H ₂ CL ..THEORY/ SCATTERING SIGMA/ GAS
71-RO-04	ROSCISZEWSKI	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ INCOHERENT/ QUASI-ELASTIC/ LIQUID CRYSTAL
72-KU-02	KUGLER	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ CLASSICAL LIQUID/ INCOHERENT
72-LA-04	LARSSON	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ DIFFUSION/ CENTER-OF-MASS MOTION/ ROTATIONAL MOT
72-SE-01	SEARS	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ SCATTERING FUNCTION/ SCATTERING THEORY
73-BE-01	BEEBY	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LONG-WAVELENGTH LIMIT/ SCATTERING FUNCTION
73-BE-02	BELL, KOLLMAR+	NE/ NEUTRON-SCATTERING-IN-FLUIDS ..EXPERIMENT/ LIQUID/ NEUTRON SPECTRUM ..COHERENT SCATTERI
73-KE-03	KERR, SINGWI	NE/ NEUTRON-SCATTERING-IN-FLUIDS ..QUANTUM EFFECT ..LARGE-Q-REGION
73-LA-02	LARSSON	NEUTRON-SCATTERING-IN-FLUIDS ..ROTATIONAL MOTION/ MOLECULE
73-MI-04	MISAWA, FUKUSHIMA+	BR/ NEUTRON-SCATTERING-IN-FLUIDS ..EXPERIMENT/ LIQUID/ T-O-F
73-OL-01	OLIVEI	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ NEMATIC LIQUID CRYSTAL/ QUASI-ELASTIC PEAK
74-BA-01	BARKER, GASKELL	NEUTRON-SCATTERING-IN-FLUIDS/ RB ..TRIPLE-PEAKS
74-CO-03	COPLEY, ROWE	RB/ NEUTRON-SCATTERING-IN-FLUIDS ..DISPERSION CURVE/ ZERO SOUND/ LIQUID
74-PA-08	PARKINELLO, TOSI+	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ BINARY MIXTURES/ ISOTOPIC-EFFECTS
74-RA-02	RAHMAN	RB/ NEUTRON-SCATTERING-IN-FLUIDS ..DISPERSION CURVE/ ZERO SOUND
75-DI-01	DIANOUX, VOLINO+	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SIMPLE DIFFUSION/ UNIAXIAL ROTATIONAL DIFFUSION/ R
75-DI-02	DIANOUX, VOLINO+	NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING LAW/ LIQUID CRYSTAL
76-BL-01	BLUM, NARTEN+	NEUTRON-SCATTERING-IN-FLUIDS/ C ₆ CL ₄ ..THEORY/ NEUTRON DIFFRACTION/ LIQUID/ SCATTERIN FUNCTION
76-CA-03	CAPNEIRO	H ₂ / AR/ NEUTRON-SCATTERING-IN-FLUIDS/ NA ..FREQUENCY-SPECTRA
76-CU-07	COPLEY, RAHMAN	RB, BR / NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS/ SCATTERING-FUNCTION/ PAIR-CORREL
76-DU-03	DUVAL, DUPLESSIX+	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SMALL-ANGLE/ COPOLYMER SOLUTION
76-HA-08	HAUS, MEIJER	NEUTRON-SCATTERING-IN-FLUIDS ..MEMORY-FUNCTION-METHOD/ THEORY
76-KA-02	KAHOL, BANSAL+	RB/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ MEMORY-FUNCTION-METHOD
76-LU-04	LOVESEY, SCHOFIELD	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SCATTERING BY SMALL PARTICLES/ SCATTERING FUNCTI
76-SE-01	SEARS	NEUTRON-SCATTERING-IN-FLUIDS/ HE ..THEORY/ SCATTERING SIGMA/ ABSORBING MEDIA
76-TE-01	TEWARI, TEWARI	AR/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID ..85.2DK
77-BA-04	BANSAL, NAGHIZADEH	NEUTRON-SCATTERING-IN-FLUIDS/ THEORY-OF-FLUIDS/ RUBIDIUM ..COHERENT SCATTERING FUNCTION
77-MU-01	MUNAKATA, IGARASHI	NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ INCOHERENT SCATTERING FUNCTION
77-YU-02	YOSHIDA, TAKENO	THEORY-OF-FLUIDS/ NEUTRON-SCATTERING-IN-FLUIDS/ AR ..INCOHERENT SCATTERING FUNCTION/ CLASS

1. 4 THEORY-OF-SOLIDS

58-SJ-01	SJOELANDER	THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS ..SCATTERING CROSS SECTION
63-BA-04	BARRON, LEADBETTER+	THEORY-OF-SOLIDS ..DEBYE-WALLER FACTOR/ THEORY
63-CO-02	COCHRAN, COWLEY	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY
63-SQ-02	SQUIRES	THEORY-OF-SOLIDS ..INTERATOMIC FORCE CONSTANTS/ DISPERSION RELATION/ THEORY/ SOLID ..CUBIC CRY
64-SA-01	BAYM	THEORY-OF-SOLIDS ..SCATTERING LAW
65-AK-02	AKCASU, OSBORN	THEORY-OF-SOLIDS/ SCATTERING-THEORIES ..DAMPING THEORY/ SCATTERING CROSS SECTION/ ANHARMONI
65-CH-01	CHAMPIER, TOUSSAINT	THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
65-CO-01	COCHRAN	THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID

65-CO-04 COWLEY, COWLEY THEORY-OF-SOLIDS ..ANHARMONICITY/ THEORY ..ALKALI HALIDE
 65-CZ-01 CZACHOR THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ DISPERSION RELATION/ THEORY/ SOLID ..HEXAGONAL CLOSED PACK
 65-DI-01 DICK THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
 65-HA-05 HARRISON THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
 65-JO-01 JOSHI, SHARMA THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS
 65-KA-01 KAGAN, ZHERNOV THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS
 65-LA-03 LAX THEORY-OF-SOLIDS ..THEORY
 65-LE-01 LEHMAN, WOLFMAN+ THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
 65-MA-03 MARADUDIN THEORY-OF-SOLIDS ..ANHARMONICITY/ THEORY ..HELMHOLTZ FREE ENERGY
 65-PA-04 PATHAK THEORY-OF-SOLIDS ..ANHARMONICITY/ DISPERSION RELATION/ THEORY ..GREEN FUNCTION
 65-RO-03 ROSENSTOCK THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
 65-SI-02 SINGH, MANI+ THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..ALKALI METAL
 65-SR-01 SRINIVASAN, RAO THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS
 65-SR-02 SRIVASTAVA THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..ELECTRON-PHONON INTER
 65-SU-02 SUNAKAWA, / FUKUI THEORY-OF-SOLIDS ..PSEUDOPOTENTIAL
 66-BL-01 BLANK, KANER THEORY-OF-SOLIDS ..THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS/ SOLID ..METAL
 66-CO-03 COWLEY, COWLEY K.BR/ NA.I/ THEORY-OF-SOLIDS ..THEORY/ ANHARMONICITY/ PHONON DISPERSION
 66-CZ-01 CZACHOR THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY/ SOLID/ DISPERSION RELATION ..METAL
 66-DE-02 DELTOUR THEORY-OF-SOLIDS ..BORN-VON KARMAN MODEL/ FREQUENCY SPECTRUM/ THEORY ..MOMENT METHOD/ MONTE CAR
 66-GI-01 GILAT, RAUBENHEIMER THEORY-OF-SOLIDS ..FREQUENCY DISTRIBUTION/ SOLID/ THEORY ..EXTRAPOLATION METHOD
 66-MA-01 MAHAN THEORY-OF-SOLIDS ..THEORY ..ELECTRON-PHONON INTERACTION
 66-MI-01 MINTS THEORY-OF-SOLIDS ..SOLID/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS ..DISORDERED LINEAR CHAIN
 66-NU-01 NUSIMOVICI, BIRMAN THEORY-OF-SOLIDS ..DISPERSION RELATION/ BORN-VON KARMAN MODEL/ THEORY ..SUM RULE/ WURTZ
 66-PA-05 PAYTON THEORY-OF-SOLIDS ..HARMONIC APPROXIMATION/ THEORY
 66-PA-06 PAYTON, VISSCHER THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION/ THEORY ..DISORDERED HARMONIC
 66-RA-05 RASHBA THEORY-OF-SOLIDS ..THEORY/ MOLECULAR DYNAMICS
 66-SA-04 SAUER THEORY-OF-SOLIDS ..MOLECULAR DYNAMICS/ SOLID
 66-SL-01 SLATER THEORY-OF-SOLIDS ..THEORY ..ELECTRON BAND/ GREEN FUNCTION
 67-BA-03 BARKER-JR, VERLESER THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY
 67-DE-01 DEPLANTE CR/ FE/ W/ THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY/ DISPERSION RELATION ..CUBIC METAL/ KOHN EFFECT
 67-GI-02 GILAT THEORY-OF-SOLIDS ..THEORY/ PHONON SPECTRA/ BCC METALS
 67-IS-01 ISHIKAWA THEORY-OF-SOLIDS ..ANHARMONIC CRYSTAL/ PHONON SHIFT AND DAMPING/ QUASI-HARMONIC APPROXIMATION
 67-LO-01 LORD-JR THEORY-OF-SOLIDS ..MAGNON-PHONON COUPLING
 67-MA-01 MARSTON, DICK THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY
 67-OV-01 OVERTON-JR, SCHUCH THEORY-OF-SOLIDS ..THEORY
 67-PA-05 PATHAK, DEO THEORY-OF-SOLIDS ..SOLID/ LATTICE DYNAMICS ..ANHARMONIC EFFECT
 67-TA-02 TASAMI, ZERBI THEORY-OF-SOLIDS ..FREQUENCY DISTRIBUTION/ RANDOM POLYMER
 67-TA-03 TAYLOR THEORY-OF-SOLIDS ..CRYSTAL VIBRATION/ IMPERFECT CRYSTALS WITH DEFECTS
 67-WA-01 WAGNER THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS
 68-CH-02 CHEVEAU THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..METAL
 68-CO-07 COHEN, MARTIN+ THEORY-OF-SOLIDS ..LATTICE DYNAMICS ..FORCE CONSTANTS
 68-DE-03 DELTOUR THEORY-OF-SOLIDS ..FREQUENCY DISTRIBUTION/ THEORY/ SOLID ..CONTINUED FRACTION/ LINEAR CHAIN
 68-HA-04 HARTMANN THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..ALLOY/ IMPURITY EFFECT/ DOUB
 68-HA-05 HAUTECLER, NEVE-DE-MEVERGIES THEORY-OF-SOLIDS ..LATTICE DYNAMICS ..METAL/ HEXAGONAL STRUCTURE
 68-HO-01 HO THEORY-OF-SOLIDS/ NA/ K ..DISPERSION RELATION/ THEORY/ LATTICE DYNAMICS
 68-IY-01 IYENGAR THEORY-OF-SOLIDS ..LATTICE DYNAMICS ..LECTURE NOTE
 68-KA-01 KAGAN, BROVMAN THEORY-OF-SOLIDS ..LATTICE DYNAMICS ..METAL/ ELECTRON CONTRIBUTION
 68-KO-03 KOTHARI, SINGAL THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS
 68-LE-02 LEIBFRIED THEORY-OF-SOLIDS ..LECTURE NOTE
 68-MA-01 MANNHEIM THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY
 68-SI-04 SINHA THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS ..METAL
 68-WA-01 WAGNER THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS

69-AU-01	AUGST, ZHERNOV	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ IMPURITY EFFECT
69-CA-02	CARBOTTE, DYNES+	THEORY-OF-SOLIDS ..FORCE CONSTANTS ARE TAKEN FROM EXPERIMENTAL DISPERSION CURVES, ELECTRO
69-GA-01	GARCIA-COLIN, KOO	THEORY-OF-SOLIDS ..CRITICAL BEHAVIOUR/ SCALING LAW
69-GI-01	GILAT	THEORY-OF-SOLIDS ..LATTICE DYNAMICS ..ACCIDENTAL DEGENERACIES/ CUBIC CRYSTAL
69-LE-04	LEATH, GOODMAN	THEORY-OF-SOLIDS ..FREQUENCY SPECTRUM/ THEORY/ GREEN FUNCTION
69-MA-02	MARADUDIN, OITMAA	THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS ..IMPURITY VIBRATION
69-OI-01	OITMAA, MARADUDIN	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ IMPERFECT CRYSTAL ..CRYSTAL WITH EXTENDED POINT DEF
69-PL-01	PLAKIDA, SIKLOS	THEORY-OF-SOLIDS ..LINEAR CHAIN/ ANHARMONIC LATTICE/ FREQUENCY AND DAMPING
69-PL-02	PLAKIDA, SIKLOS	THEORY-OF-SOLIDS ..ANHARMONIC CRYSTAL/ DOUBLE-TIME GREEN FUNCTION/ FREQUENCY AND DAMPING
69-RA-01	RANNINGER	THEORY-OF-SOLIDS ..CORRELATION FUNCTION/ SECOND SOUND ..CRYSTAL LATTICE
69-SH-01	SHARAN, BAJPAI	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ FORCE CONSTANT/ ELASTIC CONSTANT ..BODY CENTRED TETRAG
69-SI-02	SINHA	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ SOLID/ THEORY
69-TO-02	TONG, MARADUDIN	THEORY-OF-SOLIDS ..THEORY
69-WU-01	WU, TAYLOR	THEORY-OF-SOLIDS ..THEORY/ FREQUENCY SPECTRUM/ CHAIN
70-AC-01	ACHAR, BARSH	THEORY-OF-SOLIDS ..THEORY ..DEFECT/ LOCALIZED MODE
70-BO-02	BOCCHIERI, SCOTTI+	THEORY-OF-SOLIDS ..THEORY ..ONE-DIMENSIONAL LATTICE/ ERGODICITY/ NUMERICAL STUDY/ CLASS
70-ID-01	IDA	THEORY-OF-SOLIDS ..ANHARMONICITY/ HEAT CAPACITY
70-JO-01	JOHNSON	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY
70-KE-04	KERR, SJOELANDER	THEORY-OF-SOLIDS ..LATTICE DYNAMICS
70-KU-05	KUSHWAHA, RAJPUT	THEORY-OF-SOLIDS/ NA/ K ..PHONON DISPERSION CURVE/ METAL/ BCC
70-PL-01	PLAKIDA, SIKLOS	THEORY-OF-SOLIDS ..ANHARMONIC THREE DIMENSIONAL LATTICE/ F.C.C. LATTICE
70-RI-02	RIEDER	THEORY-OF-SOLIDS ..THEORY/ LIGHT IMPURITY MODE/ ESTIMATION OF FORCE CONSTANT CHANGE
70-RI-03	RIEDER	THEORY-OF-SOLIDS ..THEORY/ LIGHT IMPURITY MODE/ ESTIMATION OF FORCE CONSTANT CHANGE
70-SH-01	SHAPIRO	THEORY-OF-SOLIDS ..FREQUENCY DISTRIBUTION/ THEORY ..LATTICE DYNAMICAL CALCULATION OF LINDEMANN
70-SH-02	SHAPIRO, KNOPOFF	THEORY-OF-SOLIDS ..THEORY
70-SI-01	SIKLOS	THEORY-OF-SOLIDS ..THEORY/ ANHARMONICITY ..LINEAR CHAIN/ PSEUDOHARMONIC APPROXIMATION/ MORSE PO
70-SI-02	SIKLOS	THEORY-OF-SOLIDS ..THEORY/ SOLID/ ANHARMONICITY ..PSEUDOHARMONIC APPROXIMATION/ MORSE POTENTIAL
70-SI-03	SINGH, JOSHI	THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL/ ME
70-SL-01	SLAGGIE	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ SOLID
70-TA-02	TAYLOR, WU	THEORY-OF-SOLIDS ..GLASS/ DISORDERED LATTICE/ FREQUENCY SPECTRUM ..AMORPHOUS
70-VE-01	VENKATARAMAN, SAHNI	THEORY-OF-SOLIDS/ REVIEW-ARTICLES ..FORMAL THEORY/ MOLECULAR CRYSTAL/ COMPLEX IONIC CR
70-WE-03	WERTHAMER	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ ANHARMONICS ..PRESSURE/ ELASTIC CONSTANT/ SPECIFIC HEAT
71-BU-02	BURSTEIN, MARADUDIN+	THEORY-OF-SOLIDS ..LYDDANE-SACHS-TELLER RELATIONS/ FINITE WAVE VECTOR
71-CH-02	CHEN, STEELE	THEORY-OF-SOLIDS ..THEORY/ MOLECULAR DYNAMICS/ LINIER MOLECULE
71-HA-01	HALL, MATTEW	THEORY-OF-SOLIDS ..LATTICE VIBRATION/ ORDER-DISORDER TRANSFORMATION/ BINARY ALLOY
71-HU-01	HUELLER	THEORY-OF-SOLIDS/ ARGON/ KRYPTON/ XENON ..CAUCHY-RELATION
71-KL-01	KLEIN, BARKER+	THEORY-OF-SOLIDS/ AR ..40K/ 40DK/ 77DK
71-KL-02	KLEIN	THEORY-OF-SOLIDS ..THEORY/ PHONON SPECTRUM/ BETA-TUNGSTEN COMPOUNDS
71-KU-04	KUSHWAHA, SINGH	THEORY-OF-SOLIDS/ CS ..THEORY/ PHONON DISPERSION
71-LE-01	LEIGH, SZIGETI+	THEORY-OF-SOLIDS ..THEORY/ FORCE CONSTANT/ PHONON FREQUENCY
71-MU-01	MURTAZIN	THEORY-OF-SOLIDS/ NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ INTERSTITIAL IMPURITIES/ TWO-TIME GREE
71-NA-02	NAMJOSHI, MITRA+	THEORY-OF-SOLIDS/ NA/F/ NA/CL ..LATTICE DYNAMICS/ DISPERSION RELATION/ RIGID ION MODEL US
71-PI-01	PICK	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ MICROSCOPIC THEORY/ SHELL MODEL/ INSULATORS
71-PL-02	PLAKIDA	THEORY-OF-SOLIDS ..THEORY/ ANHARMONIC METAL/ PHONON SPECTRUM
71-RA-02	RAICH, ETTERS	THEORY-OF-SOLIDS ..THEORY/ FREQUENCY DISTRIBUTION FUNCTION ..ORIENTATIONAL ORDER DISORDER TR
71-SI-03	SINHA, GUPTA	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ MICROSCOPIC APPROACH
71-SI-01	SZIGETI	THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ FORCE CONSTANTS
71-TA-02	TAKENO, GODA	THEORY-OF-FLUIDS/ THEORY-OF-SOLIDS ..THEORY/ DISORDERED SYSTEM/ AMORPHOUS SOLID/ CLASSICAL LI
71-TO-02	TOWERS	THEORY-OF-SOLIDS ..LATTICE VIBRATION/ ALLOYS/ SHORT-RANGE ORDER
71-WA-04	WARSHTEL	THEORY-OF-SOLIDS ..LATTICE VIBRATION/ MOLECULAR CRYSTAL/ ANHARMONICITY
72-AL-05	ALLEN	THEORY-OF-SOLIDS ..PHONON WIDTHS/ ELECTRON-PHONON INTERACTION/ SUPERCONDUCTIVITY
72-CO-05	COWLEY	THEORY-OF-SOLIDS/ SCATTERING-THEORIES ..THEORY/ PHONON/ ALLOYS/ ORDER-DISORDER STATE

72-DZ-01 DZYUB, KOCHMARSKY THEORY-OF-SOLIDS ..PHONON DISPERSION/ WITH SUBSTITUTIONAL IMPURITIES
 72-HA-01 HANKE, RILZ THEORY-OF-SOLIDS/ REVIEW-ARTICLES ..MICROSCOPIC THEORY/ PHONON/ METAL/ REVIEW
 72-HO-02 THEORY-OF-SOLIDS/ HE/ NE ..QUANTUM CRYSTALS/ PHONON SPECTRUM
 72-HO-04 HOKOVITZ, GUTFREUND+ THEORY-OF-SOLIDS ..THEORY/ PHONON SPECTRUM/ EFFECT OF A PLANAR FERMI SURFACE
 72-IS-01 ISHIBASHI, TAKAGI THEORY-OF-SOLIDS ..COMPUTER EXPERIMENT/ DYNAMICS/ LINEAR CHAIN/ DOUBLE MINIMUM
 72-JA-02 JACOBI THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS ..TRANSLATIONAL AND LIBRATIONAL MODES
 72-KA-06 KANAMORI THEORY-OF-SOLIDS ..JAHN-TELLER EFFECT/ PHONON
 72-LI-01 LITZMAN, BARTISEK+ THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ DEFECT/ LONG RANGE INTERACTION/ GREEN FUNCTION
 72-NA-02 NAKAMURA, YONEZAWA THEORY-OF-SOLIDS ..THEORY/ DISORDERED SYSTEM/ PHONON FREQUENCY SPECTRA
 72-NA-04 NAMAIZAWA THEORY-OF-SOLIDS ..THEORY/ QUANTUM LATTICE DYNAMICS/ PHONON DISPERSION
 72-PA-04 PASZKIEWICZ THEORY-OF-SOLIDS ..THEORY/ SOLID/ ANHARMONICITY ..ELASTIC CONSTANTS
 72-PA-06 PAWLEY THEORY-OF-SOLIDS ..THEORY/ MOLECULAR LATTICE DYNAMICS/ ANALYTIC FORMULATION/ PAIR POTENTIAL
 72-PU-01 PUSTOVOIT THEORY-OF-SOLIDS/ NEUTRON-SCATTERING-IN-SOLIDS ..SEMICONDUCTOR/ SOUND-INSTABILITY CONDITION/ X-
 72-RU-02 RUVALDS, TUETTO+ THEORY-OF-SOLIDS ..THEORY/ RESONANCE STATE OF TWO PHONONS
 72-SH-01 SHAM THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS/ ELASTIC CONSTANT ..METAL
 72-SH-02 SHAM NH₃, SN/ THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS
 72-SH-05 SHAWVER, DEAN THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY SPECTRUM/ BORN-VON KARMAN MODE
 72-SI-05 SINGH THEORY-OF-SOLIDS ..THEORY/SHELL MODEL
 72-TA-02 TAKENO, GODA THEORY-OF-SOLIDS/ THEORY-OF-FLUIDS/ HE ..THEORY/ PHONON-LIKE EXCITATION
 72-TO-01 TOKUNAGA THEORY-OF-SOLIDS ..LATTICE VIBRATION/ DIPOL INTERACTION/ PEROVSKITE STRUCTURE
 72-TR-01 TRICKEY, WITRIOL+ THEORY-OF-SOLIDS ..THEORY/ SELF-CONSISTENT HARMONIC TREATMENT/ HARD-CORE QUANTUM CRYSTAL
 72-WA-01 WAEBER GA/ THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS ..METAL/ ORTHORHOMBIC
 72-YA-02 YAMADA THEORY-OF-SOLIDS ..SPIN-PHONON INTERACTION/ LATTICE INSTABILITY
 73-AS-01 ASKAR THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ ANHARMONICITY ..MONOATOMIC CHAI
 73-BO-01 BOETTGER THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..DISORDERED LATTICE/ DYSON EQ
 73-CO-01 COCHRAN THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS
 73-CZ-01 CZACHOR THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS
 73-GE-01 GERVAIS THEORY-OF-SOLIDS ..QUARTZ
 73-HO-02 HONG, KOPELMAN THEORY-OF-SOLIDS ..COHERENT POTENTIAL APPROXIMATION/ DISORDERED MOLECULAR SOLIDS/ INTERACTI
 73-LI-01 LITZMAN, ROZSA THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS ..POINT DEFECT/ GREEN'S FUNCTION/ LOCAL MODE
 73-LO-01 LULY THEORY-OF-SOLIDS ..THEORY/ SOLID/ FREQUENCY SPECTRUM
 73-ME-01 MEIER NH₃, SN/ SR.TI.O₃/ THEORY-OF-SOLIDS ..THEORY/ ANHARMONICITY ..SINGULAR WIDTH GAMMA/ QUASI-PARTIC
 73-PO-01 POHL, LOVE+ THEORY-OF-SOLIDS ..SPECIFIC HEAT/ NON-CRYSTALLINE
 73-SC-01 SCHMID, HOELZL THEORY-OF-SOLIDS ..LOCALIZED MODE
 73-SO-02 SOMA THEORY-OF-SOLIDS ..METAL/ ELASTIC CONSTANT/ STATIC AND DYNAMICAL
 73-WA-01 WARREN, WORLTON THEORY-OF-SOLIDS ..SYMMETRY PROPERTY/ COMPUTER ANALYSIS/ 23 CRYSTALS
 74-AL-06 ALTSJULER, VEKILOU+ THEORY-OF-SOLIDS/ Zn.S ..PHONON DISPERSION/ RIGID ION MODEL
 74-BA-02 BARRON, GIBBONS THEORY-OF-SOLIDS ..THERMAL-EXPANSION ..QUASIHARMONIC-LATTICE
 74-BA-03 BARRON, GIBBONS THEORY-OF-SOLIDS ..DISPERSION-CURVES ..QUASIHARMONIC-LATTICE
 74-BA-04 BARRON, GIBBONS THEORY-OF-SOLIDS ..DISPERSION-CURVES ..QUASIHARMONIC-LATTICE
 74-BO-02 BORSTNIK, AZMAN THEORY-OF-SOLIDS ..FREQUENCY SPECTRA/ HYDROGEN BOND/ DISORDERED CHAIN
 74-CH-04 CHEVYCHELOV, LIFSHTS THEORY-OF-SOLIDS ..POINT-DEFECTS/ LATTICE-DISTORTION/ VACANCY.
 74-CO-01 COHEN, KLEIN THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY SPECTRUM ..IMPURITY/ METAL/ RAR
 74-GR-03 GRUNEWALD, SHARNBERG THEORY-OF-SOLIDS ..THEORY/ LIFE TIME/ ..ELECTRON-PHONON INTERACTION/ IMPURITIES/ PHON
 74-HO-02 HOKOVITZ, WEGER THEORY-OF-SOLIDS ..PHONON DISPERSION/ CHAIN CRYSTAL
 74-IO-01 IOSILEVSKII THEORY-OF-SOLIDS ..SPECTRAL DISTRIBUTION/ PLATE/ EFFECT OF SURFACE
 74-JA-01 JAIN, JAIN THEORY-OF-SOLIDS ..THEORY/ PSEUDOPOTENTIAL FORM FACTOR/ SIMPLE METALS
 74-JO-02 JOHNSON THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ BOND CHARGE MODEL
 74-JO-03 JOHNSON, MOORE THEORY-OF-SOLIDS/ DIAMOND/ SI ..PHONON DISPERSION/ BOND CHARGE MODEL
 74-KU-01 KUENER THEORY-OF-SOLIDS ..LATTICE DYNAMICS
 74-LU-02 LUTY, PAWLEY THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS ..SHELL MODEL
 74-MI-01 MITSKEVICH THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS ..NON-CONDUCTING CRYSTAL/ DENSITY MATRIX

74-PA-01	PAINTER, HARTMAN	THEORY-OF-SOLIDS .. VIBRATIONAL SPECTRA
74-PA-09	PAWLEY	THEORY-OF-SOLIDS .. PHONON SYMMETRY/ SPACE GROUP
74-SC-03	SCHOFIELD	THEORY-OF-FLUIDS/ THEORY-OF-SOLIDS .. THEORY/ CORRELATION FUNCTION
74-SC-05	SCHWABL	THEORY-OF-SOLIDS .. PHASE TRANSITION/ A.B.O3 PEROVSKITE STRUCTURE
74-SC-06	SCHWABL	THEORY-OF-SOLIDS .. PHASE TRANSITIONS
74-SE-01	SEN, HARTMANN	THEORY-OF-SOLIDS .. THEORY/ PHONON/ MASS-DISORDERED SYSTEM/ COHERENT-POTENTIAL/ ONE-DIMENSION
74-TE-02	TEWARY	THEORY-OF-SOLIDS .. THEORY/ SOLID/ LATTICE DYNAMICS .. GREEN FUNCTION/ SKEW DISLOCATION
74-TR-01	TRIPATHI, BEHERA	THEORY-OF-SOLIDS .. GREEN-FUNCTION
75-BA-02	BARKER, GASKEL	THEORY-OF-SOLIDS/ HE .. THEORY/ LIQUID/ CURRENT CORRELATION FUNCTION/ SCATTERING LAW
75-BR-01	BRAETER, PRIEZHEV	THEORY-OF-SOLIDS .. THEORY/ PHONON FREQUENCY SPECTRUM/ DIATOMIC CHAIN/ COHERENT POTENTIAL
75-EG-01	EGGARTER	THEORY-OF-SOLIDS .. EXACT FORMALISM/ PHONON FREQUENCY/ MIXED CHAIN
75-HE-03	HEIMENDAH, THORPE	THEORY-OF-SOLIDS .. PHONON SPECTRA/ METALLIC GLASSES
75-HO-02	HOKIGUCHI, MORITA	THEORY-OF-SOLIDS .. THEORY/ SOLID/ GREEN'S FUNCTION .. CUBIC LATTICE
75-KU-05	KUNC, BALKANSKI+	THEORY-OF-SOLIDS/ ZN.S/ SI.C/ AL.SB/ GA.AS/ IN.SB/ ZN.SE/ CD,TE/ CU,1/ CU,B
75-MA-02	MARTIN	THEORY-OF-SOLIDS .. ELASTIC CONSTANT
75-MA-03	MARTIN	THEORY-OF-SOLIDS .. INNER ELASTIC CONSTANTS/ NONCENTROSYMMETRIC CRYSTALS
75-MA-04	MARTIN	THEORY-OF-SOLIDS .. ELASTIC CONSTANT/ DIAMOND STRUCTURE
75-NE-02	MEN, LADYEHINSKI	THEORY-OF-SOLIDS .. PHONON SPECTRUM/ ONE-DIMENSIONAL/ TRIATOMIC
75-OH-01	OHASHI, OHASHI+	THEORY-OF-SOLIDS/ CU-AU .. DILUTE ALLOY/ PHONON SHIFT AND WIDTH
75-PO-03	POSTON, BUDGER	THEORY-OF-SOLIDS .. THEORY/ FREQUENCY SPECTRUM
75-SA-02	SAHOO, VENKATARAMAN	THEORY-OF-SOLIDS .. LATTICE DYNAMICS/ MOLECULAR IMPURITY
75-SR-03	SRIVASTAVA	THEORY-OF-SOLIDS .. ANHARMONIC PHONON/ COLLISION OPERATOR
75-TA-01	TAKAHASHI	THEORY-OF-SOLIDS .. COUPLED SYSTEM/ DAMPING
75-TI-01	TINDEMANS-VAN-EIJNDHOVEN, KROESE	THEORY-OF-SOLIDS .. THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
75-WE-04	WESTERA, COWLEY	THEORY-OF-SOLIDS .. ANHARMONIC SOLID/ CELL-CLUSTER EXPANSION/ THERMODYNAMIC PROPERTIES
75-ZH-02	ZHIDKOV, TRETYAKOV	THEORY-OF-SOLIDS .. DEBYE-WALLER FACTOR/ BHATTIA'S MODEL
76-BE-07	BERTOLO, SHUKLA	THEORY-OF-SOLIDS .. AR/ KR/ XE .. THEORY/ SOLID/ LATTICE DYNAMICS .. KIHARA POTENTIAL/ PHONON GRE
76-BQ-02	BOHRA, GUPTA	THEORY-OF-SOLIDS/ GD/ SC/ PD/ PT .. MAGNETIC FORM FACTORS/ METAL
76-FR-01	FREEMAN	THEORY-OF-SOLIDS .. LOCALIZED, RESONANCE PHONON MODE
76-FU-01	FUKUDA	THEORY-OF-SOLIDS .. MIXED CRYSTAL/ PHONON DISPERSION/ A.B(1-X).C(X) TYPE
76-GE-01	GENZEL, BAUHOFFER	THEORY-OF-SOLIDS .. LATTICE DYNAMICS/ SCREW DISLOCATION
76-GL-01	GLASS	THEORY-OF-SOLIDS .. DISPERSION RELATION/ SHELL MODEL/ TRANSITION METAL/ THEORY
76-GO-07	GOYAL, SARKER+	THEORY-OF-SOLIDS .. AMORPHOUS SOLID/ SPECTRAL DENSITY
76-HA-02	HALL, FAULKNER	THEORY-OF-SOLIDS/ NB.C .. THEORY/ TRANSITION METAL COMPOUND/ PHONON DISPERSION
76-HA-03	HANKE, HAFNER+	THEORY-OF-SOLIDS .. INCOHERENT SCATTERING LAW/ AVERAGE-T-MATRIX APPROX.
76-KE-01	KEHR, RICHTER	THEORY-OF-SOLIDS .. RESPONSE FUNCTION/ CLASSICAL PARAMAGNET/ APPLIED FIELD
76-LO-05	LOVESEY, LOVELUCK	THEORY-OF-SOLIDS .. RESONANT MODES/ COMPLEX DEFECTS
76-MO-04	MOSTOLLER, WOOD	THEORY-OF-SOLIDS .. LATTICE DYNAMICS/ SHELL MODEL/ QUANTUM MECHANICAL APPROXIMATION
76-NI-03	NIEDERMANN, WAGNER	THEORY-OF-SOLIDS/ V .. THEORY/ PHONON DISPERSION
76-OL-01	OLI, ANIMALU	THEORY-OF-SOLIDS .. SOFT-OPTICAL-MODE/ CENTRAL-PEAK
76-RE-02	REITER, TZOAR	THEORY-OF-SOLIDS .. LATTICE DYNAMICS/ ISOTROPY SHIFT
76-SA-03	SAKALSKI	THEORY-OF-SOLIDS .. SOLITON .. CENTRAL-PEAK/ DISLOCATION
76-VA-03	VARMA	THEORY-OF-SOLIDS .. CELLULAR DISORDERED SYSTEM/ CLUSTER THEORY
77-GO-01	GODAR	THEORY-OF-SOLIDS .. THEORY/ SOLID .. NUMERICAL CALCULATION/ ANHARMONIC AND NON-HARMONIC VIB
77-JO-02	JOHNSON, WILKINS	THEORY-OF-SOLIDS .. DISORDERED SYSTEM/ PHONON-LIKE EXCITATION
77-LE-02	LEIHKAU, BOETTGER	THEORY-OF-SOLIDS .. ANHARMONIC EFFECT/ PHONON NUMBER DENSITY/ NE
77-MI-02	MINGA, PATHAK	THEORY-OF-SOLIDS .. DYNAMIC SHELL MODEL/ MOLECULAR CRYSTAL
77-OP-01	OPIE, GRINDLAY	THEORY-OF-SOLIDS .. ANHARMONICITY/ LATTICE DYNAMICS/ PHASE TRANSITION
77-PA-03	PAWLEY, LEECH	THEORY-OF-SOLIDS .. PHONON DISPERSION/ ALKALI METAL
77-PL-01	PLAKIDA, SIKLOS	LI/ NA/ K/ RB/ THEORY-OF-SOLIDS .. PHONON DISPERSION/ ALKALI METAL
77-RA-03	RAI, HEMKAR	THEORY-OF-SOLIDS/ NB/ NB-MO/ MO .. LATTICE DYNAMICS/ PHONON DISPERSION/ 4D BCC METAL
77-VA-03	VARMA, WEBER	

77-WA-01	WAKABAYASHI	THEORY-OF-SOLIDS/ NB/ MO ..PHONON DISPERSION/ TRANSITION METAL/ CHARGE FLUCTUATION
1.	5	THEORY-OF-FLUIDS
59-SW-01	SWALIN	THEORY-OF-FLUIDS ..DIFFUSION/ FLUCTUATION THEORY
60-VI-02	VINEYARD	THEORY-OF-FLUIDS ..KINETIC THEORY/ TWO TIMES/ TWO BODYS
61-RI-01	RICE, ALLNATT	THEORY-OF-FLUIDS ..LIQUID DYNAMICS
63-DE-01	DE-BAR	THEORY-OF-FLUIDS ..THEORY/ CORRELATION FUNCTION/ CRYSTAL/ LIQUID
63-KA-01	KADANOFF, MARTIN	THEORY-OF-FLUIDS ..LIQUID/ CORRELATION FUNCTION
64-NO-01	NOSSAL	THEORY-OF-FLUIDS ..THEORY/ LIQUID
65-WE-01	WEINSTOCK	THEORY-OF-FLUIDS ..AUTOCORRELATION FUNCTION
66-DE-06	DESAI	THEORY-OF-FLUIDS ..GAS/ CORRELATION FUNCTION/ THEORY ..NON-GAUSSIAN CORRECTION/ MONATOMIC GAS
66-EF-01	EFROS	THEORY-OF-FLUIDS ..THEORY/ LIQUID ..SELF-DIFFUSION
66-ZW-01	ZWANZIG	THEORY-OF-FLUIDS ..STATISTICAL MECHANICS/ GAS/ LIQUID/ SOLID/ THEORY ..LIQUIDVILLE OPERATOR
67-BE-02	BERNE, FRISCH	THEORY-OF-FLUIDS ..LIQUID/ THEORY ..HIGH-FREQUENCY RESPONSE
67-BO-01	BOON, RICE	AR/ THEORY-OF-FLUIDS ..THEORY/ LIQUID ..MOMENTUM AUTO-CORRELATION FUNCTION
67-LE-01	LEBOWITZ, PERCUS	THEORY-OF-FLUIDS ..LIQUID DYNAMICS
67-SC-02	SCHROFT, MARCH	THEORY-OF-FLUIDS/ AR ..THEORY
67-SC-03	SCHNEIDER, STOLL+	THEORY-OF-FLUIDS ..COLLECTIVE EXCITATION/ LIQUID METAL/ DISPERSION CURVE
67-SI-02	SINGWI, TOSI	THEORY-OF-FLUIDS/ ARGON ..THEORY/ LIQUID ..VELOCITY AUTO-CORRELATION
68-HR-02	BROWN, MARCH	THEORY-OF-FLUIDS ..CORRELATION FUNCTION/ FREQUENCY SPECTRA/ MASS EFFECT/ ALLOYS
68-DA-02	DAMLE, SJOELANDER+	THEORY-OF-FLUIDS ..LIQUID/ FREQUENCY SPECTRUM/ THEORY ..ITINERANT-OSCILLATOR-MODEL
68-EN-01	ENDERBY, NORTH	THEORY-OF-FLUIDS/ NA-K ..STRUCTURE FACTOR/ ALLOY LIQUID/ PERCUS-YEVICK
68-FO-01	FORSTER, MARTIN	THEORY-OF-FLUIDS ..LIQUID/ THEORY/ CORRELATION FUNCTION ..FOURTH-FREQUENCY-MOMENT/ SUM RUL
68-FO-02	FORSTER, MARTIN+	THEORY-OF-FLUIDS ..LIQUID/ CORRELATION FUNCTION ..ARGON/ VISCOSITY/ MOMENT METHOD
68-FR-02	FRANCHETTI	THEORY-OF-FLUIDS/ NEUTRON-SCATTERING-IN-FLUIDS ..MONATOMIC LIQUIDS/ RADIAL DENSITY/ SCATTERING
68-GL-05	GLASS, RICE	THEORY-OF-FLUIDS ..LIQUID/ CORRELATION FUNCTION/ THEORY/ NEUTRON SCATTERING ..ONE-PARTICLE AND
68-GR-03	GROSS, WISNIVESKY	THEORY-OF-FLUIDS ..KINETIC EQUATION/ HARD SPHERE GAS
68-KE-01	KERR	THEORY-OF-FLUIDS ..LIQUID/ CORRELATION FUNCTION/ THEORY
68-LE-01	LEBOWITZ, PERCUS+	THEORY-OF-FLUIDS ..THEORY ..TIME DEPENDENT DISTRIBUTION FUNCTION/ ONE-DIMENSIONAL SYSTEM
68-MA-03	MARCH	THEORY-OF-FLUIDS ..LECTURE NOTE/ SCATTERING FUNCTION
68-PE-01	PERCUS, YEVICK	THEORY-OF-FLUIDS ..THEORY/ DIRECT CORRELATION FUNCTION
68-RI-03	RICHTER, VOSS	THEORY-OF-FLUIDS ..THEORY/ COLLECTIVE MOTION/ CLASSICAL SYSTEM/ DISPERSION/ VLASOV EQUATION
68-ST-02	STECKI, WOJNAR	THEORY-OF-FLUIDS ..GAS/ THEORY/ CORRELATION FUNCTION
69-GY-01	GYORFFY, MARCH	NEUTRON-SCATTERING-IN-FLUIDS/ THEORY-OF-FLUIDS ..INTERMEDIATE SCATTERING FUNCTION/ LIQUID
69-LE-05	LEBOWITZ, PERCUS+	THEORY-OF-FLUIDS ..THEORY/ CORRELATION FUNCTION
69-RI-01	RICHTER, VOSS	THEORY-OF-FLUIDS/ SCATTERING-THEORIES ..THEORY/ SCATTERING LAW/ VLASOV MODEL
70-AI-01	AICAWADI	THEORY-OF-FLUIDS ..THEORY/ COLLECTIVE MODE/ LIFETIME/ MODE-MODE INTERACTION
70-AK-01	AKCASU, DANIELS	THEORY-OF-FLUIDS ..THEORY/ LIQUID ..GENERALIZED LANGEVIN EQUATION/ CURRENT-CURRENT CORRELA
70-CO-05	CORNIGOLD, DUDERSTADT	THEORY-OF-FLUIDS ..CORRELATION FUNCTION
70-FO-01	FORSTER, MARTIN	THEORY-OF-FLUIDS ..KINETIC THEORY
70-HA-03	HARP, BERNE	THEORY-OF-FLUIDS ..THEORY/ LIQUID/ MOLECULAR DYNAMICS ..MEMORY FUNCTIONS/ TIME CORRELATION FUN
70-KA-05	KAWASAKI	THEORY-OF-FLUIDS ..CORRELATION FUNCTION,
70-KN-01	KNOPOFF, SHAPIRO	THEORY-OF-FLUIDS ..THEORY
70-PA-05	PATHAK, SINGWI	THEORY-OF-FLUIDS/ ARGON ..THEORY/ LIQUID/ SCATTERIN LAW/ GAUSSIAN APPROXIMATION
70-RO-01	ROSS	THEORY-OF-FLUIDS ..STRUCTURE FACTOR/ SIGMA(THETA.F) ..COMPRESSIBILITY/ LIQUID METAL
70-RO-02	ROTHSCHILD	THEORY-OF-FLUIDS ..LIQUID/ THEORY
70-TO-01	TONG, RASHMI+	THEORY-OF-FLUIDS ..GENERAL THEORY
70-ZW-01	ZWANZIG, BIXON	THEORY-OF-FLUIDS ..CORRELATION FUNCTION/ THEORY/ LIQUID
71-BA-06	BARKER, FISHER+	THEORY-OF-FLUIDS/ AR ..COMPUTER-SIMULATION/ MONTE-CARLO ..THREE-BODY-INTERACTION
71-CH-03	CHIHARA, SASAKI+	THEORY-OF-FLUIDS ..THEORY/ SPACE-TIME CORRELATION FUNCTION/ VLASOV-BOLTZMANN EQUATION

71-DE-04	DESAT	THEORY-OF-FLUIDS ..THEORY/ CLASSICAL LIQUID/ SINGLE-PARTICLE MOTION
71-F1-01	FISHER	THEORY-OF-FLUIDS ..VELOCITY CORRELATION
71-LO-02	LOVESEY	THEORY-OF-FLUIDS/ AR ..TRIPLE-PEAK-STRUCTURE
71-LO-03	LOVESEY	THEORY-OF-FLUIDS ..LIQUID/ DENSITY RESPONDS FUNCTION
71-MO-01	MOSCINSKI, NAWALANY	THEORY-OF-FLUIDS/ CU
71-NO-01	NOLTING	THEORY-OF-FLUIDS/ AL/ AR ..THEORY/ VAN-HOVE-CORRELATION-FUNCTION
71-O-01	O-REILLY	THEORY-OF-FLUIDS ..VELOCITY-AUTOCORRELATION/ SELF-DIFFUSION ..QUASILATTICE-MODEL
71-PR-06	PRUEITT	THEORY-OF-FLUIDS ..HYDRODYNAMICS
71-TA-01	TAKAHASHI	THEORY-OF-FLUIDS ..THEORY/ LIQUID/ CORRELATION FUNCTION/ SCATTERING LAW ..LIQUID METAL/ TWO TIM
71-TA-02	TAKENO, GODA	THEORY-OF-FLUIDS/ THEORY-OF-SOLIDS ..THEORY/ DISORDERED SYSTEM/ AMORPHOUS SOLID/ CLASSICAL LI
72-AK-01	AKCASU, LINNEBUR	THEORY-OF-FLUIDS ..MODELLED KINETIC EQUATION/ TWO DAMPING CONSTANT
72-BA-06	BARKER, GASKELL	THEORY-OF-FLUIDS ..CORRELATION FUNCTION
72-CH-01	CHAY, FRANK	ARGON/ THEORY-OF-FLUIDS ..CORRELATION FUNCTION
72-CH-02	CHIHARA	H2.O/ THEORY-OF-FLUIDS ..CORRELATION FUNCTION
72-CO-04	CORNOLD	THEORY-OF-FLUIDS ..THEORY/ QUANTAL SPACE-TIME CORRELATION/ HARTREE APPROXIMATION
72-DU-02	DUFTY	THEORY-OF-FLUIDS ..THEORY/ AUTOCORRELATION/ MEMORY FUNCTION
72-EG-01	EGELSTAFF	THEORY-OF-FLUIDS ..CORRELATION FUNCTION
72-GO-01	GODA	THEORY-OF-FLUIDS/ SCATTERING-THEORIES ..TIME DEPENDENT TRIPLET FUNCTION/ PRESSURE DERIVATIVE OF
72-HA-03	HASSAN, LADO	THEORY-OF-FLUIDS ..THEORY/ PHONON DISPERSION/ LIQUID/ LAW OF CORRESPONDING STATES
72-KA-09	KATZ, RICE	THEORY-OF-FLUIDS ..DENSITY OF LOCALIZED STATE/ FLUID
72-MA-02	MARTIN, PARODI+	THEORY-OF-FLUIDS ..THEORY/ SCATTERING LAW ..HYDRODYNAMICS AND THERMODYNAMICS
72-MA-03	MAZENKO	THEORY-OF-FLUIDS ..MEMORY FUNCTION
72-MA-04	MAZENKO, WEI+	THEORY-OF-FLUIDS ..THEORY/ DENSITY FLUCTUATION/ DILUTE GAS/ HARD SPHERE/ KINETIC EQUATION
72-MI-03	MITRA, DASS+	THEORY-OF-FLUIDS ..THEORY/ LIQUID/ VELOCITY AUTOCORRELATION/ MEMORY FUNCTION
72-RE-01	RESIBOIS	THEORY-OF-FLUIDS ..CLASSICAL LIQUID/ THEORY
72-TA-01	TAKENO, GODA	THEORY-OF-SOLIDS/ HE ..THEORY/ PHONON-LIKE EXCITATION/ LIQUID HELIUM
72-TA-02	TAKENO, GODA	THEORY-OF-FLUIDS/ HE ..THEORY/ PHONON-LIKE EXCITATION
73-CH-02	CHIHARA	THEORY-OF-FLUIDS ..NEUTRAL AND CHARGED QUANTUM FLUIDS/ INTEGRAL EQUATION
73-CH-03	CHIHARA	THEORY-OF-FLUIDS ..QUANTAL BINARY MIXTURE/ DYNAMICAL STRUCTURE FACTOR/ QUASI-ELASTIC EAK/ ZERO
73-CH-04	CHIHARA	THEORY-OF-FLUIDS ..INTEGRAL EQUATION/ LONG-RANGE AND SHORT-RANGE POTENTIALS
73-CH-05	CHIHARA	THEORY-OF-FLUIDS ..INTEGRAL EQUATION/ CHARGED PARTICLE SYSTEM
73-FO-02	FOSTER	THEORY-OF-FLUIDS ..CLASSICAL FLUID/ KINETIC THEORY/ PAIR CORRELATION FUNCTION
73-GR-02	GRUNDKE, HENDERSON+	THEORY-OF-FLUIDS ..PERCUS-YEVICK/ MIXTURE ..LENNARD-JONES
73-LO-04	LOVESEY	THEORY-OF-FLUIDS/ AR ..GENERALIZED LANGEVIN EQUATION/ SCATTERING FUNCTION
73-MA-01	MACHIDA, MURASE	THEORY-OF-FLUIDS/ AR ..SIMPLE LIQUID/ RELAXATION TIME FOR LONGITUDINAL MODE
73-MA-02	MAZENKO	THEORY-OF-FLUIDS ..THEORY/ FLUID/ VELOCITY AUTOCORRELATION
73-MA-03	MAZENKO	THEORY-OF-FLUIDS ..THEORY/ FLUID/ DIFFUSION
73-MI-06	MITRA	THEORY-OF-FLUIDS/ NA ..MEMORY FUNCTION/ SELF DIFFUSION CONSTANT
73-PA-07	PATRAK, BANSAL	NEON/ RUBIDIUM/ HYDROGEN/ THEORY-OF-FLUIDS/ DYNAMICAL STRUCTURE FACTOR ..HUBBARD-BEEBY THEORY
73-SE-01	SEARS	THEORY-OF-FLUIDS ..THEORY/ LIQUIDS ..THEORY/ FLUID/ SCATTERING FUNCTION
73-TO-01	TOSI, MARCH	THEORY-OF-FLUIDS ..PARTIAL CORRELATION FUNCTION/ SMALL Q REGION/ ELECTRONIC EFFECT
73-VI-01	VISSCHER	THEORY-OF-FLUIDS ..SELF-DIFFUSION/ VELOCITY-AUTOCORRELATION
73-WI-02	WINFIELD, EGELSTAFF	KR/ THEORY-OF-FLUIDS ..TRIPLET CORRELATION
74-AN-01	ANDERSEN	THEORY-OF-FLUIDS ..PAIR CORRELATION FUNCTION FOR HYDROGEN BONDED LIQUIDS/ WATER
74-BE-01	BEDEAUX, MAZUR	THEORY-OF-FLUIDS ..BROWNIAN-MOTION
74-BL-01	BLINC, LUGOMER+	THEORY-OF-FLUIDS ..NEMATIC LIQUID CRYSTAL
74-BR-03	BROOKS, DONNELLY	THEORY-OF-FLUIDS/ HE ..SECOND SOUND
74-CH-01	CHALDLER	THEORY-OF-FLUIDS ..DYNAMICS OF LIQUID
74-CH-02	CHAUDLER	THEORY-OF-FLUIDS ..DYNAMICS OF LIQUID
74-EB-01	EBBSJOE, SCHOFIELD+	THEORY-OF-FLUIDS ..THEORY/ LIQUID/ VELOCITY AUTO-CORRELATION FUNCTION ..PERTURBATION TH
74-F1-02	FIAMAN, KOVAC	THEORY-OF-FLUIDS ..THEORY/ MOLECULAR DYNAMICS
74-F1-03	FIXMAN, KOVAC	THEORY-OF-FLUIDS ..THEORY/ MOLECULAR DYNAMICS

74-HA-05 HASEGAWA, WATABE THEORY-OF-FLUIDS/ NA/ K ..LIQUID METAL/ ELECTRON THEORY/ STRUCTURE FACTOR/ THERMAL EXPANS
 74-JO-05 JORDAN AR/ THEORY-OF-FLUIDS ..THEORY/ LIQUID/ CORRELATION FUNCTION ..DIFFUSION COEFFICIENT
 74-LE-01 LEE, LEE THEORY-OF-FLUIDS/ HE ..DISPERSION RELATION
 74-LE-02 LERIBAU, MILLER THEORY-OF-FLUIDS ..THEORY/ LIQUID/ STRUCTURE FACTOR ..PERCUS-YEVICK EQUATION
 74-NA-01 NARBUTOWICZ, STECKI THEORY-OF-FLUIDS ..CORRELATION FUNCTION
 74-PA-07 PARRINELLO, TOSI+ THEORY-OF-FLUIDS ..THEORY/ LIQUID/ DYNAMICAL STRUCTURE FACTOR/ SCATTERING LAW ..BINARY L
 74-RA-07 RAO THEORY-OF-FLUIDS ..CLUSTER EXPANSION/ DYNAMIC STRUCTURE FACTOR/ CLASSICAL LIQUIDS
 74-SA-04 SANDLER, DAS-GUPTA+ THEORY-OF-FLUIDS ..RADIAL-DISTRIBUTION-FUNCTION ..ANALYSIS-OF-DATA
 74-SC-03 SCHOFIELD THEORY-OF-FLUIDS/ THEORY-OF-SOLIDS ..THEORY/ CORRELATION FUNCTION
 74-WA-02 WATTS LIGHT WATER/ THEORY-OF-FLUIDS ..RADIAL-DISTRIBUTION-FUNCTION/ MONTE-CARLO
 75-BA-01 BARKER, GASKELL THEORY-OF-FLUIDS/ NA ..LIQUID METALS/ DAMPING OF COLLECTIVE MODE/ LONG-RANGE OSCILLATORY I
 75-BE-01 BENNETT THEORY-OF-FLUIDS ..MOLECULAR DYNAMICS/ MASS TENSOR
 75-BL-04 BLOCK, SCHOMMERS RB/ THEORY-OF-FLUIDS ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ CORRELATION FUNCTION ..TRIPL
 75-GO-01 GOETZE, LUECKE THEORY-OF-FLUIDS/ AR ..CLASSICAL FLUID/ EXCITATION SPECTRUM
 75-HA-01 HANSEN, McDONALD THEORY-OF-FLUIDS ..MOLECULAR DYNAMICS/ MOLTEN SALT/ STRUCTURE FACTOR/ SCATTERING FUNCTIO
 75-JH-01 JHON, FORSTER THEORY-OF-FLUIDS/ AR ..THEORY/ DYNAMICAL STRUCTURE FACTOR
 75-SI-01 SIEGEL THEORY-OF-FLUIDS ..PERCUS-YEVICK TEMPERATURE
 75-SI-02 SIEGEL THEORY-OF-FLUIDS ..LIQUID VIRTUAL CRYSTAL/ LONG WAVELENGTH SOUND VELOCITY/ LIQUID BINARY ALLOYS
 75-SI-03 SIEGEL THEORY-OF-FLUIDS ..STRUCTURE FACTOR/ BINARY ALLOY LIQUID
 75-SI-04 SIEGEL THEORY-OF-FLUIDS ..SOUND VELOCITY/ MELTING TEMPERATURE/ LIQUID METAL
 75-SI-05 SIEGEL THEORY-OF-FLUIDS ..MELTING/ STRUCTURE FACTOR/ DISPERSION RELATION
 75-TE-01 TENTI, DESAI THEORY-OF-FLUIDS ..THEORY ..MODEL COLLISION OPERATOR/ KINETIC EQUATION
 75-TE-02 TEWARI, TEWARI THEORY-OF-FLUIDS/ AR ..THEORY/ LIQUID/ SCATTERING LAW/ CORRELATION FUNCTION ..HUBBARD AND B
 75-TK-01 TKACHENKO, FISHER THEORY-OF-FLUIDS ..NONLINEAR THREE POINT SUSCEPTIBILITY/ CLASSICAL LIQUID
 75-YO-01 YOSHIDA, TAKENO THEORY-OF-FLUIDS/ AR ..CLASSICAL SIMPLE LIQUID/ DYNAMICAL STRUCTURE FACTOR/ DISPERSION CUR
 76-CA-06 CASTRESANA, MAZENKO+ THEORY-OF-FLUIDS ..TIME-DEPENDENT PHASE-SPACE DENSITY CORRELATION FUNCTION/ FLUID MIX
 76-CH-05 CHIAKWELU, GASKELL RB/ THEORY-OF-FLUIDS ..VELOCITY AUTOCORRELATION FUNCTION/ EFFECT ON FREQUENCY SPECTRUM
 76-DU-01 DUFTY, GROOME+ THEORY-OF-FLUIDS/ KR ..DYNAMIC-STATIC STRUCTURE FACTOR
 76-FE-01 FERNANDEZ THEORY-OF-FLUIDS ..DOUBLE COLLISION EFFECTS/ THEORY
 76-GI-01 GIAQUINTA, PARRINELLO+ THEORY-OF-FLUIDS ..FREQUENCY SPECTRA/ SHEAR VISCOSITY/ SELF-DIFFUSION/ THERMAL DIFF
 76-GI-02 GIAQUINTA, PARRINELLO+ THEORY-OF-FLUIDS ..CORRELATION FUNCTION/ MOLTEN SALT
 76-GU-03 GOETZE, ZIPPELIUS THEORY-OF-FLUIDS/ AR/ RB ..SELF-CORRELATION FUNCTION/ CLASSICAL LIQUIDS
 76-KO-05 KORSUNSKY, NABERUKHIN THEORY-OF-FLUIDS ..ALLOY/ PARTIAL INTERFERENCE FUNCTION
 76-KU-02 KUMARAVADIVEL, EVANS THEORY-OF-FLUIDS ..THEORY/ ENTROPIES/ STRUCTURE FACTORS/ WEEKS-CHANDLER-ANDERSON THEO
 76-ME-02 MEHRINGER THEORY-OF-FLUIDS ..DYNAMICS OF ATOMIC MOTION/ ONE-PARTICLE PROBABILITY DENSITY/ CORRELA
 76-MI-03 MITRA, GILLAN THEORY-OF-FLUIDS ..INTERATOMIC POTENTIAL/ LIQUID STRUCTURE
 76-SY-01 SYKES THEORY-OF-FLUIDS ..CORRELATION FUNCTION/ KINETIC EQUATION/ CLASSICAL LIQUIDS
 76-YO-01 YOSHIDA NA/ RB/ PB/ THEORY-OF-FLUIDS ..DYNAMICAL STRUCTURE FACTOR/ COLLECTIVE MODE
 77-BA-01 BANAL, PATHEK THEORY-OF-FLUIDS ..GENERALIZED LANGEVIN EQUATION/ DYNAMICAL STRUCTURE FACTOR
 77-BA-02 BANSAI, AILAWADI THEORY-OF-FLUIDS/ RB ..COHERENT SCATTERING FUNCTION
 77-BA-03 BANSAI, PATHEK THEORY-OF-FLUIDS ..CURRENT CORRELATION FUNCTION
 77-BA-04 BANSAI, NAGHIZADEH NEUTRON-SCATTERING-IN-FLUIDS/ THEORY-OF-FLUIDS/ RUBIDIUM ..COHERENT SCATTERING FUNCTION
 77-BE-01 BEAR THEORY-OF-FLUIDS ..STRUCTURAL CORRELATION/ MOLECULAR PAIR CORRELATION
 77-BO-04 BOYD THEORY-OF-FLUIDS ..THEORY ..HARTREE-FOCK APPROXIMATION/ RADIAL DISTRIBUTION
 77-CA-04 CASTRESANA, MAZENKO+ THEORY-OF-FLUIDS ..GAS/ THEORY/ CORRELATION FUNCTION ..BINARY MIXTURE/ THERMAL FLUCTU
 77-ED-01 EDER THEORY-OF-FLUIDS ..VELOCITY AUTOCORRELATION FUNCTION/ DIFFUSION COEFFICIENT/ HARD SPHERA GAS
 77-GL-01 GLANDT, FITTS THEORY-OF-FLUIDS ..RADIAL DISTRIBUTION FUNCTION/ PERCUS-YEVICK THEORY
 77-KA-01 KAHOL, CHATURVEDI+ THEORY-OF-FLUIDS ..LIQUID/ MOLECULAR DYNAMICS ..LONGITUDINAL AND TRANSVERSAL CURRENT CO
 77-LE-01 LEE THEORY-OF-FLUIDS ..CORRELATION FUNCTION/ SOFT SPHERE SYSTEM
 77-LE-03 LEWIS, LOVESEY THEORY-OF-FLUIDS ..STRUCTURE FACTOR/ COLLECTIVE DENSITY EXCITATION
 77-MC-01 McDONALD, VIELLEFOSSE+ THEORY-OF-FLUIDS ..HYDRODYNAMIC CALCULATION/ MOLECULAR-DYNAMIC CALCULATION/ IONIC

77-NA-02 NARA, OGAWA+ THEORY-OF-FLUIDS ..LIQUID METAL/LATTICE GAS MODEL/ HUBBERD MODEL/
 77-YO-02 YOSHIDA, TAKENO THEORY-OF-FLUIDS/ NEUTRON-SCATTERING-IN-FLUIDS/ AR ..INCOHERENT SCATTERING FUNCTION/ CLASS
 77-YO-03 YOSHIDA THEORY-OF-FLUIDS ..DYNAMICAL STRUCTURE FACTOR/ CURRENT-CURRENT CORRELATION FUNCTION

1. 6 SCATTERING-THEORIES

52-PL-01 PLACZEK SCATTERING-THEORIES ..TOTAL AND DIFFERENTIAL CROSS SECTION
 54-VI-01 VINEYARD SCATTERING-THEORIES ..TEORY/ MULTIPLE SCATTERING
 58-EG-01 EDELSTAFF BE/ MG/ SCATTERING-THEORIES ..THEORY/ EXPERIMENT/ SOLID/ SIGMA(E, E-PRIME, THETA)/ SIGMA(E) ..O
 58-MA-01 MAZO, ZEMACH SCATTERING-THEORIES ..THEORY/ SCATTERING CROSS SECTION ..IMPERFECT GAS/ ELASTIC AND INELASTIC
 60-NE-01 NELKIN SCATTERING-THEORIES ..SIGMA(E) ..DOPPLER-BROADENING OF ABSORPTION RESONANCE/ SLOW NEUTRON SCATT
 60-SC-01 SCHOFIELD SCATTERING-THEORIES ..SCATTERING THEORY
 60-VO-01 VOLKIN SCATTERING-THEORIES ..MOLECULAR DYNAMICS/ THEORY/ SIGMA(E, E-PRIME, THETA) ..MOLECULAR ROTATOR
 61-EG-03 EDELSTAFF SCATTERING-THEORIES ..SCATTERING THEORY ..DATA TREATMENT
 61-EG-04 EDELSTAFF SCATTERING-THEORIES ..SCATTERING THEORY/ SCATTERING FUNCTION
 61-MC-01 MCLATCHIE, HEARD+ SCATTERING-THEORIES ..SCATTERING LAW/ DEBYE APPROXIMATION/ SOLID/ LIQUID/ THEORY
 61-SC-02 SCHOFIELD SCATTERING-THEORIES ..SCATTERING THEORY ..SPACE-TIME CORRELATION FUNCTION
 61-TU-02 TURNER SCATTERING-THEORIES ..THEORY/
 62-AA-01 AHMOT, CASE+ SCATTERING-THEORIES ..SCATTERING THEORY
 62-EG-03 EDELSTAFF, SCHOFIELD SCATTERING-THEORIES/ H₂O/ PB ..EXPERIMENT/ THEORY/ LIQUID/ DIFFUSION PARAMETER ..ROO
 62-FE-01 FERZIGAR, LEONARD SCATTERING-THEORIES ..THEORY/ DIFFRACTION
 62-KO-03 KOSALY, TURNER SCATTERING-THEORIES ..QUASI-CLASSICAL APPROXIMATION
 62-MC-03 MCURRY SCATTERING-THEORIES ..THEORY/ MOLECULAR ROTATIONS/ MOLECULAR VIBRATIONS/ SIGMA(E, E-PRIME, THETA)
 62-PU-01 PUROHIT, ROJAGOPAL SCATTERING-THEORIES ..SCATTERING THEORY
 62-PU-02 PUROHIT, ROJAGOPAL SCATTERING-THEORIES ..SCATTERING THEORY
 63-EG-02 EDELSTAFF SCATTERING-THEORIES ..SCATTERING LAW/ THEORY ..SELF TERM/ INTERFERENCE TERM
 63-PL-01 PLUMMER, SUMMERFIELD SCATTERING-THEORIES ..THEORY
 63-RA-01 RAHMAN SCATTERING-THEORIES ..SCATTERING THEORY/ SCATTERING FUNCTION
 63-SU-01 SUMMERFIELD, ZWEIFEL SCATTERING-THEORIES ..SCATTERING LAW/ THEORY/ CORRELATION FUNCTION/ SCATTERING THEORY
 64-NI-01 NIJBOER, KOKKEDEE SCATTERING-THEORIES ..THEORY/ LIQUID/ SOLID/ SCATTERING THEORY
 64-SU-01 SUMMERFIELD SCATTERING-THEORIES ..THEORIES/ FERMI-APPROXIMATION
 65-AK-02 AKCASU, OSBORN THEORY-OF-SOLIDS/ SCATTERING-THEORIES ..DAMPING THEORY/ SCATTERING CROSS SECTION/ ANHARMONI
 65-MA-01 MAIOROV SCATTERING-THEORIES ..SCATTERING FUNCTION
 65-RO-02 ROSENBAUM, ZWEIFEL SCATTERING-THEORIES ..SCATTERING THEORY
 65-ST-03 STEELE, PECORA SCATTERING-THEORIES ..THEORY/ STATISTICAL MECHANICS/ DIFFERENTIAL CROSS SECTION/ CORRELATIO
 65-VA-01 VAN-LEEUEWEN, YIP SCATTERING-THEORIES ..THEORY ..KINETIC EQUATIONS/ DENSE GAS
 66-KO-06 KOSALY, SOLT SCATTERING-THEORIES ..THEORY ..MODIFICATION OF KRIEGER-NELKIN THEORY
 66-NI-01 NIJBOER, RAHMAN SCATTERING-THEORIES ..SCATTERING FUNCTION/ CORRELATION FUNCTION/ THEORY
 66-NO-01 NOSSAL SCATTERING-THEORIES ..CORRELATION FUNCTION/ SCATTERING FUNCTION
 66-SU-02 SUNAKAWA, FUKUI+ SCATTERING-THEORIES ..DIFFERENTIAL CROSS SECTION/ MULTIPLE SCATTERING
 67-GI-01 GIBBS, LINDENMEIER SCATTERING-THEORIES ..THEORY/ CROSS SECTION EVALUATION
 67-KU-01 KURKIJARVI SCATTERING-THEORIES ..CORRELATION FUNCTION/ THEORY
 67-PL-01 PLUMMER SCATTERING-THEORIES ..SCATTERING THEORY
 67-RA-02 RAMASESHEN, VISWANATHAN SCATTERING-THEORIES ..ANORMALOUS SCATTERING/ POLARIZATION VECTOR/ ONE-PHONON SCATT
 67-SL-01 SLAGGIE SCATTERING-THEORIES ..THEORY
 67-SU-02 SUMMERFIELD, ZWEIFEL SCATTERING-THEORIES ..THEORY ..MULTIPLE SCATTERING CORRECTION
 67-SU-01 SUMMERFIELD, ZWEIFEL SCATTERING-THEORIES ..SCATTERING THEORY/ GAS
 67-WI-01 WIGNALL SCATTERING-THEORIES ..CROSS SECTION EVALUATION/ EXPERIMENT
 68-PA-04 PAHOR SCATTERING-THEORIES ..SCATTERING THEORY ..MULTIPLE SCATTERING CORRECTION
 68-SC-03 SCHERMER, BLUME SCATTERING-THEORIES ..SOLID/ SCATTERING THEORY
 68-SU-01 SUGAWARA, YIP+ SCATTERING-THEORIES ..GAS/ FREQUENCY SPECTRUM/ THEORY ..KINETIC-THEORY

69-BA-01 BASHER, PULL SCATTERING-THEORIES ..SCATTERING LAW ..MONTE CARLO METHOD
 69-ED-01 EDER SCATTERING-THEORIES ..THEORY/ PHONON EXPANSION/ MULTI-PHONON CONTRIBUTION
 69-KU-01 KUSCHER, SUMMERFIELD SCATTERING-THEORIES ..DETAILED-BALANCE/ THEORY
 69-RI-01 RICHTER, VOSS THEORY-OF-FLUIDS/ SCATTERING-THEORIES ..THEORY/ SCATTERING LAW/ VLASOV MODEL
 69-SL-01 SLAGGIE SCATTERING-THEORIES ..THEORY/ SCATTERING LAW
 70-ER-01 ERIKSSON SCATTERING-THEORIES ..SCATTERING THEORY
 70-NI-01 NISHIGORI SCATTERING-THEORIES ..THEORY/ QUASICLASSICAL APPROXIMATION
 71-81-02 BISHOFF, MOORE+ SCATTERING-THEORIES/ COMPUTER-CODES/ H₂O ..MULTIPLE SCATTERING/ THEORY/ SIGMA(E, E-PRIME
 71-MA-06 MARSHALL, LOVESEY SCATTERING-THEORIES ..THEORY/ CORRELATION FUNCTION/ PHONON/ MAGNETIC/ SPIN WAVE/ LIQUID/
 72-BU-06 BUYERS, SEARS+ NE/ SCATTERING-THEORIES ..THEORY/ EXPERIMENT/ LIQUID DYNAMICS/ COLLECTIVE MOTION/ SINGLE PA
 72-CO-05 THEORY-OF-SOLIDS/ SCATTERING-THEORIES ..THEORY/ PHONON/ ALLOYS/ ORDER-DISORDER STATE
 72-EG-01 EGGLESTAFF THEORY-OF-FLUIDS/ SCATTERING-THEORIES ..TIME DEPENDENT TRIPLET FUNCTION/ PRESSURE DERIVATIVE OF
 72-JA-05 JANNINK, SUMMERFIELD SCATTERING-THEORIES ..THEORY/ POLYMER CHAINS IN SOLUTION/ DIFFUSIVE MOTION
 74-FR-01 FRANK SCATTERING-THEORIES ..ULTRACOLD NEUTRON
 74-HA-04 HARA, HONDA SCATTERING-THEORIES ..SCATTERING FUNCTION/ CORRECTION OF MULTIPLE SCATTERING
 75-WO-01 WOOD, MOSTOLLER SCATTERING-THEORIES ..THEORY/ SOLID/ GREEN'S FUNCTION/ COHERENT SCATTERING ..INTERSTITIALS
 76-GE-02 GERSCH, HOLM SCATTERING-THEORIES ..CRITICAL MULTIPLE SCATTERING/ GLAUBER APPROXIMATION

1, 7 COMPUTER-CODES

61-BE-01 BELL COMPUTER-CODES
 61-HO-01 HONECK COMPUTER-CODES
 62-MA-02 MACLATCHI COMPUTER-CODES
 63-LI-01 LINDENMEIER, MATSUMOTO+ H₂O/ POLYETHYLENE/ COMPUTER-CODES ..SCATTERING THEORY/ LIQUID/ SIGMA(E, E-PRIME, TH
 63-MA-01 MACDOUGALL COMPUTER-CODES ..SIGMA(E, E-PRIME)/ SCATTERING LAW/ GAS/ LIQUID/SOLID/ CROSS SECTION EVALUATION
 64-HO-01 HONECK, HOUSTON+ COMPUTER-CODES ..MULTIPLE SCATTERING/ THEORY
 64-MC-01 MCMURRY, GANNON COMPUTER-CODES/ H₂O ..THEORY/ SCATTERING LAW/ SIGMA(E, E-PRIME)/ SIGMA-TRANSPORT
 64-NA-01 NALIBOFF, KOPPEL COMPUTER-CODES ..THEORY/ COHERENT/ ..POLYCRYSTAL/ FORTRAN LIST
 65-GA-01 GANNON, MCMURRY C.H₄/ C₂H₆/ COMPUTER-CODES ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION
 65-HO-03 HONECK, NALIBOFF COMPUTER-CODES
 65-II-01 IJIMA, TOKIZAWA COMPUTER-CODES
 65-MA-04 MATSUOKA, ARAI COMPUTER-CODES/ HYDROGEN ..THEORY/ LIQUID
 65-NA-02 NALIBOFF COMPUTER-CODES
 65-SH-02 SHIMADA COMPUTER-CODES
 66-BE-04 BEVINGTON, PETITT COMPUTER-CODES ..CODE/ NEUTRON SCATTERING/ ANGULAR DISTRIBUTION
 66-KO-03 KOPPEL, TRIPLETT+ COMPUTER-CODES ..SCATTERING FUNCTION/ LATTICE DYNAMICS/ MOLECULAR DYNAMICS/ SCATTERING T
 66-SP-01 SPARCK COMPUTER-CODES ..CDC-3600 PROGRAM
 66-ZY-01 JAPANESE NUCLEAR DATA COMMITTEE + COMPUTER-CODES
 67-BO-03 BOYSTER, MCMURRY COMPUTER-CODES ..THEORY/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS ..FORTRAN PROGRAM FOR THE I
 67-CL-01 CLENDENIN COMPUTER-CODES ..CROSS SECTION EVALUATION/ SOLID/ SCATTERING FUNCTION ..FORTRAN LIST
 67-CU-01 CURTIS, GRIMESEY COMPUTER-CODES ..NEUTRON SPECTRUM
 67-HU-01 HUTCHINSON, SCHOFIELD COMPUTER-CODES ..SCATTERING FUNCTION ..INCOHERENT GAUSSIAN APPROXIMATION
 67-JA-02 JARVIS COMPUTER-CODES
 67-KO-03 KOPPEL, TRIPLETT+ COMPUTER-CODES ..SCATTERING FUNCTION ..DIFFERENTIAL CROSS SECTION
 67-LI-02 LITTON COMPUTER-CODES
 67-NA-01 NAKAHARA, KATO BE/ H₂O/ COMPUTER-CODES ..SOLID/ THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
 67-NO-01 NOBLE, SOLBRIG-JR+ COMPUTER-CODES ..LATTICE DYNAMICS ..COHERENT SINGLE-PHONON SCATTERING OF NEUTRONS
 67-VI-01 VISSER, VAN-DEER-WALT COMPUTER-CODES
 68-BI-01 BISHOFF, MOORE+ COMPUTER-CODES ..THEORY/ SLAB SAMPLE/ TUBLER SAMPLE
 68-BO-07 BOYSTER, SOLBRIG-JR COMPUTER-CODES ..LATTICE DYNAMICS/ DISPERSION RELATION ..STRUCTURE FACTOR FOR COHERENT
 69-BO-07 BOYSTER, MCMURRY+ COMPUTER-CODES ..THEORY/ SOLID/ LATTICE DYNAMICS/ INTERATOMIC FORCE CONSTANTS/ STRUCTURE

69-BU-01 BUTLAND COMPUTER-CODES ..POLYCRYSTAL
69-DI-01 DICKEY, PASKIN COMPUTER-CODES ..THEORY/ SOLID/ LATTICE DYNAMICS/ MOLECULAR DYNAMICS/ ANHARMONICITY
69-PR-04 PREVENDER COMPUTER-CODES ..LATTICE DYNAMICS/ FORCE CONSTANTS FITTING ..CS,CL TYPE CRYSTAL/ PROGRAM LIST
69-PR-05 PREVENDER COMPUTER-CODES ..LATTICE DYNAMICS/ DISPERSION CURVES/ POLARIZATION VECTOR/ STRUCTURE FACTOR
70-AR-01 ARKUSZEWSKI COMPUTER-CODES ..THEORY/ SOLID/ SCATTERING LAW
70-BO-03 BORGONOV COMPUTER-CODES ..SCATTERING LAW/ SIGMA(E,E-PRIME)
70-KA-01 KADOTANI COMPUTER-CODES ..CODE MANUAL
71-BI-02 BISCHOFF, MOORE+ SCATTERING-THEORIES/ COMPUTER-CODES/ H2,O ..MULTIPLE SCATTERING/ THEORY/ SIGMA(E, E-PRIME
72-BU-04 BUTLAND COMPUTER-CODES ..PHONON SPECTRA/ SCATTERING LAW
72-NA-01 NAKAHARA, KADOTANI ZR-H/ COMPUTER-CODES ..THEORY/ SIGMA (E,E-PRIME)/ SIGMA (E)/ SIGMA-TRANSPORT(E)/ SOLID
74-JO-04 JOHNSON COMPUTER-CODES ..MULTIPLE SCATTERING CORRECTION/ INELASTIC SCATTERING

1, 8 INSTRUMENTS-AND-METHODS

70-ST-02 STOCKMEYER INSTRUMENTS-AND-METHODS ..MONOCHROMETER/ CHOPPER
75-BA-03 BARTUNIK, JACOB INSTRUMENTS-AND-METHODS/ PROTEIN ..MULTI-DETECTOR SYSTEM/ ILL,GRENOBLE
75-CA-04 CARPENTER, HUELLER+ INSTRUMENTS-AND-METHODS ..TIME-OF-FLIGHT NEUTRON DIFFRACTION/ ARGONNE
75-CO-04 CONVERT INSTRUMENTS-AND-METHODS ..POSITION SENSITIVE DETECTOR/ ILL,GRENOBLE
75-DA-01 DACHS, AXMANN INSTRUMENTS-AND-METHODS ..NEUTRON DIFFRACTOMETER/ HIGH RESOLUTION/ SMALL SAMPLE/ BERLIN
75-DA-02 DAVIDSON INSTRUMENTS-AND-METHODS ..POSITION SENSITIVE DETECTOR
75-DE-02 DE-VRIES, ADRIAN INSTRUMENTS-AND-METHODS ..SINGLE CRYSTAL DIFFRACTOMETER/ SOUTH AFRICA
75-FR-02 FREDRIKZE, VAN-TRICHT INSTRUMENTS-AND-METHODS ..NEUTRON DIFFRACTION/ LIQUIDS/ AMORPHOUS SYSTEMS
75-FR-03 FREY, PRANDL INSTRUMENTS-AND-METHODS ..LAMELLAR MONOCHROMATOR
75-HA-03 HAYTER INSTRUMENTS-AND-METHODS ..POLARIZATION ANALYSIS
75-HE-04 HEINONEN, HIISMAEKI+ INSTRUMENTS-AND-METHODS ..FOURIER CHOPPER/ FINLAND
75-IB-02 ISHEL REVIEW-ARTICLES/ INSTRUMENTS-AND-METHODS ..SMALL ANGLE SCATTERING/ ILL,GRENOBLE
75-IS-02 ISHIKAWA, WATANABE+ INSTRUMENTS-AND-METHODS ..EPITHERMAL NEUTRON DIFFRACTION/ GD COMPOUNDS
75-JU-01 JUST, SCHMATZ+ INSTRUMENTS-AND-METHODS ..DIFFUSE SCATTERING
75-KO-02 KOZLOV, OSTANEVICH+ INSTRUMENTS-AND-METHODS ..SMALL ANGLE SCATTERING
75-LE-01 LEBECH, NIELSEN INSTRUMENTS-AND-METHODS ..SCANNING IN RECIPROCAL SPACE
75-RO-02 ROULT, BUEVOZ+ INSTRUMENTS-AND-METHODS ..HIGH PRESSURE, T-O-F DIFFRACTION/ GRENOBLE
75-SC-01 SCHAEFPE, SEIFERT INSTRUMENTS-AND-METHODS/ FE ..SMALL ANGLE SCATT./ BLOCH WALL/ MAGNETIC SCATT.
75-SC-03 SCHLENKER, BARUCHEL INSTRUMENTS-AND-METHODS ..NEUTRON TOPOGRAPHY
75-SC-04 SCHNEIDER INSTRUMENTS-AND-METHODS ..SEPARATION OF THERMAL DIFFUSE/ MUENCHEN
75-SE-01 SEQUEIRA INSTRUMENTS-AND-METHODS ..BOMBAY,INDIA/ DIFFRACTOMETER OPERATION
75-ST-03 STEICHELE, ARNOLD INSTRUMENTS-AND-METHODS ..TIME-OF-FLIGHT DIFFRACTION/ GARCHING, BRD
75-SU-02 SUTHERLAND, WROE INSTRUMENTS-AND-METHODS ..GUIDE TUBE/ COLD NEUTRON
75-WI-02 WILLIAMS INSTRUMENTS-AND-METHODS ..POLARIZATION ANALYSIS
75-WI-03 WINDSOR INSTRUMENTS-AND-METHODS ..T-O-F DIFFRACTION/ PROFILE FITTING
76-AB-01 ARKAGAM, BACCHELLA+ INSTRUMENTS-AND-METHODS ..POLARIZED NEUTRON/ POLARIZED TARGETS
76-AL-02 ALBERTINI, BOEUF+ INSTRUMENTS-AND-METHODS ..CURVED MONOCHROMATOR
76-BA-07 BAUSPIESS, BONSE+ INSTRUMENTS-AND-METHODS ..NEUTRON INTERFEROMETER
76-DA-05 DAVIDSON, CASE INSTRUMENTS-AND-METHODS ..DIFFRACTION TOPOGRAPHY
76-HA-09 HAYTER INSTRUMENTS-AND-METHODS ..POLARIZED NEUTRON
76-JA-01 JACOB INSTRUMENTS-AND-METHODS ..DETECTOR/ ELECTRONICS
76-SC-01 SCHLENKER, BARUCHEL INSTRUMENTS-AND-METHODS ..DIFFRACTION TOPOGRAPHY
76-WE-03 WERNER, COLELLA+ INSTRUMENTS-AND-METHODS ..NEUTRON INTERFEROMETRY/ MISSOURI

2 MONATOMIC ELEMENTS

2. 1 ALUMINIUM

AL

56-SQ-01 SQUIRES NEUTRON-SCATTERING-IN-SOLIDS/ AL ..THEORY/ LATTICE VIBRATION/ FREQUENCY DISTRIBUTION ..ENERGY D
 57-CA-01 CARTER, PALEVSKY+ AL ..EXPERIMENT/ LATTICE VIBRATION/ DISPERSION RELATION
 58-BR-03 BROCKHOUSE, STEWART AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
 60-LA-02 LARSSON, DAHLBORG+ AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..293-932UK
 61-LA-02 LARSSON, HOLMRYD+ AL ..EXPERIMENT/ SOLID/ DISPERSION RELATION
 62-LE-01 LEHMAN, WOLFRAM+ CU/ AL/ ZR-H ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
 63-SQ-01 SQUIRES AL ..LATTICE DYNAMICS/FREQUENCY SPECTRUM
 65-BR-01 BREDOV, KOTOV+ AL ..PHONON SPECTRUM/ EXPERIMENT
 65-LA-01 LARSSON, DAHLBORG+ AL ..EXPERIMENT/ LIQUID/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
 65-SC-01 SCHMUNK, BRUGGER+ AL/ BE ..EXPERIMENT/ SCATTERING FUNCTION/ TOF/ FREQUENCY DISTRIBUTION ..POLYCRYSTAL/ COH
 65-ST-01 STEDMAN, NILSSON AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
 65-ST-02 STEDMAN, NILSSON AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..CRYSTAL SPECTROMETER/ 80DK
 65-YA-01 YARNELL, WARREN+ AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
 66-AN-01 ANIMALU, BONSIGNORI+ NA/ K/ AL/ LI/ Rb/ CS ..THEORY/ PHONON DISPERSION/ MODEL POTENTIAL
 66-BR-05 BRUGGER METHANE/ ETHANE/ AL/ NA/ PB/ AR ..COMPIATION/ SCATTERING FUNCTION
 66-EG-01 EGELSTAFF, DUFFILL+ PB/ SN/ BI/ ZN/ AL ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR
 66-GI-02 GILAT, NICKLOW+ AL ..PHONON DISPERSION/ PHONON SPECTRA
 66-II-01 IIJIMA AL ..CALCULATION/ PHONON SPECTRUM/ SCATTERING FUNCTION/ COHERENT
 66-SH-01 SHUKLA, DAYAL AL ..THEORY/ PHONON DISPERSION/ SCATTERING FUNCTION/ KREBS MODEL
 66-ST-01 STEDMAN, NILSSON AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..3-AXIS SPECTROMETER/ 80DK/ 300DK
 67-BJ-02 BJORKMAN, LUNDQVIST+ AL ..THEORY/ LATTICE DYNAMICS
 67-CA-02 CARBOTTE, DYNES AL ..THEORY/ SUPERCONDUCTING TRANSITION/ PHONON SPECTRA
 67-CO-01 COCKING AL/ PB/ BI/ Rb/ SN ..SOLID/ LIQUID/ DISPERSION RELATION/ EXPERIMENT
 67-LA-01 LAKATOS NEUTRON-SCATTERING-IN-SOLIDS/ AL ..LATTICE DYNAMICS/ THEORY/ FREQUENCY DISTRIBUTION
 67-ST-03 STEDMAN, ALMØVIST+ AL/ PB ..LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..800DK FOR AL/ 500DK FOR PB
 68-GR-02 GRIMVALL, GRIMVALL AL/ NB/ PB ..FREQUENCY DISTRIBUTION/ THEORY/ LATTICE DYNAMICS ..DEBYE TEMP.
 68-SC-06 SCHNEIDER, STOLL NA/ MG/ AL ..THEORY/ LATTICE DYNAMICS ..ELECTRONIC STRUCTURE/ METAL
 69-HO-02 HOEGBERG, SANDSTROM AL ..THEORY/ PHONON FREQUENCY SHIFT AND DAMPING
 69-JH-01 JONSON, WESTIN AL ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE ..METAL/ ION-ELECTRON INTERACTION MODEL
 69-WA-05 WALLACE AL ..THEORY/ PHONON DISPERSION
 70-BI-01 BINDER AL ..EXPERIMENT/ SCATTERING CROSS SECTION
 70-BR-01 BRAUNECK, GAHN+ AL ..THEORY/ STRUCTURE FACTOR
 70-CO-06 COULTHARD SODIUM/ POTASSIUM/ ALUMINIUM/ LEAD ..THEORY/ LATTICE VIBRATION/ DISPERSION RELATION ..PRESSURE
 70-GU-02 GUPTA, TRIPATHI AL ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL/ METAL
 70-KO-01 KOEHLER, GILLIS+ AL ..THEORY/ ANHARMONICITY/ PHONON WIDTHS AND LIFETIMES/ METAL
 70-SA-04 SANDSTROM, HOEGBERG AL ..THEORY/ ANHARMONICITY/ PHONON WIDTHS AND LIFETIMES/ METAL
 70-WA-01 WALLACE AL ..THEORY/ LOCAL PSEUDOPOTENTIAL MODEL
 70-WE-05 WEYMOUTH, STEDMAN AL ..EXPERIMENT/ LATTICE DYNAMICS/ FERMI SURFACE/ KOHN ANOMALIES
 71-GI-03 GILLIS, KOEHLER AL ..THEORY
 71-NO-01 NOLLING THEORY-OF-FLUIDS/ AL/ AR ..THEORY/ VAN-HOVE-CORRELATION-FUNCTION
 71-SC-01 SCHMUCK AL ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..PSEUDOPOTENTIAL/ OPW METHOD
 71-SI-01 SINGH, SHARMA CU/ AG/ AU/ AL/ NI/ NA/ CR/ FE ..THEORY/ DEBYE-WALLER FACTOR
 72-GO-02 GOMPF, LAU+ PB/ AL/ CA ..EXPERIMENT/ PHONON SPECTRA/ COHERENT SCATTERING
 72-PR-02 PRASAD, SRIVASTAVA AL ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ DEBYE TEMPERATURE ..METAL/ T
 73-KA-01 KACHHAVA AL ..THEORY/ DISPERSION CURVE

73-SH-05 SHUKLA, CAVALHEIRO CU/ AG/ AL/ NI/ PD ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ FOURTH NEIGHBOURS FORCE
 73-ST-01 STALLARD, DAVIS-JR AL ..EXPERIMENT/ STRUCTURE FACTOR/ LIQUID METAL/ 703.1029 DC
 74-BE-02 BERTONI, BORTOLANI+ LI/ NA/ AL/ PB/ ..THEORY/ PHONON DISPERSION/ THIRD ORDER PERTURBATION THEORY
 74-BR-02 BREUER AL ..COHERENT NEUTRON SCATTERING/ POLYCRYSTAL
 74-CO-05 COWLEY AL ..CALCULATION/ FREQUENCY SPECTRA/ BORN-VON KARMAN MODEL
 74-HA-01 HAFNER, SCHMUCK AL ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ KOHN EFFECT
 74-RA-06 RAD AL ..THEORY/ NONLOCAL OPTIMIZED MODEL POTENTIAL/ PHONON DISPERSION/ LIQUID RESISTIVITY
 75-RE-02 REISSLAND, ESE AL/ NA/ MG/ IN/ TL ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ MODEL POTENTIAL CALCULATION
 76-ED-02 EDER, KUNSCH AL ..EXPERIMENT/ LIQUID STRUCTURE
 77-BO-03 BONING, BAUER+ AL ..EXPERIMENT/ CONSTANT-0 METHOD ..FRENKEL DEFECT/ SHIFT OF TRANSVERSE PHONON FREQUENCY/
 77-JA-01 JACUCCI, KLEIN AL ..COMPUTER SIMULATION/ SCATTERING FUNCTION

2. 2 ANTIMONY

SB

63-AR-01 ARNOLD, NERESON GA/ IN/ SB/ AS ..EXPERIMENT/ SCATTERING AMPLITUDE
 68-EL-01 EL-ELA, SALAMA+ SB ..TOTAL CROSS SECTION
 71-SH-02 SHARP, WARMING SB ..EXPERIMENT/ PHONON DISPERSION
 71-SO-04 SOSNOWSKI, MALISZEWSKI+ SB ..EXPERIMENT/ PHONON DISPERSION/ 5-NEIGHBOURS MODEL FITTING
 71-SO-05 SOSNOWSKI, MALISZEWSKI+ SB ..EXPERIMENT/ PHONON DISPERSION/ MODEL CALCULATION
 71-SO-06 SOSNOWSKI, MALISZEWSKI+ SB ..EXPERIMENT/ PHONON DISPERSION
 71-WA-06 WASEDA, SUZUKI SB ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR
 72-SO-03 SOSNOWSKI, CZACHOR+ SB ..EXPERIMENT/ PHONON DISPERSION/ FIVE-NEIGHBOUR MODEL FITTING
 72-SO-04 SOSNOWSKI, CZACHOR+ SB ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ FREQUENCY SPECTRUM

2. 3 ARGON

AR

47-ME-01 MEHRINGER AR ..MODEL CALCULATION/ PHONON-LIKE EXCITATION/ DISPERSION CURVE
 59-DE-01 DE-GENNES AR NEUTRON-SCATTERING-IN-FLUIDS/ AR ..SCATTERING THEORY/ ..LIQUID DYNAMICS/ MOMENTS METHOD
 62-GI-01 GINGRICH, TOMPSON ARGON ..EXPERIMENT/ LIQUID ..X-RAY
 63-BR-02 BROCKHOUSE, BERGSMAN SN/ H2.O/ AR/ HE ..EXPERIMENT/ LIQUID
 64-KR-01 KRGO, BORGONOV+ AR ..EXPERIMENT/ LIQUID/ SOLID
 64-RA-01 RAHMAN AR ..THEORY/ MOLECULAR DYNAMICS ..LIQUID DYNAMICS/ DIGITAL COMPUTER SIMULATION
 65-CH-02 CHEN, EDER+ NEON/ ARGON/ DEUTERIUM/ CARBON TETRAFLUORIDE ..EXPERIMENT/ LIQUID/ SIGMA(THETA.E)
 65-DA-01 DASANNACHARYA, RAO AR ..EXPERIMENT/ LIQUID/ SCATTERING LAW
 65-GR-04 GRINDLAY, HOWARD AR ..THEORY/ SOLID/ LATTICE DYNAMICS
 65-KR-02 KRGO, BORGONOV+ AR ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
 65-RA-02 RANDOLPH AR ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY DISTRIBUTION ..LIQUID AND SOLID
 65-SE-01 SEARS NEUTRON-SCATTERING-IN-FLUIDS/ AR ..LIQUID/ CORRELATION FUNCTION
 65-SI-04 SINGWI ARGON ..THEORY/ LIQUID/ SCATTERING LAW ..COHERENT SCATTERING/ ONE-PHONON APPROXIMATION
 66-DE-03 DESAI AR ..THEORY/ LIQUID/ INTERMEDIATE SCATTERING FUNCTION
 66-DE-05 DESAI, NELKIN AR ..THEORY/ LIQUID ..COLLECTIVE MOTION IN LIQUID
 66-ED-01 EDER, CHEN+ AR/ NE ..EXPERIMENT/ H IN LIQUID AR AND NE
 66-GU-01 GUPTA, DAYAL AR/ KR ..THEORY/ PHONON SPECTRA/ SPECIFIC HEAT
 66-PA-03 PASKIN REVIEW-ARTICLES/ AR/ NA/ CE/ RB ..LIQUID/ THEORY/ STRUCTURE FACTOR/ VELOCITY AUTOCORRELATION FU
 66-RA-01 RAHMAN NEUTRON-SCATTERING-IN-FLUIDS/ AR ..LIQUID/ FREQUENCY DISTRIBUTION ..COMPUTER EXPERIMENT/ 85.5DK
 66-RA-02 RAHMAN AR ..FREQUENCY DISTRIBUTION/ THEORY/ LIQUID/ MOLECULE DYNAMICS ..COMPUTER EXPERIMENT
 67-BO-01 BCON, RICE AR/ THEORY-OF-FLUIDS ..THEORY/ LIQUID ..MOMENTUM AUTO-CORRELATION FUNCTION
 67-LE-02 LEVI AR ..MOLECULAR DYNAMICS/ LIQUID/ FREQUENCY DISTRIBUTION/ THEORY
 67-MI-01 MIKOLAJ, PINGS AR ..LIQUID/ EXPERIMENT
 67-MI-02 MIKOLAJ, PINGS AR ..EXPERIMENT/ LIQUID ..RADIAL DISTRIBUTION/ -130DC--110DC/ X-RAY

67-SC-02 SCHROFT, MARCH THEORY-OF-FLUIDS/ AR ..THEORY
 67-SI-02 SINGWI, TOSI THEORY-OF-FLUIDS/ ARGON ..THEORY/ LIQUID ..VELOCITY AUTO-CORRELATION
 67-SK-02 SKOELD, LARSSON AR ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION/ DISPERSION RELATION ..94DK
 67-SK-04 SKOELD AR ..LIQUID/ THEORY/ SCATTERING FUNCTION ..QUASIELASTIC SCATTERING
 68-AG-02 AGRAWAL, DESAI+ NEUTRON-SCATTERING-IN-FLUIDS/ AR/ NA/ PB/ METHANE ..THEORY ..MODEL CALCULATION
 68-AN-01 ANDRIESSE AR ..THEORY/ LIQUID/ SCATTERING THEORY ..84DK
 68-AN-02 ANDRUS, MUETHER+ AR ..LIQUID/ EXPERIMENT
 68-AN-03 ANDRUS, MUETHER+ AR ..SCATTERING LAW/ EXPERIMENT/ LIQUID ..BE FILTER METHOD/ 87DK/ 97DK/ 111DK/ 124DK/ 22A
 68-AN-04 ANDRUS, MUETHER+ AR ..EXPERIMENT/ TOF/ QUASI-ELASTIC
 68-AN-05 ANDRUS, MUETHER+ AR ..LIQUID/ EXPERIMENT ..QUASI-ELASTIC PEAK/ TEMPERATURE DEPENDENCE/ 87.97, 111, 124 DEG.K
 68-AR-01 ARDENTE, NARDELL+ AR/ NA ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION/ SCATTERING FUNCTION
 68-DE-04 DESAI, YIP AR ..LIQUID/ SCATTERING FUNCTION ..94.4DK
 68-EG-01 EGGER, GSARGER+ AR ..EXPERIMENT/ PHONON DISPERSION/ SINGLE CRYSTAL
 68-FR-01 FRANCHETTI, MAZZA AR/ NE/ HE ..THEORY/ MONATOMIC LIQUID/ RADIAL DENSITY AND SCATTERIN FUNCTION
 68-GL-03 GLASS, RICE NEUTRON-SCATTERING-IN-FLUIDS/ AR ..THEORY/ LIQUID/ CORRELATION FUNCTION ..COHERENT-SCATTERING
 68-MA-09 MARTIN, YIP AR ..FREQUENCY DISTRIBUTION/ THEORY/ LIQUID/ STATISTICAL MECHANICS ..FLUCTUATION-DISSIPATION T
 68-RI-01 RICHTER, VOSS AR/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LINEARIZED VLASOV-BOLTZMAN EQUATION
 68-RI-02 RICHTER, VOSS AR ..THEORY/ LIQUID/ QUASI-ELASTIC SCATTERING ..LINEARIZED VLASOV EQUATION
 68-SI-01 SINGWI, SJOELANDER AR ..THEORY/ LIQUID/ PAIR DISTRIBUTION FUNCTION ..85.9DK
 68-SI-02 SINGWI, SKOELD+ NEUTRON-SCATTERING-IN-FLUIDS/ AR ..THEORY/ LIQUID/ MOLECULAR DYNAMICS
 69-AN-01 ANDRIESSE, COMPAGNER+ AR ..EXPERIMENT/ GAS DYNAMICS
 69-PA-01 PAGE, EGELSTAFF+ AR/ RB ..LIQUID/ STRUCTURE FACTOR
 69-SC-01 SCHNEIDER, STOLL+ NEUTRON-SCATTERING-IN-FLUIDS/ AR ..DISPERSION
 69-TA-01 TAHIR-KHELI, WU AR ..CORRELATION FUNCTION/ LIQUID/ FREQUENCY DISTRIBUTION/ MEAN SQUARE DISPLACEMENT/ THEOR
 70-AN-01 ANDRIESSE AR ..INTERMEDIATE SCATTERING FUNCTION ..4A NEUTRONS
 70-AN-02 ANDRIESSE ARGON ..THEORY ..MODEL WHICH IS USEFUL FOR THE INTERPRETATION OF THE GAS DATA
 70-BA-04 BARKER, KLEIN AR ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ ANHARMONICITY
 70-BA-02 BATCHELDER, COLLINS+ AR ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION CURVE
 70-BO-01 BOBETIC, BARKER AR ..THEORY/ SOLID/ LATTICE DYNAMICS/ ANHARMONICITY ..THREE-BODY FORCE/ SPECIFIC HEAT/ DEB
 70-BR-04 BRUIN, HASMAN ARGON ..INTERMEDIATE SCATTERING FUNCTION/ STRUCTURE FACTOR/ GAS
 70-GL-01 GLYDE NE/ AR/ KR/ XE ..THEORY/ ANHARMONICITY
 70-GO-01 GOLDMAN, HORTON+ AR ..DISPERSION CURVE/ LIFETIME / THEORY/ SELF-CONSISTET APPROXIMATION
 70-KI-03 KITAGAWA AR/ KR/ POLYETHYLENE ..REVIEW/ LATTICE DYNAMICS
 70-LE-02 LEECH, REISSLAND NE/ AR/ KR/ XE ..THEORY/ LATTICE DYNAMICS/ ANHARMONICITY ..THERMODYNAMICAL PROPERTIES
 70-LE-03 LEECH, REISSLAND NE/ AR/ KR/ XE ..THEORY/ ANHARMONICITY ..SPECIFIC HEAT/ DEBYE TEMPERATURE/ THERMAL EXPANS
 70-PA-05 PATHAK, SINGWI THEORY-OF-FLUIDS/ ARGON ..THEORY/ LIQUID/ SCATTERIN LAW/ GAUSSIAN APPROXIMATION
 70-SC-03 SCHNEIDER, BROUT+ AR ..THEORY
 70-ZA-01 ZANDVELD, ANDRIESSE+ AR ..EXPERIMENT/ LIQUID/ VELOCITY AUTOCORRELATION FUNCTION ..MEAN SQUARE ATOMIC DISPL
 71-BA-06 BARKER, FISHER+ THEORY-OF-FLUIDS/ AR ..COMPUTER-SIMULATION/ MONTE-CARLO ..THREE-BODY-INTERACTION
 71-BA-08 BATCHELDER, HAYWOOD+ AR ..EXPERIMENT/ SOLID/ PHONON DISPERSION/ 4, 40, 77K
 71-BA-09 BATCHELDER, COLLINS+ AR ..PHONON DISPERSION/ EXPERIMENT
 71-CH-01 CHATURVEDI, BAIJAL AR ..THEORY/ SPACE-TIME CORRELATION FUNCTION/ NON-GAUSSIAN EFFECT
 71-DE-01 DE-WETTE, FOWLER AR ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION FUNCTION ..THERMAL EXPANSION/ SPECI
 71-DO-01 DORNER, EGGER AR ..EXPERIMENT/ PHONON DISPERSION/ SOUND VELOCITY/ ELASTIC CONSTANT
 71-EG-01 EGELSTAFF, PAGE+ RB/ AR/ C.CL4 ..EXPERIMENT/ TRIPLET CORRELATION FUNCTION/ THEORY
 71-GU-02 GUPTA, GUPTA AR/ KR/ XE ..THEORY/ PHONON DISPERSION AND SPECTRA/ ANHARMONIC POTENTIAL
 71-HU-01 HUELLER THEORY-OF-SOLIDS/ ARGON/ KRYPTON/ XENON ..CAUCHY-RELATION
 71-JA-01 JAIN, BHANDARI AR/ NA ..THEORY/ MEMORY FUNCTION/ LIQUID DYNAMICS
 71-KL-01 KLEIN, BARKER+ THEORY-OF-SOLIDS/ AR ..4DK/ 40DK/ 77DK
 71-LO-02 LOVESEY THEORY-OF-FLUIDS/ AR ..TRIPLE-PEAK-STRUCTURE
 71-NO-01 NOLTING THEORY-OF-FLUIDS/ AL/ AR ..THEORY/ VAN-HOVE-CORRELATION-FUNCTION
 71-VA-01 VAN-LOEF AR ..EXPERIMENT/ LIQUID/ SELF-DIFFUSION

71-WA-05	WASEDA, SUZUKI	CS/ AR	..THEORY/ LIQUID ..PAIR POTENTIAL/ BORN-GREEN EQUATION
72-AN-01	ANDRIESEN, LEGRAND	AR	..EXPERIMENT/ NEUTRON DIFFRACTION
72-BA-06	BARKER, GASKELL	ARGON/ THEORY-OF-FLUIDS	..CORRELATION FUNCTION
72-DU-01	DUBOIS	AR	..THEORY/ DISPERSION/ SCATTERING FUNCTION/ LIQUID DYNAMICS
72-FR-01	FRANCHETTI	AR/ ZN	..THEORY/ RADIAL DENSITY FUNCTION
72-HO-01	HORNER	HE/ NE/ AR	..THEORY/ PHONON DISPERSION/ SELFCONSISTENT TREATMENT
72-LA-01	LADO	AR	..THEORY/ DENSITY AUTOCORRELATION FUNCTION
72-PA-01	PAGE	AR	..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR/ NEUTRON DIFFRACTION/ 84,5DK
72-PO-01	POLLOCK	AR	..THEORY/ LENNARD-JONES HARMONIC CRYSTALS
72-RO-03	ROWE, SKOELD	AR	..EXPERIMENT/ LIQUID/ 85.2K/ SCATTERING FUNCTION
72-SK-02	SKOELD, ROWE+	AR	..EXPERIMENT/ LIQUID/ SCATTERING LAW/ COHERENT AND INCOHERENT
72-SK-03	SKOELD, ROWE+	AR	..EXPERIMENT/ INELASTIC SCATTERING FUNCTION/ 85,2DK
72-TO-02	TOLPYGO, TROITSKAYA	NE/ AR/ KR	..DISPERSION CURVE
73-BA-01	BARKER, GASKELL	AR	..THEORY/ DYNAMIC STRUCTURE FACTOR
73-LO-04	LOVESEY	THEORY-OF-FLUIDS/ AR	..GENERALIZED LANGEVIN EQUATION/ SCATTERING FUNCTION
73-MA-01	MACHIDA, MURASE	THEORY-OF-FLUIDS/ AR	..SIMPLE LIQUID/ RELAXATION TIME FOR LONGITUDINAL MODE
73-SH-06	SHUKLA, SALZBERG	AR	..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA/ AXIALLY SYMMETRIC MODEL
74-CH-06	CHUNG, YIP	AR	..THEORY/ LIQUID ..LONGITUDINAL CURRENT CORRELATION FUNCTION
74-FU-01	FUJII, LURIE+	AR	..EXPERIMENT/ SOLID/ DISPERSION RELATION/ TRIPLE AXIS NEUTRON SPECTROMETER/ FREQUENCY SPE
74-JO-05	JORDAN	AR/ THEORY-OF-FLUIDS	..THEORY/ LIQUID/ CORRELATION FUNCTION ..DIFFUSION COEFFICIENT
74-OL-01	OLSSON, LARSSON	C.H4/ AR	..NEUTRON SCATTERING/ DIFFUSION CONSTANT
74-SC-04	SCHRODT, DAVIS	AR	..THEORY/ LIQUID ..HARD AND SOFT PARTS SEPARATION OF POTENTIAL/ THERMAL CONDUCTIVITY/ SE
74-TS-01	TSANG, MACLIN	AR	..VELOCITY CORRELATION/ LIQUID
75-BR-02	BROSTON	AR	..THEORY/ INTERMOLECULAR POTENTIAL
75-FR-01	FRANCHETTI	AR	..THEORY/ DISPERSION/ RADIAL DISTRIBUTION
75-GA-01	GARG, GUPTA	NE/ AR/ KR/ XE	..LATTICE DYNAMICS/ ANHARMONICITY/ CENTRAL FORCE MODEL/ DISPERSION RELATION
75-GU-02	GUPTA, GARG	NE/ KR/ XE/ AR	..THEORY/ DISPERSION RELATION/ SOLID/ ANHARMONICITY
75-GO-01	GOETZE, LUECKE	THEORY-OF-FLUIDS/ AR	..CLASSICAL FLUID/ EXCITATION SPECTRUM
75-JH-01	JHGN, FORSTER	THEORY-OF-FLUIDS/ AR	..THEORY/ DYNAMICAL STRUCTURE FACTOR
75-TE-04	TEWARI, TEWARI	THEORY-OF-FLUIDS/ AR	..THEORY/ LIQUID/ SCATTERING LAW/ CORRELATION FUNCTION ..HUBBARD AND B
75-YO-01	YOSHIDA, TAKENO	THEORY-OF-FLUIDS/ AR	..CLASSICAL SIMPLE LIQUID/ DYNAMICAL STRUCTURE FACTOR/ DISPERSION CUR
76-BO-02	ROHRA, GUPTA	THEORY-OF-SOLIDS/ AR/ KR/ XE	..THEORY/ SOLID/ LATTICE DYNAMICS ..KIYARA POTENTIAL/ PHONON GRE
76-CA-03	CARNEIRO	H2/ AR/ NEUTRON-SCATTERING-IN-FLUIDS/ NA	..FREQUENCY-SPECTRA
76-GU-03	GOETZE, ZIPPELIUS	THEORY-OF-FLUIDS/ AR/ RB	..SELF-CORRELATION FUNCTION/ CLASSICAL LIQUIDS
76-KA-01	KAMOL, BANSAL+	ARGON	..THEORY/ MOLECULAR DYNAMICS/ MODEL FITTING/ LIQUID
76-TE-01	TEWARI, TEWARI	AR/ NEUTRON-SCATTERING-IN-FLUIDS	..THEORY/ LIQUID ..85,2DK
76-WA-04	WASEDA, SUZUKI	NE/ AR/ KR/ XE	..LIQUID/ PAIR POTENTIAL/ BORN-GREEN EQUATION
77-GA-03	GASKELL, CHIAKWELU	ARGON/ RUBIDIUM	..THEORY/ FREQUENCY SPECTRUM/ MEMORY FUNCTION
77-RA-04	RAND, RAO+	KR/ AR/ NE	..EXPERIMENT ..LIGHT SCATTERING/ ELASTIC CONSTANTS/ COMPARISON WITH NEUTRON SCATTERI
77-SC-04	SCHOMMERS	AR	..2-DIMENSION/ PAIR-CORRELATION
77-TA-02	TAUB, CARNEIRO+	AR	..EXPERIMENT/ DISPERSION RELATION/ CONSTANT-0 METHOD ..ADSORBED ARGON FILM IN GRAPHITE
77-VE-01	VESTNER, WALDMANN	..NITROGEN/ ARGON ..GAS/ HYDRODYNAMICS ..FRICTIONAL AND THERMAL FORCES ON A SPHERICAL PART	
77-YO-02	YOSHIDA, TAKENO	THEORY-OF-FLUIDS/ NEUTRON-SCATTERING-IN-FLUIDS/ AR	..INCOHERENT SCATTERING FUNCTION/ CLASS

2. 4 ARSENIC

AS

63-AR-01	ARNOLD, NERESON	GA/ IN/ SB/ AS	..EXPERIMENT/ SCATTERING AMPLITUDE
76-RE-01	REICHARDT, RIEDER	ARSENIC	..EXPERIMENT/ PHONON DISPERSION/ BORN-VON-KARMAN FITTING

2. 5 BARIUM

BA

73-PR-01 PRASAD, SRIVASTAVA BA/ SP/ CA ..THEORY/ SOLID / DISPERSION RELATION/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL

2. 6 BERYLLIUM BE

51-EG-01 EGELSTAFF H/ BE/ V/ SE/ MO/ FE ..SOLID/ EXPERIMENT/ TRANSMISSION

58-EG-01 EGELSTAFF BE/ MG/ SCATTERING-THEORIES ..THEORY/ EXPERIMENT/ SOLID/ SIGMA(E, E-PRIME, THETA)/ SIGMA(E) ..O

62-BR-04 BRUGGER BE/ BE-O/ GRAPHITE/ H2/O/ D2/O/ METHANE/ PROPANE/ TERPHENYL/ COMPILATIONS ..SCATTERING FUNCTION

62-EG-04 EGELSTAFF H2/O/ D2/O/ GRAPHITE/ BE ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ THEORY ..EVALUATION

62-EG-05 EGELSTAFF MG/ RE/ PB ..THEORY/ SOLID/ LIQUID/ SIGMA(E, E-PRIME, THETA) ..METAL/ LIQUID METAL

62-SC-01 SCHMUNK, BRUGGER+ BE ..EXPERIMENT/ SOLID/ DISPERSION RELATION

63-SI-01 SINCLAIR BE/ BE-O ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY DISTRIBUTION/ TOF ..293 DK

64-FU-02 FULLWOOD, CAERTNER+ BE ..NEUTRON SPECTRUM/ EXPERIMENT ..TIME AND BUCKLING DEPENDENT NEUTRON SPECTRUM

64-HA-02 HAYWOOD, SINCLAIR GRAPHITE/ BE/ BE-O ..COMPILATION/ SCATTERING FUNCTION

64-SC-01 SCHMUNK ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY DISTRIBUTION ..COHERENT SCATTERING LAW/ ROOM TEMP,

64-YO-02 YOUNG, KOPPEL BE/ MG/ ZN ..THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS ..ROOT SAMPLING METHOD

65-BE-01 BEYSTER, KOPPEL D2/O/ H2/O/ POLYETHYLENE/ BE ..THEORY/ EXPERIMENT/ LIQUID/ SOLID/ CROSS SECTION EVALUATION

65-DE-03 DEWAMES, WOLFRAM+ BE/ ZN ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION

65-SC-01 SCHMUNK, BRUGGER+ AL/ BE ..EXPERIMENT/ SCATTERING FUNCTION/ TOF/ FREQUENCY DISTRIBUTION ..POLYCRYSTAL/ COH

65-YO-01 YOUNG, KOPPEL BE/ C/ H2/O/ D2/O/ C-H2/ H2/ D2 ..THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATION

65-YO-04 YOUNG, KOPPEL BE ..POLYCRYSTAL/ SCATTERING LAW

66-AH-01 AHLERS BE ..EXPERIMENT/ DEBYE TEMPERATURE ..HEAT CAPACITY/ FROM 1.4 DK TO 30 DK

66-SA-03 SAHM, VENKATARAMAN+ BE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION

66-SC-03 SCHMUNK BE ..THEORY/ SOLID/ DISPERSION RELATION ..TEST OF SUM RULE

66-SC-04 SCHMUNK BE ..EXPERIMENT/ DISPERSION RELATION ..(0001), (0110), (1120) DIRECTION/ DATA GIVEN IN GRAPHICA

66-YO-01 YOUNG, MARADUDIN BE/ C/ BE-O ..SCATTERING FUNCTION/ THEORY/ LATTICE DYNAMICS/ FREQUENCY DIS

67-KO-02 KOPPEL, MARADUDIN BE ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..METAL

67-KO-04 KOPPEL, YOUNG BE ..THEORY/ SOLID

67-NA-01 NAKAHARA, KATO BE/ H2/O/ COMPUTER-CODES ..SOLID/ THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION

68-BR-01 BROVMAN, KAGAN+ BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS

68-CZ-01 CZACHOR MG/ ZN/ BE ..THEORY/ PHONON DISPERSION

68-GL-01 GLAESER H2/O/ ZR-H/ GRAPHITE/ D2/O/ BE/ BE-O ..COMPILATION/ SCATTERING FUNCTION/ CROSS SECTION EVALUATI

68-GL-02 GLAESER H2/O/ D2/O/ ZR-H/ GRAPHITE/ BE/ BE-O ..SCATTERING FUNCTION/ DIFFUSION PARAMETER/ COMPILATION

68-JO-01 JOHNSTON BE ..THEORY/ SOLID/ HARMONIC APPROXIMATION/ SCATTERING LAW/ INCOHERENT APPROXIMATION/ FREQUENCY

68-KO-02 KOPPEL, YOUNG BE ..LATTICE DYNAMICS/ SOLID/ THEORY/ DISPERSION RELATION

68-PA-01 PAGE, HAYWOOD H2/O/ D2/O/ GRAPHITE/ BE/ BE-O ..COMPILATION/ LIQUID/ SOLID/ FREQUENCY DISTRIBUTION ..AT VAR

69-BG-06 BORGONOV BE ..CALCULATION/ COHERENT/ POLYCRYSTAL/ SCATTERING LAW

69-GI-02 GILAT, RIZZI+ BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE ..METAL/ MODEL POTENTIAL CALCULATION

69-JO-01 JOHNSTON BE ..THEORY/ SOLID/ HARMONIC APPROXIMATION/ BORN-VON KARMAN MODEL/ SCATTERING LAW/ DEBYE-WALLER

69-KI-01 KING-3RD, CUTLER BE ..DISPERSION RELATION/ SOLID/ THEORY/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL/ PHONON/ META

69-ME-02 METZBOWER BE/ MG/ ZN ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..NONCENTRAL-FORCE/ FIVE FORC

69-SA-05 SAHNI, VENKATARAMAN BE ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL/ OPW METHO

70-BO-04 BORGONOV, SPREVAK BE ..THEORY/ COHERENT SCATTERING/ POLYCRYSTAL

70-FR-01 FRAAS, PORTO+ BE ..EXPERIMENT/ RAMAN SCATTERING

70-KI-02 KING, CUTLER BE ..LATTICE DYNAMICS/ THEORY/ SOLID/ DISPERSION RELATION ..HEXAGONAL CLOSE-PACKED CRYSTAL/ P

70-PR-01 PRAKASH, JOSHI BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..SINGLE-ORTHOGONALIZED-PLANE-WA

70-SH-03 SHARAN, BAJPAI BE/ MG/ TL ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..HEXAGONAL METAL

71-BE-03 BEZDEK, FINEGOLD ZN/ BE ..THEORY/ LATTICE DYNAMICS

71-KU-02 KUSHWAHA BE/ TL ..NON-CENTRAL FORCE MODEL

71-SR-01 SRINIVASAN, RAO MG/ ZN/ BE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT/ ANHARMONICS

71-TH-01 THAPER, RAO+ BE ..EXPERIMENT/ PHONON DISPERSION/ MODIFIED AXIAL SYMMETRIC MODEL FITTING

71-TR-05 TROTT, HEALD BE/ MG/ ZN ..THEORY/ PHONON DISPERSION AND SPECTRA/ HEXAGONAL LATTICE
 73-BO-04 BOSE, TRIPATHI+ BE/ MG/ ZN ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ SPECIFIC HEAT/ CENTRAL AND NON
 73-KU-04 KUSHWAHA MG/ BE/ TL ..THEORY/ PHONON DISPERSION/ SHORT-RANGE CLOSED-SHELL AND IONIC INTERACTION
 73-RA-01 RAJPUT, KUSHWAHA BE/ MG ..THEORY/ PHONON DISPERSION/ KREB MODEL
 73-RO-03 ROY, DASANNACHARYA+ BE ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
 73-UP-02 UPADHYAYA, VERMA BE/ MG/ HO/ TL ..THEORY/ PHONON DISPERSION/ MODIFIED SHARMA-JOSHI MODEL
 74-DA-02 DASANNACHARYA, IYENGAR+ BE ..EXPERIMENT/ PHONON DISPERSION/ SIX-NEIGHBOUR FORCE MODEL
 75-KA-03 KANDA, KADOTANI+ BE ..TOTAL CROSS SECTION/ EXPERIMENT
 75-MA-05 MAURYA, SRIVASTAVA BE/ MG/ ZN ..THEORY/ PHONON DISPERSION/ HCP METAL/ TOYA THEORY
 75-UP-01 UPADHYAYA, SINHA BE/ MG/ Y/ HO ..THEORY/ PHONON DISPERSION/ DISPERSION RELATION ..BHATIA MODEL
 76-DA-07 DAY, SUN+ BE/ LI ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL METHOD
 76-ST-01 STEDMAN, AMILIUS+ BE ..EXPERIMENT/ PHONON DISPERSION/ NINE SYMMETRY LINE/ 80K
 76-SU-01 SUN, DAY+ LI/ BE ..THEORY/ PHONON DISPERSION/ EFFECT OF CONDUCTION ELECTRON
 77-JA-02 JANAK BE ..SELF-CONSISTENT KKR ENERGY BAND CALCULATION
 77-SH-03 SHARMA, UPADHYAYA BE/ TB/ HO ..THEORY/ PHONON DISPERSION/ FORCE CONSTANT MODEL

2. 7 BISMUTH

BI

64-YA-02 YARNELL, WARREN+ BI ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
 66-EG-01 EGELSTAFF, DUFFILL+ PB/ SN/ BI/ ZN/ AL ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR
 66-OE-01 OEHME, RICHTER CS/ BI/ NA ..STRUCTURE FACTOR
 67-CO-01 COCKING AL/ PB/ BI/ RB/ SN ..SOLID/ LIQUID/ DISPERSION RELATION/ EXPERIMENT
 67-SM-01 SMITH BI ..LATTICE DYNAMICS/ EXPERIMENT/ TOF/ SCATTERING FUNCTION ..CONST.-Q METHOD/ 75DK
 68-MA-10 MATEESCU, TEUTSCH+ ZN/ TL/ PB/ SN/ BI ..EXPERIMENT/ LIQUID/ STATISTICAL MECHANICS ..LIQUID METAL/ 340DC-11000
 68-NO-01 NORTH, ENDERBY+ BI ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ CONST-0
 68-SO-01 SOSNOWSKI, BEDNARSKI+ BI ..EXPERIMENT/ LIQUID/ SOLID/ DISPERSION RELATION ..280DC FOR LIQUID/ 262DC FOR SOL
 68-TU-01 TUNKALO, KUOPPAMAKI+ BI ..EXPERIMENT/ ELASTIC CONSTANTS/ 300-544DK
 72-BU-01 BURENKOV, VALIEV+ BI ..EXPERIMENT/ ELASTIC CONSTANT
 72-KA-05 KAMMER, CARDINAL+ NA/ K/ HG/ BI/ NA-K ..THEORY/ INTERATOMIC FORCE CONSTANTS/ KNIGHT SHIFT/ FREQUENCY SPECTRUM ..P
 77-SR-01 SRIVASTAVA

2. 8 BORON

B

64-AL-01 ALS-NIELSEN, DIETRICH HE/ B/ AU ..EXPERIMENT/ CROSS SECTION
 65-DO-05 DONALDSON, PASSELL+ B/ N/ O ..MIRROR REFLECTION/ SCATTERING AMPLITUDE
 73-FO-01 FOLTER I/ B ..THEORY/ DISPERSION FUNCTION/ BORN VON KARMAN MODEL

2. 9 BROMINE

BR

62-CA-01 CAGLIOTI, RICCI BR ..LIQUID/ EXPERIMENT
 63-CA-01 CAGLIOTI, ASCARELLI BR ..LIQUID/ EXPERIMENT
 63-CO-07 COOTE, HAYWOOD BR ..SCATTERING LAW/ EXPERIMENT/ LIQUID
 64-AN-01 ANTONINI, ASCARELLI+ BR ..EXPERIMENT/ LIQUID
 68-CA-02 CARPENTER, SCHAEFER BR/ C2.F6 ..SCATTERING THEORY
 73-MI-04 MISAWA, FUKUSHIMA+ BR/ NEUTRON-SCATTERING-IN-FLUIDS ..EXPERIMENT/ LIQUID/ T-O-F
 74-NI-02 NIIMURA BR ..ANALYSIS/ LIQUID STRUCTURE FACTOR

2. 10 BROMINE

BR2

- 67-CA-03 CARPENTER C2.F6/ BR2 ..SCATTERING LAW/ CORRELATION FUNCTION/ THEORY/ GAS/ MOLECULAR DYNAMICS ..TORSIONAL
2. 11 CADMIUM CD
- 71-TO-01 TOUSSAINT CD ..EXPERIMENT/ PHONON DISPERSION/ X-RAY SCATTERING
 72-ME-04 MENON, RAO CD ..THEORY/ SOE, TOE/ THERMAL EXPANSION/ GRUNEISEN CONSTANT
 72-TO-04 TOUSSAINT, CHAMPIER CD ..X-RAY DIFFUSE SCATTERING/ 88DK/ PHONON DISPERSION/ MODEL FITTING/ FREQUENCY SPECT
 75-CH-03 CHERNYSHOV, PARSHIN+ CD ..EXPERIMENT/ PHONON DISPERSION/ CD-110 ISOTOPE
 75-SI-11 SINGH, MAURYA+ CD ..THEORY/ PHONON DISPERSION/ AXIALLY SYMMETRIC MODEL
 76-CH-06 CHILD CD ..QUASIELASTIC/ SHORT RANGE ORDER/ MAGNETIC
 76-ER-01 EREMEEV, SADIKOV+ MG/ ZN/ CD ..EXPERIMENT/ SEPARATED ISOTOP CD-110, CD-111/ PHONON SPECTRA
 77-MA-05 MAURYA, SRIVASTAVA CD ..THEORY/ DISPERSION RELATION ..MODIFIED TOYA'S THEORY
 77-SI-04 SINHA, UPADHYAYA ZN/ CD ..THEORY/ PHONON DISPERSION
2. 12 CALCIUM CA
- 72-GO-02 GOMPF, LAU+ PB/ AL/ CA ..EXPERIMENT/ PHONON SPECTRA/ COHERENT SCATTERING
 73-PR-01 PRASAD, SRIVASTAVA RA/ SR/ CA ..THEORY/ SOLID / DISPERSION RELATION/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL
 73-SW-01 SWAROOP, BOHRA+ CA/ SR ..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ DEBYE TEMP./ SHARMA-JOSHI MODEL
 76-TA-03 TAUT, ESCHKIG CA ..THEORY/ SOLID/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ DEBYE TEMPERATURE ..PSEUDO-
2. 13 CARBON C
- 65-YO-01 YOUNG, KOPPEL BE/ C/ H2.O/ D2.O/ C.H2/ H2/ D2 ..THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATION
 66-YO-01 YOUNG BE/ C/ BE.O ..SCATTERING FUNCTION/ THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DIS
 68-II-01 IIZUMI, AYAO C ..SIGMA (E)
 69-CO-04 COLLINS, HAYWOOD C ..COHERENT INELASTIC SCATTERING/ CARBON FIBERS
 76-CH-01 CHADI, MARTIN C/ SI/ GE ..CALCULATION/ LATTICE DYNAMICAL PROPERTY/ ZONE BOUNDARY TRANSVERSE ACOUSTIC PHONO
2. 14 CERIUM CE
- 66-PA-03 PASKIN REVIEW-ARTICLES/ AR/ NA/ CE/ RB ..LIQUID/ THEORY/ STRUCTURE FACTOR/ VELOCITY AUTOCORRELATION FU
2. 15 CESIUM CS
- 66-OE-01 OEHME, RICHTER CS/ BI/ NA ..STRUCTURE FACTOR
 69-PR-02 PRAKASH, JOSHI LI/ NA/ K/ RB/ CS ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ THEORY/ SOLID/ LATTICE DYN
 70-SI-04 SINGH, PRAKASH LI/ RB/ K/ CS/ ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION ..ALKALI METAL
 71-CO-04 COX, MINKIEWICZ CS ..EXPERIMENT/ SCATTERING AMPLITUDE
 71-KU-04 KUSHWAHA, SINGH THEORY-OF-SOLIDS/ CS ..THEORY/ PHONON DISPERSION
 71-WA-05 WASEDA, SUZUKI CS/ AR ..THEORY/ LIQUID ..PAIR POTENTIAL/ BORN-GREEN EQUATION
 72-SI-02 SINGH, PRAKASH LI/ NA/ K/ RB/ CS ..THEORY/ DISPERSION CURVE
 72-SI-03 SINGH, PRAKASH LI/ NA/ K/ RB/ CS ..THEORY/ PHONON DISPERSION
 74-JO-01 JOGI CS/ PT ..THEORY/ PHONON DISPERSION/ ANGULAR FORCE MODEL
 76-SR-01 SRIVASTAVA, MITRA+ CS/ NA/ K ..THORY OF SOLIDS/ FREQUENCIES VS. ATOMIC NUMBER/ THEORY
 77-PR-02 PRASAD, SRIVASTAVA RB/ CS ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION

2. 16 CHLORINE
- CL
- 75-GR-01 GROUT, LEECH+ C.S2/ CL ..THEORY/ LATTICE DYNAMICS/ SOLID
2. 17 CHROMIUM
- CR
- 65-MO-01 MOELLER, MACKINTOSH CR ..EXPERIMENT/ SOLID/ DISPERSION RELATION ..TRIPLE AXIS SPECTROMETER
67-GI-02 GILAT CR/ FE/ W/ THEORY-OF-SOLIDS ..THEORY/ PHONON SPECTRA/ BCC METALS
- 70-RI-01 RICE, HALPERIN CR ..THORY/ LATTICE VIBRATION ..FERMI SURFACE/ ELECTRON SUSCEPTIBILITY/ EFFECT OF THE KOHN
71-SH-03 SHAW, MUHLESTEIN CR ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ KOHN EFFECT/ FREQUENCY SPECTRA
71-SH-04 SHAW, MUHLESTEIN CR ..EXPERIMENT/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ KOHN ANOMARY
71-SO-01 SOKOLOFF CR ..THEORY
72-MU-01 MUHLESTEIN, GUERMENT+ CR ..EXPERIMENT/ PHONON DISPERSION/ 300DK TO 503DK
74-PA-03 PAL CR ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION/ DEBYE-WALLER FACTOR/ DISPERSION RELATION
75-SI-10 SINGH, SINGH+ CR ..THEORY/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS ..DIELECTRIC FUNCTION/ PSEUDOPOTEN
76-JA-05 JAINI, GOHEL CR ..THEORY/ PHONON DISPERSION/ TRANSITION METAL/ B.C.C.
76-MO-02 MOON, KOEHLER+ REVIEW-ARTICLES/ CR/ V/ SC/ PD/ TI/ Y/ NB/ ..MAGNETIC FORM FACTOR
76-SI-03 SINGH, KHAKOO+ FE/ CR/ W ..THEORY/ PHONON DISPERSION/ MODEL CALCULATION
77-PA-02 PARIKH, HAY V/ NB/ TA/ CR/ MO/ W/ FE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANTS
77-SI-05 SINHA, KLINE+ CR ..EXPERIMENT/ MAGNETIC SCATTERING/ SPIN DYNAMICS
2. 18 COBALT
- CO
- 70-CZ-01 CZACHOR MG/ CO/ Y ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ BORN-VON KARMAN MODEL ..AXIAL
70-CZ-02 CZACHOR, RAJCA MG/ CO/ Y ..CALCULATION/ HEXAGONAL METAL/ FREQUENCY SPECTRA
74-KO-01 KOESTER, KNOPF+ CO ..SCATTERING AMPLITUDE
74-SI-02 SINGH, KUSHWAHA CO ..THEORY/ PHONON DISPERSION/ DEBYE TEMP.
77-GL-04 GLINKA, MINKIEWICZ+ CO ..EXPERIMENT/ SMALL ANGLE SCATTERING/ INELASTIC/ MAGNON
2. 19 COPPER
- CU
- 58-TO-01 TOYA CU ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
61-CR-01 CRIBIER, JACROT+ CU ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
62-LE-01 LEHMAN, WOLFRAM+ CU/ AL/ ZR-H ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
62-SO-01 SOSNOWSKI, KOZUBOWSKY CU ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
63-MA-02 MALISZEWSKI, SOSNOWSKI+ ZN/ CU/ MG ..EXPERIMENT
64-VI-01 VINTAIKIN, GORBACHEV+ CU ..DISPERSION RELATION/ SOLID/ EXPERIMENT
65-BL-01 BLECH, AVERBACH V/ CU ..THEORY/ MULTIPLE SCATTERING
65-SI-06 SINHA, SOUIRES CU ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ TOF
65-SL-01 SLATER V/ SI/ CU/ NEUTRON-SCATTERING-IN-SOLIDS ..HARMONIC APPROXIMATION/ DEBYE APPROXIMATION
66-BU-01 BUHRER, SCHNEIDER+ CU ..EXPERIMENT/ PHONON DISPERSION
66-DE-01 DE-WETTE, COTTERILL+ CU ..THEORY/ PHONON DISPERSION
66-SI-02 SINHA CU ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ TOF ..ROOM TEMPERATURE
67-GU-01 GUPTA, SHARMA CU/ AU ..LATTICE DYNAMICS/ THEORY
67-NI-01 NICKLOW, GILAT+ CU ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION/ FREQUENCY SPECTRUM ..3-AXIS SPECTR
67-SV-02 SVENSSON, BROCKHOUSE+ CU ..EXPERIMENT/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ FORCE ANALYSIS
67-YU-01 YUEN, VARHNI CU ..LATTICE DYNAMICS/ THEORY/ DISPERSION RELATION/ FREQUENCY SPECTRUM ..FCC CUBIC METAL

68-BU-01 BUHRER, SCHNEIDER+ CU ..PHONON DISPERSION
68-NI-03 NILSSON CU ..EXPERIMENT/ LATTICE VIBRATION/ DISPERSION RELATION ..KOHN EFFECT
69-BE-01 BEHARI, TRIPATHI CU ..DISPERSION RELATION/ THEORY ..MODIFIED ANGULAR FORCE MODEL/ ELECTRON-ION INTERACTIO
69-BE-02 BEHARI, TRIPATHI CU ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..MODIFIED ANGULAR FORCE MODEL/ ELECT
69-KR-01 KREBS, HOELZL LI/ NA/ K/ Rb/ CU/ AL/ Pb/ FE/ NI/ PT/ COMPUTER-CODES ..PSEUD-ION APPROXIMATION/ FITTING TO
70-BE-03 BEHARI, TRIPATHI CU/ AG/ AU ..THEORY/ LATTICE VIBRATION/ DISPERSION RELATION ..NON-CENTRAL FORCE MODEL/ EL
70-BU-01 BUHRER CU ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ CONST-Q METHOD ..PSEUDO-POTENTIAL ANALYSIS
71-BA-04 BAJPAL, NEELAKANDAN PD/ CU ..THEORY/ DISPERSION CURVE/ MODIFIED AXIALLY SYMMETRIC MODEL/ EFFECT OF CONDUCTION
71-MI-01 MILLER, BROCKHOUSE MOSCINSKI, NAWALANY THEORY-OF-FLUIDS/ CU
71-MO-01 SHARMA, SINGH CU/ AG/ AU ..THEORY/ PHONON DISPERSION/ METAL
71-SH-01 SHUKLA, CAVALHEIRO CU ..THEORY/ METAL/ PHONON DISPERSION/ DE-LAUNAY MODEL
71-SI-01 SINGH, SHARMA CU/ AG/ AU/ AL/ NI/ NA/ CR/ FE ..THEORY/ DEBYE-WALLER FACTOR
72-PH-01 PRAKASH, JOSHI CU ..THEORY/ DISPERSION RELATION
73-NI-04 NILSSON, ROLANDSON CU ..EXPERIMENT/ PHONON DISPERSION/ 80K/ MODEL FITTING/ PHONON DENSITY
73-SH-04 SHUKLA, SALZBERG CU ..THEORY/ PHONON DISPERSION/ BHATTIA MODEL
73-SH-05 SHUKLA, CAVALHEIRO CU/ AG/ AL/ NI/ PD ..THEORY/ PHONON DISPERSION/ PHONON SPECTA/ FOURTH NEIGHBOURS FORCE
73-SH-07 SHUKLA, CLOSS CU ..THEORY/ PHONON DISPERSION
73-SH-10 SHUKLA, CLOSS CU ..THEORY/ PHONON DISPERSION/ ANGULAR FORCE MODEL
73-SH-11 SHUKLA, CLOSS CU ..THEORY/ PHONON DISPERSION/ LEHMAN AND KREB MODEL
73-SI-01 SINGH, PRAKASH CU/ AG/ AU ..THEORY/ PHONON DISPERSION
74-CO-06 COWLEY, SHUKLA CU ..ANHARMONICITY/ THERMODYNAMIC QUANTITIES
74-GO-02 GOEL, PANDAY+ CU/ AG ..THEORY/ LATTICE DYNAMICS/ INTERATOMIC FORCE CONSTANT/ DISPERSAION RELATION ..ELECTRO
75-CL-01 CLOSS, SHUKLA CU ..THEORY/ PHONON DISPERSION/ SCREENED SHELL MODEL
75-FI-01 FIELEK CU/ NI ..THEORY/ PHONON DISPERSION/ METAL/ MODEL CALCULATION
75-FI-02 FIELEK COPPER/ GOLD/ SILVER ..LIQUID NOBLE METAL ..STRUCTURE FACTOR
75-GO-02 GOPALARAO, MURTHY COPPER/ SODIUM ..DISPERSION RELATION
75-KU-01 KUMAR, TOLPADI CU ..MODEL CALCULATION/ PHONON DISPERSION
75-KU-02 KUMAR, TOLPADI CU ..DISPERSION RELATIONS/ CUBIC METAL/ THEORY
76-GO-04 GOHEL, JANI NA/ CU/ W ..DISPERSION RELATIONS/ CUBIC METAL/ THEORY
76-LA-03 LAROSE, BROCKHOUSE CU ..EXPERIMENT/ PHONON DISPERSION/ 23-1063C/ TEMPERATURE EFFECT
77-GL-02 GLASS, BOFFI+ COPPER ..CALCULATION/ PHONON DISPERSION CURVE/ SCREW DISLOCATION/ SIMPLE CUBIC LATTICE MODEL
77-JA-03 JANDERWAL CU ..SOLID/ THEORY/ LATTICE DYNAMICS ..SUBLATTICE FORCE CONSTANTS
77-NA-01 NAND, TRIPATHI CU/ AG ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL
77-VA-02 VANDERWAL GE/ CU ..CALCULATION/ ATOMIC FORCE-CONSTANT

2. 20 DEUTERIUM

D

64-ST-01 STEHN, GOLDBERG+ H/ D/ H2,O/ D2,O/ HE/ LI/ BE/ GRAPHITE/ N/ O/ NE/ NA/ MG/ AL/ SI/ AR/ K/ COMPILATIONS ..S
65-CH-02 CHEN, EDER+ NEON/ ARGON/ DEUTERIUM/ CARBON TETRAFLUORIDE ..EXPERIMENT/ LIQUID/ SIGMA(THETA,E)
68-TA-02 TALHOUK, HARRIS+ D ..EXPERIMENT/ LIQUID/ MOLECULAR DYNAMICS ..20DK/ NEUTRON DIFFRACTION/ RADIAL DISTRIBUTI
70-KL-02 KLEIN, KOEHLER D ..LATTICE DYNAMICS/ SOLID
71-NI-02 NIELSEN, MOLLER D ..EXPERIMENT/ LATTICE DYNAMICS/ 5DK/ DISPERSION RELATION
71-NI-03 NIELSEN, MOELLER DEUTERIUM ..EXPERIMENT/ ORTHO-DEUTERIUM/ PHONON DISPERSION/ SOLID AT 5DK/ ELASTIC CONSTAN
73-NI-02 NIELSEN H/ D ..EXPERIMENT/ PHONON DISPERSION/ PARA-H.ORTHO-D/ TEMPERATURE,PRESSURE EFFECT

2. 21 DEUTERIUM

D2

64-YO-01 YOUNG, KOPPEL H2/ D2 ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING CROSS SECTION ..20.4DK
64-YO-04 YOUNG, KOPPEL H2/ D2 ..THEORY/ MOLECULAR DYNAMICS/ LIQUID ..SCATTERING CROSS SECTION

70-KL-03	KLUMP, SCHNEPP+	H2/ D2	..FREQUENCY DISTRIBUTION/ THEORY/ SOLID
2, 22	DIAMOND		
63-MI-01	MICHAELL, HARDY+	DIAMOND	..FREQUENCY SPECTRUM/ LATTICE DYNAMICS
64-YA-01	YARNELL, WARREN+	DIAMOND	..EXPERIMENT/ DISPERSION RELATION
65-WA-02	WARREN, WENZEL+	DIAMOND	..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS
65-WA-03	WARREN	DIAMOND	..THEORY/ PHONON DISPERSION
66-DO-02	DOLLING, COWLEY	GE/ SI/ DIAMOND/ GA, AS	..COHERENT INELASTIC SCATTERING STUDIES/ PHONON DISPERSION
66-KU-01	KUCHER, NECHIPORUK	DIAMOND	..THEORY/ PHONON DISPERSION
67-AG-01	AGGARWAL	DIAMOND	..THEORY/ PHONON DISPERSION/ TWO-NEIGHBOUR BORN-VON KARMAN MODEL
67-BL-01	BLANCHARD, VARSHNI	DIAMOND	..LATTICE DYNAMICS/ THEORY/ DISPERSION RELATION ..SHELL MODEL CALCULATION/ DEBY
67-MC-02	MC MURRY, SOLBRIG-JH+	DIAMOND	..LATTICE DYNAMICS/ DISPERSION RELATION/ THEORY
67-PE-02	PECKHAM	DIAMOND	..PHONON DISPERSION RELATION
67-WA-02	WARREN, YARNELL+	DIAMOND	..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION
68-WA-02	MARADUDIN, VOSKO	DIAMOND	..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY PROPERTIES/ SPACE GROUP/ IRREDUCIBLE
69-MO-01	MONTGOMERY	ZN, S/ DIAMOND/ SR, TI, O3	..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY PROPERTIES
71-JE-03	JEX	DIAMOND/ GE/ SI	..THEORY/ PHONON DISPERSION/ THERMAL PROPERTIES/ ANHARMONIC INTERACTION
72-TU-01	TUBINO, PISERI+	DIAMOND/ SI/ GE/ SN	..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ VALENCE FORCE POTENTIAL
74-JO-03	JOHNSON, MOORE	THEORY-OF-SOLIDS/ DIAMOND/ SI	..PHONON DISPERSION/ BOND CHARGE MODEL
76-AL-01	AL'TSHULER, VEKILOV+	DIAMOND/ TIN/ GERMANIUM	..THEORY/ PSEUDOPOTENTIAL METHOD/ PHONON DISPERSION
2, 23	ERBIUM	ER	
73-RA-03	RAO, MENON	ER	..THEORY/ PHONON DISPERSION/ KEATING METHOD/ THERMAL EXPANSION/ PHONON DENSITIES
2, 24	EUROPIUM	EU	
76-CO-05	COOKE, DAVIS	EUROPIUM	..CALCULATION/ EXCHANGE INTEGRAL
2, 25	GADOLINIUM	GD	
74-RA-04	RAO, MENON	GADOLINIUM	..DISPERSION CURVE/ THEORY
76-FR-01	FREEMAN	THEORY-OF-SOLIDS/ GD/ SC/ PD/ PT	..MAGNETIC FORM FACTORS/ METAL
2, 26	GALLIUM	GA	
63-AR-01	ARNOLD, NERESON	GA/ IN/ SB/ AS	..EXPERIMENT/ SCATTERING AMPLITUDE
67-RA-06	RAO, DASANNACHARYA+	GA	..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION
69-WA-01	WAEBER	GA	..THEORY/ LATTICE DYNAMICS/ ..GROUP-THEORETICAL ANALYSIS
69-WA-02	WAEBER	GA	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ TRIPLE-AXIS SPECTROMETER ..770K
70-VA-01	VADOCVIC, COLVER	AG/ GA/ HG/ NA/ PB/ SN/ ZN	..THEORY/ SELF-DIFFUSION CONSTANT
72-AN-03	ANTONINI, CORCHIA	GA	..EXPERIMENT/ LIQUID STRUCTURE/ MULTIPLE SCATTERING
72-AN-05	ANTONINI, CORCHIA	GA	..DYNAMICS OF LIQUIDS
72-WA-01	WAEBER	GA/	THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS ..METAL/ ORTHORHOMBIC
73-BR-01	BRENNER, JANDL+	GA/ SE	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ INELASTIC NEUTRONSCATTERING
73-LO-01	LOEFFLER	GALLIUM	..EXPERIMENT/ SCATTERING LAW/ LIQUID/ 305.1253K

73-PA-01	PAGE, SAUNDERSON+	GA	..STRUCTURE FACTOR/ LIQUIDS ..QUASI-ELASTIC PEAK
2. 27	GERMANIUM	GE	
57-BR-01	BROCKHOUSE, IYENGAR	GE	..EXPERIMENT/ PHONON DISPERSION
58-BR-04	BROCKHOUSE, IYENGAR	GE	..EXPERIMENT/ DISPERSION RELATION
59-BR-02	BROCKHOUSE	GE	..EXPERIMENT/ DISPERSION RELATION
59-BR-03	BROCKHOUSE	GE/ SI	..EXPERIMENT/ DISPERSION RELATION
59-GH-01	GHOSE, PALEVSKY+	GE	..EXPERIMENT/ DISPERSION RELATION
63-BR-03	BROCKHOUSE, BECKA+	GE	..EXPERIMENT/ LATTICE DYNAMICS
63-BR-04	BROCKHOUSE, DASANNACHAYA	GE	..EXPERIMENT/ DISPERSION RELATION ..TEMPERATURE EFFECTS
65-DO-04	DOLLING	GE/ SI	..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
65-PO-02	PGPE	GE	..LATTICE DYNAMICS/ SOLID/ THEORY
66-DO-02	DOLLING, COWLEY	GE/ SI/ DIAMOND/ GA, AS	..COHERENT INELASTIC SCATTERING STUDIES/ PHONON DISPERSION
71-JE-03	JEX	DIAMOND/ GE/ SI	..THEORY/ PHONON DISPERSION/ THERMAL PROPERTIES/ ANHARMONIC INTERACTION
71-NI-05	NILSSON, NELIN	GE	..EXPERIMENT/ DISPERSION CURVE/ LATTICE DYNAMICS/ 80DK/ LINE WIDTH
72-JE-01	JEX	GE/ SI	..THEORY/ PHONON/ ANHARMONIC INTERACTION
72-KR-01	KRESS	GE/ SN	..THEORY/ PHONON DISPERSION/ MODIFIED SHELL MODEL
72-NE-01	NELIN, NILSSON	GE	..EXPERIMENT/ CALCULATION/ PHONON DENSITY
72-NI-03	NILSSON, NELIN	GE/ SI	..LATTICE DYNAMICS/ NEUTRON SPECTROSCOPY
72-PA-03	PANDY, DAYAL	GE	..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
72-TU-01	TUBINO, PISERI+	DIAMOND/ SI/ GE/ SN	..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ VALENCE FORCE POTENTIAL
73-PA-05	PANDEY, DAYAL	SI/ GE	..THEORY/ PHONON DISPERSION/ CLARK-GAZIS-WALLIS TYPE ANGULAR FORCE MODEL/ FOUR PARAMETER
73-TH-01	THORPE	GE/ SI	..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..BORN MODEL
74-AX-02	AXE, KEATING+	GE	..EXPERIMENT/ FREQUENCY SPECTRA/ AMORPHOUS MATERIAL
74-NE-01	NELIN	GE	..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..DEFORMATION DIPOLE MODEL/ SHELL DIP
74-NE-02	NELIN, NILSSON	GE	..EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ CRYSTAL SPECTROMETER
74-NE-04	NELIN	GE	..THEORY/ SOLID/ LATTICE DYNAMICS/ HARMONIC APPROXIMATION/ DISPERSION RELATION ..SHELL DIPOL
74-NE-05	NELIN, NILSSON	GE	..EXPERIMENT/ ON RELATION ..DOUBLE MONOCHROMATOR CRYSTAL SPECTROMETER
74-WE-01	WEATRE, ALBEN	GE	..THEORY/ NEUTRON SPECTRUM ..AMORPHOUS SOLID
75-AL-01	ALBEN, WEATRE+	SI/ GE	..EXPERIMENT/ RAMAN, IR SPECTRA/ PHONON SPECTRA/ NUMERICAL CALCULATION/ PREDICTION FO
75-CH-02	CHEN, VETELINO+	GE/ SI	..THEORY/ SOLID/ FREQUENCY DISTRIBUTION ..AMORPHOUS SOLID/ RIGID ION MODEL
76-AL-01	AL'TSHULER, VEKILOV+	DIAMOND/ TIN/ GERMANIUM	..THEORY/ PSEUDOPOTENTIAL METHOD/ PHONON DISPERSION
76-CH-01	CHADI, MARTIN	C/ SI/ GE	..CALCULATION/ LATTICE DYNAMICAL PROPERTY/ ZONE BOUNDARY TRANSVERSE ACOUSTIC PHONO
77-VA-02	VANDERWAL	GE/ CU	..CALCULATION/ ATOMIC FORCE-CONSTANT
2. 28	GOLD	AU	
64-AL-01	ALS-NIELSEN, DIETRICH	HE/ B/ AU	..EXPERIMENT/ CROSS SECTION
67-GU-01	GUPTA, SHARMA	CU/ AU	..LATTICE DYNAMICS/ THEORY
70-BE-03	BEHARI, TRIPATHI	CU/ AG/ AU	..THEORY/ LATTICE VIBRATION/ DISPERSION RELATION ..NON-CENTRAL FORCE MODEL/ EL
71-SH-01	SHARMA, SINGH	CU/ AG/ AU	..THEORY/ PHONON DISPERSION/ METAL
71-SI-01	SINGH, SHARMA	CU/ AG/ AU/ AL/ NI/ NA/ CR/ FE	..THEORY/ DEBYE-WALLER FACTOR
71-SW-01	SWAROOP, TIWARI	AU	..THEORY/ PHONON DISPERSION
73-LY-01	LYNN, SMITH+	AU	..DISPERSION RELATION/ INELASTIC NEUTRON SCATTERING/ FREQUENCY DISTRIBUTION/ EXPERIMENT
73-SI-01	SINGH, PRAKASH	CU/ AG/ AU	..THEORY/ PHONON DISPERSION
74-KH-01	KHANNA, UPADHYAY+	AU	..DISPERSION-CURVES
74-SI-01	SIGH, PRAKASH	AU	..DISPERSION-CURVES
75-CL-01	CLOSS, SHUKLA	CU/ AG/ AU	..THEORY/ PHONON DISPERSION/ SPECIFIC HEAT
75-GO-02	GOPALARAO, MURTHY	COPPER/ GOLD/ SILVER	..LIQUID NOBLE METAL ..STRUCTURE FACTOR

```

75-NA-01  NANO, TRIPATHI  AU ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..PSEUDOPOTENTIAL
75-TI-02  TIWARI  AU ..THEORY/ PHONON DISPERSION/ KREB MODEL
76-CA-07  CAVALHEIRO, SHUKLA  AU ..THEORY/ PHONON DISPERSION/ DE LAUNAY MODEL

2, 29  GRAPHITE

51-KO-01  KOMATSU, NAGAMIYA  GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
53-KR-01  KRAMHANSL, BROOKS  GRAPHITE ..THEORY/ SOLID/ LATTICE DYNAMICS
53-RO-01  ROSENSTOCK  GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
55-JA-01  JACROT, NETTER+  GRAPHITE/ H2.O/ D2.O ..EXPERIMENT/ LIQUID/ SOLID
55-KO-01  KOMATSU  GRAPHITE ..THEORY/ LATTICE DYNAMICS ..SPECIFIC HEAT
56-BA-01  BALDOCK  GRAPHITE ..FREQUENCY SPECTRUM/ THEORY/ SOLID/ LATTICE DYNAMICS
56-YO-01  YOSHIMORI, KITANO  GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
58-MC-01  MCREYNOLDS, NELKIN+  H2.O/ POLYETHYLENE/ ZR-H/ MG-H/ GRAPHITE ..EXPERIMENT/ THEORY/ LIQUID/ SOLID
61-EG-02  EGELSTAFF, COCKING  GRAPHITE ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY SPECTRUM ..24DC/ 336DC/ 425DC/ 610DC/
61-PA-03  PARKS  GRAPHITE ..LATTICE DYNAMICS
61-PA-04  PARKS  GRAPHITE ..THEORY ..SCATTERING KERNELS
61-WO-01  WOODS, BROCKHOUSE+  GRAPHITE/ H2.O/ D2.O/ ZR-H/ LI, H/ NA, H/ N, H4, CL ..EXPERIMENT/ CRYSTAL SPECTROMETER/ FRE
62-BR-04  BRUGGER  BE/ BE.O/ GRAPHITE/ H2.O/ D2.O/ METHANE/ PROPANE/ TERPHENYL/ COMPILATIONS ..SCATTERING FUNCTION
62-DO-01  DOLLING, BROCKHOUSE  GRAPHITE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
62-EG-04  EGELSTAFF  H2.O/ D2.O/ GRAPHITE/ BE ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ THEORY ..EVALUATION
62-KO-04  KOTHARI  GRAPHITE ..DIFFUSION PARAMETER
62-MA-01  MACDOUGALL  GRAPHITE ..THEORY/ NEUTRON SPECTRUM/ SCATTERING FUNCTION/ CROSS SECTION EVALUATION
62-PA-01  PARKS, BEYSTER+  GRAPHITE ..EXPERIMENT/ NEUTRON SPECTRA
62-SC-02  SCHOFIELD  H2.O/ GRAPHITE ..THEORY/ COMPILATION
63-EG-04  EGELSTAFF, HARRIS  GRAPHITE ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ ..HIGH FREQUENCY MODE/ 950DC
63-HA-04  HAYWOOD, THORSON  GRAPHITE ..EXPERIMENT/ FREQUENCY DISTRIBUTION
64-HA-02  HAYWOOD, SINCLAIR  GRAPHITE/ BE/ BE.O ..COMPILATION/ SCATTERING FUNCTION
64-KE-01  KELLY  GRAPHITE ..THEORY/ SOLID/ LATTICE DYNAMICS
64-KO-01  KOMATSU  GRAPHITE ..THEORY/ LATTICE DYNAMICS ..SPECIFIC HEAT
64-WI-01  WIKNER, JOANOU+  GRAPHITE ..EXPERIMENT/ LATTICE VIBRATION/ FREQUENCY DISTRIBUTION/ SCATTERING FUNCTION/ NEU
64-WI-02  WILSON  GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
65-WH-01  WHITEMORE  POLYETHYLENE/ GRAPHITE/ METHANE/ ZR-H/ Y-H/ LA-H ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ SCATTERI
65-WH-02  WHITEMORE  GRAPHITE ..EXPERIMENT
65-YO-02  YOUNG, KOPPEL  GRAPHITE ..THEORY/ FREQUENCY SPECTRUM/ BORN-VON KARMAN MODEL
65-YO-03  YOUNG, WIKNER+  GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION/ NEUTRON SPECTRUM ..SCATTERING
66-BE-06  BEYSTER, NEILL+  H2.O/ D2.O/ ZR-H/ GRAPHITE/ BE.O ..NEUTRON SPECTRUM/ COMPILATION/ LIQUID/ GAS
66-ME-01  MEERS  GRAPHITE ..EXPERIMENT/ LATTICE DYNAMICS
66-WH-02  WHITEMORE  D2.O/ GRAPHITE ..EXPERIMENT/ SCATTERING FUNCTION ..24DC
66-WO-01  WORDEN, PUKCELL+  H2.O/ D2.O/ GRAPHITE ..NEUTRON SPECTRUM/ SIGMA(E,E-PRIME)
67-GL-01  GLAESER  REVIEW-ARTICLES/ H2.O/ ZR-H/ GRAPHITE/ D2.O/ BE/ BE.O ..INCOHERENT APPROXIMATION/ MULTIPLE SCATT
67-PA-01  PAGE  GRAPHITE ..SCATTERING FUNCTION/ EXPERIMENT ..HIGH TEMPERATURE
67-WH-01  WHITEMORE  D2.O/ H/ GRAPHITE ..CROSS SECTION EVALUATION/ LIQUID/ SOLID/ EXPERIMENT/ SCATTERING FUNCTION
68-BO-06  BOWMAN, KRAMHANSL  GRAPHITE ..THEORY/ LATTICE DYNAMICS
68-CA-04  CARVALHO  GRAPHITE ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT ..TOF/ 533DK
68-ER-01  EREMEEV, MOSTOVOI+  GRAPHITE ..SCATTERING FUNCTION/ EXPERIMENT ..15DC/ 490DC/ 1000DC
68-GL-01  GLAESER  H2.O/ ZR-H/ GRAPHITE/ D2.O/ BE/ BE.O ..COMPILATION/ SCATTERING FUNCTION/ CROSS SECTION EVALUATI
68-GL-02  GLAESER  H2.O/ D2.O/ ZR-H/ GRAPHITE/ BE/ BE.O ..SCATTERING FUNCTION/ DIFFUSION PARAMETER/ COMPILATION
68-PA-01  PAGE, HAYWOOD  H2.O/ D2.O/ GRAPHITE/ BE/ BE.O ..COMPILATION/ LIQUID/ SOLID/ FREQUENCY DISTRIBUTION ..AT VAR
68-PA-02  PAGE  GRAPHITE ..EXPERIMENT/ TOF/ FREQUENCY DISTRIBUTION ..1800DK
68-WH-01  WHITEMORE  GRAPHITE ..CROSS SECTION EVALUATION/ EXPERIMENT/ FREQUENCY DISTRIBUTION/ SCATTERING FUNCTION

```

69-CO-03 COLLINS, HAYWOOD GRAPHITE ..EXPERIMENT/ DISPERSION CURVE ..ALONG C-AXIS
 69-TA-02 TAKAHASHI GRAPHITE ..THEORY/ LATTICE DYNAMICS/ SCATTERING FUNCTION ..COHERENT SCATTERING/ COMPUTER CALCUL
 70-CO-04 CONN GRAPHITE ..THEORY/ SPECTRAL DENSITY/ SIGMA(E)
 71-RO-07 ROY GRAPHITE ..EXPERIMENT/ TEMPERATURE EFFECT/ PHONON FREQUENCY
 72-BU-02 BUTLAND, MADDISON GRAPHITE ..REVIEW/ EVALUATION/ SPECIFIC HEAT
 72-BU-05 BUTLAND GRAPHITE ..SCATTERING MATRICES/ PHONON SPECTRUM/ SPECIFIC HEAT/ ASSUMING ISOTROPIC STRUCTURE
 72-GA-01 GAUSTER GRAPHITE ..THEORY/ SOLID ..ELASTIC CONSTANTS
 72-NI-01 NICKLOW, WAKABAYASHI+ GRAPHITE ..PHONON DISPERSION
 73-NA-01 NAKAHARA GRAPHITE/ REVIEW-ARTICLES ..THEORY, SCATTERING LAW/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION/ D
 73-RO-01 ROSS GRAPHITE ..EXPERIMENT/ 1-O-F/ PHONON DISPERSION/ 20, 1000 AND 1920DC
 74-MA-02 MANI, RAMANI GRAPHITE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..TENSOR FORCE MODEL
 74-RA-01 RAFIZADEH GRAPHITE ..THEORY/ BORN-VON KARMAN MODEL/ DISPERSION RELATION/ MEAN SQUARE DISPLACEMENT/ CENTRA
 76-KJ-01 KJEMS, PASSELL+ GRAPHITE ..EXPERIMENT/ NEUTRON SPECTRUM ..ADSORBED NITROGEN FILM STUDY/ 10 TO 90DK/ PHASE
 76-MA-05 MARTIN, CAISLEY GRAPHITE ..SMALL ANGLE SCATTERING
 77-BR-02 BROCKHOUSE, SHIRANE GRAPHITE ..EXPERIMENT/ PHONON DISPERSION/ TEMPERATURE EFFECT/ 1200DC
 77-NI-01 NICHOLSON, BACON GRAPHITE ..FORCE CONSTANT MODEL/ ELASTIC CONSTANT/ PHONON DISPERSION CURVE
 77-WA-02 WAKABAYASHI MO.52/ GRAPHITE/ NB.52/ PB.12 ..THEORY/ PHONON DISPERSION/ LAYERED STRUCTURES

2. 30 HAFNIUM

HF

70-SH-05 SHARAN, BAJPAT ZR/ HF ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ DEBYE TEMPERATURE
 72-KU-04 KUSHWAHA, KUMAR TI/ HF/ Y ..THEORY/ PHONON DISPERSION/ H.C.P. TRANSITION METAL

2. 31 HELIUM

HE

57-CO-01 COHEN, FEYNMANN, HE ..THEORY/ SCATTERING BY ROTON
 57-EG-01 EGELSTAFF, LONDON HE ..LIQUID/ EXPERIMENT / SIGMA(E)/ SIGMA(E, THETA) ..LIQUID HELIUM
 57-PA-01 PALEVSKY, OTNES+ HE ..EXPERIMENT/ ROTON
 58-HE-01 HENSHAW HE ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
 58-PA-01 PALEVSKY, OTNES+ HE ..EXPERIMENT/ ROTON/ DISPERSION RELATION
 58-YA-01 YARNELL, ARNOLD+ HE ..EXPERIMENT/ ROTON/ DISPERSION CURVE/ LIQUID ..1.4DK
 59-YA-01 YARNELL, ARNOLD+ HE ..EXPERIMENT/ LIQUID/ ROTON EXCITATION/ DISPERSION RELATION ..1.1DK
 60-CO-01 COHEN HE ..THEORY/ LIQUID
 60-CO-02 COHEN HE ..THEORY/ NEUTRON SCATTERING/THERMODYNAMICS
 61-HE-03 HENSHAW, WOODS HE ..EXPERIMENT/ LIQUID/ DISPERSION RELATION ..1.78-4.21DK
 62-PA-02 PARRY, TURNER HE ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
 63-BR-02 BROCKHOUSE, BERGSMAN+ HE/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ SCATTERING LAW/ CORRELATION FUNCTION ..LI
 64-AL-01 ALS-NIELSEN, DIETRICH SN/ H2.O/ AR/ HE ..EXPERIMENT/ LIQUID
 64-ST-01 STEHN, GOLDBERG+ HE/ B/ AU ..EXPERIMENT/ CROSS SECTION
 65-BO-02 BOST HE/ D/ H2.O/ D2.O/ HE/ LI/ BE/ GRAPHITE/ N/ O/ NE/ NA/ MG/ AL/ SI/ AR/ K/ COMPILATIONS ..S
 65-GL-04 GLASSGOLD HE ..THEORY
 65-WO-03 WOODS HE ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
 67-BI-02 BITTER, GISSLER+ HE ..EXPERIMENT/ PHONON DISPERSION
 67-BI-03 BITTER, GISSLER+ HE ..PHONON DISPERSION
 67-DE-03 DEWETTE, NOSANOW+ HE ..THEORY/ LATTICE VIBRATION/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
 67-KI-04 KITCHENS, MINKIEWICZ+ HE ..SOLID/ EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS ..THREE CRYSTAL SPECTR
 67-KO-01 KOEHLER HE ..THEORY/ LATTICE DYNAMICS
 67-LI-01 LIPSCHULTZ, MINKIEWICZ+ HE ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
 67-MO-02 MORLEY HE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..HCP PHASE/ ODK/ DE

67-PL-02 PLUMMER, SUMMEKFIELD+ HE ..THEORY/ DISTRIBUTION FUNCTION/ GAS ..DIFFERENTIAL SCATTERING CROSS SECTION/ 5-6
 68-BR-05 BRUN, SINHA+ HE ..EXPERIMENT/ DISPERSION RELATION ..4.2DK
 68-CO-09 COWLEY, WOODS HE ..LIQUID/ EXPERIMENT/ SCATTERING FUNCTION ..1.1DK/ 4.2DK
 68-EC-01 ECKSTEIN, VARGA HE ..THEORY/ LIQUID/ STATISTICAL MECHANICS
 68-FR-01 FRANCHETTI, MAZZA AR/ NE/ HE ..THEORY/ MONATOMIC LIQUID/ RADIAL DENSITY AND SCATTERIN FUNCTION
 68-MI-04 MINKIEWICZ, KITCHENS+ HE ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..1.03DK
 68-SH-01 SHAH HE ..LIQUID/ EXPERIMENT ..HE-3/ X-RAY SCATTERING/ HIGH-FREQUENCY-SOUND VELOCITY
 68-WO-01 WOODS, COWLEY HE ..EXPERIMENT/ LIQUID/ TOF/ CONST.-0 ..1.1DK-4.2DK
 69-FE-03 FERNANDEZ, GERSCH HE ..EXPERIMENT/ LIQUID/ TOF/ CONST.-0 ..1.1DK-4.2DK
 69-KL-01 KLEMENS, LIPSCHULTZ HE ..GROUND STATE/ THEORY ..ENERGY WIDTH OSCILLATION
 69-MO-03 MORLEY, KIEWER HE ..DISPERSION RELATION/ THEORY/ FREQUENCY DISTRIBUTION/ SOLID ..SOUND VELOCITY/ SELF-CON
 70-GL-02 GLYDE, COWLEY HE ..ANHARMONICITY
 70-GO-02 GOLDMAN, HORTON+ NE/ HE ..SELF-CONSISTENT APPROXIMATION/ DISPERSION CURVE/ LIFE TIME/ THEORY
 70-HA-02 HARLING HE ..EXPERIMENT/ EXCITATION CURVE
 70-HO-01 HORNER HE ..THEORY/ PHONON/ SPECIFIC HEAT
 70-KE-05 KERR, PATHAK+ HELIUM ..THEORY/ LIQUID/ SCATTERING LAW/ GAUSSIAN APPROXIMATION ..LARGE MOMENTUM TRANSFER/ 0
 70-LA-03 LAI, SIM+ HE ..DISPERSION CURVE/ THEORY
 70-LA-04 LAI, SIM+ HE ..THEORY/ PHONON DISPERSION/ LIQUID
 70-NA-04 MARIS, MASSEY HE ..THEORY/ PHONON DISPERSION
 70-PI-02 PINES, WOO HE ..THEORY/ STRUCTURE FACTOR/ PHONON DISPERSION/ LIQUID
 70-PU-01 PUFF, TENN HE ..THEORY
 70-SE-01 SEARS HE ..THEORY/ LIQUID
 70-WE-04 WERTHAMER HELIUM ..THEORY/ SOLID ..PHONON RELAXATION
 70-WO-01 WOODS, COWLEY HE ..SUPERFLUID
 71-CO-02 COWLEY, WOODS HE ..EXPERIMENT/ LIQUID/ PHONON DISPERSION
 71-GI-01 GILLESSEN, BIEM HE ..THEORY/ PHONON DAMPING/ SOLID HE
 71-GL-01 GLYDE, KHANNA HE ..THEORY
 71-HA-05 HARLING HE ..DYNAMICS OF LIQUID
 71-RE-01 REESE, SINHA+ HE ..EXPERIMENT/ PHONON DISPERSION/ 4.2K/ PHONON DENSITY
 71-SP-01 SPCSITO HE ..THEORY
 71-TR-02 TRAYLOR, STASSIS+ HE ..EXPERIMENT/ PHONON DISPERSION/ FCC HE
 72-01-01 DIETRICH, GRAF+ HE ..EXPERIMENT/ LIQUID/ ROTON DISPERSION/ LINE WIDTH
 72-DR-02 DROZ HE ..LIQUID DYNAMICS
 72-GI-01 GILBERT HE ..FOURIER TRANSFORM OF SCATTERED INTENSITY/ PROBABILITY DENSITY
 72-GL-02 GLYDE, KHANNA HE ..THEORY/ PHONON DISPERSION/ T-MATRIX/ SCH APPROXIMATION
 72-HA-05 HAVLIN, LUBAN HE ..THEORY
 72-HO-01 HURNER NE/ NE/ AR ..THEORY/ PHONON DISPERSION/ SELFCONSISTENT TREATMENT
 72-HO-02 HURNER THEORY-OF-SOLIDS/ HE/ NE ..QUANTUM CRYSTALS/ PHONON SPECTRUM
 72-HO-03 HURNER HE/ NE ..THEORY/ SCATTERING FUNCTION/ SINGLE-PARTICLE EXCITATION/ QUANTUM CRYSTAL
 72-KE-01 KERR, PATAK+ HE ..THEORY
 72-KI-02 KITCHENS, SHIRANE+ HE ..EXPERIMENT/ SOLID HE/ SINGLE PARTICLE EXITATIONS
 72-KO-01 KOEHLER, WERTHAMER HE ..THEORY/ DISPERSION RELATION
 72-MO-01 MOOK, SCHERM+ HE ..EXPERIMENT/ HIGH ENERGY NEUTRON SCATTERING
 72-OS-01 OSGOOD, MINKIEWICZ+ HE ..EXPERIMENT/ PHONON DISPERSION
 72-RA-06 RAD, MENON HELIUM ..DISPERSION-RELATION
 72-SE-02 SEARS HELIUM ..ANHARMONICITY/ FREQUENCY-SPECTRUM
 72-SO-02 SOLANA, CELLI+ HE ..THEORY/ TWO-ROTON RESONANCE/ ROTON DISPERSION/ LINEWIDTH
 72-SV-01 SVENSSON, WOODS+ HE ..LIQUID DYNAMICS/ PHONON DISPERSION
 72-TA-01 TAKENO, GODA THEORY-OF-FLUIDS/ HE ..THEORY/ PHONON-LIKE EXCITATION/ LIQUID HELIUM
 72-TA-02 TAKENO, GODA THEORY-OF-SOLIDS/ THEORY-OF-FLUIDS/ HE ..THEORY/ PHONON-LIKE EXCITATION
 72-TR-02 TRYLOR, STASSIS+ HE ..EXPERIMENT/ PHONON DISPERSION/ FCC HE-4
 72-WE-01 WERTHAMER HE ..THEORY

72-WO-01	WOODS, SVENSSON+	HE ..EXPERIMENT/ LIQUID DYNAMICS/ LOW-MOMENTUM-TRANSFER
72-YA-01	YAMADA, ISHIKAWA	HE ..THEORY/ PHONON DISPERSION/ LIQUID HELIUM
73-HO-01	HOMMA, NAGAI+	HE ..THEORY/ PHONON VELOCITY AND DISPERSION/ BCC SOLID HE
73-JA-01	JACKSON	HE ..SUPERFLUID
73-KE-01	KEBOKAWA, YAMASAKI+	HE ..THEORY/ LIQUID/ PHONON-ROTON DISPERSION
73-KE-02	KEBOKAWA	HE ..THEORY/ PHONON VELOCITY/ ROTHEN MINIMUM/ TEMPERATURE EFFECT/ LIQUID
73-MI-03	MINKIEWICZ, KLITCHENS+	HE ..DISPERSION CURVE
73-NI-05	NISHIYAMA	HE ..THEORY/ LIQUID HE/ ROTHEN DISPERSION AND LEVEL DENSITY
73-WO-01	WOODS, SVENSSON+	HE ..SUPERFLUID/ PRESSURE EFFECT
74-BR-03	BROOKS, DONNELLY	THEORY-OF-FLUIDS/ HE ..SECOND SOUND
74-GR-01	GRAF, MINKIEWICZ+	HE ..EXPERIMENT/ INELASTIC NEUTRON SCATTERING/ SOLIDS/ SCATTERING LAW/ DISPERSION RELATI
74-IA-01	IACHELLO, RASETTI	HE ..THEORY/ PHONON DISPERSION
74-KU-02	KURIHARA, KURODA+	HE ..THEORY/ SOLID HE/ BCC/ PHONON DISPERSION
74-LE-01	LEE, LEE	THEORY-OF-FLUIDS/ HE ..DISPERSION RELATION
74-MO-01	MOOK	HE ..INELASTIC NEUTRON SCATTERING/ SCATTERING LAW
74-OH-01	OHMI, KAWAMOTO+	HE ..THEORY/ ROTHEN SPECTRUM/ HE-3-AND HE-4 MIXTURE
74-SC-02	SCHERM, STIRLING+	HE ..HE-3/ SC(W)
74-TS-02	TSUZUKI	HE ..THEORY/ LIQUID HE/ ROTHEN DISPERSION/ TEMPERATURE EFFECT
75-BA-02	BARKER, GASKEL	THEORY-OF-SOLIDS/ HE ..THEORY/ LIQUID/ CURREN CORRELATION FUNCTION/ SCATTERING LAW
75-LO-01	LOVESEY	HE ..THEORY/ LIQUID/ STRUCTURE FACTOR/ SCATTERING LAW/ CORRELATION FUNCTION ..ISOTHERMAL SUSCEP
75-ME-01	MEIER, BECK+	HE ..THEORY/ LIQUID/ DISPERSION RELATION
76-BE-04	BENIN	HE ..THEORY/ PHONON WIDTH AND LIFETIME ..SUPERFLUID STATE/ 0.25DK
76-CA-04	CARNEIRO, ELLENSON+	HELIUM ..ADSORBED/ GRAPHITE/ MONOLAYER/ ELASTIC/ INELASTIC/ SUPERFLUID/ COLLECTIVE EXC
76-CO-11	COWLEY	HE ..EXPERIMENT/ HE-4, HE-3/ QUANTUM LIQUIDS
76-CO-13	COWLEY	HE ..RECENT MEASUREMENTS/ QUANTUM LIQUID
76-DA-02	DASANNACHARYA, KOLLAR+	HE ..EXPERIMENT/ RAYLEIGH AND BRILLOUIN SCATTERING
76-GL-03	GLYDE, KHANNA	HE ..CALCULATION/ DYNAMICAL FORM FACTOR/ LIQUID HELIUM/ RANDOM PHASE APPROXIMATION/ ZERO
76-GL-04	GLYDE, KHANNA	HE ..THEORY/ PARTICLE AND SPIN CORRELATION/ 3HE/ EXPERIMENT
76-GO-01	GOETZE, LUECKE	HE ..DYNAMICAL STRUCTURE FACTOR/ LIQUID HE-2
76-GO-02	GOETZE, LUECKE	HE ..DYNAMICAL STRUCTURE FACTOR/ LIQUID HE-2
76-HI-02	HILTON, STIRLING+	HE ..EXPERIMENT/ EXCITATION SPECTRUM
76-SE-01	SEARS	NEUTRON-SCATTERING-IN-FLUIDS/ HE ..THEORY/ SCATTERING SIGMA/ ABSORBING MEDIA
76-SK-01	SKOELD, PELIZZARI+	HE ..EXPERIMENT/ SCATTERING FUNCTION/ 0.015K
76-SK-02	SKOELD, PELIZZARI+	HE ..EXPERIMENT/ 0.015K/ HE-3/ SPIN FLUCTUATION SCATTERING/ ZERO SOUND MODE
76-ST-06	STIRLING, SCHERM+	HE ..NEUTRON INELASTIC SPECTRUM/ TIME OF FLIGHT METHOD/ CONTINUED FRACTION METHOD
76-SV-01	SVENSSON, MARTELL+	HE ..EXPERIMENT/ SCATTERING FUNCTION
76-SV-02	SVENSSON, STIRLING+	HE ..EXPERIMENT/ DISPERSION/ LOW @ PART
76-WO-02	WOODS, SVENSSON+	HE ..EXPERIMENT/ SCATTERING LAW/ DISPERSION
77-DO-02	DONNELLY, ROBERTS	HE ..EXPERIMENT ..ROTON ENERGY / HE(11)/ BELOW 1DK
77-EC-01	ECKERT, THOMLINSON+	HE ..EXPERIMENT/ PHONON DISPERSION/ 38K.4.9KBAR/ PHONON SPECTRUM
77-GO-04	GOLUB, PENDLEBURY	HE ..THEORY/ ULTRA-COLD NEUTRON
77-SK-01	SKOELD, PELIZZARI	HE ..EXPERIMENT/ ZERO-SOUND MODE/ SPIN-FLUCTUATION
77-WO-02	WOODS, HILTON+	HELIUM ..DISPERSION CURVE/ NEUTRON INELASTIC SCATTERING/ LIQUID HELIUM/ EXPERIMENT/ SCATTER
77-WO-03	WOODS, SEARS	HELIUM ..NEUTRON-SCATTERING EXPERIMENT/ AVERAGE KINETIC ENERGY/ LIQUID HELIUM/ FREQUENCY MOM

2, 32 HOLMIUM

HO

69-LE-02 LEAKE, MINKIEWICZ+ HO ..DISPERSION RELATION/ TRIPLE AXIS SPECTROMETER/ LATTICE DYNAMICS ..295DK/ PARAMAGNE
70-LA-02 LAHTENKORVA MG/ Y/ HO ..DISPERSION RELATION/ HARMONIC APPROXIMATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..EL
71-NI-01 NICKLOW, WAKABAYASHI+ HO ..EXPERIMENT/ PHONON DISPERSION CURVES/ FREQUENCY DISTRIBUTION/ SPECIFIC HEAT/ DE
72-ME-05 MENON, RAO HO/ Y ..THEORY/ PHONON DISPERSION/ HEXAGONAL METAL

73-UP-02 UPADHYAYA, VERMA BE/ MG/ HO/ TL ..THEORY/ PHONON DISPERSION/ MODIFIED SHARMA-JOSHI MODEL
 75-CA-06 CAVALHEIRO, SHUKLA SC/ TB/ HO/ TL/ ZR ..THEORY/ PHONON DISPERSION/ DE-LAUNAY MODEL
 75-UP-01 UPADHYAYA, SINHA RE/ MG/ Y/ HO ..THEORY/ EXPERIMENT/ DISPERSION RELATION ..BHATTIA MODEL
 77-SH-03 SHARMA, UPADHYAYA BE/ TB/ HO ..THEORY/ PHONON DISPERSION/ FORCE CONSTANT MODEL
 77-SI-01 SINGH, SINGH+ ZN/ ZR/ TL/ TB/ HO ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH
 77-UP-01 UPADHYAYA, ANIMALU TB/ HO ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION

2. 33 HYDROGEN

H

51-EG-01 EGELSTAFF H/ BE/ V/ SE/ MO/ FE ..SOLID/ EXPERIMENT/ TRANSMISSION
 51-ME-01 MESSIAH H/ C.H4 ..THEORY/ SCATTERING THEORY ..ROOM TEMP.
 58-BR-01 BRIMBERG H ..THEORY/ MOLECULAR DYNAMICS/ SIGMA(E)
 63-MC-01 MCREYNOLDS, WHITTEMORE H ..EXPERIMENT/ LIQUID
 63-WH-01 WHITTEMORE, DANNER H ..EXPERIMENT/ LIQUID/ SIGMA (E,E-PRIME,THETA)
 64-EG-02 EGELSTAFF, HAYWOOD+ H ..EXPERIMENT/ SOLID/ LIQUID ..12, 15, 18 AND 21DK
 64-ST-01 STEHN, GOLDBERG+ H/ D/ H2.O/ D2.O/ HE/ LI/ BE/ GRAPHITE/ N/ O/ NE/ NA/ MG/ AL/ SI/ AR/ K/ COMPILATIONS ..S
 64-WH-01 WHITTEMORE C.H4/ H ..EXPERIMENT/ LIQUID/ MOLECULAR DYNAMICS ..NEUTRON SPECTRA/ TOTAL CROSS SECTION
 65-HO-04 HORSLEY H ..CROSS SECTION EVALUATION ..SIGMA TOTAL
 65-NA-02 NALIBOFF COMPUTER-CODES/ HYDROGEN ..THEORY/ LIQUID
 65-SE-02 SEARS H ..SCATTERING LAW
 66-KO-04 KOPPEL H2.O/ POLYETHYLENE/ ZR-H/ H ..CROSS SECTION EVALUATION/ SCATTERING FUNCTION/ THEORY/ LIQUID/ SO
 67-WH-01 WHITTEMORE D2.O/ H/ GRAPHITE ..CROSS SECTION EVALUATION/ LIQUID/ SOLID/ EXPERIMENT/ SCATTERING FUNCTION
 68-ST-01 STAMENKOVICH H ..DOUBLE-POTENTIAL-Well/ HYDROGEN BOND ..SIGMA (THETA,E)/ THEORY/ MOLECULAR DYNAMICS
 70-OL-01 OLIVI HYDROGEN ..MOLECULAR ROTATION/ SIGMA(THETA,E) ..DIFFERENTIAL CROSS SECTION
 70-SC-04 SCHOTT H ..EXPERIMENT
 70-SC-06 SCOTT, RIETSCHEL H ..EXPERIMENT/ PHONON STATE DENSITY/ QUADRUPOLE INTERACTION CONSTANT
 71-HO-02 HOUK, SHAMBRON+ H ..EXPERIMENT/ PARAHYDROGEN/ SCATTERING LENGTH
 71-ST-05 STOCKMEYER H ..THEORY/ SOLID HYDROGEN/ PHONON
 72-LE-04 LEFEVRE, CHEN+ H ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ PRESSURE DEPENDENCE/ KINETIC THEORY ANALYSIS
 72-NI-02 NIELSEN, CARNEIRO H ..EXPERIMENT/ PHONON DISPERSION/ SOLID PARAHYDROGEN
 73-NI-02 NIELSEN H/ U ..EXPERIMENT/ PHONON DISPERSION/ PARA-H.ORTHO-D/ TEMPERATURE,PRESSURE EFFECT
 73-SE-01 SEARS NEON/ RUBIDIUM/ HYDROGEN/ THEORY-OF-FLUIDS ..THEORY/ FLUID/ SCATTERING FUNCTION
 74-BI-01 BICKERMAN, BIEM+ HYDROGEN ..THEORY/ SOLID ORTHO-HYDROGEN/ PHONON DISPERSION AND SPECTRA/ SCATTERING FUNCTI
 76-EH-01 EBNER, MYLES HYDROGEN ..NEUTRON SCATTERING/ THEORY/ ORTHO-PARA HYDROGEN MIXTURE/ SOLID
 76-PO-01 POSTOL, CHEN+ H ..GASEOUS HYDROGEN/ QUASIELASTIC/ SELF-DIFFUSION
 77-CH-02 CHEN, POSTOL+ HYDROGEN ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ DENSE GAS/ SELF-DIFFUSION COEFFICIENT/ DENS

2. 34 HYDROGEN

H2

37-SC-01 SCHWINGER, TELLER H2 ..THEORY/ TOTAL CROSS SECTION
 41-SA-01 SACHS, TELLER NEUTRON-SCATTERING-IN-FLUIDS/ H2/ C.H4/ N.H3/ H2.O ..SCATTERING THEORY ..MOLECULAR GASES
 47-HA-01 HAMMERMESH, SCHWINGER H2 ..THEORY/ GAS/ SCATTERING CROSS SECTION
 61-SA-01 SARMA H2 ..THEORY/ MOLECULAR DYNAMICS/ LIQUID
 63-BA-02 BALLY, TARINA+ C.H4/ N.H3/ H2 ..SIGMA(E,E-PRIME,THETA)/ EXPERIMENT/ GAS ..ROOM TEMPERATURE
 63-WE-01 WEBB H2/ D2 ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING CROSS SECTION ..20.4DK
 64-YO-01 YOUNG, KOPPEL H2/ D2 ..THEORY/ MOLECULAR DYNAMICS/ LIQUID ..SCATTERING CROSS SECTION
 64-YO-04 YOUNG, KOPPEL H2 ..THEORY/ MOLECULAR DYNAMICS/ DIFFERENTIAL CROSS SECTION ..20.5DK
 65-KO-02 KOPPEL, YOUNG H2 ..MOLECULAR DYNAMICS/ SOLID/ LIQUID/ EXPERIMENT
 67-EG-01 EGELSTAFF, HAYWOOD+ H2 ..EXPERIMENT/ MOLECULAR MOTION/ LIQUID AND SOLID
 67-EG-07 EGELSTAFF, HAYWOOD+ H2 ..EXPERIMENT/ MOLECULAR MOTION/ LIQUID AND SOLID

67-EL-04	ELLIOTT, HARTMAN	H2	..MOLECULAR DYNAMICS/ THEORY/ SIGMA(THETA,E)
70-KL-01	KLEIN, KOEHLER	H2	..DISPERSION RELATION
70-KL-03	KLUMP, SCHNEPP+	H2/ D2	..FREQUENCY DISTRIBUTION/ THEORY/ SOLID
70-MI-02	MISNTA, OLIVI	H2	..THEORY/ DIFFERENTIAL CROSS SECTION
71-BI-01	BIEM, MERTENS	H2	..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA/ SOLID HYDROGEN
71-NO-02	NOOLANDI	H2	..THEORY/ SOLID
71-ST-03	STEIN, STOCKMEYER+	H2	..EXPERIMENT/ SOLID HYDROGEN/ T-O-F SPECTRA/ PHONON DENSITY
72-JA-01	JACOBI, SCHNEPP	C.O2/ H2/ N2	..THEORY/ LATTICE DYNAMICS ..QUADRAPOL-QUADRAPOL POTENTIAL
72-ST-02	STEIN	H2	..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ SCATTERING LAW/ FREQUENCY DISTRIBUTION
72-ST-03	STEIN, STILLER+	H2	..LATTICE AND MOLECULAR DYNAMICS
74-CA-02	CARNEIRO	H2/ N2	..EXPERIMENT/ PHONON LIKE EXCITATION/ LIQUID DYNAMICS
74-CA-03	CARNEIRO, NIELSEN	H2	..EXPERIMENT/ PHONON DISPERSION/ LIQUID DYNAMICS
75-DI-03	DIEHL, BIEM	H2	..THEORY/ SCATTERING CROSS SECTION/ ORTHO-PARA CONVERSION
76-CA-03	CARNEIRO	H2/ AR/ NEUTRON-SCATTERING-IN-FLUIDS/ NA	..FREQUENCY-SPECTRA
77-UT-01	UTSURO	H2	..CALCULATION/ SIMPLE DYNAMIC MODEL/ CROSS SECTION/ ENERGY SPECTRUM
2. 35 INDIUM			
		IN	
63-AR-01	ARNOLD, NERESON	GA/ IN/ SB/ AS	..EXPERIMENT/ SCATTERING AMPLITUDE
72-KU-03	KUMAR, SHARAN	IN	..THEORY/ PHONON DISPERSION/ DEBYE TEMPERATURE
73-GU-01	GUNTON, SAUNDERS	IN/ IN-TL	..THEORY/ PHONON DISPERSION/ MARTENSITIC PHASE CHANGE
73-SH-02	SHARAN, KUMAR	IN	..THEORY/ PHONON DISPERSION/ DEBYE TEMP./ ELASTIC CONSTANT
75-RE-02	REISSLAND, ESE	AL/ NA/ MG/ IN/ TL	..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ MODEL POTENTIAL CALCULATION
2. 36 IODINE			
		I	
73-FO-01	FOLTER	I/ B	..THEORY/ DISPERSION FUNCTION/ BORN VON KARMAN MODEL
2. 37 IRON			
		FE	
61-IY-01	IVENGAR, SATYA-MURTHY+	FE	..EXPERIMENT/ DISPERSION RELATION
62-LO-01	LOW	FE	..EXPERIMENT/ SOLID/ DISPERSION RELATION
66-MA-02	MAHESH, DAYAL	FE/ MO/ W	..THEORY/ PHONON DISPERSION AND FREQUENCY DISTRIBUTION
67-BE-01	BERGSMÄ, VAN-DIJK+	FE	..DISPERSION RELATION/ EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ CRYSTAL SPECTROMETER/ BO
67-BR-01	BROCKHOUSE, ABOU-HELAL+	FE	..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION
67-GI-02	GILAT	CR/ FE/ W	..THEORY-OF-SOLIDS ..THEORY/ PHONON SPECTRA/ BCC METALS
67-MI-03	MINKIEWICZ, SHIRANE+	FE	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..ROOM
67-VA-01	VAN-DINGENEN, HAUTECLER	FE	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..ROOM TEMPERATURE/ TOF MET
68-VA-02	VAN-DIJK, BERGSMÄ	FE/ FE-AL	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
70-VA-03	VAN-DIJK	FE/ FE-AL	..EXPERIMENT/ LATTICE DYNAMICS/ PHONON DISPERSION
72-BA-05	BAJPAI, NEELAKANDAN	FE/ NB/ TA/ W	..THEORY/ PHONON DISPERSION/ BCC METAL/ MODIFIED AXIALSYMMETRIC MODEL
72-BE-01	BEHARI, TRIPATHI	FE/ MO/ W	..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA
75-SC-01	SCHAEPPF, SEIFERT	INSTRUMENTS-AND-METHODS/ FE	..SMALL ANGLE SCATT./ BLOCH WALL/ MAGNETIC SCATT.
75-UP-03	UPADHYAYA, SHARMA+	FE/ W/ MO/ V/ NB/ TA	..LATTICE DYNAMICS/ DISPERSION RELATION/ TRANSITION METAL/ THEORY/
76-BR-01	BRESCANSIN, PADIAL+	FE/ MO/ W/ NB/ TA/ CR	..THEORY/ PHONON DISPERSION/ TRANSITION METAL/ MODEL CALCULATION
76-SI-03	SINGH, KHAROO+	FE/ CR/ W	..THEORY/ PHONON DISPERSION/ MODEL CALCULATION
76-SI-05	SIROTA, BULAT	FE	..EXPERIMENT/ PHONON SPECTRUM
77-WE-01	WEBER, STEEB+	FE	..EXPERIMENT/ MAGNETIC SCATTERING

2. 38 KRYPTON

KR

61-CL-01 CLAYTON, HEATON KR ..EXPERIMENT/ STRUCTURE FACTOR/ LIQUID/ RADIAL DISTRIBUTION ..117,133,153,183 AND 2100K
 66-GU-01 GUPTA, DAVAL AR/ KR ..THEORY/ PHONON SPECTRA/ SPECIFIC HEAT
 67-BR-03 BROWN, HORTON KR ..LATTICE DYNAMICS/ THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..73DK
 67-DA-01 DANIELS, SHIRANE+ KR ..EXPERIMENT/ PHONON DISPERSION/ 79DK
 67-HO-03 HOGEBERG, BOHLIN KR ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
 70-GL-01 GLYDE NE/ AR/ KR/ XE ..THEORY/ ANHARMONICITY
 70-KI-03 KITAGAWA AR/ KR/ POLYETHYLENE ..REVIEW/ LATTICE DYNAMICS
 70-LE-02 LEECH, REISSLAND NE/ AR/ KR/ XE ..THEORY/ LATTICE DYNAMICS/ ANHARMONICITY ..THERMODYNAMICAL PROPERTIES
 70-LE-03 LEECH, REISSLAND NE/ AR/ KR/ XE ..THEORY/ ANHARMONICITY ..SPECIFIC HEAT/ DEBYE TEMPERATURE/ THERMAL EXPANS
 71-BA-07 BARKER, BOBETIC+ KR ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT
 71-GU-02 GUPTA, GUPTA AR/ KR/ XE ..THEORY/ PHONON DISPERSION AND SPECTRA/ ANHARMONIC POTENTIAL
 71-HU-01 HUELLER THEORY-OF-SOLIDS/ ARGON/ KRYPTON/ XENON ..CAUCHY-RELATION
 72-BO-01 BOBETIC, BARKER+ KR ..THEORY/ DEBYE PARAMETER/ THERMAL EXPANSION/ BULK MODULVS
 72-TO-02 TOLPYGO, TROITSKAYA NE/ AR/ KR ..DISPERSION CURVE
 73-PE-01 PETER, SKALYO+ KR ..SOLID/ EXPERIMENT/ ELASTIC CONSTANTS/ ..COLD NEUTRON
 73-SA-02 SALZBERG, SHUKLA KR ..THEORY/ PHONON DISPERSION/ PHONON SPECTRUM/ AXIALLY SYMMETRIC MODEL
 73-WI-02 WINFIELD, EGELSTAFF KR/ THEORY-OF-FLUIDS ..TRIPLET CORRELATION
 74-SK-01 SKALYO-JR., ENDOH+ KR ..PHONON DISPERSION CURVE/ FREQUENCY DISTRIBUTION/ INELASTIC NEUTRON SCATTERING
 75-GA-01 GARG, GUPTA NE/ AR/ KR/ XE ..LATTICE DYNAMICS/ ANHARMONICITY/ CENTRAL FORCE MODEL/ DISPERSION RELATION
 75-GU-02 GUPTA, GARG NE/ KR/ XE/ AR ..THEORY/ DISPERSION RELATION/ SOLID/ ANHARMONICITY
 76-BO-02 ROHRA, GUPTA THEORY-OF-SOLIDS/ AR/ KR/ XE ..THEORY/ SOLID/ LATTICE DYNAMICS ..KIHARA POTENTIAL/ PHONON GRE
 76-CA-01 CARELLI, DE-SANTIS+ KR/ C.H4 ..EXPERIMENT/ DIFFUSION PARAMETER ..LENARD-JONES FLUID/ HARD-SPHERE FLUID/220
 76-DU-01 DUFTY, GROOME+ KR/ C.H4 ..EXPERIMENT/ DIFFUSION PARAMETER ..LENARD-JONES FLUID/ HARD-SPHERE FLUID/220
 76-WA-04 WASEDA, SUZUKI THEORY-OF-FLUIDS/ KR ..DYNAMIC-STATIC STRUCTURE FACTOR
 77-RA-04 RAND, RAO+ NE/ AR/ KR/ XE ..LIQUID/ PAIR POTENTIAL/ BORN-GREEN EQUATION
 KR/ AR/ NE ..EXPERIMENT ..LIGHT SCATTERING/ ELASTIC CONSTANTS/ COMPARISON WITH NEUTRON SCATTERI

2. 39 LEAD

PB

54-EG-01 EGELSTAFF PB ..EXPERIMENT/ LIQUID
 55-BR-01 BROCKHOUSE PB ..EXPERIMENT/ LIQUID
 59-BR-01 BROCKHOUSE, POPE PB ..EXPERIMENT/ LIQUID
 59-PE-01 PELAH, WHITEMORE+ PB ..EXPERIMENT/ LIQUID/ SOLID/ TOF/ NEUTRON SPECTRUM/ QUASI-ELASTIC PEAK
 61-BR-01 BROCKHOUSE, RAO+ PB ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
 61-BR-02 BROCKHOUSE, ARASE+ PB ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ PHONON LIFE TIME
 61-EG-01 EGELSTAFF, COCKING+ H2.O/ D2.O/ PB ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION
 61-PA-01 PALEVSKY H2.O/ PB/ SN ..EXPERIMENT/ LIQUID ..ROOM TEMP. ..45DC FOR H2.O/ 462DC FOR PB/ 350DC FOR SN/ BE-F
 61-RA-01 RAHMAN, SINGWI+ NEUTRON-SCATTERING-IN-FLUIDS/ PB ..THEORY ..LIQUID DYNAMICS
 62-BR-01 BROCKHOUSE, ARASE+ PB ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..CRYSTAL SPECTROMETER/ 100DK
 62-CO-04 COTTER PB ..EXPERIMENT/ LIQUID/ SOLID/ FREQUENCY DISTRIBUTION
 62-EG-03 EGELSTAFF, SCHOFIELD SCATTERING-THEORIES/ H2.O/ PB ..EXPERIMENT/ THEORY/ LIQUID/ DIFFUSION PARAMETER ..ROO
 62-EG-05 EGELSTAFF MG/ BE/ PB ..THEORY/ SOLID/ LIQUID/ SIGMA(E, E-PRIME, THETA) ..METAL/ LIQUID METAL
 62-TU-01 TURBERFIELD PB ..EXPERIMENT/ LIQUID ..340DC/ 520DC/ 324DC
 63-EG-03 EGELSTAFF PB/ SN ..EXPERIMENT/ SCATTERING-IN-FLUIDS/ H2.O/ PB ..THEORY/ LIQUID/ FREQUENCY DISTRIBUTION/ SCATT
 63-SI-03 SINGWI, SJOELANDER+ NEUTRON-SCATTERING-IN-FLUIDS/ H2.O/ PB ..THEORY/ LIQUID/ FREQUENCY DISTRIBUTION/ SCATT
 65-CO-03 COCKING, EGELSTAFF PB/ SN ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
 65-DO-07 DORNER, PLESSER+ PB ..EXPERIMENT
 65-GI-03 GILAT PB ..PHONON FREQUENCY DISTRIBUTION
 65-PA-02 PALEVSKY PB/ H2.O/ SN ..EXPERIMENT/ LIQUID

65-TO-01 TOYA PB ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
 66-BR-05 METHANE/ ETHANE/ AL/ NA/ PB/ AR ..COMPIATION/ SCATTERING FUNCTION
 66-EG-01 EGGLESTAFF, DUFFILL+ PB/ SN/ BI/ ZN/ AL ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR
 66-LE-01 LECHNER, QUITTNER PB ..PHONON DISPERSION/ PRESSURE EFFECT
 66-RA-03 RANDOLPH LEAD ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..352DC
 66-RA-04 RANDOLPH, SINGH+ PB ..SCATTERING LAW/ LIQUID/ CRYSTAL SPECTROMETER/ EXPERIMENT ..COLLECTIVE MOTION
 67-CO-01 COCKING AL/ PB/ BI/ RB/ SN ..SOLID/ LIQUID/ DISPERSION RELATION/ EXPERIMENT
 67-DO-02 DORNER, PLESSER+ PB ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..LIQUID DYNAMICS/ METAL
 67-DO-03 DORNER, PLESSER+ PB ..EXPERIMENT/ 3-AXIS SPECTROMETER/ LIQUID/ DISPERSION CURVE
 67-DO-04 DORNER, PLESSER+ PB ..EXPERIMENT/ POLYCRYSTAL/ LIQUID/ DISPERSION CURVES
 67-NE-03 NELKIN, RANGANATHAN LEAD ..SCATTERING LAW/ QUASI-ELASTIC PEAK/ THEORY ..VLASOV EQUATION
 67-RA-03 RANDOLPH PB ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
 67-RA-04 RANDOLPH, MYERS PB ..EXPERIMENT/ LIQUID/ DISPERSION RELATION ..350DC/ COLLECTIVE VIBRATIONAL MODE
 67-ST-03 STEDMAN, ALMQVIST+ AL/ PB ..LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..800DK FOR AL/ 500DK FOR PB
 67-ST-04 STEDMAN, ALMQVIST+ PB ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION ..800DK/ 300DK
 68-AG-02 AGRAWAL, DESAI+ NEUTRON-SCATTERING-IN-FLUIDS/ AP/ NA/ PB/ METHANE ..THEORY ..MODEL CALCULATION
 68-CO-03 COCKING, EGELSTAFF PB ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..15DC ABOVE AND BELOW MELTING POINT/ 350D
 68-CO-04 COCKING NA/ PB ..EXPERIMENT/ LIQUID/ ..LIQUID DYNAMICS
 68-CO-05 COCKING PB ..THEORY/ LIQUID DYNAMICS
 68-CO-06 COCKING, EGELSTAFF PB ..LIQUID DYNAMICS/ TEMPERATURE DEPENDENCE
 68-GR-02 GRIMVALL, GRIMVALL AL/ NB/ PB ..FREQUENCY DISTRIBUTION/ THEORY/ LATTICE DYNAMICS ..DEBYE TEMP.
 68-NO-01 NORTH, ENDERBY+ ZN/ TL/ PB/ SN/ BI ..EXPERIMENT/ LIQUID/ STATISTICAL MECHANICS ..LIQUID METAL/ 340DC-1100D
 68-NO-03 NORTH, ENDERBY+ PB/ TI ..STRUCTURE FACTOR
 68-RA-04 RANDOLPH PB ..LIQUID/ CORRELATION FUNCTION/ SCATTERING LAW/ EXPERIMENT
 68-SC-04 SCHMUCK, QUITTNER LEAD ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
 68-SC-05 SCHMUCK, QUITTNER PB ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVES ..PSEUDOPOTENTIAL CALCULATION
 68-WI-01 WIGNALL, EGELSTAFF PB ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..336-726DC
 69-DE-02 DESAI, YIP NA/ PB ..THEORY/ LIQUID/ SCATTERING FUNCTION ..LIQUID METAL
 69-IC-01 ICHIKAWA, SHIMOJI LI/ NA/ K/ HG/ PB ..DIFFUSION PARAMETER/ LIQUID/ THEORY ..LIQUID METAL/ FRICTION CONSTAN
 69-RO-01 ROWELL, MCMILLAN+ PB/ PB-TL ..EXPERIMENT/ SPECTRAL DENSITY ..TUNNELING EXPERIMENT
 70-CO-06 COULTHARD SODIUM/ POTASSIUM/ ALUMINIUM/ LEAD ..THEORY/ LATTICE VIBRATION/ DISPERSION RELATION ..PRESSURE
 70-FU-01 FURRER, HALG PB ..ANHARMONIC EFFECT
 70-RO-03 ROY, BROCKHOUSE PB/ PB-TL ..EXPERIMENT/ FREQUENCY SPECTRA/ POLYCRYSTALLINE SAMPLES/ TRIPLE AXIS SPECTROMET
 70-VA-01 VADOVIC, COLVER AG/ GA/ HG/ NA/ PB/ SN/ ZN ..THEORY/ SELF-DIFFUSION CONSTANT
 71-GR-01 GREENFIELD, WISER NA/ PB ..EXPERIMENT/ STRUCTURE FACTOR ..X-RAY DIFFRACTION
 71-GU-03 GUPTA, TRIPATHI PB ..THEORY/ PHONON DISPERSION/ ELASTIC PROPERTIES/ PSEUDOPOTENTIAL
 71-GU-04 GUPTA, TRIPATHI PB ..THEORY/ PHONON DISPERSION
 72-BE-02 BEHARI PB ..THEORY/ SOLID/ LATTICE DYNAMICS
 72-GO-02 GOMPF, LAU+ PB/ AL/ CA ..EXPERIMENT/ PHONON SPECTRA/ COHERENT SCATTERING
 73-CA-01 CAVALHETTO, SHUKLA PB ..THEORY/ PHONON DISPERSION/ DEBYE TEMP./ DE LAUNAY MODEL
 73-KA-02 KACHHAVA PB ..THEORY/ PHONON DISPERSION
 73-KA-03 KACHHAVA PB ..THEORY/ PHONON DISPERSION
 73-PR-02 PRASAD, SRIVASTAVA PB ..THEORY/ PHONON DISPERSION/ ASHCROFT MODEL PSEUDOPOTENTIAL
 74-BE-02 BERTONI, BORTOLANI+ PB ..THEORY/ PHONON DISPERSION/ MODEL POTENTIAL CALCULATION
 74-NO-01 NOVOTNY, HOLDEN+ LI/ NA/ AL/ PB/ ..THEORY/ PHONON DISPERSION/ THIRD ORDER PERTURBATION THEORY
 76-BO-01 BOBROVSKY, GOSHCITSKII+ PB ..NEUTRON DIFFRACTION
 76-ST-02 STEFFEN, HASEMANN PB ..EXPERIMENT/ PHONON DISPERSION/ 4.2, 20.4, 78.0 AND 300K
 76-ST-03 STEFFEN, HASEMANN PB ..RADIAL DENSITY FUNCTION/ X-RAY SCATTERING
 76-YO-01 YOSHIDA NA/ RB/ PB/ THEORY-OF-FLUIDS ..DYNAMICAL STRUCTURE FACTOR/ COLLECTIVE MODE

65--RR-01	KREBS	LI/ NA/ K	..THEORY/ SOLID/ DISPERSION RELATION
66--AN-01	ANIMALU, BONSIGNORI+	NA/ K/ AL/ LI/ RB/ CS	..THEORY/ PHONON DISPERSION/ MODEL POTENTIAL
68--SH-01	SMITH, DOLLING+	LI	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..98DK/ LI7
69--IC-01	ICHIKAWA, SHIMOJI	LI/ NA/ K/ HG/ PB	..DIFFUSION PARAMETER/ LIQUID/ THEORY ..LIQUID METAL/ FRICTION CONSTANT
69--KR-01	KREBS, HOELZL	LI/ NA/ K/ RB/ CU/ AL/ PB/ FE/ NI/ PI/ COMPUTER-CODES	..PSEUD-ION APPROXIMATION/ FITTING TO
69--PR-02	PRAKASH, JOSHI	LI/ NA/ K/ RB/ CS	..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ THEORY/ SOLID/ LATTICE DYN
69--WA-04	WALLACE	LI	..DISPERSION RELATION/ SOLID/ THEORY/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL/ PHONON/ GRUENEISEN
70--GU-01	GUPTA	LI	..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL/ METAL
70--PA-03	PAL	LI	..THEORY/ LATTICE VIBRATION/ DISPERSION/ SHARM-JOSHI MODEL
70--PR-02	PRICE, SINGWI+	NA/ K/ LI/ RB	..THEORY/ DISPERSION RELATION ..PHONON LIFE TIMES DUE TO ELECTRON-PHONON INTE
70--SI-04	SINGH, PRAKASH	LI/ RB/ K/ CS	..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION ..ALKALI METAL
71--GU-01	GUPTA, TRIPATHI	LI	..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT/ COMPRESSIBILITY
71--TR-04	TRIPATHI, BEHARI	LI/ NA/ K	..CALCULATION/ PHONON DISPERSION/ DEBYE TEMP.
72--BA-02	RAJPAT, NEELAKANDAN	LI/ NA/ K	..THEORY/ PHONON DISPERSION/ BCC METAL/ AXIALLY SYMMETRIC MODEL
72--KA-01	KACHHAVA	LI	..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL CALCULATION
72--KA-02	KACHHAVA	LI	..THEORY/ PHONON DISPERSION
72--PR-03	PRASAD, SRIVASTAVA	LI	..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..PSEUDOPOTENTIAL
72--SI-02	SINGH, PRAKASH	LI/ NA/ K/ RB/ CS	..THEORY/ DISPERSION CURVE
72--SI-03	SINGH, PRAKASH	LI/ NA/ K/ RB/ CS	..THEORY/ PHONON DISPERSION
72--SI-04	SINGH, SRIVASTAVA	LI	..THEORY/ PHONON DISPERSION/ THERMAL EXPANSION/ GRUENEISEN PARAMETER
73--KU-02	KUSHWAHA	LI	..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..PSEUDOPOTENTIAL
73--ON-01	ONG	LI	..THEORY/ PHONON DISPERSION/ HARTREE-FOCK EQ./ HARRISON METHOD
73--SH-03	SHARAN, KUMAR+	LI	..THEORY/ PHONON DISPERSION
74--BE-02	BERTONI, BORTOLANI+	LI/ NA/ AL/ PB/ ..THEORY/ PHONON DISPERSION/ THIRD ORDER PERTURBATION THEORY	
74--DA-01	DA-CUNHA-LIMA, BRESANSIN+	K/ LI/ RB	..PHONON DISPERSION RELATION/ KREBS MODEL
74--PR-01	PRAKASH, PATHAK+	K/ RB/ LI	..THEORY/ LATTICE DYNAMICS/ PHONON DISPERSION/ ANGULAR FORCE MODEL
74--PR-02	PRAKASH, PATHAK+	LI/ K/ RB	..THEORY/ PHONON DISPERSION
75--NA-02	NANC, TRIPATHI+	LI	..THEORY/ MODEL POTENTIAL APPROACH
76--BE-02	BEG, NIELSEN	LI	..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ COHERENT INELASTIC NEUTRON SCA
76--DA-07	DAY, SUN+	BE/ LI	..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL METHOD
76--PE-01	PERDEW, VOSKO	LI	..THEORY/ PHONON DISPERSION/ LOCAL EFFECTIVE POTENTIAL
76--SU-01	SUN, DAY+	LI/ BE	..THEORY/ PHONON DISPERSION/ EFFECT OF CONDUCTION ELECTRON
77--DA-02	DAY, SUN+	LI/ NA/ K	..THEORY/ PHONON DISPERSION
77--RA-03	RAJ, HEMKAR	LI/ NA/ K/ RB	..THEORY-OF-SOLIDS ..PHONON DISPERSION/ ALKALI METAL
77--WE-02	WEILACHER, KOTH-SEEFRIED+	LITHIUM	..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
77--WE-03	WEILACHER, BROSS	LI	..THEORY/ PHONON DISPERSION

41

MAGNESIUM

M6

58--FG-01	EGLSTAFF	RE/ MG/ SCATTERING-THEORIES	..THEORY/ EXPERIMENT/ SOLID/ SIGMAE, E-PRIME, THETA)/ SIGMA(E) ..O
62--CO-01	COLLINS	MG	..EXPERIMENT/ SOLID/ DISPERSION RELATION
62--EG-05	EGLSTAFF	MG/ BE/ PR	..THEORY/ SOLID/ LIQUID/ SIGMAE, E-PRIME, THETA) ..METAL/ LIQUID METAL
63--LY-01	IYENGER, VENKATARAMAN+	MG	..EXPERIMENT/ DISPERSION RELATION
63--MA-02	MALISZEWSKI, SOSNOWSKI+	ZN/ CU/ MG	..EXPERIMENT
64--YO-02	YOUNG, KOPPEL	BE/ MG/ ZN	..THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS ..ROOT SAMPLING METHOD
65--LY-01	IYENGER, VENKATARAMAN+	MG	..LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION
65--LY-02	IYENGER, VENKATARAMAN+	MG	..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
65--SW-01	SQUIRES	MG	..PHONON DISPERSION/ EXPERIMENT
66--SW-01	SQUIRES	MG	..PHONON DISPERSION
67--RO-03	ROY, VENKATARAMAN	MG	..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL

2. 41 MAGNESIUM

MG

58-FG-01	EGELSTAFF	BE/ MG/ SCATTERING-THEORIES	..THEORY/ EXPERIMENT/ SOLID/ SIGMA(E, E-PRIME, THETA)/ SIGMA(E) ..0
62-CO-03	COLLINS	MG	..EXPERIMENT/ SOLID/ DISPERSION RELATION
62-EG-05	EGELSTAFF	MG/ BE/ PB	..THEORY/ SOLID/ LIQUID/ SIGMA(E, E-PRIME, THETA) ..METAL/ LIQUID METAL
63-IY-01	IYENGER, VENKATARAMAN+	MG	..EXPERIMENT/ DISPERSION RELATION
63-MA-02	MALISZEWSKI, SOSNOWSKI+	ZN/ CU/ MG	..EXPERIMENT
64-YO-02	YOUNG, KOPPEL	BE/ MG/ ZN	..THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS ..ROOT SAMPLING METHOD
65-IY-01	IYENGER, VENKATARAMAN+	MG	..LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION
65-IY-02	IYENGER, VENKATARAMANNH+	MG	..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
65-SQ-01	SQUIRES	MG	..PHONON DISPERSION/ EXPERIMENT
66-SQ-01	SQUIRES	MG	..PHONON DISPERSION
67-RO-03	ROY, VENKATARAMAN	MG	..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL

68-BR-01 BROVMAN, KAGAN+ BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS
 68-CZ-01 CZACHOR MG/ ZN/ BE ..THEORY/ PHONON DISPERSION
 68-PY-01 PYNN, SQUIRES MG ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ TOF
 68-SC-06 SCHNEIDER, STOLL NA/ MG/ AL ..THEORY/ LATTICE DYNAMICS ..ELECTRONIC STRUCTURE/ METAL
 68-WA-03 WARREN CS.CL/ MG ..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY PROPERTIES/ SPACE GROUP/ IRREDUCIBLE REP
 69-GI-02 GILAT, RIZZI+ BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE ..METAL/ MODEL POTENTIAL CALCULATION
 69-ME-02 MEITZBOWER BE/ MG/ ZN ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..NONCENTRAL-FORCE/ FIVE FORC
 69-PI-01 PINDOR, PYNN MG ..DISPERSION RELATION/ SOLID/ THEORY/ LATTICE DYNAMICS ..PHONON/ POTENTIAL/ METAL
 70-CZ-01 CZACHOR MG/ CO/ Y ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ BORN-VON KARMAN MODEL ..AXIAL
 70-CZ-02 CZACHOR, RAJCA MG/ CO/ Y ..CALCULATION/ HEXAGONAL METAL/ FREQUENCY SPECTRA
 70-FL-01 FLOYD, KLEINMAN MG ..THEORY/ PHONON DISPERSION RELATION/ METAL/ PSEUDOPOTENTIAL
 70-LA-02 LAHTEENKORVA MG/ Y/ HO ..DISPERSION RELATION/ HARMONIC APPROXIMATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..EL
 70-PR-01 PRAKASH, JOSHI BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..SINGLE-ORTHOGONALIZED-PLANE-WA
 70-SH-03 SHARAN, BAJPAI BE/ MG/ TL ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..HEXAGONAL METAL
 71-KI-02 KING-III, CUTLER MG ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..METAL/ PSEUDOPOTENTIAL
 71-SR-01 SRINIVASAN, RAO MG/ ZN/ BE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT/ ANHARMONICS
 71-TR-05 TROTT, HEALD BE/ MG/ ZN ..THEORY/ PHONON DISPERSION AND SPECTRA/ HEXAGONAL LATTICE
 72-BA-01 BAJPAI MG/ ZR/ Y/ TI/ TL/ HF ..THEORY/ PHONON DISPERSION/ FOURTH NEIGHBOURS MODEL/ HEXAGONAL LATTICE
 72-BA-04 BAJPAI, ONO MG ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
 72-PY-01 PYNN, SQUIRES MG ..EXPERIMENT/ PHONON DISPERSION/ PHONON DENSITY/ DEBYE TEMP.
 73-BO-04 BOSE, TRIPATHI+ BE/ MG/ ZN ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ SPECIFIC HEAT/ CENTRAL AND NON
 73-KU-04 KUSHWAHA MG/ BE/ TL ..THEORY/ PHONON DISPERSION/ SHORT-RANGE CLOSED-SHELL AND IONIC INTERACTION
 73-RA-01 RAJPUT, KUSHWAHA BE/ MG ..THEORY/ PHONON DISPERSION/ KREB MODEL
 73-SH-08 SHUKLA, CLOSS MG ..THEORY/ LATTICE DYNAMICS/ INTERATOMIC FORCE CONSTANT/ DISPERSION RELATION ..ELECTRON, IO
 73-UP-02 UPADHYAYA, VERMA BE/ MG/ HO/ TL ..THEORY/ PHONON DISPERSION/ MODIFIED SHARMA-JOSHI MODEL
 74-ES-01 ESCHRIG, VAN-LOYEN+ MG ..PHONON DENSITY OF STATE
 74-MA-03 MAURYA, SRIVASTAVA MG ..THEORY/ SOLID/ DISPERSION RELATION ..TOYA'S THEORY
 75-MA-05 MAURYA, SRIVASTAVA BE/ MG/ ZN ..THEORY/ PHONON DISPERSION/ HCP METAL/ TOYA THEORY
 75-RE-02 REISSLAND, ESE AL/ NA/ MG/ IN/ TL ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ MODEL POTENTIAL CALCULATION
 75-UP-01 UPADHYAYA, SINHA BE/ MG/ Y/ HO ..THEORY/ EXPERIMENT/ DISPERSION RELATION ..BHATTIA MODEL
 76-ER-01 EREMEEV, SADIKOV+ MG/ ZN/ CD ..EXPERIMENT/ SEPARATED ISOTOP CD-110, CD-111/ PHONON SPECTRA

2. 42 MERCURY

HG

51-PL-01 PLACZEK, NIJBOER+ NEUTRON-SCATTERING-IN-FLUIDS/ HG ..THEORY/ SIGMA(E,E-PRIME,THETA)/ SOLID/ LIQUID/ SCATTE
 54-VI-02 VINEYARD HG ..EXPERIMENT/ STRUCTURE FACTOR/ LIQUID METAL
 69-IC-01 ICHIKAWA, SHIMOJI LI/ NA/ K/ HG/ PB ..DIFFUSION PARAMETER/ LIQUID/ THEORY ..LIQUID METAL/ FRICTION CONSTAN
 70-VA-01 VADOVIC, CULVER AG/ GA/ HG/ NA/ PB/ SN/ ZN ..THEORY/ SELF-DIFFUSION CONSTANT
 70-WA-02 WASEDA, SUZUKI HG ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR ..LIQUID METAL
 73-FR-01 FRANCHETTI HG ..THEORY/ RADIAL DISTRIBUTION FUNCTION
 77-SR-01 SRIVASTAVA NA/ K/ HG/ BI/ NA-K ..THEORY/ INTERATOMIC FORCE CONSTANTS/ KNIGHT SHIFT/ FREQUENCY SPECTRUM ..P

2. 43 MOLYBDENUM

MO

51-EG-01 EGELSTAFF H/ BE/ V/ SE/ MO/ FE ..SOLID/ EXPERIMENT/ TRANSMISSION
 64-WO-01 WOODS, CHEN MO ..EXPERIMENT/ SOLID/ DISPERSION RELATION
 65-WO-01 WOODS NB/ TA/ MO/ W ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
 66-MA-02 MAHESH, DAYAL FE/ MO/ W ..THEORY/ PHONON DISPERSION AND FREQUENCY DISTRIBUTION
 66-RO-01 ROSENSTOCK, BLANKEN NA/ NB/ MO/ TA/ W/ CU-ZN/ SN ..THEORY/ DISPERSION RELATION ..FORCE CONSTANTS FOR BORN-
 69-WA-03 WALKER, EGELSTAFF MO ..DISPERSION RELATION/ LATTICE DYNAMICS/ TOF ..ROOM TEMPERATURE

72-BE-01 BEHARI, TRIPATHI FE/ MO/ W ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA
 72-BU-07 BUYERS, POWELL+ MO ..EXPERIMENT/ PHONON DISPERSION/ KOHN ANOMALY/ TEMPERATURE EFFECT
 75-UP-03 UPADHYAYA, SHARMA+ FE/ W/ MO/ V/ NB/ TA ..LATTICE DYNAMICS/ DISPERSION RELATION/ TRANSITION METAL/ THEORY/
 76-BR-01 BRESCANSIN, PADIAL+ FE/ MO/ W/ NB/ TA/ CR ..THEORY/ PHONON DISPERSION/ TRANSITION METAL/ MODEL CALCULATION
 77-PA-02 PARIKH, HAY V/ NB/ TA/ CR/ MO/ W/ FE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANTS
 77-PO-01 POWELL, MARTELL+ NB/ MO/ NB-MC ..CALCULATION/ MODEL FITTING/ PHONON DENSITY/ DEBYE TEMPERATURE
 77-VA-03 VARMA, WEBER THEORY-OF-SOLIDS/ NB/ NB-MO/ MO ..LATTICE DYNAMICS/ PHONON DISPERSION/ 4D BCC METAL
 77-WA-01 WAKABAYASHI THEORY-OF-SOLIDS/ NB/ MO ..PHONON DISPERSION/ TRANSITION METAL/ CHARGE FLUCTUATION

2. 44 NEON

NE

65-CH-02 CHEN, EDER+ NEON/ ARGON/ DEUTERIUM/ CARBON TETRAFLUORIDE ..EXPERIMENT/ LIQUID/ SIGMA(THETA.E)
 66-ED-01 EDER, CHEN+ AR/ NE ..EXPERIMENT/ H IN LIQUID AR AND NE
 67-JA-01 JAHN, KHAN NE ..THEORY/ LIQUID/ STATISTICAL MECHANICS
 68-FR-01 FRANCHETTI, MAZZA AR/ NE/ HE ..THEORY/ MONATOMIC LIQUID/ RADIAL DENSITY AND SCATTERIN FUNCTION
 69-LE-03 LEAKE, DANIELS+ NE ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..4.7DK/ 25DK/ TRIPLE-AXIS-S
 70-GL-01 GLYDE NE/ AR/ KR/ XE ..THEORY/ ANHARMONICITY
 70-GO-02 GOLDMAN, HORTON+ NE/ HE ..SELF-CONSISTENT APPROXIMATION/ DISPERSION CURVE/ LIFE TIME/ THEORY
 70-GU-04 GUPTA, GUPTA NE ..THEORY/ PHONON DISPERSION AND SPECTRUM/ PSEUDOHARMONIC CENTRAL-FORCE RIGID-ATOM MODEL
 70-LE-02 LEECH, REISSLAND NE/ AR/ KR/ XE ..THEORY/ LATTICE DYNAMICS/ ANHARMONICITY ..THERMODYNAMICAL PROPERTIES
 70-LE-03 LEECH, REISSLAND NE/ AR/ KR/ XE ..THEORY/ ANHARMONICITY ..SPECIFIC HEAT/ DEBYE TEMPERATURE/ THERMAL EXPANS
 71-BE-01 BEHARI, TRIPATHI NE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT/ DEBYE TEMP./ FREQUENCY SPECTRA
 72-BO-03 BOHLIN NE ..THEORY/ INELASTIC SCATTERING PROFIL/ NUMERICAL CALCULATION/ SOLID
 72-BU-06 BUYERS, SEARS+ NE/ SCATTERING-THEORIES ..THEORY/ EXPERIMENT/ LIQUID DYNAMICS/ COLLECTIVE MOTION/ SINGLE PA
 72-EG-02 EGELSTAFF, WANG RB/ NE ..THEORY/ EXPERIMENT/ LIQUID/ STRUCTURE FACTOR ..DENSITY DEPENDENT POTENTIAL
 72-HO-01 HORNER HE/ NE/ AR ..THEORY/ PHONON DISPERSION/ LIQUID/ QUANTUM CRYSTALS/ PHONON SPECTRUM
 72-HO-02 HORNER THEORY-OF-SOLIDS/ HE/ NE ..QUANTUM CRYSTALS/ SELFCONSISTENT TREATMENT
 72-HO-03 HORNER HE/ NE ..THEORY/ SCATTERING FUNCTION/ SINGLE-PARTICLE EXCITATION/ QUANTUM CRYSTAL
 72-SK-01 SKALYO-JR, MINKIEWICZ+ NE ..EXPERIMENT/ PHONON DISPERSION/ A-S MODEL FITTING/ FREQUENCY DISTRIBUTION
 72-TO-02 TOLPYGO, TROITSKAYA NE/ AR/ KR ..DISPERSION CURVE
 73-BE-02 BELL, KOLLMAR+ NE/ NEUTRON-SCATTERING-IN-FLUIDS ..EXPERIMENT/ LIQUID/ NEUTRON SPECTRUM ..COHERENT SCATTERI
 73-KE-03 KERR, SINGWI NE/ NEUTRON-SCATTERING-IN-FLUIDS ..QUANTUM EFFECT ..LARGE-Q-REGION
 73-SE-01 SEARS NEON/ RUBIDIUM/ HYDROGEN/ THEORY-OF-FLUIDS ..THEORY/ FLUID/ SCATTERING FUNCTION
 74-BR-01 BRENNAN, HUTCHINSON+ NEON ..PAIR-DISTRIBUTION FUNCTION
 74-BU-02 BUYERS, SEARS+ NE ..EXPERIMENT/ S(0,OMEGA) COMPILATION
 75-BU-04 BUYERS, V.F./ LONNGI+ NEON ..QUASI-ELASTIC PEAK/ SCATTERING LAW
 75-EN-01 ENDOH, SHIRANE+ NE ..PHONON DISPERSION/ SOLID NE
 75-GA-01 GARG, GUPTA NE/ AR/ KR/ XE ..LATTICE DYNAMICS/ ANHARMONICITY/ CENTRAL PORCE MODEL/ DISPERSION RELATION
 75-GU-02 GUPTA, GARG NE/ KR/ XE/ AR ..THEORY/ DISPERSION RELATION/ SOLID/ ANHARMONICITY
 76-EC-01 ECKERT, AXE+ NE ..EXPERIMENT/ PHONON DISPERSION/ 6KBAR/ 82K
 76-EC-02 ECKERT, DANIELS+ NE ..EXPERIMENT/ PHONON DISPERSION/ 8DK/ PHONON SPECTRUM
 76-EC-03 ECKERT, AXE+ NE ..EXPERIMENT/ PHONON DISPERSION/ 82K,6KBAR/ BORN-VON-KARMAN ANALYSIS
 76-WA-04 WASEDA, SUZUKI NE/ AR/ KR/ XE ..LIQUID/ PAIR POTENTIAL/ BORN-GREEN EQUATION
 77-RA-04 RAND, RAO+ KR/ AR/ NE ..EXPERIMENT ..LIGHT SCATTERING/ ELASTIC CONSTANTS/ COMPARISON WITH NEUTRON SCATTERI

2. 45 NICKEL

NI

63-MO-01 MOZER, OTONES NI/ PD/ NI-PD ..EXPERIMENT/ LATTICE DYNAMICS ..INPURITY MODE
 63-TC-01 TCHERNOPLEKOV, ZEMLYANOV+ NI ..EXPERIMENT/ TOF/ FREQUENCY DISTRIBUTION
 64-BI-01 BIRGENEAU, CORDES+ NI ..296 DEGREE KELVIN/ EXPERIMENT/ DISPERSION RELATION/ 3-AXIS SPECTROMETER

- 64-BR-04 BRUGGER NI ..EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
- 65-HA-06 HAUTECLEER, VAN-DINGEN NI ..PHONON DISPERSION
- 65-MO-03 MOZER, OTNES+ NI/ V/ TI/ TI-ZR ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION
- 67-HA-02 HAUTECLEER, VAN-DINGEN NI ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..ROOM TEMP
- 67-SH-03 SHUKLA, DAYAL NI ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ KREBS MODEL
- 67-SI-01 SINGH NI ..LATTICE DYNAMICS/ THEORY/ FREQUENCY DISTRIBUTION ..DEBYE TEMPERATURE/ 00K-300DK
- 68-DE-02 DE-WIT, BROCKHOUSE NI ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..400DC/ 300DC/ ROOM TEMP
- 70-WA-03 WASEDA, SUZUKI+ NI ..EXPERIMENT/ LIQUID/ 1500DC/ RADIAL DISTRIBUTION FUNCTION
- 71-FR-01 FRIKKEE NI ..EXPERIMENT/ SOLID/ TOF/ DISPERSION RELATION ..METAL
- 71-HA-03 HANKE NI ..THEORY/ METAL/ MODIFIED SHELL
- 71-PR-01 PRAKASH, JOSHI NI ..THEORY/ DISPERSION CURVE/ TWO-BAND MODEL/ HARTREE APPROXIMATION
- 71-SI-01 SINGH, SHARMA CU/ AG/ AU/ AL/ NI/ NA/ CR/ FE ..THEORY/ DEBYE-WALLER FACTOR
- 73-PA-02 PAL NI ..THEORY/ PHONON DENSITY/ SHARMA-JOSHI MODEL/ SPECIFIC HEAT/ DEBYE WALLER FACTOR
- 73-SH-05 SHUKLA, CAVALHEIRO CU/ AG/ AL/ NI/ PD ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ FOURTH NEIGHBOURS FORCE
- 75-BE-05 BERTOLO, SHUKLA NI/ PD/ PT ..THEORY/ PHONON DISPERSION/ MODIFIED BHATIA MODEL
- 75-FI-02 FIELEK CU/ NI ..THEORY/ PHONON DISPERSION/ METAL/ MODEL CALCULATION
- 75-PA-01 PAL NI ..THEORY/ PHONON DISPERSION/ SPECTRUM/ DE-LAUNAY MODEL
- 75-SI-09 SINGH, SINGH+ NI ..PHONON DISPERSION/ THEORY/ FERRO- AND PARAMAGNETIC PHASE
- 77-CL-01 CLOSS, SHUKLA NI/ PT/ PD ..THEORY/ PHONON DISPERSION/ DEBYE-WALLER FACTOR
- 77-MI-03 MITRA NI ..CALCULATION/ MOLECULAR DYNAMIC SIMULATION/ DEBYE-WALLER FACTOR
2. 46 NIOBIUM NB
- 63-NA-01 NAKAGAWA, WOODS NB
- 65-NA-01 NAKAGAWA, WOODS NB/ TA/ MO/ W ..EXPERIMENT/ SOLID/ DISPERSION RELATION
- 65-WO-01 WOODS NB/ TA/ MO/ W ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
- 66-RO-01 ROSENSTOCK, BLANKEN NA/ NB/ MO/ TA/ W/ CU-ZN/ SN ..THEORY/ DISPERSION RELATION ..FORCE CONSTANTS FOR BORN-
- 68-GR-02 GRIMVALL, GRIMVALL AL/ NB/ PB ..FREQUENCY DISTRIBUTION/ THEORY/ LATTICE DYNAMICS ..DEBYE TEMP.
- 69-SH-02 SHARP NB ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ DEBYE TEMPERATURE ..296DK/ TOF/ TRIPLE-AXIS
- 69-SH-03 SHARP NB ..KOHN EFFECT/ DISPERSION RELATION ..FERMI SURFACE
- 71-KO-02 KORSUNSKII, GENKIN+ NB ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL
- 72-BA-05 BAJPAI, NEELAKANDAN FE/ NB/ TA/ W ..THEORY/ PHONON DISPERSION/ BCC METAL/ MODIFIED AXIALSYMMETRIC MODEL
- 72-PO-02 POWELL, WOODS+ NB ..EXPERIMENT/ PHONON DISPERSION/ 296 TO 1030K
- 74-CH-05 CHUI NB ..DISPERSION RELATION
- 74-PY-01 PYN, AXE NB ..THEORY/ PHONON LIFETIME/ MAGNETIC FIELD EFFECT
- 75-RO-04 ROWE, VAGELATOS+ NB/ NB-H ..EXPERIMENT/SOLID/ DISPERSION RELATION ..ALLOY/ TRIPLE-AXIS-SPECTROMETER
- 75-UP-03 UPADHYAYA, SHARMA+ FE/ W/ MO/ V/ NB/ TA ..LATTICE DYNAMICS/ DISPERSION RELATION/ TRANSITION METAL/ THEORY/
- 76-BR-01 BRESANSIN, PADIAL+ FE/ MO/ W/ NB/ TA/ CR ..THEORY/ PHONON DISPERSION/ TRANSITION METAL/ MODEL CALCULATION
- 76-TA-02 TASSET, CHRISTEN+ NB ..SMALL ANGLE SCATTERING/ FLUXOID LINE LATTICES
- 77-PA-02 PARIKH, HAY V/ NB/ TA/ CR/ MO/ W/ FE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANTS
- 77-PO-01 POWELL, MARTELL+ NB/ MO/ NB-MO ..CALCULATION/ MODEL FITTING/ PHONON DENSITY/ DEBYE TEMPERATURE
- 77-VA-03 VARMA, WEBER THEORY-OF-SOLIDS/ NB/ NB-MO ..LATTICE DYNAMICS/ PHONON DISPERSION/ 4D BCC METAL
- 77-WA-01 WAKABAYASHI THEORY-OF-SOLIDS/ NB/ MO ..PHONON DISPERSION/ TRANSITION METAL/ CHARGE FLUCTUATION
2. 47 NITROGEN N
- 65-DO-05 DONALDSON, PASSELL+ B/ N/ O ..MIRROR REFLECTION/ SCATTERING AMPLITUDE
- 68-YO-01 YOUNG N ..SCATTERING THEORY/ MOLECULAR DYNAMICS
- 75-KJ-01 KJEMS, DOLLING N ..INELASTIC NEUTRON SCATTERING
- 75-PO-05 POWLES N ..SCATTERING LAW/ LIQUID

75-SI-06 SINCLAIR, CLARKE+ N ..EXPERIMENT/ LIQUID/ 77.4DK/ SINGLE PARTICLE EXCITATION
 75-WE-02 WEIS, KLEIN NITROGEN ..THEORY/ SIGMA(THETA.E)/ MOLECULAR DYNAMICS/ PHONON WIDTH AND LIFETIMES/ QUASI-ELAST
 76-KO-01 KOESTER, KNOPF+ N ..COHERENT SCATTERING LENGTH/ EXPERIMENT
 77-DU-01 DUNMORE NITROGEN ..THEORY/ SOLID ..LIBRATIONAL MOTION/ MEAN FIELD MODEL/ SECOND QUANTIZATION/ INTERMOLE
 77-GO-05 GOODINGS NITROGEN ..THEORY/ SOLID/ SIGMA(THETA.E) ..ONE-LIBRON INELASTIC STRUCTURE FACTOR/ COHERENT SCAT
 77-KL-01 KLEIN, WEIS N ..CALCULATION/ DYNAMICAL STRUCTURE FACTOR/ HEXAGONAL/ PERTOACIC BOUNDARY CONDITION
 77-VE-01 VESTNER, WALDMANN NITROGEN/ ARGON ..GAS/ HYDRODYNAMICS ..FRICTIONAL AND THERMAL FORCES ON A SPHERICAL PART

2. 48 NITROGEN

N2

65-VE-02 VERTEBNYI, DZYUB+ N2/ O2 ..EXPERIMENT/ TOTAL CROSS SECTION/ LIQUID/ SOLIDS
 66-TE-01 TEUTSCH, MATEESCU+ N2 ..EXPERIMENT/ LIQUID DYNAMICS
 68-MA-10 MATEESCU, TEUTSCH+ N2/ B1 ..EXPERIMENT/ TOF/ SCATTERING FUNCTION ..77.4DK FOR N2/ 560DK FOR B1
 72-JA-01 JACOBI, SCHNEPP C.O2/ H2/ N2 ..THEORY/ LATTICE DYNAMICS ..QUADRAPOL-QUADRAPOL POTENTIAL
 74-CA-02 CARNEIRO H2/ N2 ..EXPERIMENT/ PHONON LIKE EXCITATION/ LIQUID DYNAMICS
 75-CA-01 CARNEIRO, MCTAGUE N2 ..EXPERIMENT/ SCATTERING CAW/ LIQUID/ 66.4K
 75-HU-01 HULER, ZUNGER N2 ..DISPERSION/ PHONON DENSITY OF STATE/ ALPHA AND GAMMA CRYSTAL
 75-WU-01 WEIS, KLEIN N2 ..COMPUTER SIMULATION/ SCATTERING FUNCTION/ SOLIDN2
 76-GO-05 GOLDMAN, KLEIN N2 ..THEORY/ ELASTIC CONSTANT/ HCP N2
 76-WE-01 WEIS, LEVESQUE N2 ..THEORY/ DYNAMICAL STRUCTURE FACTOR/ MOLECULAR DYNAMICS

2. 49 OXYGEN

O

65-DO-05 DONALDSON, PASSELL+ B/ N/ O ..MIRROR REFLECTION/ SCATTERING AMPLITUDE
 68-SU-02 SUMMERFELD, LURIE O ..SCATTERING FUNCTION/ EXPERIMENT/ THEORY/ GAS ..MAGNETIC SCATTERING/ ROOM TEMP.
 68-VA-01 VALENTINE O ..EXPERIMENT ..USING U,O2 SINGLE CRYSTAL

2. 50 OXYGEN

O2

65-VE-02 VERTEBNYI, DZYUB+ N2/ O2 ..EXPERIMENT/ TOTAL CROSS SECTION/ LIQUID/ SOLIDS

2. 51 PALLADIUM

PD

63-MO-01 MOZER, OTONES NI/ PD/ NI-PD ..EXPERIMENT/ LATTICE DYNAMICS ..INPUITY MODE
 66-MI-02 MILLER, BROCKHOUSE PD ..EXPERIMENT/ THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..TRIPLE AXIS SPECTROMET
 70-BH-03 BROWN PD ..THEORY/ PHONON DISPERSION/ KREBS MODEL
 71-BR-04 BROWN PD ..CALCULATION/ PHONON DISPERSION/ 3-PARAMETER MODEL
 71-MI-01 MILLER, BROCKHOUSE PD/ CU ..EXPERIMENT/ CALCULATION/ NEUTRON SCATTERING/ DISPERSION CURVE/ FREQUENCY SPECT
 71-PA-02 PAL ..CALCULATION/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ DEBYE TEMPERATURE
 73-PA-03 PAL, SINGH PD ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ SPECIFIC HEAT/ KREBS MODEL
 73-SH-05 SHUKLA, CAVALHEIRO CU/ AG/ AL/ NI/ PD ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ FOURTH NEIGHBOURS FORCE
 74-GO-01 GOEL, PANDEY+ AG/ PD/ PT ..PHONON DISPERSION RELATION
 75-BE-05 BERTOLO, SHUKLA NI/ PD/ PT ..THEORY/ PHONON DISPERSION/ MODIFIED BHATTIA MODEL
 75-MI-01 MILLER PD ..EXPERIMENT/ PHONON DISPERSION/ KOHN ANOMALY
 76-FR-01 FREEMAN THEORY-OF-SOLIDS/ GD/ SC/ PD/ PT ..MAGNETIC FORM FACTORS/ METAL
 76-MO-02 MOON, KOEHLER+ REVIEW-ARTICLES/ CR/ V/ SC/ PD/ TI/ Y/ NB/ ..MAGNETIC FORM FACTOR
 76-PA-01 PAL ..THEORY/ PHONON DISPERSION/ SPECTRUM
 77-CL-01 CLOSS, SHUKLA NI/ PT/ PD ..THEORY/ PHONON DISPERSION/ DEBYE-WALLER FACTOR

2. 52 PLATINUM

PT

66-OH-01 OHRLICH, DREXEL PT ..EXPERIMENT/ LATTICE DYNAMICS/ TOF/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
 71-KO-01 KONTI PT ..THEORY/ ANGULAR FORCE MODEL/ DISPERSION CURVE/ FREQUENCY SPECTRA/ DEBYE-WALLER FACTOR/ DEB
 72-DU-03 DJITTON, BROCKHOUSE+ PT ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ FORCE CONSTANT/ PHONON SPECTRUM/ TE
 74-GO-01 GOEL, PANDEY+ AG/ PD/ PT ..PHONON DISPERSION RELATION
 74-JO-01 JOGI RB/ CS/ PT ..THEORY/ PHONON DISPERSION/ ANGULAR FORCE MODEL
 75-BE-05 BERTOLO, SHUKLA NI/ PD/ PT ..THEORY/ PHONON DISPERSION/ MODIFIED BHATTIA MODEL
 75-CA-05 CAVALHEIRO, SHUKLA PT/ TH ..THEORY/ PHONON DISPERSION/ DE-LAUNAY MODEL
 76-FR-01 FREEMAN THEORY-OF-SOLIDS/ GD/ SC/ PD/ PT ..MAGNETIC FORM FACTORS/ METAL
 77-CL-01 CLOSS, SHUKLA NI/ PT/ PD ..THEORY/ PHONON DISPERSION/ DEBYE-WALLER FACTOR
 77-KU-01 KULSHRESTHA, UPADHYAYA PT ..THEORY/ PHONON DISPERSION/ TRANSITION METAL MODEL POTENTIAL

2. 53 POTASSIUM

K

65-KR-01 KREBS LI/ NA/ K ..THEORY/ SOLID/ DISPERSION RELATION
 66-AN-01 ANIMALU, BONSIGNORI+ NA/ K/ AL/ LI/ RB/ CS ..THEORY/ PHONON DISPERSION/ MODEL POTENTIAL
 66-CO-02 COWLEY, WOODS+ K ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION ..9DK
 66-GU-03 GUPTA, KISHORE K ..THEORY/ PHONON SPECTRUM/ SPECIFIC HEAT
 68-HO-01 HO THEORY-OF-SOLIDS/ NA/ K ..DISPERSION RELATION/ THEORY/ LATTICE DYNAMICS
 69-BO-01 BOFFEY K/ HB ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..ELECTRON-PHONON INTERACTION/ EXC
 69-BU-03 BUYERS, COWLEY K ..PHONON LIFETIME/ ANHARMONIC EFFECT/ EXPERIMENT/ THEORY ..9DK/ 215DK/ 299DK/ NEUTRA
 69-IC-01 ICHIKAWA, SHIMOJI LI/ NA/ K/ RB/ HG/ PB ..DIFFUSION PARAMETER/ LIQUID/ THEORY ..LIQUID METAL/ FRICTION CONSTAN
 69-KR-01 KREBS, HOELZL LI/ NA/ K/ RB/ CU/ AL/ PB/ FE/ NI/ PT/ COMPUTER-CODES ..PSEUD-ION APPROXIMATION/ FITTING TO
 69-PR-02 PRAKASH, JOSHI LI/ NA/ K/ RB/ CS ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ THEORY/ SOLID/ LATTICE DYN
 70-CO-06 COULTHARD SODIUM/ POTASSIUM/ ALUMINIUM/ LEAD ..THEORY/ LATTICE VIBRATION/ DISPERSION RELATION ..PRESSURE
 70-KU-05 KUSHWAHA, RAJPUT THEORY-OF-SOLIDS/ NA/ K ..PHONON DISPERSION CURVE/ METAL/ BCC
 70-PR-02 PRICE, SINGWI+ NA/ K/ LI/ RB ..THEORY/ DISPERSION RELATION ..PHONON LIFE TIMES DUE TO ELECTRON-PHONON INTE
 70-SI-04 SINGH, PRAKASH LI/ RB/ K/ CS/ ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION ..ALKALI METAL
 71-TR-04 TRIPATHI, BEHARI LI/ NA/ K ..CALCULATION/ PHONON DISPERSION/ DEBYE TEMP.
 72-BA-02 BAJPAI, NEELAKANDAN LI/ NA/ K ..THEORY/ PHONON DISPERSION/ BCC METAL/ AXIALLY SYMMETRIC MODEL
 72-GR-01 GREENFIELD, WISER+ NA/ K ..THEORY/ LIQUID/ STRUCTURE FACTOR/ HARD-SPHERE MODEL
 72-SI-02 SINGH, PRAKASH LI/ NA/ K/ RB/ CS ..THEORY/ DISPERSION CURVE
 72-SI-03 SINGH, PRAKASH LI/ NA/ K/ RB/ CS ..THEORY/ PHONON DISPERSION
 73-DU-01 DUESBERY, TAYLOR+ K ..ANHARMONICITY/ DISPERSION CURVE/ THEORY
 74-AI-01 AILAWADI, BANERJER+ NA/ K ..EFFECTIVE PAIR POTENTIAL/ RADIAL DISTRIBUTION FUNCTION/ LIQUID
 74-DA-01 DA-CUNHA-LIMA, BRESANSIN+ K/ LI/ RB ..PHONON DISPERSION RELATION/ KREBS MODEL
 74-HA-05 HASEGAWA, WATABE THEORY-OF-FLUIDS/ NA/ K ..LIQUID METAL/ ELECTRON THEORY/ STRUCTURE FACTOR/ THERMAL EXPANS
 74-PA-02 PAL, SETH K ..THEORY/ PHONON DISPERSION/ PHONON SPECTRUM/ SPECIFIC HEAT
 74-PR-01 PRAKASH, PATHAK+ K/ RB/ LI ..THEORY/ LATTICE DYNAMICS/ PHONON DISPERSION/ ANGULAR FORCE MODEL
 74-PR-02 PRAKASH, PATHAK+ LI/ K/ RB ..THEORY/ PHONON DISPERSION
 75-GO-01 GOEL, PANDEY+ NA/ K ..THEORY/ PHONON DISPERSION/ METAL/ MODIFIED SHARMA-JOSHI MODEL
 75-JI-01 JINDAL NA/ K ..THEORY/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS ..OPW METHOD/ DIELECTRIC FUNCTION
 76-HA-07 HASEGAWA K/ NA ..THEORY/ LIQUID STRUCTURE/ THIRD ORDER PERTURBATION
 76-ME-06 MEYER, DOLLING+ K ..EXPERIMENT/ PHONON DISPERSION/ 1BAR, 4.1KBAR/ MODE GRUENEISEN CONST.
 76-SR-01 SRIVASTAVA, MITRA+ CS/ NA/ K ..THORY OF SOLIDS/ FREQUENCIES VS. ATOMIC NUMBER/ THEORY
 77-DA-02 DAY, SUN+ LI/ NA/ K ..THEORY/ PHONON DISPERSION
 77-DO-01 DOLLING, MEYER K ..EXPERIMENT/ PHONON DISPERSION/ 4.3K
 77-GL-05 GLYDE, HAINSEN+ K ..MOLECULAR DYNAMICS COMPUTATION/ DYNAMICAL STRUCTURE FACTOR/ ANHARMONIC LATTICE DYNAMIC

- 77-HA-01 HANSEN, KLEIN K ..BCC K/ DAGAN-RASOLT TAYLOR PSEUDOPOTENTIAL
77-MU-02 MURPHY K ..THEORY/ LIQUID ..MONTE CARLO METHOD/ 338.408DK
77-RA-03 RAI, HEMKAR LI/ NA/ K/ RB/ THEORY-OF-SOLIDS ..PHONON DISPERSION/ ALKALI METAL
77-SR-01 SRIVASTAVA NA/ K/ HG/ BI/ NA-K ..THEORY/ INTERATOMIC FORCE CONSTANTS/ KNIGHT SHIFT/ FREQUENCY SPECTRUM ..P
2. 54 RHENIUM RH
77-RA-05 RAO, RAMANAND RHENIUM ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA
2. 55 RUBIDIUM RB
66-AN-01 ANIMALU, BONSIGNORI+ NA/ K/ AL/ LI/ RB/ CS ..THEORY/ PHONON DISPERSION/ MODEL POTENTIAL
66-PA-03 PASKIN REVIEW-ARTICLES/ AR/ NA/ CE/ RB ..LIQUID/ THEORY/ STRUCTURE FACTOR/ VELOCITY AUTOCORRELATION FU
67-CO-01 COCKING AL/ PB/ BI/ RB/ SN ..SOLID/ LIQUID/ DISPERSION RELATION/ EXPERIMENT
68-CO-08 COPLEY, BROCKHOUSE+ RB ..EXPERIMENT/ DISPERSION RELATION ..120DK
69-BO-01 BOFFEY K/ RB ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..ELECTRON-PHONON INTERACTION/ EXC
69-KR-01 KREBS, HOELZL LI/ NA/ K/ RB/ CU/ AL/ PB/ FE/ NI/ PT/ COMPUTER-CODES ..PSEUD-ION APPROXIMATION/ FITTING TO
69-PA-01 PAGE, EGELSTAFF+ AR/ RB ..LIQUID/ STRUCTURE FACTOR
69-PR-02 PRAKASH, JOSHI LI/ NA/ K/ RB/ CS ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ THEORY/ SOLID/ LATTICE DYN
70-PA-02 PAL ..THEORY/ FREQUENCY SPECTRUM/ DEBYE TEMP.
70-PR-02 PRICE, SINGWI+ NA/ K/ LI/ RB ..THEORY/ DISPERSION RELATION ..PHONON LIFE TIMES DUE TO ELECTRON-PHONON INTE
70-SI-04 SINGH, PRAKASH LI/ RB/ K/ CS ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION ..ALKALI METAL
71-EG-01 EGELSTAFF, PAGE+ RB/ AR/ C-CL4 ..EXPERIMENT/ TRIPLET CORRELATION FUNCTION/ THEORY
72-EG-02 EGELSTAFF, WANG RB/ NE ..THEORY/ EXPERIMENT/ LIQUID/ STRUCTURE FACTOR ..DENSITY DEPENDENT POTENTIAL
72-EG-03 EGELSTAFF, PAGE+ RB ..MEAN SQUARE FORCE
72-SC-01 SCHOMMERS RB ..SCATTERING LAW/ FLUID STATE/ STRUCTURE FACTOR
72-SI-02 SINGH, PRAKASH LI/ NA/ K/ RB/ CS ..THEORY/ DISPERSION CURVE
72-SI-03 SINGH, PRAKASH LI/ NA/ K/ RB/ CS ..THEORY/ PHONON DISPERSION
72-SU-01 SUCK, GLAESER RB ..EXPERIMENT/ LIQUID AND SOLID/ COLLECTIVE EXCITATION
73-CO-04 COPLEY, BROCKHOUSE RB ..EXPERIMENT/ PHONON DISPERSION/ 12.85.120.205K/ HARMONIC ANALYSIS/ PHONON DENSITY
73-CO-05 COPLEY RB/ NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ DISPERSION CURVE
73-SI-01 SEARS NEON/ RUBIDIUM/ HYDROGEN/ THEORY-OF-FLUIDS ..THEORY/ FLUID/ SCATTERING FUNCTION
74-RA-01 BARKER, GASKELL NEUTRON-SCATTERING-IN-FLUIDS/ RB ..TRIPLE-PEAKS
74-CO-03 COPLEY, ROWE RB/ NEUTRON-SCATTERING-IN-FLUIDS ..DISPERSION CURVE/ ZERO SOUND/ LIQUID
74-CO-04 COPLEY, ROWE RB ..SCATTERING LAW/ COHERENT SCATTERING/ EXPERIMENT
74-DA-01 DA-CUNHA-LIMA, BRESANSIN+ K/ LI/ RB ..PHONON DISPERSION RELATION/ KREBS MODEL
74-JO-01 JOGI RB/ CS/ PT ..THEORY/ PHONON DISPERSION/ ANGULAR FORCE MODEL
74-PR-01 PRAKASH, PATHAK+ K/ RB/ LI ..THEORY/ LATTICE DYNAMICS/ PHONON DISPERSION/ ANGULAR FORCE MODEL
74-PR-02 PRAKASH, PATHAK+ LI/ K/ RB ..THEORY/ PHONON DISPERSION
74-RA-02 RAHMAN RB/ NEUTRON-SCATTERING-IN-FLUIDS ..DISPERSION CURVE/ ZERO SOUND
74-RA-03 RAHMAN RB ..MOLECULAR DYNAMIC CALCULATION/ LIQUID
75-BL-04 BLOCK, SCHOMMERS RB/ THEORY-OF-FLUIDS ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ CORRELATION FUNCTION ..TRIPLET
75-RO-01 ROSENGREN, JOHANSSON RB ..THEORY/ PHONON DISPERSION AND SPECTRA/ PSEUDOPOTENTIAL CALCULATION
75-SC-03 SCHOMMERS RB ..THEORY/ LIQUID/ VELOCITY AUTOCORRELATION FUNCTION/ FREQUENCY DISTRIBUTION
76-AI-01 AILAWADI, MILLER+ NA/ RB ..THEORY/ STRUCTURE FACTOR
76-CH-03 CHIAKWELU, GASKELL RB/ THEORY-OF-FLUIDS ..VELOCITY AUTOCORRELATION FUNCTION/ EFFECT ON FREQUENCY SPECTRUM
76-GE-03 GESZTI SODIUM/ RUBIDIUM ..CALCULATION/ ATOMIC DYNAMICS/ LIQUID METAL/ OSCILLATION/ DISPERSION CURVE
76-GO-03 GOETZE, ZIPPELIUS THEORY-OF-FLUIDS/ AR/ RB ..SELF-CORRELATION FUNCTION/ CLASSICAL LIQUIDS
76-KA-02 KAHOL, BANSAL+ RB/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ MEMORY-FUNCTION-METHOD
76-MI-04 MITRA, HUTCHINSON+ RUBIDIUM ..THEORY/ PAIR POTENTIAL/ CALCULATED FROM EXPERIMENTAL DATA

76-YO-01 YOSHIDA NA/ RB/ PB/ THEORY-OF-FLUIDS ..DYNAMICAL STRUCTURE FACTOR/ COLLECTIVE MODE
 77-BA-02 BANSAL, AILAWADI THEORY-OF-FLUIDS/ RB ..COHERENT SCATTERING FUNCTION
 77-BA-04 BANSAL, NAGHIZADEH NEUTRON-SCATTERING-IN-FLUIDS/ THEORY-OF-FLUIDS/ RUBIDIUM ..COHERENT SCATTERING FUNCTION
 77-GA-03 GASKELL, CHIAKWELO ARGON/ RUBIDIUM ..THEORY/ FREQUENCY SPECTRUM/ MEMORY FUNCTION
 77-PR-02 PRASAD, SRIVASTAVA RB/ CS ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
 77-RA-03 RAI, HEMKAR LI/ NA/ K/ RB/ THEORY-OF-SOLIDS ..PHONON DISPERSION/ ALKALI METAL

2. 56 SCANDIUM

SC

71-WA-01 WAKABAYASHI, SINHA+ SC ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ PHONON DENSITY/ DEBYE TEMPERATURE
 73-BO-03 BOSE, GUPTA+ SC ..THEORY/ PHONON DISPERSION/ FIVE PARAMETER
 73-RA-04 RAO, MENON SC ..THEORY/ PHONON DISPERSION/ SECOND ORDER ELASTIC CONSTANT/ KEATING METHOD
 74-KA-05 KUR, KUSHWAHA SC ..THEORY/ PHONON DISPERSION
 75-CA-06 CAVALHEIRO, SHUKLA SC/ TB/ HO/ TL/ ZR ..THEORY/ PHONON DISPERSION/ DE-LAUNAY MODEL
 75-SI-07 SINGH, PRAKASH SC/ Y ..CALCULATION/ PHONON DISPERSION/ HCP METAL
 75-SI-12 SINHA, UPADHYAYA SC/ Y/ ZR ..THEORY/ PHONON DISPERSION/ KREB MODEL
 76-FR-01 FREEMAN THEORY-OF-SOLIDS/ GD/ SC/ PD/ PT ..MAGNETIC FORM FACTORS/ METAL
 76-MO-02 MOON, KOEHLER+ REVIEW-ARTICLES/ CR/ V/ SC/ PD/ TL/ Y/ NB/ ..MAGNETIC FORM FACTOR
 77-SI-02 SINGH, PRAKASH SC/ Y ..THEORY/ PHONON DISPERSION/ H.C.P. METAL

2. 57 SELENIUM

SE

51-EG-01 EGELSTAFF H/ BE/ V/ SE/ MO/ FE ..SOLID/ EXPERIMENT/ TRANSMISSION
 67-AX-01 AXMANN, GISSLER SE/ TE ..EXPERIMENT/ TOF/ POLYCRYSTAL
 67-GE-02 GEICK, SCHROEDER+ SE ..INFRARED EXPERIMENT/ CALCULATION/ PHONON DISPERSION
 67-HE-01 HENNINGER, BUSCHERT+ SE ..SIGMA(THETA,E)/ CORRELATION FUNCTION/ EXPERIMENT/ LIQUID/ SOLID/ CROSS SECTION E
 67-KO-05 KOTOV, OKUNEVA+ SE ..EXPERIMENT/ FREQUENCY SPECTRA/ AMORPHOUS AND CRYSTAL SE
 68-GI-02 GISSLER, AXMANN+ SE/ TE ..EXPERIMENT/ SOLID/ LIQUID/ TOF/ 3-AXIS-SPECTROMETER ..340DC FOR SE/ 450DC FOR TE
 72-KO-02 KOLLMAR SE ..EXPERIMENT/ QUASIELASTIC SCATTERING/ LIQUID STATE
 72-NA-03 NAKAYAMA, ODAJIMA SE ..THEORY/ VALENCE-FORCE-FIELD/ ELASTIC CONSTANT
 73-BR-01 BREBNER, JANDL+ GA/ SE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ INELASTIC NEUTRONSCATTERING
 73-NA-02 NAKAYAMA, ODAJIMA SE ..THEORY/ PHONON DISPERSION/ VALENCE FORCE FIELD/ SIX FORCE CONSTANTS
 74-HA-03 HAMILTON, LASSIER+ SE ..EXPERIMENT/ DISPERSION RELATION/ INTERATOMIC FORCE CONSTANT ..THREE-AXIS-SPECTROME
 74-TE-01 TEUCHERT, GEICK SE/ TE ..THEORY/ PHONON DISPERSION
 75-TE-03 TEUCHERT, GEICK+ SE ..EXPERIMENT/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS ..SHELL MODEL
 75-WE-03 WENDEL, WEBER+ SE ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..SHELL MODEL
 76-MA-04 MARTIN, LUCOVSKY+ SE/ TE ..THEORY/ DISPERSION RELATION/ BORN-VON KARMAN MODEL/ SOLID ..VALENCE-FORCE-FIELD
 76-ME-01 MEEK SE/ TE ..THEORY/ PHONON SPECTRA

2. 58 SILICON

SI

59-BR-03 BROCKHOUSE GE/ SI ..EXPERIMENT/ DISPERSION RELATION
 61-DO-01 DOLLING SI ..EXPERIMENT/ DISPERSION RELATION
 63-DO-01 DOLLING SI ..EXPERIMENT/ DISPERSION RELATION
 63-DO-02 DOLLING SI ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ MODIFIED SHELL MODEL/ ROOM TEMPERATURE
 65-DO-04 DOLLING GE/ SI ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
 65-SL-01 SLATER V/ SI/ CU/ NEUTRON-SCATTERING-IN-SOLIDS ..HARMONIC APPROXIMATION/ DEBYE APPROXIMATION
 66-DO-02 DOLLING, COWLEY GE/ SI/ DIAMOND/ GA,AS ..COHERENT INELASTIC SCATTERING STUDIES/ PHONON DISPERSION
 68-MA-07 MARTIN SI ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION

70-PA-01 PAL SI ..THEORY/ DISPERSION RELATION
 70-SI-06 SINGH, DAYAL SI ..THEORY/ PHONON DISPERSION/ SIX VALENCE FORCE MODEL
 70-SO-01 SOLBIG SI ..THEORY/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS/ FORCE CONSTANTS ..VALENCE FORCE
 71-JE-03 JEX DIAMOND/ GE/ SI ..THEORY/ PHONON DISPERSION/ THERMAL PROPERTIES/ ANHARMONIC INTERACTION
 71-SO-02 SOLBRIG-JR SI ..THEORY/ PHONON DISPERSION/ VALENCE FORCE POTENTIAL
 72-JE-01 JEX GE/ SI ..THEORY/ PHONON/ ANHARMONIC INTERACTION
 72-NI-03 NILSSON, NELIN GE/ SI ..LATTICE DYNAMICS/ NEUTRON SPECTROSCOPY
 72-TH-02 THOMA, ZIMMERMANN SI ..CALCULATION/ SURFACE PHONON
 72-TU-01 TUBINO, FISERI+ DIAMOND/ SI/ GE/ SN ..THEORY/ PHONON DISPERSION/ CLARK-GAZIS-WALLIS TYPE ANGULAR FORCE MODEL/ FOUR PARAME
 73-PA-05 PANDEY, DAYAL SI/ GE ..THEORY/ PHONON DISPERSION/ FREQUENCY DISTRIBUTION ..BORN MODEL
 73-TH-01 THORPE GE/ SI ..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..BORN MODEL
 74-JO-03 JOHNSON, MOORE THEORY-OF-SOLIDS/ DIAMOND/ SI ..PHONON DISPERSION/ BOND CHARGE MODEL
 74-NE-06 NESTERENKO, GORBACHEV+ SI ..PHONON SPECTRUM/ EFFECT OF SURFACE/ EXPERIMENT
 75-AL-01 ALBEN, WEALRE+ SI/ GE ..EXPERIMENT/ RAMAN, IR SPECTRA/ PHONON SPECTRA/ NUMERICAL CALCULATION/ PREDICTION FO
 75-AL-02 ALTSHULER, VEKILOV+ SI/ GA, AS/ ZN, S ..THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL METH
 75-CH-02 CHEN, VETELINO+ GE/ SI ..THEORY/ SOLID/ FREQUENCY DISTRIBUTION ..AMORPHOUS SOLID/ RIGID ION MODEL
 76-CH-01 CHADJ, MARTIN C/ SI/ GE ..CALCULATION/ LATTICE DYNAMICAL PROPERTY/ ZONE BOUNDARY TRANSVERSE ACOUSTIC PHONO
 77-WE-04 WEINSTEIN ZN, TE/ ZN, SE/ ZN, S/ SI/ GA, P ..RAMAN SPECTRA/ METALLIC PHASE TRANSITION/ PHONON DISPERSION RELA

2. 59 SILVER

AG

69-DR-01 DREXEL, GLAESER+ AG ..DISPERSION RELATION/ BORN-VON KARMAN MODEL/ EXPERIMENT ..ROOM TEMPERATURE/ PSEUDORAND
 69-KA-02 KAMITAKAHARA, BROCKHOUSE AG ..DISPERSION RELATION/ EXPERIMENT/ CONSTANT-0 METHOD ..ROOM TEMPERATURE
 70-BE-03 BEHARI, TRIPATHI CU/ AG/ AU ..THEORY/ LATTICE VIBRATION/ DISPERSION RELATION ..NON-CENTRAL FORCE MODEL/ EL
 70-SH-04 SHARAN, RAJPAI AG ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATIONS/ SPECIFIC HEAT
 70-VA-01 VADCOVIC, COLVER AG/ GA/ HG/ NA/ PB/ SN/ ZN ..THEORY/ SELF-DIFFUSION CONSTANT
 71-DR-01 DREXEL AG ..EXPERIMENT/ PHONON DISPERSION
 71-NI-04 NIKULIN, TSAREV AG ..CALCULATION/ PHONON FREQUENCY
 71-SH-01 SHARMA, SINGH CU/ AG/ AU ..THEORY/ PHONON DISPERSION/ METAL
 71-SI-01 SINGH, SHARMA CU/ AG/ AU/ AL/ NI/ NA/ CR/ FE ..THEORY/ DEBYE-WALLER FACTOR
 72-DR-01 DREXEL AG ..EXPERIMENT/ PSEUDOPOTENTIAL ANALYSIS/ PHONON DISPERSION
 73-SH-05 SHUKLA, CAVALHEIRO CU/ AG/ AL/ NI/ PD ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ FOURTH NEIGHBOURS FORCE
 73-SI-01 SINGH, PRAKASH CU/ AG/ AU ..THEORY/ PHONON DISPERSION
 74-GO-01 GOEL, PANDEY+ AG/ PD/ PT ..PHONON DISPERSION RELATION
 74-GO-02 GOEL, PANDAY+ CU/ AG ..THEORY/ LATTICE DYNAMICS/ INTERATOMIC FORCE CONSTANT/ DISPERSION RELATION ..ELECTRO
 75-CL-01 CLOSS, SHUKLA CU/ AG/ AU ..THEORY/ PHONON DISPERSION/ SPECIFIC HEAT
 75-GO-02 GOPALARAO, MURTHY COPPER/ GOLD/ SILVER ..LIQUID NOBLE METAL ..STRUCTURE FACTOR
 77-NA-01 NAND, TRIPATHI CU/ AG ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL

2. 60 SODIUM

NA

58-TO-02 TOYA NA ..THEORY/ SOLID/ LATTICE DYNAMICS
 62-CO-01 COCKING, TURBERFIELD NA ..EXPERIMENT/ TOF SPECTRA ..1100C/ 80DC
 62-WO-01 WOODS, BROCKHOUSE+ NA ..EXPERIMENT/ SOLID/ DISPERSION RELATION
 62-WO-02 WOODS, BROCKHOUSE+ NA ..EXPERIMENT/ SOLID/ DISPERSION RELATION ..90 DK
 63-CO-01 COCHRAN NA ..THEORY/ SOLID/ DISPERSION RELATION
 63-CO-04 COCKING NA ..EXPERIMENT/ LIQUID ..DOUBLE DIFFERENTIAL CROSS SECTION
 64-RA-02 RANDOLPH NA ..SCATTERING LAW / STRUCTURE FACTOR/ LIQUIDS
 65-KR-01 KREBS LI/ NA K ..THEORY/ SOLID/ DISPERSION RELATION
 65-PR-01 PRAKASH, JOSHI NA ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION

65-SH-01 SHAM NA ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
 65-SI-03 SINGWI, FELDMANN NA ..THEORY/ SCATTERING FUNCTION/ LIQUID ..PHONON IN LIQUID
 66-AN-01 ANIMALU, BONSIGNORI+ NA/ K/ AL/ LI/ RB/ CS ..THEORY/ PHONON DISPERSION/ MODEL POTENTIAL
 66-BR-05 BRUGGER METHANE/ ETHANE/ AL/ NA/ PB/ AR ..COMPIATION/ SCATTERING FUNCTION
 66-DI-01 DIEDERICH, TRIVISONNO NA ..EXPERIMENT ..SINGLE CRYSTAL/ 78 DK TO 195 DK/ ULTRASONIC PULSE ECHO TECHNIQUE
 66-OE-01 OEHME, RICHTER CS/ BI/ NA ..STRUCTURE FACTOR
 66-PA-02 PASKIN, RAHMANN NA ..THEORY/ LIQUID ..MOLECULAR POTENTIAL/ RADIAL DENSITY FUNCTION
 66-PA-03 PASKIN REVIEW-ARTICLES/ AR/ NA/ CE/ RB ..LIQUID/ THEORY/ STRUCTURE FACTOR/ VELOCITY AUTOCORRELATION FU
 66-RO-01 ROSENSTOCK, BLANKEN NA/ NB/ MO/ TA/ W/ CU-ZN/ SN ..THEORY/ DISPERSION RELATION ..FORCE CONSTANTS FOR BORN-
 67-BJ-01 BJOERKMAN, GRIMVALL NA ..THEORY/ PHONON POLARIZATION/ KREBS MODEL
 67-FE-01 FEZIGER, FEINSTEIN NEUTRON-SCATTERING-IN-FLUIDS/ NA ..SCATTERING THEORY/ GAS/ LIQUID/
 67-FE-02 FEZIGER, FEINSTEIN NA/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID DYNAMICS
 67-HO-01 HO, RUOFF NA ..THEORY/ PHONON DISPERSION/ QUASI-HARMONIC MODEL
 67-HO-02 HO, RUOFF NA ..THEORY/ PHONON DISPERSION/ QUASI-HARMONIC CALCULATION
 67-RA-05 RANDOLPH NA ..EXPERIMENT/ LIQUID
 68-AG-02 AGRAWAL, DESAI+ NEUTRON-SCATTERING-IN-FLUIDS/ AR/ NA/ PB/ METHANE ..THEORY ..MODEL CALCULATION
 68-AR-01 ARDENTE, NARDELL+ AR/ NA ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION/ SCATTERING FUNCTION
 68-CO-04 COCKING NA/ PB ..EXPERIMENT/ LIQUID/ ..LIQUID DYNAMICS
 68-HO-01 HO THEORY-OF-SOLIDS/ NA/ K ..DISPERSION RELATION/ THEORY/ LATTICE DYNAMICS
 68-OZ-01 OZELTON, SWALIN NA ..DIFFUSION COEFFICIENT/ LIQUID
 68-RA-02 RANDOLPH NA ..SCATTERING FUNCTION/ EXPERIMENT/ LIQUID ..375.8DK/ QUASI-ELASTIC/ INELASTIC
 68-RA-03 RANDOLPH NA ..EXPERIMENT/ TOF ..102DC/ SMALL MOMENTUM TRANSFER/ DIFFUSIVE AND COLLECTIVE EXCITATION
 68-SC-06 SCHNEIDER, STOLL NA/ MG/ AL ..THEORY/ LATTICE DYNAMICS ..ELECTRONIC STRUCTURE/ METAL
 69-CO-02 COCKING NA ..QUASI-ELASTIC PEAK/ TOF/ SCATTERIN LAW/ MEAN SQUARE DISPLACEMENT/ EXPERIMENT/ LIQUID/ DIFF
 69-DE-02 DESAI, YIP NA/ PB ..THEORY/ LIQUID/ SCATTERING FUNCTION ..LIQUID METAL
 69-IC-01 ICHIKAWA, SHIMOJI LI/ NA/ K/ HG/ PB ..DIFFUSION PARAMETER/ LIQUID/ THEORY ..LIQUID METAL/ FRICTION CONSTAN
 69-KR-01 KREBS, HOELZL LI/ NA/ K/ RB/ CU/ AL/ PB/ FE/ NI/ PT/ COMPUTER-CODES ..PSEUDION APPROXIMATION/ FITTING TO
 69-PR-01 PRAKASH, JOSHI NA ..DISPERSION RELATION/ SOLID/ THEORY/ LATTICE DYNAMICS ..PHONON/ POTENTIAL/ METAL
 69-PR-02 PRAKASH, JOSHI LI/ NA/ K/ RB/ CS ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ THEORY/ SOLID/ LATTICE DYN
 70-BE-02 BEHARI, TRIPATHI NA ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..BCC METAL
 70-CO-06 COULTHARD SODIUM/ POTASSIUM/ ALUMINIUM/ LEAD ..THEORY/ LATTICE VIBRATION/ DISPERSION RELATION ..PRESSURE
 70-GE-01 GELDART, TAYLOR+ NA ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ DEBYE TEMPERATURE/ THORY/ LATTICE DYNAM
 70-JA-01 JAIN, SAXENA+ NA ..SCATTERING LAW/ THEORY/ LIQUID/ CORRELATION FUNCTION ..LIQUID METAL/ RESPONSE FUNCTION/
 70-KO-02 KOLLMANNBERGER, FRITSCH+ NA ..EXPERIMENT/ X-RAY/ LIQUID ..STRUCTURE FUNCTION/ 102DC/ 149DC
 70-KU-05 KUSHWAHA, RAJPUT THEORY-OF-SOLIDS/ NA/ K ..PHONON DISPERSION/ PSEUDOPOTENTIAL MODEL
 70-MA-05 MARTINELLI NA ..THEORY/ BAND STRUCTURE/ PHONON DISPERSION/ LIQUID METAL
 70-NA-01 NAKAHARA NA ..THEORY/ SCATTERING LAW/ LIQUID ..VLASOV EQUATION/ LIQUID METAL
 70-PR-02 PRICE, SINGWI+ AG/ GA/ HG/ NA/ PB/ SN/ ZN ..THEORY/ DISPERSION RELATION ..PHONON LIFE TIMES DUE TO ELECTRON-PHONON INTE
 70-VA-01 VADOVIC, COLVER NA ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE/ AXIALLY SYMMETRIC MODEL
 71-BA-03 BAJPAI, NEELAKANDAN NA ..EXPERIMENT/ PHONON FREQUENCY/ PRESSURE EFFECT
 71-ER-02 ERNST NA ..EXPERIMENT/ PHONON FREQUENCY/ STRUCTURE FACTOR ..X-RAY DIFFRACTION
 71-GR-01 GREENFIELD, WISER NA/ PB ..EXPERIMENT/ STRUCTURE FACTOR ..X-RAY DIFFRACTION
 71-JA-01 JAIN, BHANDARI AR/ NA ..THEORY/ MEMORY FUNCTION/ LIQUID DYNAMICS
 71-MI-02 MILLINGTON, SOUTHERS NA ..EXPERIMENT/ PHONON DISPERSION
 71-NA-01 NAKAHARA NEUTRON-SCATTERING-IN-FLUIDS/ NA ..THEORY/ SCATTERING SIGMA/ LIQUID METAL
 71-TR-04 TRIPATHI, BEHARI LI/ NA/ K ..CALCULATION/ PHONON DISPERSION/ DEBYE TEMP.
 71-WE-01 WERNER, PYNNA NA ..PHONON DISPERSION
 72-BA-01 BAJPAI, NEELAKANDAN LI/ NA/ K ..THEORY/ PHONON DISPERSION/ BCC METAL/ AXIALLY SYMMETRIC MODEL
 72-GL-01 GLYDE, TAYLOR NA ..THEORY/ PHONON DISPERSION/ LIFE TIME/ ANHARMONIC/ 5, 90, 160, 293, 361K
 72-GR-01 GREENFIELD, WISER+ NA/ K ..THEORY/ LIQUID/ STRUCTURE FACTOR/ HARD-SPHERE MODEL
 72-KO-03 KOTHARI, SINGHAL NA ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..ANGULAR FORCE
 72-MI-02 MITRA SODIUM ..VELOCITY AUTOCORRELATION

72-SH-06 SHUKLA, DA-CUNHA-LIMA+ NA ..THEORY/ PHONON DISPERSION
 72-SI-02 SINGH, PRAKASH LI/ NA/ K/ RB/ CS ..THEORY/ DISPERSION CURVE
 72-SI-03 SINGH, PRAKASH LI/ NA/ K/ RB/ CS ..THEORY/ PHONON DISPERSION
 72-TO-03 TONG NA ..THEORY/ LOCAL-EFFECTIVE-POTENTIAL APPROX./ LATTICE PARAMETER/ COMPRESSIBILITY/ COHESIVE EN
 73-BA-02 BARKER, GASKELL NA ..THEORY/ SC(0,0,0)/ LIQUID/ HYDRODYNAMIC APPROACH
 73-FR-02 FRITSCH, GEIPEL+ NA ..EXPERIMENT/ ULTRASONIC PULSE ECHO/ ELASTIC CONSTANT
 73-MI-06 MITRA THEORY-OF-FLUIDS/ NA ..MEMORY FUNCTION/ SELF DIFFUSION CONSTANT
 73-PA-06 PATHAK, SINGWI+ NA ..THEORY/ LIQUID/ COLLECTIVE MOTION/ STRUCTURE FACTOR/ SCATTERING FUNCTION
 73-SH-09 SHUKLA, SALZBERG NA ..THEORY/ PHONON DISPERSION/ BHATTIA MODEL
 74-AI-01 AILAWADI, BANERJER+ LI/ NA/ AL/ PB/ ..THEORY/ PHONON DISPERSION/ THIRD ORDER PERTURBATION THEORY
 74-BE-02 BERTONI, BORTOLANI+ THEORY-OF-FLUIDS/ NA/ K ..LIQUID METAL/ ELECTRON THEORY/ STRUCTURE FACTOR/ THERMAL EXPANS
 74-HA-05 HASEGAWA, WATABE NA ..THEORY/ FREQUENCY DISTRIBUTION ..F-G MATRIX METHOD
 74-NE-07 NEWMAN NA ..THEORY-OF-FLUIDS/ NA ..LIQUID METALS/ DAMPING OF COLLECTIVE MODE/ LONG-RANGE OSCILLATORY I
 75-BA-01 BARKER, GASKELL NA ..PAIR CORRELATION FUNCTION
 75-CU-01 CUBIOTTI, GIULIANC+ NA/ K ..THEORY/ PHONON DISPERSION/ METAL/ MODIFIED SHARMA-JOSHI MODEL
 75-GO-01 GOEL, PANDEY+ NA/ K ..THEORY/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS ..OPW METHOD/ DIELECTRIC FUNCTION
 75-JI-01 JINDAL NA/ K ..THEORY/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS ..OPW METHOD/ DIELECTRIC FUNCTION
 75-KU-01 KUMAR, TOLPADI COPPER/ SODIUM ..DISPERSION RELATION
 75-RE-02 REISSLAND, ESE AL/ NA/ MG/ IN/ TL ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ MODEL POTENTIAL CALCULATION
 76-AI-01 AILAWADI, MILLER+ H2/ AR/ NEUTRON-SCATTERING-IN-FLUIDS/ NA ..FREQUENCY-SPECTRA
 76-CA-03 CARNEIRO SODIUM/ RUBIDIUM ..CALCULATION/ ATOMIC DYNAMICS/ LIQUID METAL/ OSCILLATION/ DISPERSION CURVE
 76-GE-03 GESZTI NA/ CU/ W ..DISPERSION RELATIONS/ CUBIC METAL/ THEORY
 76-GO-04 GOMEL, JANI K/ NA ..THEORY/ LIQUID STRUCTURE/ THIRD ORDER PERTURBATION
 76-HA-07 HASEGAWA K/ NA/ K ..THORY OF SOLIDS/ FREQUENCIES VS. ATOMIC NUMBER/ THEORY
 76-SR-01 SRIVASTAVA, MITRA+ NA/ RB/ PB/ THEORY-OF-FLUIDS ..DYNAMICAL STRUCTURE FACTOR/ COLLECTIVE MODE
 76-YO-01 YOSHIDA LI/ NA/ K ..THEORY/ PHONON DISPERSION
 77-DA-02 DAY, SUN+ LI/ NA/ K/ RB/ THEORY-OF-SOLIDS ..PHONON DISPERSION/ ALKALI METAL
 77-RA-03 RAI, HEMKAR NA/ K/ HG/ BI/ NA-K ..THEORY/ INTERATOMIC FORCE CONSTANTS/ KNIGHT SHIFT/ FREQUENCY SPECTRUM ..P
 77-SR-01 SRIVASTAVA NA/ K/ HG/ BI/ NA-K ..THEORY/ INTERATOMIC FORCE CONSTANTS/ KNIGHT SHIFT/ FREQUENCY SPECTRUM ..P

2. 61 STRONTIUM

SR

73-PR-01 PRASAD, SRIVASTAVA BA/ SR/ CA ..THEORY/ SOLID / DISPERSION RELATION/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL
 73-SW-01 SWAROOP, BOHRA+ CA/ SR ..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ DEBYE TEMP./ SHARMA-JOSHI MODEL

2. 62 SULPHUR

S

71-PA-04 PAWLEY, RINALDI+ S ..THEORY/ EXPERIMENT/ PHONON DISPERSION
 74-PA-10 PAWLEY, MIKA NAPHTHALENE/ ANTHRACENE/ SULPHUR ..THEORY/ PRESSURE EFFECT/ LATTICE DYNAMICS/ PHONON DISPERSI
 75-LU-01 LUTY, PAWLEY S ..THEORY/ PHONON DISPERSION/ SHELL MODEL

2. 63 TANTALUM

TA

64-WO-02 WOODS TA ..EXPERIMENT/ SOLID/ DISPERSION RELATION
 65-WO-01 WOODS NB/ TA/ MO/ W ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
 66-RO-01 ROSENSTOCK, BLANKEN NA/ NB/ MO/ TA/ W/ CU-ZN/ SN ..THEORY/ DISPERSION RELATION ..FORCE CONSTANTS FOR BORN-
 72-BA-05 BAJPAT, NEELAKANDAN FE/ NB/ TA/ W ..THEORY/ PHONON DISPERSION/ BCC METAL/ MODIFIED AXIALLYSYMMETRIC MODEL
 76-BR-01 BRESCANSIN, PADIAL+ FE/ MO/ W/ NB/ TA/ CR ..THEORY/ PHONON DISPERSION/ TRANSITION METAL/ MODEL CALCULATION
 77-PA-02 PARIKH, HAY V/ NB/ TA/ CR/ MO/ W/ FE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANTS

2. 64	TECHNETIUM	TC		
72-SM-02	SMITH, WAKABAYASHI+	NB./ ZR./ C/ TC/ ZR/ Y	..EXPERIMENT/ SUPERCONDUCTIVITY/ ELECTRON-PHONON INTERACTION	
2. 65	TELLURIUM	TE		
65-HU-01	HULIN	TE	..THEORY/ SOLID/ LATTICE DYNAMICS	
67-AX-01	AXMANN, GISSLER	SE/ TE	..EXPERIMENT/ TOF/ POLYCRYSTAL	
68-GI-02	GISSLER, AXMANN+	SE/ TE	..EXPERIMENT/ SOLID/ LIQUID/ TOF/ 3-AXIS-SPECTROMETER ..340DC FOR SE/ 450DC FOR TE	
72-ME-02	MENON, RAO	TE	..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION	
73-CO-06	COALEY	TE	..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..BOND CHARGE MODEL	
74-TE-01	TEUCHERT, GEICK	SE/ TE	..THEORY/ PHONON DISPERSION	
75-PO-04	POWELL, MARTEL	TE	..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ DEBYE TEMPERATURE	
76-MA-04	MARTIN, LUCOVSKY+	SE/ TE	..THEORY/ DISPERSION RELATION/ BORN-VON KARMAN MODEL/ SOLID ..VALENCE-FORCE-FIELD	
76-ME-01	MEEK	SE/ TE	..THEORY/ PHONON SPECTRA	
76-WE-02	WENDEL	TE	..THEORY/ PHONON DISPERSION/ VALENCE FORCE FIELD MODEL	
2. 66	TERBIUM	TB		
70-HO-02	HOUANN, NICKLOW	TB	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES/ CONST.- ω METHOD ..FREQUENCY SPECTRA	
73-UP-01	UPADHYAYA, VERMA	Y/ TB	..THEORY/ PHONON DISPERSION/ SHARMA-JOSHI MODEL	
75-CA-06	CAVALHEIRO, SHUKLA	SC/ TB/ HO/ TL/ ZR	..THEORY/ PHONON DISPERSION/ DE-LAUNAY MODEL	
77-SH-03	SHARMA, UPADHYAYA	BE/ TB/ HO	..THEORY/ PHONON DISPERSION/ FORCE CONSTANT MODEL	
77-SI-01	SINGH, SINGH+	ZN/ ZR/ TL/ TB/ HO	..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH	
77-UP-01	UPADHYAYA, ANIMALU	TB/ HO	..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION	
2. 67	THALLIUM	TL		
68-NO-01	NORTH, ENDERBY+	ZN/ TL/ PB/ SN/ BI	..EXPERIMENT/ LIQUID/ STATISTICAL MECHANICS ..LIQUID METAL/ 340DC-1100D	
70-SH-03	SHARAN, RAJPAI	BE/ MG/ TL	..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..HEXAGONAL METAL	
71-KU-02	KUSHWAHA	BE/ TL	..NON-CENTRAL FORCE MODEL	
71-KU-05	KUSHWAHA, RAJPUT	TL	..CALCULATION/ KREB MODEL/ PHONON DISPERSION/ DEBYE TEMP.	
71-WO-01	WORTON, SCHMUNK	TL	..EXPERIMENT/ PHONON DISPERSION/ FREQUENCY SPECTRA ..77DK/ 296DK	
72-BA-01	BAJPAI	MG/ ZR/ Y/ TI/ TL/ HF	..THEORY/ PHONON DISPERSION/ FOURTH NEIGHBOURS MODEL/ HEXAGONAL LATTICE	
72-ME-03	MENON, RAO	TL	..THEORY/ PHONON DISPERSION/ SECOND ORDER ELASTIC CONSTANT	
73-KU-04	KUSHWAHA	MG/ BE/ TL	..THEORY/ PHONON DISPERSION/ SHORT-RANGE CLOSED-SHELL AND IONIC INTERACTION	
73-UP-02	UPADHYAYA, VERMA	BE/ MG/ HO/ TL	..THEORY/ PHONON DISPERSION/ MODIFIED SHARMA-JOSHI MODEL	
75-CA-06	CAVALHEIRO, SHUKLA	SC/ TB/ HO/ TL/ ZR	..THEORY/ PHONON DISPERSION/ DE-LAUNAY MODEL	
75-RE-02	REISSLAND, ESE	AL/ NA/ MG/ IN/ TL	..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ MODEL POTENTIAL CALCULATION	
77-SI-01	SINGH, SINGH+	ZN/ ZR/ TL/ TB/ HO	..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH	
2. 68	THORIUM	TH		
73-RE-01	REESE, SINHA	THORIUM	..EXPERIMENT/ PHONON DISPERSION/ FORCE CONSTANT ANALYSIS/ PHONON SPECTRA/ DEBYE TEMPERATURE	
75-CA-05	CAVALHEIRO, SHUKLA	PT/ TH	..THEORY/ PHONON DISPERSION/ DE-LAUNAY MODEL	
77-KU-02	KUMAR	THORIUM	..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..PSEUDOPOTENTIAL	

77-VR-01 VRATI, GUPTA+ THORIUM ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL

2. 69 TIN

61-PA-01 PALEVSKY H2.O/ PB/ SN ..EXPERIMENT/ LIQUID ..ROOM TEMP. 45DC FOR H2.O/ 462DC FOR PB/ 350DC FOR SN/ BE-F
 63-BR-02 BROCKHOUSE, BERGSMAN+ SN/ H2.O/ AR/ HE ..EXPERIMENT/ LIQUID
 63-CO-05 COCKING, GUNER SN ..EXPERIMENT/ SOLID/ LIQUID
 63-EG-03 EGELSTAFF PB/ SN ..EXPERIMENT/ SCATTERING FUNCTION/ LIQUID
 63-MU-01 MUSGRAVE SN ..THEORY/ SOLID/ FREQUENCY DISTRIBUTION
 63-WO-01 WOLFRAM, LEHMAN+ SN ..THEORY/ SOLID/ DISPERSION RELATION
 64-DE-01 DE-WAMES, LEHMAN SN ..THEORY/ SOLID/ LATTICE DYNAMICS
 65-BO-01 BORGONOV, CAGLIOTI+ SN ..EXPERIMENT/ CRYSTAL SPECTROMETER/ DISPERSION RELATION ..ROOM TEMPERATURE/ BODY C
 65-BR-03 BROVMAN, KAGAN SN ..SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
 65-CO-03 COCKING, EGELSTAFF PB/ SN ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
 65-LO-02 LONG-PRICE SN ..EXPERIMENT/ TOF/ DISPERSION RELATION ..ROOM TEMPERATURE/ BODY CENTERED TETRAGONAL
 65-MU-01 MUSGRAVE SN ..THEORY/ SOLID/ LATTICE DYNAMICS
 65-PA-02 PALEVSKY PB/ H2.O/ SN ..EXPERIMENT/ LIQUID
 65-RO-04 ROWE, BROCKHOUSE+ SN ..EXPERIMENT/ DISPERSION RELATION ..BODY CENTERED TETRAGONAL
 65-SC-02 SCHMUNK, GAUIN SN ..EXPERIMENT/ DISPERSION RELATION ..BODY CENTERED TETRAGONAL CRYSTAL
 66-BR-03 BROVMAN, KAGAN SN ..THEORY/ PHONON DISPERSION AND STATE DENSITIES/ HEAT CAPACITY/ DEBYE TEMPERATURE/ WHITE
 66-EG-01 EGELSTAFF, DUFFILL+ PB/ SN/ BI/ ZN/ AL ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR
 67-BR-02 BROVMAN, KAGAN SN/ SN, O2 ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ THEORY/ LATTICE DYNAMICS/ BORN-VON
 67-CH-01 CHEN SN ..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY PROPERTIES
 67-CO-01 COCKING AL/ PB/ BI/ RB/ SN ..SOLID/ LIQUID/ DISPERSION RELATION/ EXPERIMENT
 67-KA-04 KAY, RITTER SN ..SCATTERING AMPLITUDE/ EXPERIMENT
 67-ME-01 MEYERS SN ..EXPERIMENT/ PHONON SPECTRUM
 67-MY-01 MYERS SN ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..COLD NEUTRON FACILITY/ ODC/
 67-PR-01 PRICE SN ..SOLID/ EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..CONDUCTION ELECTRON
 67-RO-01 ROWE SN ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..110DK
 68-KO-05 KOTOV, OKUNEV+ SN ..EXPERIMENT/ PHONON SPECTRA/ SPECIFIC HEAT
 68-NO-01 NORTH, ENDERBY+ ZN/ TL/ PB/ SN/ BI ..EXPERIMENT/ LIQUID/ STATISTICAL MECHANICS ..LIQUID METAL/ 340DC-1100D
 69-PH-06 PRICE, ROWE SN ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES/ CONST.-0/ FREQUENCY SPECTRUM ..90DK/ 250
 71-PR-04 PRICE, ROWE+ SN/ IN, SB ..EXPERIMENT/ PHONON DISPERSION CURVE ..90DK FOR SN/ 300DK FOR IN, SB
 71-PR-05 PRICE, ROWE SN/ IN, SB ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL CALCULATION
 71-RO-06 ROWELL, MCMILLAN+ SN ..EXPERIMENT/ ELECTRON TUNNELING/ PHONON SPECTRUM
 72-KA-03 KAY, GILAT SN ..THEORY/ PHONON DISPERSION/ STATE DENSITY/ MODEL POTENTIAL
 72-KA-05 KAMMER, CARDINAL+ BI/ SN ..EXPERIMENT/ ELASTIC CONSTANT
 72-KR-01 KRESS GE/ SN ..THEORY/ PHONON DISPERSION/ MODIFIED SHELL MODEL
 72-TU-01 TUBINO, PISERI+ DIAMOND/ SI/ GE/ SN ..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ VALENCE FORCE POTENTIAL
 74-SO-01 SOMA SN ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL
 76-AL-01 AL'TSHULER, VEKILOV+ DIAMOND/ TIN/ GERMANIUM ..THEORY/ PSEUDOPOTENTIAL METHOD/ PHONON DISPERSION
 77-ZD-01 ZDETSIS SN ..THEORY/ BORN-VON KARMAN MODEL/ PHONON DISPERSION/ PHONON SPECTRA/ GREY TIN

2. 70 TITANIUM

TI

65-NO-03 MOZER, OTNES+ NI/ V/ TI/ TI-ZR ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION
 66-NO-03 NORTH, ENDERBY+ PB/ TI ..STRUCTURE FACTOR
 70-SH-06 SHARAN, BAJPAL Y/ TI ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ DEBYE TEMPERATURE
 72-SA-01 BAJPAL MG/ ZR/ Y/ TI/ TL/ HF ..THEORY/ PHONON DISPERSION/ FOURTH NEIGHBOURS MODEL/ HEXAGONAL LATTICE
 72-KU-04 KUSHWAHA, KUMAR TI/ HF/ Y ..THEORY/ PHONON DISPERSION/ H.C.P. TRANSITION METAL

73-RA-02	RAO, MENON	TI	..THEORY/ PHONON DISPERSION/ SOE CONSTANT/ THERMAL EXPANSION/ KEATING-S APPROCH
2, 71	TUNGSTEN	*	
64-CH-01	CHEN, BROCKHOUSE	W	..EXPERIMENT/ SOLID/ DISPERSION RELATION
65-PA-01	PAL, SHARMA	W	..THEORY/ PHONON DISPERSION
65-WO-01	WODS	NB/ TA/ MO/ W	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
66-MA-02	MAHESH, DAYAL	FE/ MO/ W	..THEORY/ PHONON DISPERSION AND FREQUENCY DISTRIBUTION
66-RO-01	ROSENSTOCK, BLANKEN	NA/ NB/ MO/ TA/ W/ CU-ZN/ SN	..THEORY/ DISPERSION RELATION ..FORCE CONSTANTS FOR BORN-
67-GI-02	GILAT	CR/ FE/ W/ THEORY-OF-SOLIDS	..THEORY/ PHONON SPECTRA/ BCC METALS
70-AL-01	ALEXANDROV, KOESTER+	W	..EXPERIMENT/ SCATTERING AMPLITUDE/ SMALL ANGLE SCATTERING
70-AL-02	ALEXANDROV, BALAGUROV+	W	..EXPERIMENT/ DEBYE-WALLER FACTOR
72-BA-05	BAJPAI, NEELAKANDAN	FE/ NB/ TA/ W	..THEORY/ PHONON DISPERSION/ BCC METAL/ MODIFIED AXIALLYSYMMETRIC MODEL
72-BE-01	BEHARI, TRIPATHI	FE/ MO/ W	..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA
75-UP-03	UPADHYAYA, SHARMA+	FE/ W/ MO/ V/ NB/ TA	..LATTICE DYNAMICS/ DISPERSION RELATION/ TRANSITION METAL/ THEORY/
76-BK-01	BRESCANSIN, PADIAL+	FE/ MO/ W/ NB/ TA/ CR	..THEORY/ PHONON DISPERSION/ TRANSITION METAL/ MODEL CALCULATION
76-GO-04	GOHEL, JANI	NA/ CU/ W	..DISPERSION RELATIONS/ CUBIC METAL/ THEORY
76-JA-06	JANI, GOHEL	W	..THEORY/ PHONON DISPERSION
76-LA-02	LAROSE, BROCKHOUSE	TUNGSTEN	..EXPERIMENT/ PHONON DISPERSION/ 22C
76-SI-03	SINGH, KHAROO+	FE/ CR/ W	..THEORY/ PHONON DISPERSION/ MODEL CALCULATION
2, 72	URANIUM	U	
66-BE-03	BESHAI	U/ U.O2/ TH.O2	..EXPERIMENT/ TOTAL CROSS SECTION/ TOF
66-SI-01	SIMPSON, MOORE+	U	..EXPERIMENT/ SIGMA(E) ..0.01EV-10000EV
2, 73	VANADIUM	V	
51-EG-01	EGELSTAFF	H/ BE/ V/ SE/ MO/ FE	..SOLID/ EXPERIMENT/ TRANSMISSION
51-MC-01	MCKEYNOLDS, WEISS	V	..EXPERIMENT/ TOTAL CROSS SECTION ..TOTAL REFLECTION FROM MIRROR SURFACE OF V
58-EI-01	EISENHAEUER, PELAH+	V	..EXPERIMENT/ FREQUENCY DISTRIBUTION
58-ST-01	STEWART, BROCKHOUSE	V/ MN-CO	..EXPERIMENT/ FREQUENCY DISTRIBUTION
61-TU-01	TURBERFIELD, EGELSTAFF	V	..EXPERIMENT/ SOLID/ FREQUENCY SPECTRUM
62-TU-02	TURBERFIELD, EGELSTAFF	V	..EXPERIMENT
63-HA-01	HAAS, KLEY+	V	..SCATTERING LAW/ FREQUENCY DISTRIBUTION
63-PE-01	PELAH, HAAS+	V	..FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS
63-ZE-01	ZEMLYANOV, KAGAN+	V	..DISPERSION RELATION/ FREQUENCY SPECTRUM
65-BL-01	BLECH, AVERBACH	V/ CU	..THEORY/ MULTIPLE SCATTERING
65-GL-01	GLAESER, CARVALLO+	V	..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION/ TOF/ ROTATING CRYSTAL SPECTROMETER ..ROO
65-MO-03	MOZER, OTNES+	NI/ V/ TI/ TI-ZR	..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION
65-RU-01	RUBIN, PERETTI+	V/ V-H	..EXPERIMENT/ SOLID/ ..ROOM TEMP. FOR V/ 150 DC FOR V-H/ LOCALIZED MODE IN V DUE TO
65-SI-01	SLATER	V/ SI/ CU/ NEUTRON-SCATTERING-IN-SOLIDS	..HARMONIC APPROXIMATION/ DEBYE APPROXIMATION
65-VE-01	VENKATARAMAN, DENIZ+	V/ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR6	..EXPERIMENT/ ELASTIC SCA
67-PA-02	PAGE	V	..EXPERIMENT/ SCATTERING LAW/ FREQUENCY SPECTRUM
67-RO-02	ROY, THAPER+	V	..LATTICE DYNAMICS/ EXPERIMENT
68-MO-01	MOZER	V	..EXPERIMENT/ LATTICE DYNAMICS ..ALLOYS/ RESONANT, LOCALIZED MODES
68-ZE-01	ZEMLYANOV, MIRONOV+	V	..EXPERIMENT/ LATTICE DYNAMICS ..ALLOY/ LOCAL MODE
69-BL-01	BLEASSER, PERETTI+	V	..THEORY/ HYDROGEN/ INTERSTITIAL ..NUMERICALS
70-CO-01	COLELLA, BATTERMAN	V	..EXPERIMENT/ X-RAY THERMAL DIFFUSE SCATTERING/ LATTICE DYNAMICS/ DISPERSION CURVES/

70-KE-03 KEATING V ..EXPERIMENT/ PHONON FREQUENCY DISTRIBUTION
 75-UP-03 UPADHYAYA, SHARMA+ FE/ W/ MO/ V/ NB/ TA ..LATTICE DYNAMICS/ DISPERSION RELATION/ TRANSITION METAL/ THEORY/
 76-MO-02 MOON, KOEHLER+ REVIEW-ARTICLES/ CR/ V/ SC/ PD/ TI/ Y/ NB/ ..MAGNETIC FORM FACTOR
 76-OL-01 OLI, ANIMALU THEORY-OF-SOLIDS/ V ..THEORY/ PHONON DISPERSION
 77-PA-02 PARIKH, HAY V/ NB/ TA/ CR/ MO/ W/ FE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANTS

2. 74 XENON

XE

70-GL-01 GLYDE NE/ AR/ KR/ XE ..THEORY/ ANHARMONICITY
 70-LE-02 LEECH, REISSLAND NE/ AR/ KR/ XE ..THEORY/ LATTICE DYNAMICS/ ANHARMONICITY ..THERMODYNAMICAL PROPERTIES
 70-LE-03 LEECH, REISSLAND NE/ AR/ KR/ XE ..THEORY/ ANHARMONICITY ..SPECIFIC HEAT/ DEBYE TEMPERATURE/ THERMAL EXPANS
 71-GU-02 GUPTA AR/ KR/ XE ..THEORY/ PHONON DISPERSION AND SPECTRA/ ANHARMONIC POTENTIAL
 71-HU-01 HUELLER THEORY-OF-SOLIDS/ ARGON/ KRYPTON/ XENON ..CAUCHY-RELATION
 72-JO-01 JOGI, TRIPATHI+ XE ..THEORY/ PHONON DISPERSION AND SPECTRA/ ELASTIC FORCE MODEL
 73-PA-04 PALMER, SAUNDERSON+ XE ..DISPERSION CURVE ..(111)-DIRECTION
 74-KA-02 KANNEY, HORTON XE ..DISPERSION-CURVES ..THEORY/ MIL-LENNARD-JONES-POTENTIAL
 74-LU-01 LURIE, SHIRANE+ XE ..EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ BORN-VON KARMAN MODEL ..SPECIFIC H
 75-GA-01 GARG, GUPTA NE/ AR/ KR/ XE ..LATTICE DYNAMICS/ ANHARMONICITY/ CENTRAL FORCE MODEL/ DISPERSION RELATION
 75-GU-01 GUPTA, GARG XE ..THEORY/ PHONON DISPERSION/ QUASIHARMONIC CENTRAL FORCE RIGID-ATOM MODEL
 75-GU-02 GUPTA, GARG NE/ KR/ XE/ AR ..THEORY/ DISPERSION RELATION/ SOLID/ ANHARMONICITY
 76-RO-02 BOHRA, GUPTA THEORY-OF-SOLIDS/ AR/ KR/ XE ..THEORY/ SOLID/ LATTICE DYNAMICS ..KIHARA POTENTIAL/ PHONON GRE
 76-WA-04 WASEDA, SUZUKI NE/ AR/ KR/ XE ..LIQUID/ PAIR POTENTIAL/ BORN-GREEN EQUATION

2. 75 YTTRIUM

Y

70-CZ-01 CZACHOR MG/ CO/ Y ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ BORN-VON KARMAN MODEL ..AXIAL
 70-CZ-02 CZACHOR, RAJCA MG/ CO/ Y ..CALCULATION/ HEXAGONAL METAL/ FREQUENCY SPECTRA
 70-LA-02 LAATENKORVA MG/ Y/ HO ..DISPERSION RELATION/ HARMONIC APPROXIMATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..EL
 70-SH-06 SHARAN, RAJPAI Y/ TI ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ DEBYE TEMPERATURE
 70-SI-07 SINHA, BRUN+ Y ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..MODIFIED AXIALLY SYMMETRIC MODEL FITT
 70-SI-08 SINHA, BRUN+ Y ..EXPERIMENT/ LATTICE DYNAMICS/ AS-MODEL FITTING/ FREQUENCY SPECTRA/ SPECIFIC HEAT
 72-BA-01 BAJPAI MG/ ZR/ Y/ TI/ HF ..THEORY/ PHONON DISPERSION/ FOURTH NEIGHBOURS MODEL/ HEXAGONAL LATTICE
 72-KU-04 KUSHWAHA, KUMAR TI/ HF/ Y ..THEORY/ PHONON DISPERSION/ H.C.P. TRANSITION METAL
 72-ME-05 MENON, RAO HO/ Y ..THEORY/ PHONON DISPERSION/ HEXAGONAL METAL
 72-SM-02 SMITH, WAKABAYASHI+ NB/ C/ ZR/ C/ TC/ ZR/ Y ..EXPERIMENT/ SUPERCONDUCTIVITY/ ELECTRON-PHONON INTERACTION
 73-UP-01 UPADHYAYA, VERMA Y/ TB ..THEORY/ PHONON DISPERSION/ SHARMA-JOSHI MODEL
 73-VE-01 VERMA, UPADHYAYA Y ..THEORY/ LATTICE DYNAMICS/ SOLID ..ELASTIC CONSTANT/ ELECTRON-ION INTERACTION/ PHONON
 74-SI-04 SINHA, UPADHYAYA YTTRIUM ..DISPERSION-CURVES/ CALCULATION
 75-SI-07 SINGH, PRAKASH SC/ Y ..CALCULATION/ PHONON DISPERSION/ HCP METAL
 75-SI-12 SINHA, UPADHYAYA SC/ Y/ ZR ..THEORY/ PHONON DISPERSION/ KREB MODEL
 75-UP-01 UPADHYAYA, SINHA BE/ MG/ Y/ HO ..THEORY/ EXPERIMENT/ DISPERSION RELATION ..BHATTIA MODEL
 77-SI-02 SINGH, PRAKASH SC/ Y ..THEORY/ PHONON DISPERSION/ H.C.P. METAL

2. 76 ZINC

ZN

63-BA-03 BARGONOV, CAGLIOTI+ ZN ..EXPERIMENT/ SOLID/ DISPERSION RELATION
 63-MA-02 MALISZEWSKI, SOSNOWSKI+ ZN/ CU/ MG ..EXPERIMENT
 64-YU-02 YOUNG, KOPPEL BE/ MG/ ZN ..THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS ..ROOT SAMPLING METHOD
 65-DE-03 DE-WAMES, *ULFRAM+ BE/ ZN ..THEORY/ LATTICE DYNAMICS/ DISPERSION BELATION

65-HQ-02 HCLAS ZN ..LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION
65-MA-02 MALISZEWSKI, ROSULAWSKI+ ZN ..EXPERIMENT/ SOLID/ DISPERSION RELATION
66-EG-01 EGGLESTAFF, DUFFILL+ PR/ SN/ BI/ ZN/ AL ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR
66-GU-02 GUPTA, DAYAL ZN ..THEORY/ PHONON DISPERSION/ SIXTH-NEIGHBOUR MODEL
66-GU-04 GUPTA, DAYAL ZN ..THEORY/ PHONON DISPERSION/ A TENSOR FORCE MODEL INCLUDING UP TO SIXTH-NEIGHBOUR INTERACT
67-CA-01 CAGLIOTI, CORCHIA+ ZINC ..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION
68-BR-01 BROWMAN, KAGAN+ BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS
68-CA-01 CAGLIOTI, RIZZI+ ZN ..EXPERIMENT/ LATTICE DYNAMICS/ ANHARMONIC CONTRIBUTION
68-CZ-01 CZACHOR MG/ ZN/ BE ..THEORY/ PHONON DISPERSION
68-DA-04 DASANNACHARYA, NAVARRO+ ZN ..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION
68-IY-02 IYENGAR, VENKATARAMAN+ ZN ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..KOHN EFFECT
68-NO-01 NORTH, ENDERBY+ ZN/ TL/ PB/ SN/ BI ..EXPERIMENT/ LIQUID/ STATISTICAL MECHANICS ..LIQUID METAL/ 340DC-1100D
69-CA-01 CAGLIOTI, CORCHIA+ ZINC ..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION/ PAIR POTENTIAL
69-GI-02 GILAT, RIZZI+ BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE ..METAL/ MODEL POTENTIAL CALCULATION
69-MC-01 McDONALD, ELCOMBE+ ZINC ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ CONST.-0 METHOD
69-ME-02 METZBOWER BE/ MG/ ZN ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..NONCENTRAL-FORCE/ FIVE FORC
69-MI-01 MILLINGTON, SQUIRES ZN ..DISPERSION RELATION
70-CA-01 CAGLIOTI, RIZZI+ ZN ..EXPERIMENT/ LATTICE VIBRATION ..TEMPERATURE DEPENDENCE/ 80-670DK
70-CA-02 CAGLIOTI, RIZZI ZN ..EXPERIMENT/ TEMPERATURE DEPENDENCE OF PHONON
70-PR-01 PRAKASH, JOSHI BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..SINGLE-ORTHOGONALIZED-PLANE-WA
71-AL-01 ALMOVIST, STEDMAN ZN ..EXPERIMENT/ PHONON DISPERSION/ 80 K
71-BE-03 BEZDEK, FINEGOLD ZN/ BE ..THEORY/ LATTICE DYNAMICS
71-KU-03 KUSHWAHA, RAJPUT ZN ..THEORY/ PHONON DISPERSION/ HEXAGONAL METAL
71-SR-01 SRINIVASAN, RAO MG/ ZN/ BE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT/ ANHARMONICS
71-TR-05 TROTT, HEALD BE/ MG/ ZN ..THEORY/ PHONON DISPERSION AND SPECTRA/ HEXAGONAL LATTICE
72-BA-03 BAJPAI ZN ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..PSEUDOPOTENTIAL
72-FR-01 FRANCHETTI, AR/ ZN ..THEORY/ RADIAL DENSITY FUNCTION
72-RA-04 RAJPUT, KUSHWAHA ZN ..THEORY/ PHONON DISPERSION
73-BO-04 BOSE, TRIPATHI+ BE/ MG/ ZN ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ SPECIFIC HEAT/ CENTRAL AND NON
73-KU-03 KUSHWAHA ZN ..THEORY/ PHONON DISPERSION/ AXIALLY SYMMETRIC MODEL/ ION-ELECTRON INTERACTION
74-CH-03 CHESSE, AXE ZN ..THEORY/ EXPERIMENT/ BORN-VON KARMAN MODEL/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ EXPERIMENT/
74-FU-03 FUNKE, KALUS+ ZN ..THEORY/ BORN-VON KARMAN MODEL/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ EXPERIMENT/
75-MA-05 MAURYA, SRIVASTAVA BE/ MG/ ZN ..THEORY/ PHONON DISPERSION/ HCP METAL/ TOYA THEORY
76-ER-01 EREMEEV, SADIKOV+ MG/ ZN/ CD ..EXPERIMENT/ SEPARATED ISOTOP CD-110, CD-111/ PHONON SPECTRA
76-SC-04 SCHULZ, HUEFNER ZN ..EXPERIMENT/ RAMAN SCATTERING/ TO OPTICAL PHONON
77-SI-01 SINGH, SINGH+ ZN/ ZR/ TL/ TB/ HO ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH
77-SI-04 SINHA, UPADHYAYA ZN/ CD ..THEORY/ PHONON DISPERSION

2. 77 ZIRCONIUM ZR

70-BE-06 BEZDEK, SCHMUNK+ ZR ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ PHONON DENSITY
70-SH-05 SHARAN, BAJPAI ZR/ HF ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ DEBYE TEMPERATURE
72-BA-01 BAJPAI MG/ ZR/ Y/ TI/ TL/ HF ..THEORY/ PHONON DISPERSION/ FOURTH NEIGHBOURS MODEL/ HEXAGONAL LATTICE
72-SM-02 SMITH, WAKABAYASHI+ N9.C/ ZR.C/ TC/ ZR/ Y ..EXPERIMENT/ SUPERCONDUCTIVITY/ ELECTRON-PHONON INTERACTION
75-CA-06 CAVALHEIRO, SHUKLA SC/ TB/ HO/ TL/ ZR ..THEORY/ PHONON DISPERSION/ DE-LAUNAY MODEL
75-SI-12 SINHA, UPADHYAYA SC/ Y/ ZR ..THEORY/ PHONON DISPERSION/ KREB MODEL
77-SI-01 SINGH, SINGH+ ZN/ ZR/ TL/ TB/ HO ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH

3 ALLOYS

3. 1 ALUMINIUM-GOLD AL-AU
76-PA-03 PAPASTAIKOUDES, ROCOFYLLOU AL-AU ..EXPERIMENT/ ELECTRICAL RESISTIVITY/ PHONON RESISTIVITY/ MATTHIESSEN RULE
3. 2 ALUMINIUM-MAGNESIUM-ZINC AL-MG-ZN
76-AL-04 ALLEN, EPPERSON+ AL-ZN/ AL-MG-ZN/ AL-SI ..NEUTRON SMALL ANGLE SCATTERING
3. 3 ALUMINIUM-SILICON AL-SI
76-AL-04 ALLEN, EPPERSON+ AL-ZN/ AL-MG-ZN/ AL-SI ..NEUTRON SMALL ANGLE SCATTERING
3. 4 ALUMINIUM-THORIUM HYDRIDE AL-TH-H
61-BE-02 BERGSMAN, GOEDKOOP PD-H/ AL-TH-H/ CA-H ..EXPERIMENT/ FREQUENCY DISTRIBUTION
3. 5 ALUMINIUM-ZINC AL-ZN
76-AL-04 ALLEN, EPPERSON+ AL-ZN/ AL-MG-ZN/ AL-SI ..NEUTRON SMALL ANGLE SCATTERING
77-SC-05 SCHWABH AL-ZN ..EXPERIMENT/ SMALL ANGLE SCATTERING
3. 6 ANTIMONY-ZINC SB-ZN
76-II-01 IIDA, HONMA+ SB-ZN ..NEUTRON DIFFRACTION/ LIQUID STRUCTURE
3. 7 BARIUM HYDRIDE BA-H
70-MA-02 MAELAND YS-H/ CA-H/ SR-H/ BA-H ..EXPERIMENT/ FREQUENCY SPECTRUM
3. 8 BARIUM-LITHIUM HYDRIDE BA-LI-H
69-MA-01 MAELAND BA-LI-H/ SR-LI-H ..EXPERIMENT/ SPECTRAL DENSITY ..PEROVSKITE STRUCTURE/ BA-LI-H3/ SR-LI-H3
3. 9 BISMUTH-GALLIUM BI-GA
68-WJ-02 WIGNALL, EDELSTAFF BI-GA/ BI-ZN ..CRITICAL PHENOMENA/ BINARY LIQUID METAL
70-EG-02 EDELSTAFF, WIGNALL BI-GA ..CRITICAL PHENOMENA/ BINARY LIQUID METAL
70-EG-03 EDELSTAFF, WIGNALL BI-GA ..EXPERIMENT/ CRITICAL SCATTERING

3. 10 BISMUTH-LEAD
 BI-PB
 68-NG-01 NG, BROCKHOUSE PB-TL/ BI-TL/ BI-PB/ BI-PB-TL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..100DK/
 69-SC-03 SCHUMACHER BI-PB ..EXPERIMENT
3. 11 BISMUTH-LEAD-THALLIUM
 BI-PB-TL
 67-NG-01 NG, BROCKHOUSE BI-PB-TL ..EXPERIMENT/ PHONON/ ALLOYS
 67-NG-02 NG, BROCKHOUSE BI-PB-TL/ ..PHONON DISPERSION/ ALLOY SYSTEM
 68-NG-01 NG, BROCKHOUSE PB-TL/ BI-TL/ BI-PB/ BI-PB-TL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..100DK/
3. 12 BISMUTH-THALLIUM
 BI-TL
 68-NG-01 NG, BROCKHOUSE PB-TL/ BI-TL/ BI-PB/ BI-PB-TL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..100DK/
3. 13 BISMUTH-ZINC
 BI-ZN
 67-EG-03 EDELSTAFF, *IGNALL BI-ZN ..EXPERIMENT/ LIQUID ..QUASI-ELASTIC SCATTERING/ CONCENTRATION FLUCTUATION
 68-WI-02 *IGNALL, EDELSTAFF BI-GA/ BI-ZN ..CRITICAL PHENOMENA/ BINARY LIQUID METAL
 76-HO-01 HONMA, OKAZAKI+ BI-ZN ..EXPERIMENT/ NEUTRON DIFFRACTION/ LIQUID/ 607-750C/ ZNO, 70-BIO, 30
3. 14 CALCIUM HYDRIDE
 CA-H
 61-BE-02 BERGSMAN, GOEDKOOP PD-H/ AL-TL-H/ CA-H ..EXPERIMENT/ FREQUENCY DISTRIBUTION
 70-MA-02 MAELAND YR-H/ CA-H/ SR-H/ BA-H ..EXPERIMENT/ FREQUENCY SPECTRUM
3. 15 CERIUM HYDRIDE
 CE-H
 67-KA-02 KARIMOV, BROVMAN+ TH-H/ U-H/ CE-H ..LATTICE DYNAMICS/ THEORY
 67-KA-03 KARIMOV, ZEMLYANOV+ CE-H/ TH-H/ U-H ..EXPERIMENT/ PHONON SPECTRA
 68-KA-03 KARIMOV, BROVMAN+ CE-H/ TH-H/ U-H ..LATTICE DYNAMICS/ EXPERIMENT/ FREQUENCY DISTRIBUTION ..TOF/ 20DC
 74-VO-01 VORDERWISCH, HAUTECLER CERIUM HYDRIDE ..CE-H1, 98
 74-VO-02 VORDERWISCH, HAUTECLER CE-H ..EXPERIMENT/ PHONON SPECTRA
 77-GL-03 GLINKA, PROWE+ CE-H ..PHONON DISPERSION RELATION/ COHERENT NEUTRON SCATTERING
3. 16 CERIUM-THORIUM
 CE-TH
 76-ED-01 EDELSTEIN, MAJEWSKI+ CE, AL3/ CE-TH ..EXPERIMENT/ QUASIELASTIC
3. 17 CESIUM HYDRIDE
 CS-H
 74-VO-03 VORDERWISCH, HAUTECLER+ CESIUM HYDRIDE ..DENSITY-OF-STATES/ SPECIFIC-HEAT

3. 18 CHROMIUM-ALUMINIUM CR-AL
76-MI-01 MIKKE, JANKOWSKA NI-FE/ CO-NI/ NI-V/ NI-CR/ CR-AL ..EXPERIMENT/ SPIN WAVE
3. 19 CHROMIUM-IRON CR-FE
73-MI-02 MIKKE, JANKOWSKA CR-FE ..EXPERIMENT/ PHONON DISPERSION/ ALLOY
3. 20 CHROMIUM-TUNGSTEN CR-W
65-MO-02 MOELLER, MACKINTOSH CR-W ..DISPERSION RELATION/ EXPERIMENT/ LATTICE DYNAMICS ..DISORDERED ALLOY
70-CU-01 CUNNINGHAM, MUMLESTEIN+ CR-W ..EXPERIMENT/ IN-BAND PHONON/ MASS EFFECT
72-CO-01 COHEN, GILAT CR-W ..THEORY/ PHONON/ ALLOY/ IMPURITY EFFECT/ FORCE-CONSTANT CHANGE
72-KE-02 KESHARWANI, AGRAWAL CR-W ..THEORY/ DILUTE ALLOY/ PHONON DISPERSION AND WIDTHS/ MASS AND FORCE CONSTANT CHANGE
72-KE-03 KESHARWANI, AGRAWAL CR-W ..EXPERIMENT/ PHONON/ ALLOY/ IMPURITY EFFECT
3. 21 COBALT-GALLIUM CO-GA
77-CY-01 CYWINSKI, BOOTH+ CO-GA ..SMALL-ANGLE SCATT./ SUPERPARAMAGNETIC BEHAVIOUR
3. 22 COBALT-IRON CO-FE
77-SH-02 SHAPIRO, MOSS CU-FE ..DISPERSION CURVE/ EXPERIMENT/ FCC-HCP TRANSITION
3. 23 COBALT-NICKEL CO-NI
74-GA-01 GAMBETTI, MENZINGER+ CO-NI ..EXPERIMENT/ PHONON DISPERSION/ ALLOY/ FCC
75-ME-03 MENZINGER, SACCHETTI+ CO-NI ..DISPERSION RELATION/ CO-NI/ ALLOY/ TRIPLE-AXIS SPECTROSCOPY/ EXPERIMENT
76-MI-01 MIKKE, JANKOWSKA NI-FE/ CO-NI/ NI-V/ NI-CR/ CR-AL ..EXPERIMENT/ SPIN WAVE
3. 24 COPPER-ALUMINIUM CU-AL
68-NI-01 NICKLOW, VIJAYARAGHAVAN+ CU-AL ..EXPERIMENT/ LATTICE VIBRATION ..LOCAL MODE
68-NI-02 NICKLOW, VIJAYARAGHAVAN+ CU-AL ..PHONON DISPERSION/ LOCALIZED MODE
74-KA-04 KAPLAN, MOSTOLLER CU-AL/ N.H4.CL-K.CL ..CALCULATIONS/ COHERENT-POTENTIAL APPROXIMATION/ PHONON DENSITY OF
3. 25 COPPER-ANTIMONY CU-SB
73-KN-01 KNOLL, STEEB CU-SB ..EXPERIMENT/ RADIAL DISTRIBUTION FUNCTION/ 21 ALLOYS
73-KN-02 KNOLL, STEEB CU-SB ..PARTIAL INTERFERENCE FUNCTION/ PAIR CORRELATION FUNCTION
3. 26 COPPER-BERYLLIUM CU-BE
67-NA-02 NATKANIEC, PARLINSKI+ MG-LI/ CU-BE ..EXPERIMENT/ LOCAL VIBRATION/ NEUTRON SPECTROSCOPY

68-NA-03	NATKANIEC, PARLINSKI+	CU-BE/ CU-MG/ PB-NA/ PB-MG ..EXPERIMENT/ LATTICE DYNAMICS ..ALLOY/ LOCAL VIBRATION
3, 27	COPPER-COBALT	CU-CO
3, 28	COPPER-GERMANIUM	CU-GE
78-TO-01	TOMIMITSU, KAMADA+	CU-GE ..NEUTRON DIFFRACTION/ TOPOGRAPHY
3, 29	COPPER-GOLD	CU-AU
65-SV-01	SVENSSON, BROCKHOUSE+	CU-AU ..EXPERIMENT/ DISPERSION RELATION ..3-AXIS-SPECTROMETER/ DISORDERED ALLOYS
67-SV-01	SVENSSON, BROCKHOUSE	CU-AU ..LATTICE DYNAMICS/ EXPERIMENT ..CONSTANT- θ METHODS/ ROOM TEMP.
71-BR-05	BRUNO, TAYLOR	CU-AU ..THEORY/ GOLD-IMPURITY EFFECT/ EFFECT OF VOLUME CHANGE ON ALLOYING
71-SV-01	SVENSSON, KAMITAKAHARA	CU-AU ..EXPERIMENT/ RESONANT MODE/ SHIFT AND WIDTH OF PHONON
73-KE-04	KESHARWANI, AGRAWAL	CU-AU ..THEORY/ PHONON DISPERSION/ DILUTE ALLOY/ PHONON WIDTH/ FORCE CONSTANT CHANGE
74-CO-02	COHEN	CU-AU ..THEORY/ FREQUENCY DISTRIBUTION ..COHERENT NEUTRON SCATTERING/ PHONON SELF-ENERGY AND SH
74-HA-02	HALLMAN	CU-AU ..EXPERIMENT/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS/ BORN-VON KARMAN MODEL ..ALLOY
75-OH-01	OHASHI, OHASHI+	THEORY-OF-SOLIDS/ CU-AU ..DILUTE ALLOY/ PHONON SHIFT AND WIDTH
3, 30	COPPER-IRON	CU-FE
76-LO-01	LOEWENHAUPT, SCHEUER+	CU-FE/ AU-FE ..EXPERIMENT/ MAGNETIC DIFFUSE SCATTERING
3, 31	COPPER-MAGNESIUM	CU-MG
68-NA-03	NATKANIEC, PARLINSKI+	CU-BE/ CU-MG/ PB-NA/ PB-MG ..EXPERIMENT/ LATTICE DYNAMICS ..ALLOY/ LOCAL VIBRATION
3, 32	COPPER-MANGANESE-ALUMINIUM	CU-MN-AL
76-RA-04	RAKHECHA, CHAKRAVARTHY+	CU-MN-AL ..POLARIZED NEUTRON DIFFRACTION/ MAGNETIC STRUCTURE FACTOR
3, 33	COPPER-NICKEL	CU-NI
68-SA-01	SAKAMOTO, HAMAGUCHI	CU-NI ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..ALLOYS
69-MO-04	MOZER, PRICE+	CU-NI ..LIQUID/ SOLID/ EXPERIMENT/ ..NEAR THE MELT
76-ME-05	MENZINGER, SACCHETTI	CU-NI ..NEUTRON DIFFRACTION/ SPIN DENSITY
76-VR-01	VRIJEN, VAN-DIJK+	CU-NI ..NEUTRON DIFFUSE SCATTERING/ CLUSTERING IN CU-NI ALLOY
3, 34	COPPER-ZINC	CU-ZN
64-DO-01	DOLLING, GILAT	CU-ZN ..EXPERIMENT/ DISPERSION RELATION
65-DO-02	DOLLING, GILAT	CU-ZN ..EXPERIMENT/ DISPERSION RELATION ..296DK/ PHASE TRANSITION
65-GI-02	GILAT, DOLLING	CU-ZN ..EXPERIMENT/ DISPERSION RELATION/ LATTICE VIBRATION ..296DK/ ALLOYS

67-AL-04	ALS-NIELSEN, DIETRICH	CU-ZN	..CRITICAL SCATTERING/ ALLOY
69-AL-02	ALS-NIELSEN	CU-ZN	..NEUTRON DIFFRACTION/SHORT RANGE ORDER PARAMETER
69-HA-01	HALLMAN, BROCKHOUSE	NI-FE/ CU-ZN	..DISPERSION RELATION/ CONSTANT-Q METHOD/ FREQUENCY DISTRIBUTION ,.FCC AL
70-GI-01	GILAT	CU-ZN	..THEORY/ FLAT PHONON/ ORDER DISORDER TRANSITION
74-RA-09	RATHMANN, ALS-NIELSEN	CU-ZN	..LONG-RANGE ORDER/ NEUTRON DIFFRACTION
3, 35	ERBIUM-YTTRIUM-ALUMINIUM	ER-Y-AL	
3, 36	FE-NI-P-O-AL	FE-NI-P-O-AL	
76-LY-01	LYNN, SHIRANE+	FE-NI-P-O-AL	..EXPERIMENT/ MAGNETIC SCATTERING/ MAGNON DISPERSION/ METALLIC GLASS
3, 37	FE-NI-P-B-AL	FE-NI-P-B-AL	
3, 38	GERMANIUM-SILICON	GE-SI	
71-WA-02	WAKABAYASHI, NICKLOW+	GE-SI	..EXPERIMENT/ LOCAL MODE/ IMPURITY EFFECT
71-WA-03	WAKABAYASHI, NICKLOW+	GE-SI	..EXPERIMENT/ IMPURITY EFFECT/ LOCAL MODE/ MASS DEFECT
73-SR-01	SRIVASTAVA, JOSHI	GE-SI	..SPECTRAL DENSITY FUNCTION/ RAMAN SPECTRA/ THEORY
3, 39	GOLD-COPPER-ZINC	AU-CU-ZN	
3, 40	GOLD-IRON	AU-FE	
76-LO-01	LOEWENHAUPT, SCHEUER+	CU-FE/ AU-FE	..EXPERIMENT/ MAGNETIC DIFFUSE SCATTERING
76-MU-01	MURANI, ROTH+	AU-FE	..SMALL ANGLE SCATT./ CRITICAL SCATT./ MAGNETIC SCATT.
76-MU-02	MURANI	AU-FE	..SMALL ANGLE SCATTERING/ MAGNETIC CLUSTER
3, 41	GOLD-VANADIUM	AU-V	
67-BR-04	BROWN, ZIEBECK	AU-V	..POLARIZED NEUTRON DIFFRACTION
3, 42	HOLMIUM-RHODIUM	HO-RH	
3, 43	INDIUM-CADMIUM	IN-CD	
76-MA-01	MADHAVA, SAUNDERS	IN-CD/ IN-TL	..EXPERIMENT/ ELASTIC CONSTANT/ ACOUSTIC PHONON MODE

3, 44	INDIUM-THALLIUM	IN-TL	
73-GU-01	GUNTON, SAUNDERS	IN/ IN-TL ..THEORY/ PHONON DISPERSION/ MARTENSITIC PHASE CHANGE	
76-MA-01	MADHAVA, SAUNDERS	IN-CD/ IN-TL ..EXPERIMENT/ ELASTIC CONSTANT/ ACOUSTIC PHONON MODE	
3, 45	IRON-ALUMINIUM	FE-AL	
67-BU-02	BORGONOV, LOGIUDICE+	FE-AL ..PHONON DISPERSION/ FE3,AL	
68-VA-02	VAN-DIJK, BERGSM	FE/ FE-AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION	
70-VA-02	VAN-DIJK	FE-AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES ..BORN VON-KARMAN FIT/ 3RD NEIGHBOURS/	
70-VA-03	VAN-DIJK	FE/ FE-AL ..EXPERIMENT/ LATTICE DYNAMICS/ PHONON DISPERSION	
77-CA-02	CABLE, DAVID+	FE-AL ..EXPERIMENT/ MAGNETIC DIFFUSE SCATTERING	
3, 46	IRON-MANGANESE	FE-MN	
76-ME-07	MEZEI	FE-MN ..POLARIZED NEUTRON/ DIFFUSE SCATTERING	
76-TA-01	TAJIMA, ISHIKANA+	FE-MN ..EXPERIMENT/ MAGNON DISPERSION	
3, 47	IRON-NICKEL	FE-NI	
75-KO-01	KOMURA, LIPMANN+	FE-NI ..EXPERIMENT/ SMALL ANGLE SCATT.	
3, 48	IRON-MANGANESE-NICKEL	FE-MN-NI	
75-FE-01	FELDMANN, HENNIG+	FE-MN-NI ..EXPERIMENT/ BE IMPURITY/ LOCAL MODE/ MAGNON MODE	
3, 49	IRON-NICKEL-CHROMIUM	FE-NI-CK	
3, 50	IRON-VANADIUM	FE-V	
77-RA-02	RADHAKRISHNA, BROWN+	FE-V ..POLARISED NEUTRON DIFFRACTION	
3, 51	LANTHANUM HYDRIDE	LA-H	
71-MA-01	MAELAND, HOLMES	LANTHANUM HYDRIDE ..EXPERIMENT/ FREQUENCY SPECTRA	
71-MA-02	MAELAND, HOLMES	LA-H ..INELASTIC SCATTERING SPECTRA	
3, 52	LEAD-MAGNESIUM	PB-MG	
65-CH-03	CHERNOPLEKOV, ZEMLYANOV	PB-MG ..EXPERIMENT/ IN-BAND MODE/ FREQUENCY SPECTRUM	
68-NA-03	NATKANIEC, PARLINSKI+	CU-BE/ CU-MG/ PB-NA/ PB-MG ..EXPERIMENT/ LATTICE DYNAMICS ..ALLOY/ LOCAL VIBRATION	

3. 53 LEAD-SODIUM PB-NA
68-NA-03 NATKANIEC, PARLINSKI+ CU-BE/ CU-MG/ PB-NA/ PB-MG ..EXPERIMENT/ LATTICE DYNAMICS ..ALLOY/ LOCAL VIBRATION
3. 54 LEAD-THALLIUM PB-TL
68-NG-01 NG, BROCKHOUSE PB-TL/ BI-TL/ BI-PB/ BI-PB-TL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..100DK/
69-RO-01 ROWELL, MCMILLAN+ PB/ PB-TL ..EXPERIMENT/ SPECTRAL DENSITY ..TUNNELING EXPERIMENT
70-RO-03 ROY, BROCKHOUSE PB/ PB-TL ..EXPERIMENT/ FREQUENCY SPECTRA/ POLYCRYSTALLINE SAMPLES/ TRIPLE AXIS SPECTROMET
3. 55 LITHIUM-ALUMINIUM HYDRIDE LI-AL-H
73-TE-02 TEMPE, WADDINGTON LI-AL-H/ NA-AL-H ..EXPERIMENT/ PHONON SPECTRA/ LI-AL-H4/ NA-AL-H4
3. 56 LITHIUM-LEAD LI-PB
73-RU-01 RUPPERSBERG LI-PB ..EXPERIMENT/ LIQUID/ CORRELATION FUNCTION
3. 57 MAGNESIUM HYDRIDE MG-H
58-MC-01 MCREYNOLDS, NELKIN+ H2.O/ POLYETHYLENE/ ZR-H/ MG-H/ GRAPHITE ..EXPERIMENT/ THEORY/ LIQUID/ SOLID
3. 58 MAGNESIUM-LEAD MG-Pb
65-CH-04 CHERNOPLEKOV, ZEMLYANOV MG-PB ..EXPERIMENT/ LOCAL MODE/ PHONON SPECTRA
3. 59 MAGNESIUM-LITHIUM MG-LI
67-NA-02 NATKANIEC, PARLINSKI+ MG-LI/ CU-BE ..EXPERIMENT/ LOCAL VIBRATION/ NEUTRON SPECTROSCOPY
3. 60 MAGNESIUM-ZINC MG-ZN
74-DO-01 DORNER, FELDMANN+ MG-ZN ..THEORY/ DISPERSION RELATION/ CONSTANT- α METHOD/ MG-ZN2
3. 61 MANGANESE-COBALT MN-CO
58-ST-01 STEWART, BROCKHOUSE V/ MN-CO ..EXPERIMENT/ FREQUENCY DISTRIBUTION
3. 62 MANGANESE-COPPER MN-CU
76-DA-06 DAVIS, HICKS MN-CU/ MN-PD ..MAGNETIC DEFECT SCATTERING
77-DA-01 DAVIS MN-CU/ MN-PD ..POLARIZATION ANALYSIS/ ANTIFERRMAGNETIC DEFECTS SCATTERING

- 3, 63 MANGANESE-NICKEL
 76-HE-05 HENNION, HUTCHINGS+ MN-NI ..EXPERIMENT/ SUSCEPTIBILITY MN-NI
- 3, 64 MANGANESE-PALLADIUM
 76-DA-06 DAVIS, HICKS MN-CU/ MN-PD ..MAGNETIC DEFECT SCATTERING
 77-DA-01 DAVIS MN-CU/ MN-PD ..POLARIZATION ANALYSIS/ ANTIFERRMAGNETIC DEFECTS SCATTERING MN-PD
- 3, 65 MANGANESE-PLATINUM
 72-AN-02 ANTONINI, MINKIEWICZ MN-PT ..EXPERIMENT/ DISPERSION RELATION/ MN-PT3 ..SPIN WAVE AND PHONON MN-PT
- 3, 66 NICKEL-BERYLLIUM
 66-ZE-01 ZEMLYANOV, SOMENKOV+ NI-BE ..EXPERIMENT/ LOCAL MODE/ PHONON SPECTRA NI-BE
- 3, 67 NICKEL-CHROMIUM
 76-MI-01 MIKKE, JANKOWSKA NI-FE/ CO-NI/ NI-V/ NI-CR/ CR-AL ..EXPERIMENT/ SPIN WAVE NI-CR
- 3, 68 NICKEL-IRON
 69-HA-01 HALLMAN, BROCKHOUSE NI-FE/ CU-ZN ..DISPERSION RELATION/ CONSTANT- θ METHOD/ FREQUENCY DISTRIBUTION ..FCC AL
 76-ME-03 MENSNIKOV, SHESTAKOV+ NI-FE ..EXPERIMENT/ MAGNETIC SCATTERING/ CRITICAL/ SMALL ANGLE
 76-ME-04 MENSNIKOV, SIDOROV+ NI-FE ..SMALL ANGLE SCATTERING/ MAGNETIC INHOMOGENEITY
 76-MI-01 MIKKE, JANKOWSKA NI-FE/ CO-NI/ NI-V/ NI-CR/ CR-AL ..EXPERIMENT/ SPIN WAVE
 77-EN-01 ENDOH, NODA+ NI-FE ..EXPERIMENT/ PHONON DISPERSION/ MAGNETO-ELASTIC EFFECT
 77-MI-01 MIKKE, JANKOWSKA+ NI-FE ..EXP./ MAGNON DISPERSION/ EFFECT OF ORDERING NI-FE
- 3, 69 NICKEL-MANGANESE
 77-HE-01 HENNION, HENNION+ NI-MN ..EXPERIMENT/ MAGNON/ MAGNETIC SCATTERING NI-MN
- 3, 70 NICKEL-PALLADIUM
 62-MO-01 MOZER, OTNES+ NI-PD ..EXPERIMENT/ LATTICE VIBRATION ..DEFECT MODE/ DISORDERED ALLOYS
 63-MO-01 MOZER, OTNES NI/ PD/ NI-PD ..EXPERIMENT/ LATTICE DYNAMICS ..IMPURITY MODE
 72-KA-04 KAMITAKAHARA, BROCKHOUSE NI-PD ..EXPERIMENT/ PHONON DISPERSION/ ALLOY/ MASS EFFECT
 74-KA-01 KAMITAKAHARA, BROCKHOUSE NI-PD ..EXPERIMENT/ PHONON DISPERSION/ WIDTH/ DISORDERED ALLOY/ FCC/ NI,55-PD,45 NI-PD
- 3, 71 NICKEL-PLATINUM
 NI-PT

- 73-KU-01 KUNITOMI, TSUNODA+ NI-PT ..EXPERIMENT/ PHONON DISPERSION/ EFFECT OF MASS-DEFECT
- 3, 72 NICKEL-RHENIUM NI-RH
- 77-CA-01 CABLE NI-RH ..EXPERIMENT/ MAGNETIC DIFFUSE SCATTERING/ MAGNETIC MOMENT DISTRIBUTION
- 3, 73 NICKEL-SILICON NI-SI
- 75-WA-02 WASEDA, TAMAKI NI-SI ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR ..ALLOY
- 3, 74 NICKEL-VANADIUM NI-V
- 76-MI-01 MIKKE, JANKOWSKA NI-FE/ CO-NI/ NI-V/ NI-CR/ CR-AL ..EXPERIMENT/ SPIN WAVE
- 3, 75 NIOBIUM HYDRIDE NB-H
- 65-KL-01 KLEY, PERETTI+ V-H/ NB-H/ PD-H ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION ..50DC FOR V-H/ 33DC FOR NB-H,
POLYETHYLENE/ H₂O/ ZR-H/ NB-H/ U.O₂ ..EXPERIMENT
67-BI-01 BISCHOFF, BRYANT+ ZR-H/ NB-H/ TI-H/ U.C. ..EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
67-PA-04 PAN, YEATER+ U.C/ U.O₂/ ZR-H/ TI-H/ NB-H/ TH-H ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT
68-PU-01 PUROHIT, PAN+ V-H/ NB-H ..EXPERIMENT/ LATTICE DYNAMICS ..200DC
68-VE-02 VERDAN, RUBIN+ NB-H ..THEORY/ DIFFUSION OF HYDROGEN IN METAL HYDRIDE/ QUASIELASTIC
69-CH-02 CHERNOPOLEKOV, ZEMLYANOV+ NB-H ..IMPURITY
70-GI-02 GISSLER, ROTHER NB-H/ NB-H ..SOLID/ QUASI-ELASTIC PEAK
70-GO-03 GOSSLER, ALEFELD+ TB-H/ NB-H ..HYDROGEN DIFFUSION
70-RU-01 RUBIN, CLAESSEN NB-H ..EXPERIMENT/ HYDROGEN DIFFUSION/ QUASI-ELASTIC
71-KI-03 KISTNER, RUBIN+ NB-H ..EXPERIMENT/ LOCAL MODE/ SINGLE CRYSTAL/ 130C-400C
72-AL-03 ALEFELD, BOHN+ NB-H ..HYDROGEN MOTION
72-BI-01 BIRCHALL, ROSS NB-H ..EXPERIMENT/ HYDROGEN DIFFUSION/ SINGLE CRYSTAL
72-BI-02 BIRCHALL, ROSS NB-H ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ DIFFUSION BROADENING/ 235C, 256C/ NB-HO.07
72-ST-07 STUMP, GISSLER+ NB-H ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ INTEGRATED INTENSITY/ ANGULAR DEPENDENCE
72-ST-08 STUMP, GISSLER+ NB/ NB-H ..EXPERIMENT/SOLID/ DISPERSION RELATION ..ALLOY/ TRIPLE-AXIS-SPECTROMETER
73-GI-02 GISSLER, JAY+ NB-H ..THEORY/ HYDROGEN DIFFUSION/ QUASIELASTIC SCATTERING
75-RO-04 ROWE, VAGELATOS+ NB-H ..QUASIELASTIC/ DIFFUSION/ 165 TO 300K
77-KU-03 KUTNER, SOSNOWSKA NB-H/ (NB-MO)-H ..EXPERIMENT/ PHONON DISPERSION
77-RI-01 RICHTER, ALEFELD+ NB-H/ (NB-MO)-H ..EXPERIMENT/ PHONON DISPERSION
77-ST-02 STUMP, MAGERL+
- 3, 76 NIOBIUM-MOLYBDENUM NB-MO
- 65-WO-02 WOODS, POWELL NB-MO ..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS ..DISORDERED ALLOYS
68-PO-01 POWELL, MARTEL+ NB-MO ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..ROOM TEMP./ ALLOY/ KOHN EFFECT
77-PO-01 POWELL, MARTELL+ NB/ MO/ NB-MO ..CALCULATION/ MODEL FITTING/ PHONON DENSITY/ DEBYE TEMPERATURE
77-VA-03 VARMA, WEBER THEORY-OF-SOLIDS/ NB/ NB-MO/ MO ..LATTICE DYNAMICS/ PHONON DISPERSION/ 4D BCC METAL
- 3, 77 (NIOBIUM-MOLYBDENUM)-HYDROGEN (NB-MO)-H

77-ST-02	STUMP, MAGERL+	NB-H/ (NB-MQ)-H	..EXPERIMENT/ PHONON DISPERSION
3, 78	NIOBIUM-TANTALUM	NB-TA	..SMALL ANGLE SCATTERING/ TRANSPORT CURRENT
76-SC-05	SCMELTEN, KROEGER	NB-TA	..SMALL ANGLE SCATTERING/ TRANSPORT CURRENT
3, 79	PALLADIUM HYDRIDE	PD-H	
61-BE-02	BERGSM, GOEDKOOP	PD-H/ AL-TH-H/ CA-H	..EXPERIMENT/ FREQUENCY DISTRIBUTION
65-KL-01	KLEY, PERETTI+	V-H/ NB-H/ PD-H	..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION ..50DC FOR V-H/ 33DC FOR NB-H
66-SK-01	SKOELD, NELIN	PD-H	..EXPERIMENT/ DIFFUSION BROADNING
67-SK-03	SKOELD, NELIN	PD-H	..HYDROGEN DIFFUSION
70-BE-01	BEG, ROSS	PD-H	..EXPERIMENT/ QUASIELASTIC SCATTERING ..DIFFUSIVE MOTION
71-RO-05	ROWE, SKOELD+	PD-H	..EXPERIMENT/ QUASIELASTIC SCATTERING ..DIFFUSIVE MOTION
72-RO-05	ROWE, KUSH+	PD-H	..QUASIELASTIC SCATTERING/ HYDROGEN DIFFUSION
73-CH-06	CHOWDHURY, ROSS	PD-H/ PD-AG-H	..EXPERIMENT/ HYDROGEN VIBRATION IN METAL
74-CA-01	CARLILE, RCSS	PD-H	..EXPERIMENT/ SOLID/ SCATTERING LAW ..CHUDLEY-ELLIOT MODEL/ JUMP-DIFFUSION MODEL
74-NE-03	NELIN, SKOELD	PD-H	..EXPERIMENT/ SOLID/ QUASI-ELASTIC NEUTRON SCATTERING ..FULL WIDTH AT HALF MAXIMUM
74-RO-05	ROWE, RUSH+	PD-H	..EXPERIMENT/ PHONON DISPERSION/ 78.150.220.295K/ PD.D0.63
75-NE-01	NELIN, SKOELD	PD-H	..EXPERIMENT/ QUASI-ELASTIC PEAK/ MULTIPLE SCATTERING/ CRYSTAL SPECTROMETER ..PHASE TRA
76-GL-02	GLINKA, ROWE+	PD-H	..EXPERIMENT/ PHONON DISPERSION/ PHONON WIDTH
76-KL-02	KLEY, DREXEL+	PD-H	..EXPERIMENT/ HYDROGEN MOTION
76-RA-01	RAHMAN, SKOELD+	PD-H	..EXPERIMENT/ CALCULATION/ PHONON SPECTRA
3, 80	PALLADIUM-IRON	PD-FE	
70-MA-03	MALISZEWSKI, SOSNOWSKI+	PD-FE	..EXPERIMENT/ PHONON DISPERSION CURVE
71-MA-05	MALISZEWSKI, SOSNOWSKI+	PD-FE	..EXPERIMENT/ PHONON DISPERSION/ FORCE CONSTANT ANALYSIS
72-ST-06	STIRLING, COWLEY+	PD-FE	..LATTICE DYNAMICS/ PHONON DISPERSION/ 80 DK
75-MA-01	MALISZEWSKI, SOSNOWSKI+	PD-FE	..EXPERIMENT/ PHONON DISPERSION
3, 81	PALLADIUM-LEAD	PD-PB	
77-MA-03	MALISZEWSKI, BEDNARSKI+	PD-PB	..PHONON-DISPERSION-RELATION/ 296K/ EXPERIMENT
3, 82	PALLADIUM-MANGANESE	PD-MN	
3, 83	PALLADIUM-MANGANESE-TIN	PD-MN-SN	
3, 84	PALLADIUM-SILVER HYDRIDE	PD-AG-H	
72-CH-04	CHOWDHURY, ROSS	PD-AG-H	..EXPERIMENT/ QUASIELASTIC/ DIFFUSION/ 100C-360C
73-CH-06	CHOWDHURY, ROSS	PD-H/ PD-AG-H	..EXPERIMENT/ HYDROGEN VIBRATION IN METAL

3. 85 PALLADIUM-PLATINUM PD-PT
75-SA-01 SACCHETTI, SPINELLI TA-NB / PD-PT ..PHONON DISPERSION/ THEORY/ COHERENT POTENTIAL
3. 86 PLUTONIUM-IRON PU-FE
76-LA-01 LANDER, REDDY PU,P/ PU-FE ..POLARIZED NEUTRON DIFFRACTION
3. 87 RUBIDIUM-POTASSIUM RB-K
76-MO-03 MOSTOLLER, KAPLAN RB-K ..THEORY/ PHONON/ EFFECTS OF MASS AND FORCE CONSTANT DISORDER
77-MO-03 MOSTOLLER, THEODORE RB-K ..THEORY/ COHERENT-POTENTIAL-APPROXIMATION/ COHERENT INELASTIC CROSS SECTION
3. 88 SODIUM-ALUMINIUM HYDRIDE NA-AL-H
73-TE-02 TEMME, WADDINGTON LI-AL-H/ NA-AL-H ..EXPERIMENT/ PHONON SPECTRA/ LI-AL-H4/ NA-AL-H4
3. 89 SODIUM-POTASSIUM NA-K
68-EN-01 ENDERBY, NORTH THEORY-OF-FLUIDS/ NA-K ..STRUCTURE FACTOR/ ALLOY LIQUID/ PERCUS-YEVICK
77-SR-01 SRIVASTAVA NA/ K/ HG/ BI/ NA-K ..THEORY/ INTERATOMIC FORCE CONSTANTS/ KNIGHT SHIFT/ FREQUENCY SPECTRUM ..P
77-SW-01 SWAMY, KAHOL+ NA-K ..THEORY/ DYNAMICAL STRUCTURE FACTOR
3. 90 STRONTIUM HYDRIDE SR-H
70-MA-02 MAELAND YB-H/ CA-H/ SR-H/ BA-H ..EXPERIMENT/ FREQUENCY SPECTRUM
3. 91 STRONTIUM-LITHIUM HYDRIDE SR-LI-H
69-MA-01 MAELAND BA-LI-H/ SR-LI-H ..EXPERIMENT/ SPECTRAL DENSITY ..PEROVSKITE STRUCTURE/ BA-LI-H3/ SR-LI-H3
3. 92 TANTALUM HYDRIDE TA-H
72-DE-02 DE-GRAAF, RUSH+ V-H/ TA-H ..EXPERIMENT/ QUASIELASTIC/ HYDROGEN DIFFUSION IN METAL
74-RO-03 ROSE, RUSH+ TA-H ..EXPERIMENT/ QUASI-ELASTIC PEAK/ TOF
76-YA-01 YAMADA, WATANABE+ TA-H ..EXPERIMENT/ LOCALIZED PHONON/ MODE
3. 93 TANTALUM-NIOBIUM TA-NB
68-AL-02 ALS-NIELSEN TA-NB ..EXPERIMENT/ LATTICE DYNAMICS ..CRYSTAL SPECTROMETER/ LOCALIZED PHONON
75-SA-01 SACCHETTI, SPINELLI TA-NB / PD-PT ..PHONON DISPERSION/ THEORY/ COHERENT POTENTIAL

- 3, 94 TERBIUM HYDRIDE TB-H
70-RU-01 RUBIN, CLAESSEN TR-H/ NB-H ..SOLID/ QUASI-ELASTIC PEAK
- 3, 95 TERBIUM-YTTRIUM TB-Y
76-WA-03 WAKABAYASHI, NICKLOW TB-Y ..EXPERIMENT/ SPIN WAVE DISPERSION
- 3, 96 THORIUM HYDRIDE TH-H
67-KA-02 KARIMOV, BROVMAN+ TH-H/ U-H/ CE-H ..LATTICE DYNAMICS/ THEORY
67-KA-03 KARIMOV, ZEMLYANOV+ CE-H/ TH-H/ U-H ..EXPERIMENT/ PHONON SPECTRA
68-KA-03 KARIMOV, BROVMAN+ CE-H/ TH-H/ U-H ..LATTICE DYNAMICS/ EXPERIMENT/ FREQUENCY DISTRIBUTION ..TOF/ 20DC
76-MI-02 MILLER, SATTERTHWAITE+ TH-H ..EXPERIMENT/ PHONON STATE DENSITY
- 3, 97 TITANIUM HYDRIDE TI-H
63-SA-02 SAUNDERSON, COCKING TI-H ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY DISTRIBUTION
66-BR-02 BROECKER N.H4,CL/ N.H4,BR/ N.H4.I/ ZR-H/ TI-H ..SIGMAE)/ EXPERIMENT/ CRYSTAL SPECTROMETER
67-PA-04 PAN, YEATER+ ZR-H/ NB-H/ TI-H/ U.C ..EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
68-PU-01 PUROHIT, PAN+ U.C/ U.O2/ ZR-H/ TI-H/ NB-H/ TH-H ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT
76-AL-05 ALPERIN, FLOTOW+ TI-H ..NEUTRON DIFFRACTION
- 3, 98 TITANIUM-NICKEL TI-NI
77-LI-01 LIVET, RADHAKRISHNA TI-NI ..EXPERIMENT/ MAGNETIC DIFFUSE/ POLARIZED NEUTRON
- 3, 99 TITANIUM-URANIUM TI-U
67-CH-02 CHERNOPOLEKOV, PANOVA+ TI-U ..EXPERIMENT/ LOCAL MODE/ TI0,95-U0,05
- 3,100 TITANIUM-ZIRCONIUM TI-ZR
63-CH-01 CHERNOPOLEKOV, ZEMLYANOV+ TI-ZR ..FREQUENCY DISTRIBUTION/ EXPERIMENT ..ALLOY
65-MO-03 MOZER, OTNES+ NI/ V/ TI/ TI-ZR ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION
- 3,101 TITANIUM-ZIRCONIUM-OXYGEN TI-ZR-O
75-SU-01 SUMIN, KUKHTO+ TI-ZR-O ..ALLOY/ INELASTIC NEUTRON SPECTRA/ PHONON LEVEL
- 3,102 URANIUM HYDRIDE U-H
66-RU-03 RUSH, FLOTOW+ Y-H/ U-H ..EXPERIMENT/ HYDROGEN VIBRATION/ OPTICAL BAND SPECTRA

67-KA-02	KARIMOV, BROVMAN+	TH-H/ U-H/ CE-H ..LATTICE DYNAMICS/ THEORY
67-KA-03	KARIMOV, ZEMLYANOV+	CE-H/ TH-H/ U-H ..EXPERIMENT/ PHONON SPECTRA
68-KA-03	KARIMOV, BROVMAN+	CE-H/ TH-H/ U-H ..LATTICE DYNAMICS/ EXPERIMENT/ FREQUENCY DISTRIBUTION ..TOF/ 20DC
77-GM-01	GMAL, HEIDEMANN+	U-H ..EXPERIMENT ..MAGNETIC SCATTERING/ 200DK
3.103	VANADIUM-BERYLLIUM	V-BE
66-MO-01	MOZER, OTNES+	V-BE/ V-NI/ V-PT ..EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ ALLOY
3.104	VANADIUM HYDRIDE	V-H
65-KL-01	KLEY, PERETTI+	V-H/ NB-H/ PD-H ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION ..50DC FOR V-H/ 33DC FOR NB-H.
65-RU-01	RUBIN, PERETTI+	V/ V-H ..EXPERIMENT/ SOLID/ ..ROOM TEMP. FOR V/ 150 DC FOR V-H/ LOCALIZED MODE IN V DUE TO
68-RU-01	RUSH, FLOTOW	V-H ..FREQUENCY DISTRIBUTION/ EXPERIMENT
68-VE-02	VERDAN, RUBIN+	V-H/ NB-H ..EXPERIMENT/ LATTICE DYNAMICS ..200DC
69-CH-02	CHERNOPLEKOV, ZEMLYANOV+	V-H/ NB-H ..EXPERIMENT/ PHONON SPECTRA
72-DE-01	DE-GRAAF, RUSH+	V-H ..EXPERIMENT/ QUASIELASTIC/ DIFFUSION BROADENING
72-DE-02	DE-GRAAF, RUSH+	V-H/ TA-H ..EXPERIMENT/ QUASIELASTIC/ HYDROGEN DIFFUSION IN METAL
72-RO-04	ROWE	V-H ..EXPERIMENT/ PHONON SPECTRA/ 300K, 425K
76-AS-01	ASANO, ABE+	V-H ..NEUTRON DIFFRACTION/ V2-H
76-RU-01	RUSH, ROWE+	V-H ..EXPERIMENT/ PHONON DISPERSION
3.105	VANADIUM-NICKEL	V-NI
66-MO-01	MOZER, OTNES+	V-BE/ V-NI/ V-PT ..EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ ALLOY
3.106	VANADIUM-PLATINUM	V-PT
66-MO-01	MOZER, OTNES+	V-BE/ V-NI/ V-PT ..EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ ALLOY
3.107	YTTERBIUM HYDRIDE	YB-H
70-MA-02	MAELAND	YB-H/ CA-H/ SR-H/ BA-H ..EXPERIMENT/ FREQUENCY SPECTRUM
3.108	YTTRIUM-HOLMIUM	Y-HO
3.109	YTTRIUM HYDRIDE	Y-H
65-WH-01	WHITEMORE	POLYETHYLENE/ GRAPHITE/ METHANE/ ZR-H/ Y-H/ LA-H ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ SCATTERI
66-RU-03	RUSH, FLOTOW+	Y-H/ U-H ..EXPERIMENT/ HYDROGEN VIBRATION/ OPTICAL BAND SPECTRA
3.110	YTTRIUM-TERBIUM	Y-TE

74-MO-02	MOSTOLLER, KAPLAN+	Y-Tb	..THEORY/ LATTICE DYNAMICS/ SOLID/ FREQUENCY SPECTRUM ..COHERENT POTENTIAL APPROXI
3.111	YTTRIUM-ZINC	Y-ZN	
72-PR-05	PREVENDER, SINHA+	Y-ZN	..EXPERIMENT/ PHONON DISPERSION/ ALLOY/ MODEL ANALYSIS/ FREQUENCY DISTRIBUTION/ DEB
3.112	ZIRCONIUM HYDRIDE	ZR-H	
57-AN-01	ANDERSON, MCREYNOLDS+	ZR-H	..EXPERIMENT/ SIGMA (E,E-PRIME,THETA)
58-MC-01	MCREYNOLDS, NELKIN+	H2.O/ POLYETHYLENE/ ZR-H/ MG-H/ GRAPHITE	..EXPERIMENT/ THEORY/ LIQUID/ SOLID
61-BR-03	BRUGGER	H2.O/ BENZENE/ PARAFFINE/ ALCOHOL	..SIGMA (E,E-PRIME,THETA)/ EXPERIMENT/ LIQUIDS/ TOF
61-WO-01	WOODS, BROCKHOUSE+	GRAPHITE/ H2.O/ D2.O/ ZR-H/ LI.H/ NA.H/ N.H4.CL	..EXPERIMENT/ CRYSTAL SPECTROMETER/ FRE
62-LE-01	LEHMAN, WOLFRAM+	CU/ AL/ ZR-H	..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
64-SP-01	SPRINGER, HOFMYER+	H2.O/ D2.O/ PHENYL/ ZR-H	..EXPERIMENT/ LIQUID/ DIFFUSION PARAMETER ..AVE-MU
65-BE-02	BEYSTER, YOUNG+	H2.O/ D2.O/ ZR-H	..EXPERIMENT/ DIFFUSION PARAMETER ..AVE-MU
65-GL-03	GLAESER, EHRET+	C6.H6/ H2.O/ ZR-H	..SCATTERING LAW/ FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID ..20DC FOR
65-HA-04	HARLING, LEONARD-JR	ZR-H	..EXPERIMENT/ LATTICE DYNAMICS ..INCOHERENT/ TOF/ 295DK
65-KO-02	KORNBICHLER	D2.O/ ZR-H	..EXPERIMENT/ LIQUID/ DIFFUSION PARAMETER
65-WH-01	WHITEMORE	POLYETHYLENE/ GRAPHITE/ METHANE/ ZR-H/ Y-H/ LA-H	..EXPERIMENT/ FREQUENCY DISTRIBUTION/ SCATTERI
65-WH-03	WHITEMORE	ZR-H	..EXPERIMENT ..HIGH-ENERGY INCIDENT NEUTRONS
66-AN-03	ANTUNEZ, BEYSTER+	BE.O/ H2.O/ D2.O/ ZR-H	..EXPERIMENT/ THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATI
66-BE-06	BEYSTER, NEILL+	H2.O/ D2.O/ ZR-H/ GRAPHITE/ BE.O	..NEUTRON SPECTRUM/ COMPILATION/ LIQUID/ GAS
66-BR-02	BROECKER	N.H4.CL/ N.H4.BR/ N.H4.I/ ZR-H/ TI-H	..SIGMA(E)/ EXPERIMENT/ CRYSTAL SPECTROMETER
66-IS-01	ISHMAEV, MUSTOVOI+	ZR-H	..THEORY/ SOLID/ NEUTRON SPECTRUM
66-KO-01	KOPPEL	POLYETHYLENE/ ZR-H/ H2.O	..SCATTERING FUNCTION/ SCATTERING CROSS SECTION/ NEUTRON SPECTRUM
66-KO-04	KOPPEL	H2.O/ POLYETHYLENE/ ZR-H/ H	..CROSS SECTION EVALUATION/ SCATTERING FUNCTION/ THEORY/ LIQUID/ SO
67-BE-03	BEYSTER, BORGONOV+	C.H2/ C6.H6/ ZR-H	..EXPERIMENT
67-BI-01	BISCHOFF, BRYANT+	POLYETHYLENE/ H2.O/ ZR-H/ NB-H/ U.O2	..EXPERIMENT
67-CA-04	CARRIVEAU	ZR-H	..ANGULAR DISTRIBUTION/ TEMPERATURE EFFECT
67-GL-01	GLAESER	REVIEW-ARTICLES/ H2.O/ ZR-H/ GRAPHITE/ D2.O/ BE/ BE.O	..INCOHERENT APPROXIMATION/ MULTIPLE SCATT
68-PA-04	PAN, YEATER+	ZR-H/ NB-H/ TI-H/ U.C	..EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
68-BE-03	BEYSTER, BORGONOV+	BIPHENYL/ ZR-H/ U.O2	..LATTICE DYNAMICS/ SCATTERING FUNCTION
68-BE-04	BEYSTER, BORGONOV+	C.H2/ ZR-H/ C6.H6	..EXPERIMENT/ MOLECULAR DYNAMICS
68-GL-01	GLAESER	H2.O/ ZR-H/ GRAPHITE/ D2.O/ BE/ BE.O	..COMPILATION/ SCATTERING FUNCTION/ CROSS SECTION EVALUATI
68-GL-02	GLAESER	H2.O/ D2.O/ ZR-H/ GRAPHITE/ BE/ BE.O	..SCATTERING FUNCTION/ DIFFUSION PARAMETER/ COMPILATION
68-PU-01	PURCHIT, PAN+	U.C/ U.O2/ ZR-H/ TI-H/ NB-H/ TH-H	..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT
68-SL-01	SLAGGIE	ZR-H	..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..ROOT SAMPLING METHOD
68-SL-02	SLAGGIE	H2.O/ ZR-H	..THEORY/ CROSS SECTION EVALUATION
68-TH-01	THORSON	ZR-H	..SCATTERING FUNCTION/ EXPERIMENT/ SOLID ..DIFFERENTIAL SCATTERING CROSS SECTION
69-CA-03	CARRIVEAU, BORGONOV+	ZR-H	..SIGMA (THETA-E)/ SOLID ..750DK/ ROOMTEMPERATURE
69-SL-02	SLAGGIE	ZR-H	..THEORY/ ANHARMONICITY/ FREQUENCY DISTRIBUTION ..300DK/ 800DK
71-CO-01	COUCH, HARLING+	ZR-H	..EXPERIMENT/ SOLID/ SIGMA(E,E-PRIME,THETA)
71-DA-01	DAY, SINCLAIR	ZR-H/ H2.O/ C6.H7.N/ NA.N.H2	..EXPERIMENT/ TOF SPECTRA/ PULSED NEUTRON SOURCE
71-DA-02	DAY, SINCLAIR	ZR-H/ H2.O/ SODAMIDE/ ANILINE	..EXPERIMENT/ MOLECULAR DYNAMICS/ LINAC PULSED NEUTRON SOURCE
71-SA-01	SAASTAMOINEN, PALMGREN	ZR-H	..EXPERIMENT/ SOLID/ SCATTERING CROSS SECTION
72-NA-01	NAKAHARA, KADOTANI	ZR-H/ COMPUTER-CODES	..THEORY/ SIGMA (E,E-PRIME)/ SIGMA (E)/ SIGMA-TRANSPORT(E)/ SOLID
76-MA-06	MATSUMOTO	ZR-H	..QUASIELASTIC SCATTERING
3.113	ZIRCONIUM-NIOBIUM	ZR-NB	

JAERI - M 8417

75-AX-01 AXE, KEATING+ ZR-NB ..EXPERIMENT/ CRYSTAL SPECTROMETER/ DISPERSION RELATION ..1238DK
77-AX-02 AXE, HEIDEMANN+ ZR-NB ..DIFFUSE SCATTERING/ QUASIELASTIC

4 INORGANIC COMPOUNDS

4. 1 ALUMINA
AL2.O3
75-KA-04 KAPPUS AL2.O3 ..LATTICE DYNAMICS/ RIGID ION/ THEORY
75-MC-04 MCWHAN, SHAPIRO+ ALUMINA ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ ELASTIC CONSTANT/ DISPERSION RELATION ..IM
76-HS-01 HSU ALUMINA ..PHONON-SPECTRA/ DENSITY-OF-STATES/ THEORY ..1.3M2O.1IAL2.O3/ SUPERIONIC-CONDUCTOR
4. 2 ALUMINIUM CHLORIDE
AL.CL3
64-BO-02 BOUTIN, PRASK H2.O/ WATER-SILICA/ WATER-ALUMINA/ AL.CL3 ..EXPERIMENT/ MOLECULAR DYNAMICS ..H2.O VAPOR ADSO
4. 3 ALUMINIUM NITRIDE
AL.N
67-CO-02 COLLINS, LIGHTOWLERS+ AL.N ..OPTICAL EXPERIMENT
4. 4 ALUMINIUM PHOSPHATE
AL.P.O4
70-SC-05 SCOTT AL.P.O4 ..ANHARMONICITY/ EXPERIMENT/ RAMAN
4. 5 AMMONIA
N.H3
41-SA-01 SACHS, TELLER NEUTRON-SCATTERING-IN-FLUIDS/ H2/ C.H4/ N.H3/ H2.O ..SCATTERING THEORY ..MOLECULAR GASES
60-RU-01 RUSH, TAYLOR+ N.H3/ N.H4.1/ N.H4.BK/ N.H4.CL/ N.H4.F ..EXPERIMENT/ MOLECULAR DYNAMICS ..TOTAL CROSS SECTION
63-JA-02 JANIK, JANIK+ C.H4/ N.H3/ H2.S/ H2.O ..SIGMA(E)/ EXPERIMENT/ LIQUID
63-JA-03 JANIK, RZANY+ N.H3 ..EXPERIMENT/ TOTAL CROSS SECTION/ LIQUID
63-WE-01 WEBB C.H4/ N.H3/ H2 ..SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ GAS ..ROOM TEMPERATURE
64-CZ-01 CZERLUNCZAKIEWICZ, KOWALSKA N.H3 ..GASE/ MOLECULE/ EXPERIMENT/ SIGMA(E, E-PRIME)
64-VA-01 VAN-DINGENEN, NEVEDE-MEYERGNIES ACETYLENE/ AMMONIA/ METHANE ..TOTAL CROSS SECTION/ EXPERIMENT/ SOLID ..LON
65-ST-07 STRONG, HARKER+ AMMONIA/ HYDROGEN SULFIDE ..EXPERIMENT/ GAS/ CROSS SECTION EVALUATION ..MTR-PHASE-CHOPPER
66-VE-03 VENKATARAMAN, RAO+ AMMONIA/ METHANE ..THEORY/ CALCULATION/ CROSS SECTION/ GAS PHASE
67-OK-01 OKA N.H3 ..MOLECULE DYNAMICS/ THEORY/ FREQUENCY DISTRIBUTION
67-WE-01 WEBB METHANE/ AMMONIA ..GAS/ EXPERIMENT/ NEUTRON SPECTRUM ..20DK
68-AG-01 AGRAWAL, YIP C.H4/ H.CL/ N.H3 ..GAS/ THEORY/ CORRELATION FUNCTION ..INCOHERENT/ INTERMEDIATE SCATTERING FU
68-JA-02 JANIK C.H4/ H2.O/ N.H3/ L12.S.O4.H2.O/ H3.O.N.O3/ C.H3.1 ..EXPERIMENT/ GAS/ LIQUID/ SOLID/ MOLECULAR
72-DA-02 DASANNACHARYA, THAPER+ N.H3 ..EXPERIMENT/ MOLECULAR LIQUID/ 218K/ MODEL ANALYSIS/ SIMPLE DIFFUSION/ HINDER
72-GO-03 GOYAL, DASANNACHARYA+ AMMONIA ..EXPERIMENT/ PHONON DENSITY
74-TH-01 THAPER, DASANNACHARYA+ AMMONIA ..EXPERIMENT/ LIQUID/ ROTATIONAL CORRELATION FUNCTION
4. 6 AMMONIUM AZIDE
N.H4.N3
66-BO-02 BOUTIN, TREVINO+ N.H4.N3 ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS

4. 7 AMMONIUM BROMIDE

N.H4.BR

60-RU-01 RUSH, TAYLOR+ N.H3/ N.H4.I/ N.H4.BR/ N.H4.CL/ N.H4.F ..EXPERIMENT/ MOLECULAR DYNAMICS ..TOTAL CROSS SECTION
 62-RU-01 RUSH, TAYLOR+ N.H4.CL/ N.H4.I/ N.H4.F/ N.H4.BR/ BENZENE/ TOLUENE/ MESITYLENE/ XYLENE ..EXPERIMENT/ TOTAL C
 63-JA-01 JANIK C.H4/ N.H4.I/ N.H4.CL/ N.H4.BR/ N.H4.S.O3.F ..SIGMA(E)/ SIGMA(E-PRIME,THETA)/ EXPERIMENT/ THE
 63-MI-02 MIKKE, KROH N.H4.CL/ N.H4.BR/ N.H4.F/ N.H4.N.O3 ..LATTICE DYNAMICS/ EXPERIMENT ..INVERTED FILTER METHOD
 63-VE-01 VENKATARAMAN, USHA+ N.H4.CL/ N.H4.BR ..EXPERIMENT
 65-BA-01 BAJOREK, MACHEKHINA+ N.H4.CL/ N.H4.BR/ N.H4.I/ N.H4.F/ N.H4.N.O3/ N.H4.C.N.S/ (N.H4)2.S.O4/ (N.H4)2.S2.O8/
 65-VE-01 VENKATARAMAN, DENIZ+ V/ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR6 ..EXPERIMENT/ ELASTIC SCA
 66-BR-02 BROECKER N.H4.CL/ N.H4.BR/ N.H4.I/ ZR-H/ TI-H ..SIGMA(E)/ EXPERIMENT/ CRYSTAL SPECTROMETER
 66-VE-04 VENKATARAMAN, DENIZ+ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR6 ..EXPERIMENT/ ROTATIONAL MOD
 68-LE-03 LEUNG, TAYLOR+ N.H4.F/ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.S.O4/ (N.H4)2.CR2.O7/ N.H4.CL.O4 ..EXPERIMENT/ TO
 73-SO-01 SOKOLOFF, LOVELUCK N.H4.BR/ N.H4.CL ..THEORY/ ORDER-DISORDER TRANSITION/ SIGMA (THETA,E) ..ORIENTATIONAL D
 74-IN-01 INOUE, KIYANAGI N.H4.CL/ N.H4.BR/ N.H4.I ..CALCULATION/ SCATTERING FORM FACTOR/ ONE-DIMENSIONAL ROTOR
 74-LI-01 LIVINGSTON N.H4.BR ..EXPERIMENT/ NEUTRON SPECTRUM/ SCATTERING LAW/ QUASI-ELASTIC PEAK ..TORSIONAL VIBRATIO
 74-YA-01 YAMADA, NODA+ N.H4.BR ..EXPERIMENT/ SIGMA(THETA,E)/ DISPERSION RELATION ..STRUCTURAL PHASE TRANSITION/ SPI
 76-MA-07 MATSUSHITA N.H4.CL/ N.H4.BR ..AMMONIUM HALIDE/ THEORY-IN-SOLIDS
 76-PR-01 PRESS, ECKERT+ N.H4.BR ..EXPERIMENT/ P-T PHASE DIAGRAM

4. 8 AMMONIUM BROMOSTANNATE

(N.H4)2.SN.BR6

66-VE-04 VENKATARAMAN, DENIZ+ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR6 ..EXPERIMENT/ ROTATIONAL MOD

4. 9 AMMONIUM CHLORIDE

N.H4.CL

60-RU-01 RUSH, TAYLOR+ N.H3/ N.H4.I/ N.H4.BR/ N.H4.CL/ N.H4.F ..EXPERIMENT/ MOLECULAR DYNAMICS ..TOTAL CROSS SECTION
 62-RU-01 RUSH, TAYLOR+ N.H4.CL/ N.H4.I/ N.H4.F/ N.H4.BR/ BENZENE/ TOLUENE/ MESITYLENE/ XYLENE ..EXPERIMENT/ TOTAL C
 63-JA-01 JANIK C.H4/ N.H4.I/ N.H4.CL/ N.H4.BR/ N.H4.S.O3.F ..SIGMA(E)/ SIGMA(E-PRIME,THETA)/ EXPERIMENT/ THE
 63-MI-02 MIKKE, KROH N.H4.CL/ N.H4.BR/ N.H4.F/ N.H4.N.O3 ..LATTICE DYNAMICS/ EXPERIMENT ..INVERTED FILTER METHOD
 63-VE-01 VENKATARAMAN, USHA+ N.H4.CL/ N.H4.BR ..EXPERIMENT
 64-VE-01 VENKATARAMAN, DENIZ+ N.H4.CL ..EXPERIMENT ..300, 228 AND 135DK
 65-BA-01 BAJOREK, MACHEKHINA+ N.H4.CL/ N.H4.BR/ N.H4.I/ N.H4.F/ N.H4.N.O3/ N.H4.C.N.S/ (N.H4)2.S.O4/ (N.H4)2.S2.O8/
 65-VE-01 VENKATARAMAN, DENIZ+ V/ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR6 ..EXPERIMENT/ ELASTIC SCA
 66-BR-02 BROECKER N.H4.CL/ N.H4.BR/ N.H4.I/ ZR-H/ TI-H ..SIGMA(E)/ EXPERIMENT/ CRYSTAL SPECTROMETER
 66-VE-04 VENKATARAMAN, DENIZ+ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR6 ..EXPERIMENT/ ROTATIONAL MOD
 68-CH-01 CHEN, DVORAK HEXAMETHYLENETETRAAMINE/ ADAMANTANE/ N.H4.CL ..THEORY/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS/ D
 68-LE-03 LEUNG, TAYLOR+ N.H4.F/ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.S.O4/ (N.H4)2.CR2.O7/ N.H4.CL.O4 ..EXPERIMENT/ TO
 69-PA-02 PARLINSKI N.H4.CL ..THEORY
 69-SM-01 SMITH, TRAYLOR+ N.H4.CL ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS ..TRIPLE-AXIS-SPECTROMETER
 69-TE-01 TEH, BROCKHOUSE+ N.H4.CL ..EXPERIMENT/ CONST.-0 METHOD/ LATTICE DYNAMICS/ DISPERSION RELATION ..DEUTERATED
 71-CO-03 COMLEY AMMONIUM CHLORIDE ..THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS
 71-JE-01 JEX N.H4.CL ..THEORY/ DISPERSION RELATION
 71-JE-02 JEX N.H4.CL ..THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION FUNCTION
 71-TE-01 TEH, BROCKHOUSE AMMONIUM CHLORIDE ..EXPERIMENT/ CRYSTAL SPECTROMETER/ DISPERSION RELATION
 72-KI-01 KIM, RAFIZADEH+ N.H4.CL ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ RIGID-MOLECULAR MODEL/ ORDERED PHA
 72-TH-01 THE N.H4.CL ..THEORY/ PHONON DISPERSION/ RIGID ION, SHELL MODEL/ FREQUENCY DISTRIBUTION
 73-MI-01 MICHEL N.H4.CL ..THEORY/ INCOHERENT APPROXIMATION ..XH4-TETRAHEDRON/ REORIENTATION AROUND 2 AND 3 FOLD
 73-SK-01 SKOELD, DAHLBORG N.H4.CL ..EXPERIMENT/ NEUTRON DIFFRACTION/ TOF/ SIGMA (THETA,E) ..STEPWISE REORIENTATION O
 73-SO-01 SOKOLOFF, LOVELUCK N.H4.BR/ N.H4.CL ..THEORY/ ORDER-DISORDER TRANSITION/ SIGMA (THETA,E) ..ORIENTATIONAL D
 73-TE-01 TEH, BROCKHOUSE N.H4.CL ..LATTICE DYNAMICS/ DISPERSION CURVE

- 74-IN-01 INOUE, KIYANAGI N.H4.CL/ N.H4.BR/ N.H4.I ..CALCULATION/ SCATTERING FORM FACTOR/ ONE-DIMENSIONAL ROTOR
 74-YE-02 YELON N.H4.CL ..EXPERIMENT/ PHASE TRANSITION/ CRITICAL SCATTERING
 76-NA-07 MATSUSHITA N.H4.CL/ N.H4.BR ..AMMONIUM HALIDE/ THEORY-IN-SOLIDS
4. 10 AMMONIUM CHLORIDE-POTASSIUM CHLORIDE N.H4.CL-K.CL
 74-KA-04 KAPLAN, MOSTOLLER CU-AL/ N.H4.CL-K.CL ..CALCULATIONS/ COHERENT-POTENTIAL APPROXIMATION/ PHONON DENSITY OF
4. 11 AMMONIUM CHLOROSTANNATE (N.H4)2.SN.CL6
 65-VE-01 VENKATARAMAN, DENIZ+ V/ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR6 ..EXPERIMENT/ ELASTIC SCA
 66-VE-04 VENKATARAMAN, DENIZ+ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR6 ..EXPERIMENT/ ROTATIONAL MOD
 77-PR-01 PRAGER, PRESS+ AMMONIUM CHLOROSTANNATE ..EXPERIMENT/ TUNNEL SPLITTING/ LIBRATIONAL STATES/ QUASI-ELASTIC S
4. 12 AMMONIUM CHROMATE (N.H4)2.CR.O4
 61-RU-01 RUSH, TAYLOR+ K.H2.P.O4/ (N.H4)2.CR.O4/ (N.H4)2.CR2.O7/ N.H4.C.N.S/ N.H4.CL.O4 ..EXPERIMENT/ MOLECULAR DYN
 62-RU-02 RUSH, SAFFORD+ N.H4.P.F6/ (N.H4)2.S2.O8/ (N.H4)2.CR.O4/ N.H4.S.O3.F/ DIMETHYLACETYLENE ..EXPERIMENT/ MOLEC
4. 13 AMMONIUM DICHROMATE (N.H4)2.CR2.O7
 61-RU-01 RUSH, TAYLOR+ K.H2.P.O4/ (N.H4)2.CR.O4/ (N.H4)2.CR2.O7/ N.H4.C.N.S/ N.H4.CL.O4 ..EXPERIMENT/ MOLECULAR DYN
4. 14 AMMONIUM DIHYDROGEN ORTHOARSENATE N.H4.H2.AS.O4
 73-DI-01 DIMIC, OSREDKAR+ N.H4.H2.P.O4/ N.H4.H2.AS.O4/ (N.H4)2.H3.I.O6 ..EXPERIMENT/ ROTATING CRYSTAL SPECTROMETER/
4. 15 AMMONIUM DIHYDROGEN ORTHOPHOSPHATE N.H4.H2.P.O4
 69-ME-01 MEISTER, SKALYO+ N.H4.H2.P.O4 ..EXPERIMENT/ SOLID ..QUASI-ELASTIC NEUTRON SCATTERING / TEMPERATURE DEPENDE
 72-AN-04 ANTONINI, SOSNOWSKA+ K.H2.P.O4/ N.H4.H2.P.O4 ..ELASTIC SCATTERING/ INTERFERENCE EFFECT/ PARAELECTRIC PHASE
 73-DI-01 DIMIC, OSREDKAR+ N.H4.H2.P.O4/ N.H4.H2.AS.O4/ (N.H4)2.H3.I.O6 ..EXPERIMENT/ ROTATING CRYSTAL SPECTROMETER/
4. 16 AMMONIUM DISULFATE (N.H4)2.S2.O8
 62-RU-02 RUSH, SAFFORD+ N.H4.P.F6/ (N.H4)2.S2.O8/ (N.H4)2.CR.O4/ N.H4.S.O3.F/ DIMETHYLACETYLENE ..EXPERIMENT/ MOLEC
 63-BR-01 BRAJOVIC, BOUTIN+ N.H4.P.F6/ N.H4.I/ (N.H4)2.S2.O8/ N.H4.S.O3.F ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAM
4. 17 AMMONIUM FLUOBERYLLATE (N.H4)2.BE.F4
 65-RU-02 RUSH, TAYLOR K4.FE.(C.N)6/ (N.H4)2.S.O4/ N.H4.H.S.O4/ (N.H4)2.BE.F4 ..EXPERIMENT/ MOLECULAR LATTICE DYNAMI
4. 18 AMMONIUM FLUORIDE N.H4.F

60-KU-01 RUSH, TAYLOR+ N.H3/ N.H4.1/ N.H4.BR/ N.H4.CL/ N.H4.F ..EXPERIMENT/ MOLECULAR DYNAMICS ..TOTAL CROSS SECTION
 62-RU-01 RUSH, TAYLOR+ N.H4.CL/ N.H4.1/ N.H4.F/ N.H4.BR/ BENZENE/ TOLUENE/ MESITYLENE/ XYLENE ..EXPERIMENT/ TOTAL C
 63-MI-02 MIKKE, KROH N.H4.CL/ N.H4.BR/ N.H4.F/ N.H4.N.O3 ..LATTICE DYNAMICS/ EXPERIMENT ..INVERTED FILTER METHOD
 65-BA-01 BAJOREK, MACHEKHINA+ N.H4.CL/ N.H4.BR/ N.H4.1/ N.H4.F/ N.H4.N.O3/ N.H4.C.N.S/ (N.H4)2.S.O4/ (N.H4)2.S2.O8/
 68-LE-03 LEUNG, TAYLOR+ N.H4.F/ N.H4.CL/ N.H4.BR/ N.H4.1/ (N.H4)2.S.O4/ (N.H4)2.CR2.O7/ N.H4.CL.O4 ..EXPERIMENT/ TO

4. 19 AMMONIUM FLUOSILICATE (N.H4)2.SI.F6

66-SC-01 SCHLEMPER, HAMILTON (N.H4)2.SI.F6 ..EXPERIMENT/ NEUTRON SPECTROSCOPY

4. 20 AMMONIUM FLUOSULFONATE N.H4.S.O3.F

62-RU-02 RUSH, SAFFORD+ N.H4.P.F6/ (N.H4)2.S2.O8/ (N.H4)2.CR.O4/ N.H4.S.O3.F/ DIMETHYLACETYLENE ..EXPERIMENT/ MOLEC
 63-BR-01 BRAJOVIC, BOUTIN+ N.H4.P.F6/ N.H4.1/ (N.H4)2.S2.O8/ N.H4.S.O3.F ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAM
 63-JA-01 JANIK C.H4/ N.H4.1/ N.H4.CL/ N.H4.BR/ N.H4.S.O3.F ..SIGMA(E)/ SIGMA(E-PRIME,THETA)/ EXPERIMENT/ THE

4. 21 AMMONIUM HEXAFLUOPHOSPHATE N.H4.P.F6

62-RU-02 RUSH, SAFFORD+ N.H4.P.F6/ (N.H4)2.S2.O8/ (N.H4)2.CR.O4/ N.H4.S.O3.F/ DIMETHYLACETYLENE ..EXPERIMENT/ MOLEC
 63-BR-01 BRAJOVIC, BOUTIN+ N.H4.P.F6/ N.H4.1/ (N.H4)2.S2.O8/ N.H4.S.O3.F ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAM
 64-JA-01 JANIK, JANIK+ C.H4/ C.H3.1/ DIMETHYLACETYLENE/ N.H4.CL.O4/ N.H4.P.F6/ H3.O.CL.O4/ DIMETHOXYAZOXYBENZENE

4. 22 AMMONIUM HYDROGEN SULFATE N.H4.H.S.O4

65-RU-02 RUSH, TAYLOR K4.FE.(C.N)6/ (N.H4)2.S.O4/ N.H4.H.S.O4/ (N.H4)2.BE.F4 ..EXPERIMENT/ MOLECULAR LATTICE DYNAMI

4. 23 AMMONIUM IODIDE N.H4.I

60-RU-01 RUSH, TAYLOR+ N.H3/ N.H4.1/ N.H4.BR/ N.H4.CL/ N.H4.F ..EXPERIMENT/ MOLECULAR DYNAMICS ..TOTAL CROSS SECTION
 62-RU-01 RUSH, TAYLOR+ N.H4.CL/ N.H4.1/ N.H4.F/ N.H4.BR/ BENZENE/ TOLUENE/ MESITYLENE/ XYLENE ..EXPERIMENT/ TOTAL C
 63-BR-01 BRAJOVIC, BOUTIN+ N.H4.P.F6/ N.H4.1/ (N.H4)2.S2.O8/ N.H4.S.O3.F ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAM
 63-JA-01 JANIK C.H4/ N.H4.1/ N.H4.CL/ N.H4.BR/ N.H4.S.O3.F ..SIGMA(E)/ SIGMA(E-PRIME,THETA)/ EXPERIMENT/ THE
 65-BA-01 BAJOREK, MACHEKHINA+ N.H4.CL/ N.H4.BR/ N.H4.1/ N.H4.F/ N.H4.N.O3/ N.H4.C.N.S/ (N.H4)2.S.O4/ (N.H4)2.S2.O8/
 65-MI-01 MIKKE, DOBRZYNSKI N.H4.1/ K.I ..FREQUENCY SPECTRA/ SOLID SOLUTION
 65-VE-01 VENKATARAMAN, DENIZ+ V/ N.H4.CL/ N.H4.BR/ N.H4.1/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BK6 ..EXPERIMENT/ ELASTIC SCA
 66-BR-02 BROECKER N.H4.CL/ N.H4.BR/ N.H4.1/ ZR-H/ TI-H ..SIGMA(E)/ EXPERIMENT/ CRYSTAL SPECTROMETER
 66-KO-05 KOSALY, SOLT C.H4/ N.H4.1 ..THEORY/ DIFFERENTIAL CROSS SECTION ..86DK FOR C.H4/ ROOM TEMP. FOR N.H4.I
 66-VE-04 VENKATARAMAN, DENIZ+ N.H4.CL/ N.H4.BR/ N.H4.1/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR6 ..EXPERIMENT/ ROTATIONAL MOD
 68-LE-03 LEUNG, TAYLOR+ N.H4.F/ N.H4.CL/ N.H4.BR/ N.H4.1/ (N.H4)2.S.O4/ (N.H4)2.CR2.O7/ N.H4.CL.O4 ..EXPERIMENT/ TO
 69-DU-01 DURIG, ANTION N.H4.1 ..SOLID/ EXPERIMENT ..RAMAN SPECTRA/ FAR INFRARED SPECTRA
 74-IN-01 INCUE, KIVANAGI N.H4.CL/ N.H4.BR/ N.H4.1 ..CALCULATION/ SCATTERING FORM FACTOR/ ONE-DIMENSIONAL ROTOR
 75-VA-01 VAGELATOS, ROWE+ N.H4.1 ..EXPERIMENT/ DISPERSION RELATION/ COHERENT INELASTIC NEUTRON SCATTERING/ LATTICE
 77-GO-02 GOEL, SHARMA+ N.H4.1 ..THEORY/ PHONON DISPERSION/ PHONON DENSITY OF STATES

4. 24 AMMONIUM NITRATE N.H4.N.O3

4. 32 APOPHYLLITE
64-B0-01 BOUTIN, SAFFORD+ BA.CL2/ CHABAZITE/ ANALCITE/ CU.S.04/ APOPHYLLITE/ WATER-BERYL ..EXPERIMENT/ TOF-SPECTRUM
4. 33 ARSENIC SULFIDE AS2.S3
76-KU-01 KUKHTO, MIKHAILOV+ AS2.S3/ AS2.S3 ..EXPERIMENT/ PHONON FREQUENCY SPECTRA
4. 34 BARIUM CHLORIDE BA.CL2
64-B0-01 BOUTIN, SAFFORD+ BA.CL2/ CHABAZITE/ ANALCITE/ CU.S.04/ APOPHYLLITE/ WATER-BERYL ..EXPERIMENT/ TOF-SPECTRUM
4. 35 BARIUM CHLORATE HYDRATE BA.(CL.O3)2*H2.O
69-TH-01 THAPER, SEQUEIRA+ K2.C2.O4*H2.O/ BA.(CL.O3)2*H2.O/ LI2.S.04*H2.O/ CA.S.04*2(H2.O)/ CU.CL2*2(H2.O)/ BE.S.04
70-TH-01 THAPER, DASANNACHARYA+ BA.(CL.O3)2*H2.O/ K2.C2.O4*H2.O ..EXPERIMENT/ HYDRATES/ LIBRATION OF H2.O IN HYDRAT
4. 36 BARIUM FLUOMANGANATE BA.MN.F4
76-SH-02 SHAPIRO, COWLEY+ BA.MN.F4 ..EXPERIMENT/ PHASE TRANSITION/ MAGNON DISPERSION
76-SH-03 SHAPIRO, COWLEY+ BA.MN.F4 ..EXPERIMENT/ PHASE TRANSITION/ MAGNON DISPERSION
77-BE-02 BECHTLE, SCOTT BA.MN.F4 ..EXPERIMENT ..PHASON BRANCH/ SOUND VELOCITY ANOMALLY/ BRILLOUIN TECHNIQUE
4. 37 BARIUM FLUORIDE BA.F2
70-DE-03 DENHAM, FIELD+ CA.F2/ SR.F2/ BA.F2/ CD.F2/ PB.F2 ..THEORY/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ DISPERSION
70-HU-01 HURRELL, MINKIEWICZ BA.F2 ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES/ SPECTRAL DENSITY ..SHELL MODE
72-KU-01 KUEHNER, WAGNER SR.F2/ BA.F2 ..THEORY/ PHONON DISPERSION/ GENERALIZED SHELL MODEL/ VIBRONIC SPECTRA
76-SH-03 SHAPIRO BA.F2/ PB.F2/ AG.1 ..EXPERIMENT/ STRUCTURE ANALYSIS/ PHONON DISPERSION/ DIFFUSIVE MOTION
76-TH-01 THOMAS BA.F2/ SR.F2 ..NEUTRON DIFFRACTION/ TEMPERATURE EFFECT
4. 38 BARIUM LEAD-BISMUTH OXIDE BA.(PB-BI).O3
76-CO-15 COX, SLEIGHT BA.(PB-BI).O3 ..STRUCTURAL STUDIES
4. 39 BARIUM MANGANESE FLUORIDE BA.MN.F4
4. 40 BARIUM NITRATE BA.(N.O3)2
75-BI-02 BICHILE, KULKARNI BA.(N.O3)2 ..EXPERIMENT/ SOLID/ LATTICE PARAMETER ..THERMAL EXPANSION
4. 41 BARIUM OXIDE BA.O

71-CA-01 CALTIER, MONTANER MG.O/ CA.O/ SR.O/ BA.O ..THEORY/ PHONON DISPERSION
 75-CH-01 CHANG, TOMPSON+ BA.O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING/ FREQUENCY SPECTRA/ DEBYE TEMPER
 76-PA-02 PANDEY, UPADHAYA BA.O ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERKSION RELATION/ FREQUENCY DISTRIBUTION ..TH

4. 42 BARIUM TITANATE BA.TI.O3

61-PE-01 PELAH, LEKOWITE BA.TI.O3 ..FERROELECTRICITY/ PARAELECTRICITY/ EXPERIMENT
 66-SO-01 SOLOVEV, KUKHTO+ SR.TI.O3/ BA.TI.O3/ PB.TI.O3 ..EXPERIMENT/ LATTICE VIBRATION ..POLYCRYSTAL/ ROOM TEMP/ 47
 67-SH-02 SHIRANE, FRAZER+ BA.TI.O3 ..EXPERIMENT/ LATTICE DYNAMICS
 69-CO-01 COCHRAN NEUTRON-SCATTERING-IN-SOLIDS/ BA.TI.O3/ K.H2.P.O4/ NA.N.O2 ..THEORY/ DIELECTRIC/ CRITICAL SCATT
 69-HU-02 HUELLER BA.TI.O3 ..THEORY/ LATTICE DYNAMICS/ PHASE TRANSITION ..SOFT OPTICAL MODE
 69-YA-02 YAMADA, SHIRANE BA.TI.O3 ..EXPERIMENT/ CRITICAL SCATTERING/ QUASI-ELASTIC SCATTERING ..OVERDAMPED PHONON M
 70-SH-08 SHIRANE, AXE+ BA.TI.O3 ..EXPERIMENT/ LATTICE DYNAMICS
 71-HA-04 HARADA, AXE+ BA.TI.O3 ..EXPERIMENT/ DISPERSION RELATION/ SOFT OPTIC PHONON/ TEMPERATURE CHANGE/ MODE INTERAC
 71-IS-01 ISHIBASHI, TAKAGI BA.TI.O3/ SR.TI.O3 ..THEORY/ CALCULATION/ FORCE CONSTAT ANALYSIS
 72-HA-02 HARADA BA.TI.O3 ..SOFT PHONON MODE/ EXPERIMENT/ PHASE TRANSITION
 72-IS-02 ISHIBASHI BA.TI.O3/ SR.TI.O3 ..THEORY/ FORCE CONSTANT

4. 43 BERYLLIUM FLUORIDE BE.F2

70-LE-01 LEADBETTER, WRIGHT BE.F2 ..INELASTIC SCATTERING/ COLD NEUTRON
 76-GI-03 GILLAN, LARSEN+ CU.CL/ BE.F2/ H.F ..THEORY/ LIQUID/ PAIR-DISTRIBUTION FUNCTION ..MEAN SPHERICAL MODEL/ MIX

4. 44 BERYLLIUM OXIDE BE.O

62-BR-04 BRUGGER BE/ BE.O/ GRAPHITE/ H2.O/ D2.O/ METHANE/ PROPANE/ TERPHENYL/ COMPILATIONS ..SCATTERING FUNCTION
 63-SI-01 SINCLAIR BE/ BE.O ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY DISTRIBUTION/ TOF ..293 DK
 64-HA-02 HAYWOOD, SINCLAIR GRAPHITE/ BE/ BE.O ..COMPILATION/ SCATTERING FUNCTION
 64-PR-01 PRYOR BE.O ..THEORY/ SOLID ..ELECTRICAL CONDUCTIVITY
 65-OT-01 OTTEWITTE BE.O ..EXPERIMENT ..NEUTRON DIFFRACTION MEASUREMENTS/ DEBYE PARAMETER
 66-AN-03 ANTUNEZ, BEYSTER+ BE.O/ H2.O/ D2.O/ ZR-H ..EXPERIMENT/ THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATI
 66-BE-01 BENTLE BE.O ..EXPERIMENT/ LATTICE DYNAMICS
 66-BE-06 BEYSTER, NEILL+ H2.O/ D2.O/ ZR-H/ GRAPHITE/ BE.O ..NEUTRON SPECTRUM/ COMPILATION/ LIQUID/ GAS
 66-BR-04 BRUGGER, STRONG+ BE.O ..EXPERIMENT/ DISPERSION RELATION/ ROTATING-CRYSTAL SPECTROMETER ..ROOM TEMPERATURE
 66-YO-01 YOUNG BE/ C/ BE.O ..SCATTERING FUNCTION/ THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DIS
 67-BR-03 BRUGGER, STRONG BE.O ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..RIGID ION
 68-BO-01 BORGONOV I BE.O ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION/ INFRARED REFLECTION/ RAMAN SPECTRAL SHIFTS/ S
 68-LO-01 LOH BE.O ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..RIGID ION
 68-OS-01 OSTHELLER, SCHMUNK+ BE.O ..EXPERIMENT/ 3-AXIS SPECTROMETER/ LATTICE DYNAMICS/ DISPERSION RELATION
 68-OS-02 OSTHELLER, SCHMUNK+ BE.O ..DISPERSION RELATION/ CRYSTAL SPECTROMETER/ LATTICE DYNAMICS/ EXPERIMENT/ SOLID/
 68-PA-01 PAGE, HAYWOOD H2.O/ D2.O/ GRAPHITE/ BE/ BE.O ..COMPILATION/ LIQUID/ SOLID/ FREQUENCY DISTRIBUTION ..AT VAR
 69-NU-01 NUSIMOVICI BE.O ..THEORY
 69-SC-02 SCHROEDER BE.O ..DEBYE-WALLER FACTOR/ FREQUENCY DISTRIBUTION/ SCATTERING LAW/ SIGMA(E)/ SIGMA(E-E-PRIME)/
 70-HE-01 HEWAT ZN.O/ RE.O ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVES

4. 45 CADMIUM FLUORIDE
CD.F2
70-DE-03 DENHAM, FIELD+ CA.F2/ SR.F2/ BA.F2/ CD.F2/ PB.F2 ..THEORY/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ DISPERSION
71-GO-01 GOBEAU, HEURET CD.F2 ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA
4. 46 CADMIUM IODIDE
CD.I2
77-VA-01 VAN-DER-VALK, HAAS PB.I2/ CD.I2/ SN.S2/ SN.SE2 ..THEORY/ SOLID/ LATTICE DYNAMICS ..POLARISABLE ION MODEL
4. 47 CADMIUM SULFIDE
CD.S
65-NU-01 NUSIMOVICI, BIRMAN CD.S ..LATTICE DYNAMICS
70-NU-01 NUSIMOVICI, BALKANSKI+ CD.S ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVES/ FREQUENCY SPECTRUM ..SEMI-IONIC
70-RA-02 RAMASESHAN, VISWANATHAN CD.S ..ANOMALOUS SCATTERING
4. 48 CALCITE
CA.C.O3
69-CO-07 COWLEY CALCITE/ CORUNDUM ..THEORY/ LATTICE DYNAMICS
71-PL-03 PLITHAL, SCHACK CA.C.O3 ..THEORY/ PHONON DISPERSION/ SHELL MODEL
73-CO-07 COWLEY, PANT CA.C.O3 ..DISPERSION RELATION/ INELASTIC NEUTRON SCATTERING
73-PL-01 PLITHAL CA.C.O3 ..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ SHELL MODEL
4. 49 CALCIUM FLUORIDE
CA.F2
63-CR-01 CRIBIER, FARNOUX+ CA.F2 ..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS
69-VI-01 VIJAYARAGHAVAN, IVENGAR CA.F2 ..EXPERIMENT/ PHONON DISPERSION
70-DE-03 DENHAM, FIELD+ CA.F2/ SR.F2/ BA.F2/ CD.F2/ PB.F2 ..THEORY/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ DISPERSION
70-EL-01 ELCOMBE, PRYOR CA.F2 ..EXPERIMENT/ 3-AXIS SPECTROMETER/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY S
71-EL-01 ELCOMBE, PRYOR CA.F2 ..EXPERIMENT/ PHONON DISPERSION
72-II-01 IIZUMI CA.F2
73-II-01 IIZUMI CA.F2 ..EXPERIMENT/ PHONON WIDTH/ TEMPERATURE EFFECT
4. 50 CALCIUM HYDROXIDE
CA.(O.H)2
63-SA-01 SAFFORD, BRAJOVIC+ MG.(O.H)2/ CA.(O.H)2 ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS
65-PE-02 PELAH, KREBS+ CA.(O.H)2/ MG.(O.H)2/ LI.O.H ..EXPERIMENT/ LATTICE DYNAMICS ..TOF
71-BA-02 BAJOREK, JANIK CALCIUM HYDROXIDE ..FREQUENCY DISTRIBUTION
4. 51 CALCIUM OXIDE
CA.O
71-CA-01 CALTIER, MONTANER MG.O/ CA.O/ SR.O/ BA.O ..THEORY/ PHONON DISPERSION
71-SA-02 SAUNDERSON, PECKHAM CA.O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING
71-SA-03 SAUNDERSON, PECKHAM CA.O ..EXPERIMENT/ DISPERSION CURVE/ NEUTRON SCATTERING/ THEORY/ FREQUENCY SPECTRUM ..T
72-UP-02 UPADHYAYA, SINGH CA.O ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
72-VI-01 VIJAYARAGHAVAN, MAHSONGKOHADI+ CA.O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING/ PHONON SPECTRA
75-UP-02 UPADHYAYA, SINGH CA.O/ SR.O ..THEORY/ LATTICE DYNAMICS/ THREE BODY FORCE SHELL MODEL/ PHONON DISPERSION/ D

- 75-UP-04 UPADHYAYA, SINGH CA, O/ SR, O ..THEORY/ LATTICE DYNAMICS/ THREE-BODY FORCE SHELL MODEL/ PHONON DISPERSION/ D
- 4, 52 CALCIUM SULFATE DIHYDRATE CA, S, O4*2(H2, O)
- 69-TH-01 THAPER, SEQUEIRA+ K2, C2, O4*H2, O/ BA, (CL, O3)2*H2, O/ LI2, S, O4*H2, O/ CA, S, O4*2(H2, O)/ CU, CL2*2(H2, O)/ RE, S, O4
- 4, 53 CARBON DIOXIDE C, O2
- 66-BA-02 BATA, KROO C, O2 ..EXPERIMENT ..NEUTRON SCATTERING/ DENSITY FLUCTUATION/ CRITICAL POINT
- 67-BA-04 BATA, KROO C, O2 ..CRITICAL SCATTERING
- 68-BA-04 BATA, KROO C, O2/ C, S2 ..EXPERIMENT ..CRITICAL SCATTERING
- 68-WA-02 WILMSLEY C, O2 ..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
- 71-SU-01 SUZUKI, SCHNEPP C, O2 ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..SPECIFIC HEAT
- 72-JA-01 JACOBI, SCHNEPP C, O2/ H2/ N2 ..THEORY/ LATTICE DYNAMICS ..QUADRUPOL-QUADRAPOL POTENTIAL
- 72-PO-03 POWELL, DOLLING+ C, O2 ..EXPERIMENT/ PHONON DISPERSION/ MODEL CALCULATION
- 75-BE-03 BERNEY C, O2 ..NEUTRON SCATTERING SPECTRUM
- 75-BE-04 BERNEY C, O2 ..CALCULATION/ SOLID
- 4, 54 CARBON DISULFIDE C, S2
- 68-BA-04 BATA, KROO C, O2/ C, S2 ..EXPERIMENT ..CRITICAL SCATTERING
- 75-GR-01 GROUT, LEECH+ C, S2/ CL ..THEORY/ LATTICE DYNAMICS/ SOLID
- 4, 55 CARBON OXIDE C, O
- 68-MI-01 MIKA, DORNER+ C, O ..EXPERIMENT/ CONST.-0 ..77,3DK FOR LIQUID/ 63,1DK FOR SOLID
- 69-SH-05 SHINODA, ENKIDO C, O ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
- 76-HA-01 HALL, JAMES C, O ..LATTICE DYNAMICS
- 4, 56 CARBON SUBOXIDE C3, O2
- 76-CL-02 CLARKE, DORE+ C3, O2 ..EXPERIMENT/ LIQUID STRUCTURE
- 4, 57 CARBON TETRACHLORIDE C, CL4
- 68-O--01 O'REILLY C, CL4/ C, H, CL3/ C6, H5, CL/ H, F/ H, CL/ N, H3/ H2, O ..CORRELATION FUNCTION/ MOLECULAR ROTATIONS/ LIQUID
- 68-RA-05 RAO C, CL4 ..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION
- 71-EG-01 EGELSTAFF, PAGE+ RB/ AR/ C, CL4 ..EXPERIMENT/ TRIPLET CORRELATION FUNCTION/ THEORY
- 71-EG-02 EGELSTAFF, PAGE+ C, CL4/ GE, BR4 ..EXPERIMENT/ MOLECULAR LIQUID DYNAMICS
- 76-BL-01 BLUM, NARTEN+ NEUTRON-SCATTERING-IN-FLUIDS/ C, CL4 ..THEORY/ NEUTRON DIFFRACTION/ LIQUID/ SCATTERIN FUNCTION
- 76-CL-03 CLARKE, DORE+ C, CL4/ SI, CL4/ TI, CL4/ GE, CL4/ SN, CL4/ SI, CL4-TI, CL4/ SN, CL4-TI, CL4 ..LIQUID STRUCTURE/ NEUTR
- 4, 58 CARBON TETRAFLUORIDE C, F4
- 52-PO-01 POPE C, H4/ C, F4 ..MOLECULAR DYNAMICS/ THEORY

65-CH-02 CHEN, EDER+ NEON/ ARGON/ CARBON TETRAFLUORIDE ..EXPERIMENT/ LIQUID/ SIGMA(THETA.E)
 68-FO-03 FOURNIER, SAVOIE+ C.F4 ..FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID/ SOLID ..70DK/ 125DK/ INFRA-RED/ RAMAN

4. 59 CESIUM AZIDE

CS.N3

69-GO-01 GOVINDARAJAN, HARIDASAN K.N3/ R8.N3/ CS.N3 ..THEORY/ LATTICE VIBRATION ..RIGID ION MODEL/ BODY CENTERED TE

4. 60 CESIUM CHLORIDE

CS.CL

68-KA-04 KARO, HARDY CS.CL/ CS.BR/ CS.1 ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..R
 68-WA-03 WARREN CS.CL/ MG ..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY PROPERTIES/ SPACE GROUP/ IRREDUCIBLE REP
 69-SA-03 SAFFORD, LEUNG+ H2.O/ LA.CL3/ CS.1/ CS.CL/ K.1/ K.BR/ K.CL/ NA.CL ..EXPERIMENT/ TOF SPECTRA/ INTERMOLECULA
 70-VE-03 VETELINO, MITRA+ CS.CL/ CS.BR/ CS.1 ..THEORY/ DISPERSION CURVES ..RIGID ION MODEL/ BORN-MAYER FORCE/ GRUNE
 71-MA-03 MAHLER, SCHROEDER CS.BR/ CS.CL ..THEORY/ PHONON DISPERSION
 72-AH-01 AHMAD, SMITH+ CS.CL ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ FREQUENCY SPECTRUM
 72-CA-01 CARABATOS, PREVOT CS.CL/ CS.BR/ CS.1 ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DIS
 72-LA-03 LAL, VERMA CS.CL/ CS.BR/ CS.1 ..CALCULATION/ PHONON DISPERSION/ THREE BODY FORCE SHELL MODEL
 72-RA-03 RAM, AGRAWAL CS.CL ..THEORY/ LOCALIZED MODE/ GAP MODE/ H, D, K IMPURITY
 73-VE-03 VETELINO, NAMJOSHI+ CS.CL/ CS.BR/ CS.1 ..THEORY/ PHONON DISPERSION/ MODIFIED-RIGID-ION MODEL

4. 61 CESIUM BROMIDE

CS.BR

68-KA-04 KARO, HARDY CS.CL/ CS.BR/ CS.1 ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..R
 70-DA-01 DAUBERT CS.BR ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..TOF/ PSEUDOSTATISTICAL CHOPPER/ 300
 70-VE-03 VETELINO, MITRA+ CS.CL/ CS.BR/ CS.1 ..THEORY/ DISPERSION CURVES ..RIGID ION MODEL/ BORN-MAYER FORCE/ GRUNE
 71-MA-03 MAHLER, SCHROEDER CS.BR/ CS.CL ..THEORY/ PHONON DISPERSION
 71-RO-01 ROLANDSON, RAUNIO CS.BR ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING/ PHONON DENSITY/ DEBYE-TEMP,
 71-RO-03 ROLANDSON, RAUNIO CS.BR ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING/ PHONON DENSITY/ DEBYE-TEMP,
 72-CA-01 CARABATOS, PREVOT CS.CL/ CS.BR/ CS.1 ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DIS
 72-DA-03 DAUBERT CS.BR ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING
 72-LA-03 LAL, VERMA CS.CL/ CS.BR/ CS.1 ..CALCULATION/ PHONON DISPERSION/ THREE BODY FORCE SHELL MODEL
 73-VE-03 VETELINO, NAMJOSHI+ CS.CL/ CS.BR/ CS.1 ..THEORY/ PHONON DISPERSION/ MODIFIED-RIGID-ION MODEL
 74-VE-01 VETELINO, ROY+ CS.BR ..THEORY/ SECOND GRUENEISEN CONSTANT/ MODIFIED RIGID ION MODEL/ PRESSURE DEPENDENT LA

4. 62 CESIUM DIHYDROGEN PHOSPHATE

CS.H2,P.O4

77-SE-01 SEMMINGSSEN, ELLENSON CS.H2.P.O4 ..QUASI-ELASTIC DIFFUSE SCATTERING/ PHASE TRANSITION

4. 63 CESIUM FLUOMANGANATE

CS2,MN.F6

76-CH-07 CHODOS, BLACK+ CS2,MN.F6/ K2.SI.F6/ RB2.SI.F6/ CS2.SI.F6/ K2.GE.F6 ..EXPERIMENT/ THEORY/ DISPERSION RELATIO

4. 64 CESIUM FLUORIDE

CS.F

73-BU-01 BUEHER CS.F ..EXPERIMENT/ PHONON DISPERSION/ SEVEN PARAMETER SHELL MODEL FITTING/ PHONON SPECTRA/ HEAT
 74-GU-01 GUPTA CS.F ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..THREE-BODY FORCE SHELL MODEL

- 75-SI-08 SINGH, AGARWAL CS.F ..PHONON DISPERSION RELATION/ SHELL MODEL/ THEORY
76-AG-01 AGARWAL CESIUM FLUORIDE ..THEORY/ DISPERSION RELATION/ SOLID ..THREE-BODY-FORCE SHELL MODEL
4. 65 CESIUM FLUOSILICATE CS2.SI.F6
76-CH-07 CHODOS, BLACK+ CS2,MN.F6/ K2.SI.F6/ RB2.SI.F6/ CS2.SI.F6/ K2.GE.F6 ..EXPERIMENT/ THEORY/ DIPERSION RELATIO
4. 66 CESIUM HYDROGEN BROMIDE CS.H.BR2
73-SM-02 SMITH, TEMME+ NA.H.F2/ K.H.F2/ CS.H.CL2/ CS.H.BR2 ..EXPERIMENT/ FREQUENCY SPECTRA/ TOF SPECTRA
4. 67 CESIUM HYDROGEN CHLORIDE CS.H.CL2
70-CO-02 COLLINS, HAYWOOD+ K.H.F2/ CS.H.CL2/ NA.H.C.O3/ K.C2.CL3.O2/ K.C2.F3.O2 ..EXPERIMENT/ MOLECULAR DYNAMICS/ F
70-ST-01 STIRLING, LUDMAN+ CS.H.CL2 ..EXPERIMENT/ MOLECULAR DYNAMICS/ FREQUENCY SPECTRA ..COLD NEUTRON SOURCE
72-GH-02 GHOSH, WADDINGTON+ NA.H.F2/ CS.H.CL2/ H.CR.O2/ H.CO.O2/ K.H.(C.CL3.C.O2)2 ..EXPERIMENT/ NEUTRON SPECTROSCO
73-SM-02 SMITH, TEMME+ NA.H.F2/ K.H.F2/ CS.H.CL2/ CS.H.BR2 ..EXPERIMENT/ FREQUENCY SPECTRA/ TOF SPECTRA
4. 68 CESIUM HYDROSULFIDE CS.S.H
73-RO-02 ROWE, LIVINGSTON+ CS.S.H/ RB.S.H ..EXPERIMENT/ QUASI-ELASTIC PEAK/ MOLECULAR ROTATIONS/ MEAN SQUARE DISPLA
73-RU-02 RUSH, DE-GRAFF+ NA.S.H/ CS.S.H ..THEORY/ EXPERIMENT/ QUASI-ELASTIC PEAK/ SIGMA (THETA.E) ..SH-ION LIBRATIO
4. 69 CESIUM IODIDE CS.I
68-KA-04 KARO, HARDY CS.CL/ CS.BR/ CS.I ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..R
69-SA-03 SAFFORD, LEUNG+ H2.O/ LA.CL3/ CS.I/ CS.CL/ K.I/ K.BR/ K.CL/ NA.CL ..EXPERIMENT/ TOF SPECTRA/ INTERMOLECULA
70-VE-03 VETELINO, MITRA+ CS.CL/ CS.BR/ CS.I ..THEORY/ DISPERSION CURVES ..RIGID ION MODEL/ BORN-MAYER FORCE/ GRUNE
71-BU-01 BUHRER, HALG CS.I ..PHONON DISPERSION
72-AG-01 AGRAWAL, RAM CS.I ..THEORY/ IMPURITY EFFECT/ LATTICE DYNAMICS
72-CA-01 CARABATOS, PREVOT CS.CL/ CS.BR/ CS.I ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DIS
72-LA-03 LAL, VERMA CS.CL/ CS.BR/ CS.I ..CALCULATION/ PHONON DISPERSION/ THREE BODY FORCE SHELL MODEL
73-VE-03 VETELINO, NAMJOSHI+ CS.CL/ CS.BR/ CS.I ..THEORY/ PHONON DISPERSION/ MODIFIED-RIGID-ION MODEL
4. 70 CESIUM LEAD CHLORIDE CS.PB.CL3
73-YA-01 YAMADA, FUJII+ CS.PB.CL3 ..EXPERIMENT/ PHASE TRANSITION/ SOFT MODE
76-HA-06 HARADA, SAKATA+ CS.PB.CL3 ..NEUTRON DIFFRACTION/ STRUCTURE ANALYSIS
4. 71 CESIUM NICKEL FLUORIDE CS.NI.F3
76-DO-03 DORNER, STEINER CS.NI.F3 ..EXPERIMENT/ PHONON DISPERSION
76-ST-04 STEINER CS.NI.F3 ..EXPERIMENT/ SPIN WAVE

4. 72	CESIUM URANIUM BROMIDE	CS2.U.BR6	
71-CH-04	CHODOS	CS2.U.BR6 ..THEORY/ PHONON DISPERSION	
72-CH-03	CHODOS	CS2.U.BR6 ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION	
4. 73	CHABAZITE	CHABAZITE	
64-80-01	BOUTIN, SAFFORD+	BA.CL2/ CHABAZITE/ ANALCITE/ CU.S.O4/ APOPHYLLITE/ WATER-BERYL ..EXPERIMENT/ TOF-SPECTRUM	
4. 74	CHALCOPYRITE	CU.FE.S2	
75-PO-02	POPLAVNOI, TYUTEPEV	CU.FE.S2 ..CALCULATION/ PHONON SPECTRUM/ HARD ION MODEL	
4. 75	CHROMIUM(3) ACID	H.CR.O2	
66-RU-02	KUSH, FERRARO	H.CR.O2 ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ MOLECULAR CRYSTAL DYNAMICS ..TOF/ H.CR.O2 AND	
72-GH-02	GHOSH, WADDINGTON+	NA.H.F2/ CS.H.CL2/ H.CR.O2/ H.CO.O2/ K.H.(C.CL3.C.O2)2 ..EXPERIMENT/ NEUTRON SPECTROSCO	
4. 76	CHROMIUM SESQUIOXIDE	CR2.O3	
4. 77	CINNABAR	HG.S	
73-NU-01	MUSIMOVICI, GORRE	HG.S ..THEORY/ PHONON DISPERSION/ VELOCITY OF SOUND	
4. 78	COBALT(3) ACID	H.CO.O2	
72-GH-02	GHOSH, WADDINGTON+	NA.H.F2/ CS.H.CL2/ H.CR.O2/ H.CO.O2/ K.H.(C.CL3.C.O2)2 ..EXPERIMENT/ NEUTRON SPECTROSCO	
4. 79	COBALT CHLORIDE	CO.CL2	
77-CA-03	CARRARA, REDOULES	CO.CL2 ..EXPERIMENT/ DISPERSION RELATION ..3-AXIS SPECTROMETER	
4. 80	COBALT CHLORIDE DIHYDRATE	CO.CL2*2(H2.O)	
4. 81	COBALT FLUORIDE	CO.F2	
68-MA-05	MARTEL, COWLEY+	CO.F2 ..EXPERIMENT/ CONSTANT-Q METHOD/ DISPERSION RELATION ..800K/ 4.20K/ RIGID ION MODEL	
4. 82	COBALT HYDROGEN CARBONYL	H.CO.(C.O)4	

- 72-WH-03 WHITE, WRIGHT H.CO.(C.O)4/ H2.FE.(C.O)4/ H.MN.(C.O)5/ K.H.FE.(C.O)4/ H3.MN3.(C.O)12/ CS.H.FE3.(C.O)11 .,EX —
4. 83 COBALT OXIDE CO.O
 68-SA-02 SAKURAI, BUYERS+ CO.O ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION ..3-AXIS SPECTROMETER/ 4250K/ 11
 72-UP-01 UPADHYAYA, SINGH CO.O ..THEORY/ PHONON DISPERSION/ THREE-BODY FORCE SHELL MODEL
 74-UP-01 UPADHYAYA, SINGH MN.O/ CO.O/ NI.O ..THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS ..THREE-BODY FORCE SHELL
 77-GO-07 GOYAL, GOYAL CO.O/ NI.O ..THEORY/ FREQUENCY SPECTRUM
4. 84 COBALT PHOSPHIDE CO.P
4. 85 COBALT PHOSPHIDE CO4.P
4. 86 COBALT SULFIDE CO.S2
 76-OH-01 OHSAWA, YAMAGUCHI+ CO.S2 ..POLARIZED NEUTRON DIFFRACTION
 76-OH-02 OHSAWA, YAMAGUCHI+ CO.S2 ..NEUTRON DIFF./ POLARIZED NEUTRON
4. 87 COPPER BROMIDE CU.BR
 73-PR-03 PREVOT, CARABATOS+ CU.BR ..DISPERSION CURVE
 74-PA-06 PANDEY, DAYAL CU.BR/ CU.I ..DISPERSION-CURVES
 76-BU-01 BUEHRER AG.I/ CU.I/ CU.BR ..NEUTRON DIFF./ SUPERIONIC CONDUCTOR
 76-HA-03 HARADA, SUZUKI+ CU.BR ..NEUTRON DIFFRACTION/ ANHARMONIC EFFECT/ DEBYE-WALLER FACTOR
 76-HO-03 HOSHINO, FUJII+ CU.BR ..EXPERIMENT/ PHONON DISPERSION/ 77K
4. 88 COPPER CHLORIDE DIHYDRATE CU.CL2*2(H2.O)
 69-TH-01 THAPER, SEQUEIRA+ K2.C2.O4*H2.O/ BA.(CL.O3)2*H2.O/ LI2.S.O4*H2.O/ CA.S.O4*2(H2.O)/ CU.CL2*2(H2.O)/ BE.S.O4
 77-LY-01 LYNN, HELLER+ CU.CL2*2(H2.O) ..NEUTRON DIFFRACTION/ MAGNETIC STRUCTURE
4. 89 COPPER IODIDE CU.I
 72-HE-02 HENNION, MOUSSA CU.I ..EXPERIMENT/ DISPERSION RELATION/ RIGID ION MODEL/ FREQUENCY DISTRIBUTION/ ELASTIC C
 74-PA-06 PANDEY, DAYAL CU.BR/ CU.I ..DISPERSION-CURVES
 76-BU-01 BUEHRER AG.I/ CU.I/ CU.BR ..NEUTRON DIFF./ SUPERIONIC CONDUCTOR
 77-AL-01 ALBEN, BURNS SILVER IODIDE/ COPPER IODIDE ..EXPERIMENT/ HARMONIC LATTICE-DYNAMICS/ DENSITY OF STATES/ INFR
 77-HA-03 HAXTON CU.I ..PHONON SPECTRA/ DISPERSION CURVE/ SECOND NEIGHBOR IONIC MODEL
4. 90 COPPER MANGANESE OXIDE CU.MN2.O4
 77-RA-01 RADHAKRISHNAN, BISWAS CU.MN2.O4 ..NEUTRON DIFFRACTION/ OXYGEN PARAMETER

4, 91	COPPER SULFATE	CU.S.O4
64-80-01	BOUTIN, SAFFORD+	BA.CL2/ CHARAZITE/ ANALCITE/ CU.S.O4/ APOPHYLLITE/ WATER-BERYL ..EXPERIMENT/ TOF-SPECTRUM
4, 92	CORUNDUM	AL2.O3
69-CO-07	COWLEY	CALCITE/ CORUNDUM ..THEORY/ LATTICE DYNAMICS
74-CA-04	CATALIOTTI	CORUNDUM ..PHONON-SPECTRUM
75-81-01	BIALAS, STOLZ	CORUNDUM ..EXPERIMENT/ PHONON DISPERSION/ SAPPHIRE
75-KA-05	KAPPUS	CORUNDUM ..CALCULATION/ PHONON DISPERSION/ RIGID ION MODEL/ SAPPHIRE
4, 93	CRISTOBALITE	SI.O2
69-LE-01	LEADBETTER	SILICA/ QUARTZ/ CRISTOBALITE ..EXPERIMENT/ COLLECTIVE VIBRATION/ AMORPHOUS SOLID ..TOF/ SILICA/
72-LE-02	LEADBETTER, STRINGFELLOW	SI.O2 ..EXPERIMENT/ VITREOUS SILICA/ ALPHA QUARTZ/ PHONON SPECTRA
74-ET-01	ETCHEPARE, MERIAN+	SI.O2 ..THEORY/ NORMAL MODE/ COMPARED TO OPTICAL DATA
75-B1-03	BILIR, PHILLIPS	SI.O2 ..EXPERIMENT/ DISPERSION RELATION ..20K-200K/ AMORPHOUS/ SPECIFIC HEAT
77-LA-02	LAUGHLIN, DOANNOPOULOS	SI.O2 ..THEORY/ LATTICE VIBRATION/ AMORPHOUS SILICA/ PHONON DENSITY/ CLUSTER-BETHE-
4, 94	CUPRITE	CU2.O
71-CA-03	CARABTOS, PREVOT	CU2.O ..THEORY/ PHONON DISPERSION/ RIGID ION MODEL/ PHONON SPECTRUM
73-DA-01	DAWSON, HARGREAVE+	CU2.O ..I.R. AND RAMAN EXPERIMENT
76-BE-01	BEG, SHAPIRO	CU2.O ..EXPERIMENT/ DISPERSION RELATION/ SOLID/ TRIPLE AXIS SPECTROMETER
4, 95	CUPROUS CHLORIDE	CU.CL
71-CA-02	CARARATOS, HENNION+	CU.CL ..EXPERIMENT/ PHONON DISPERSION CURVES/ ROOM TEMP.
74-PA-05	PANDEY	CU.CL ..THEORY/ SOLID/ ..RIGID ION MODEL
75-VA-02	VARDENY, GILAT+	CU.CL ..SOLID/ THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS ..BREATHING SHELL MODEL/ RIGI
76-G1-03	GILLAN, LARSEN+	CU.CL/ BE.F2/ H.F ..THEORY/ LIQUID/ PAIR-DISTRIBUTION FUNCTION ..MEAN SPHERICAL MODEL/ MIX
77-PR-03	PREVOT, HENNION+	CU.CL ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING/ PHONON DENSITY
4, 96	DEUTERIUM PEROXIDE	D2.O2
76-TR-01	TREVINO, FARR+	D2.O2 ..EXPERIMENT/ PHONON DISPERSION
4, 97	DICARBON HEXAFLUORIDE	C2.F6
67-CA-03	CARPENTER	C2.F6/ BR2 ..SCATTERING LAW/ CORRELATION FUNCTION/ THEORY/ GAS/ MOLECULAR DYNAMICS ..TORSIONAL
68-CA-02	CARPENTER, SCHAEFFR	BR/ C2.F6 ..SCATTERING THEORY
68-CA-03	CARPENTER, LURIE	C2.F6/ C.H4 ..EXPERIMENT/ GAS/ SCATTERING FUNCTION

4. 98	DYSPROSIUM PHOSPHATE	DY.P.O4	..EXPERIMENT/ SOLID ..TWO-AXIS DIFFRACTOMETER/ ISING/ ANTIFERROMAGNET/ TRICRITICAL
75-SH-01	SHIBUYA, KNORR		
4. 99	DYSPROSIUM VANADATE	DY.V.O4	
72-ME-01	MELCHER, SCOTT	DY.V.O4	..EXPERIMENT/ ELASTIC CONSTANT/ SOFT MODE/ MEAN FIELD THEORY/ CRITICAL FLUCTUATION
4.100	ERBIUM CHROMIUM OXIDE	ER.CR.O3	
77-SH-01	SHAWIR, MELAMUD+	PR.CR.O3/ ND.CR.O3/ TB.CR.O3/ HO.CR.O3/ ER.CR.O3	..EXPERIMENT/ MAGNETIC SCATTERING / R.CR
4.101	ERBIUM IRON OXIDE	ER.FE.O3	
4.102	EUROPIUM OXIDE	EU.O	
76-AL-06	ALS-NIELSEN, DIETRICH	EU.O/ EU.S	..EXPERIMENT/ MAGNETIC CRITICAL SCATTERING
76-DI-01	DIETRICH, ALS-NIELSEN+	EU.O	..EXPERIMENT/ THEORY/ MAGNETIC SCATTERING/ SPIN DYNAMICS
76-PA-06	PASSELL, DIETRICH+	EU.O/ EU.S	..EXPERIMENT/ MAGNON DISPERSION
4.103	EUROPIUM SULFIDE	EU.S	
76-AL-06	ALS-NIELSEN, DIETRICH	EU.O/ EU.S	..EXPERIMENT/ MAGNETIC CRITICAL SCATTERING
76-PA-06	PASSELL, DIETRICH+	EU.O/ EU.S	..EXPERIMENT/ MAGNON DISPERSION
4.104	GADOLINIUM MOLYBDATE		
4.105	GALLIUM PHOSPHIDE	GA.P	
68-YA-01	YARNELL, WARREN+	GA.P	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
68-YA-02	YARNELL, WARREN+	GA.P	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ 3-AXIS SPECTROMETER/ SHELL MODE
71-BA-05	BANERJEE, VARSHNI	ZN.S/ GA.P/ SI.C	..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA/ DEBYE TEMPERATURE
75-KU-04	KUNC, BALKANSKI+	ZN.S/ ZN.SE/ GA.P/ GA.AS/ IN.SB/ SI.C/ CU.CL/ CU.I	..PHONON DISPERSION/ DENSITY OF PHONON
76-KU-03	KUNC, BILZ	ZN.SE/ ZN.O/ GA.P/ GA.AS/ GA.SB	..CALCULATION/ SHELL MODEL/ PHONON DISPERSION
77-WE-04	WEINSTEIN	ZN.TE/ ZN.SE/ ZN.S/ SI/ GA.P	..RAMAN SPECTRA/ METALLIC PHASE TRANSITION/ PHONON DISPERSION RELA
4.106	GALLIUM PHOSPHIDE-ARSENIDE	GA.(P-AS)	
75-VA-03	VARSHNEY, VETELINO+	ZN.(S-SE)/ GA.(P-AS)	..THEORY/ MIXED CRYSTAL/ PHONON DISPERSION/ STATE DENSITY
4.107	GALLIUM SESQUISULFIDE	GA2.S3	

75-FJ-03	FINKMAN, TAUC+	IN2, TE3/ GA2, SE3/ GA2, S3	..INFRARED, RAMAN SPECTRA/ DEFECT STRUCTURE/ DISPERSION CURVES
4.108	GERMANIUM SULFIDE	GE, S	
76-KR-02	KRESS, FREY+	GE, S	..EXPERIMENT/ PHONON DISPERSION
4.109	GERMANIUM TETRABROMIDE	GE, BR4	
71-EG-02	EGELSTAFF, PAGE+	C, CL4/ GE, BR4	..EXPERIMENT/ MOLECULAR LIQUID DYNAMICS
4.110	GERMANIUM TETRACHLORIDE	GE, CL4	
76-CL-03	CLARKE, DORE+	C, CL4/ SI, CL4/ TI, CL4/ GE, CL4/ SN, CL4/ SI, CL4-TI, CL4/ SN, CL4-TI, CL4	..LIQUID STRUCTURE/ NEUTR
4.111	HAFNIUM CARBIDE	HF, C	
70-SM-01	SMITH, GLAESER	TA, C/ HF, C	..EXPERIMENT/ DISPERSION RELATION
71-SM-01	SMITH, GLAESER	TA, C/ HF, C/ NB, C	..EXPERIMENT/ PHONON DISPERSION/ SUPERCONDUCTIVITY
72-MO-02	MOSTOLLER	U, C/ HF, C/ TA, C/ NB, C	..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH
73-WE-01	WEBER	TI, C/ ZR, C/ HF, C	..THEORY/ SOLID/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS
75-VE-01	VERMA, GUPTA	TA, C/ HF, C	..THEORY/ DISPERSION RELATION/ SOLID
76-GU-01	GUPTA, FREEMAN	ZR, C/ HF, C/ NB, C/ TA, C	..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ APW ENERGY BAND CALCULA
76-GU-03	GUPTA, FREEMAN	NB, C/ TA, C/ ZR, C/ HF, C	..THEORY/ PHONON ANOMALY/ GENERALIZED SUSCEPTIBILITY
76-KL-01	KLEIN, ROYER+	TA, C/ NB, C/ HF, C	..APW MUFFIN-TIN CALCULATION/ FERMI SURFACE/ PHONON FREQUENCY
4.112	HEAVY WATER	D2, O	
55-JA-01	JACROT, NETTER+	GRAPHITE/ H2, O/ D2, O	..EXPERIMENT/ LIQUID/ SOLID
58-BR-02	BROCKHOUSE	H2, O/ D2, O	..EXPERIMENT
59-BR-04	BROCKHOUSE	H2, O/ D2, O	..SCATTERING LAW/ EXPERIMENT
60-LA-01	LARSSON, HOLMRYD+	H2, O/ D2, O	..EXPERIMENT/ FREQUENCY DISTRIBUTION
61-EG-01	EGELSTAFF, COCKING+	H2, O/ D2, O/ PB	..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION
61-GI-01	GISSLER, REINSCH+	D2, O	..EXPERIMENT/ THEORY/ SIGMA(E)
61-LA-01	LARSSON, HOLMRYD+	H2, O/ D2, O	..EXPERIMENT
61-MI-01	MIKKE	H2, O/ D2, O	..EXPERIMENT
61-WH-01	WHITEMORE, MCREYNOLDS	H2, O/ D2, O	..EXPERIMENT
61-WO-01	WOODS, BROCKHOUSE+	GRAPHITE/ H2, O/ D2, O/ ZR, H/ LI, H/ NA, H/ N, H4, CL	..EXPERIMENT/ CRYSTAL SPECTROMETER/ FRE
62-BR-02	BRUGGER	METHANE/ H2, O/ D2, O/ PROPANE	..THEORY/ EXPERIMENT/ SCATTERING FUNCTION
62-BR-04	BRUGGER	BE/ SE, O/ GRAPHITE/ H2, O/ D2, O/ METHANE/ PROPANE/ TERPHENYL/ COMPIATIONS	..SCATTERING FUNCTION
62-EG-04	EGELSTAFF	H2, O/ D2, O/ GRAPHITE/ BE	..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ THEORY
62-HA-01	HAYWOOD, THORSON	H2, O/ D2, O	..EXPERIMENT/ SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION
62-HO-01	HONECK	D2, O	..SIGMA(E)
62-LA-01	LARSSON, DAHLROG	H2, O/ D2, O	..EXPERIMENT/ LIQUID DYNAMICS
63-BU-01	BUTLER	D2, O	..LIQUID/ THEORY/ SIGMA (E)
63-BU-02	BUTLER	D2, O	..LIQUID/ THEORY/ SCATTERING LAW
63-GI-02	GISSLER	D2, O	..THEORY/ EXPERIMENT/ SIGMA(E)

63-LA-01 LARSSON, DAHLBORG D2.O/ GLYCELINE/ H2.O ..EXPERIMENT/ LIQUID/ FREQUENCY DISTRIBUTION/ TOF ..278, 295, 368,
64-DA-01 DAHLBORG, GROSSHOEG+ H2.O/ D2.O
64-HA-01 HAYWOOD D2.O ..LIQUID/ EXPERIMENT/ SCATTERING LAW
64-LA-01 LARSSON, DAHLBORG H2.O/ D2.O/ PENTANE/ GLYCELINE ..EXPERIMENT/ LIQUID/ FREQUENCY DISTRIBUTION
64-MA-03 MATESCU, TEUTSH+ D2.O ..LIQUID/ SOLID/ EXPERIMENT/ FREQUENCY DISTRIBUTION / SIGMA (E,E-PRIME,THETA)/ DIFF
64-SP-01 SPRINGER, HOFMYER+ H2.O/ D2.O/ PHENYL/ ZR-H ..EXPERIMENT/ LIQUID/ DIFFUSION PARAMETER ..AVE-MU
64-ST-01 STEHN, GOLDBERG+ H/ D/ H2.O/ D2.O/ HE/ LI/ BE/ GRAPHITE/ N/ O/ NE/ NA/ MG/ AL/ SI/ AR/ K/ COMPILATIONS ..S
64-TE-01 TEUTSCH, MATESCU+ H2.O/ D2.O ..LIQUID/ EXPERIMENT/ NEUTRON SCATTERING
65-BE-01 BEYSTER, KOPPEL D2.O/ H2.O/ POLYETHYLENE/ BE ..THEORY/ EXPERIMENT/ LIQUID/ SOLID/ CROSS SECTION EVALUATION
65-BE-02 BEYSTER, YOUNG+ H2.O/ D2.O/ ZR-H ..EXPERIMENT/ DIFFUSION PARAMETER ..AVE-MU
65-KO-01 KOPPEL, YOUNG D2.O ..LIQUID/ THEORY/ SIGMA (E)/ SIGMA (THETA,E)/ SCATTERING LAW/ NEUTRON SPECTRUM
65-KO-02 KORNICHLER D2.O/ ZR-H ..EXPERIMENT/ LIQUID/ DIFFUSION PARAMETER
65-YO-01 YOUNG, KOPPEL BE/ C/ H2.O/ D2.O/ C.H2/ H2/ D2 ..THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATION
66-AN-03 ANTUNEZ, BEYSTER+ BE/ O/ H2.O/ D2.O/ ZR-H ..EXPERIMENT/ THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATI
66-BE-06 BEYSTER, NEILL+ H2.O/ D2.O/ ZR-H/ GRAPHITE/ BE.O ..NEUTRON SPECTRUM/ COMPILATION/ LIQUID/ GAS
66-MC-02 MCMURRY D2.O ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ FREQUENCY SPECTRUM / SIGMA(E)/ SIGMA-TRANSPORT(E)/ S
66-SU-01 SUICH D2.O ..NEUTRON SPECTRUM
66-WH-01 WHITEMORE D2.O/ GRAPHITE ..EXPERIMENT/ SCATTERING FUNCTION ..24DC
66-WH-02 WORDEN, PURCELL+ H2.O/ D2.O/ GRAPHITE ..NEUTRON SPECTRUM/ SIGMA(E,E-PRIME)
67-GL-01 GLAESER REVIEW-ARTICLES/ H2.O/ ZR-H/ GRAPHITE/ D2.O/ BE/ BE.O ..INCOHERENT APPROXIMATION/ MULTIPLE SCATT
67-KA-01 KADOTANI, IJIMA D2.O ..THEORY/ PHONON SPECTRUM/ SCATTERING FUNCTION/ 295,423DK
67-MC-01 MCMURRY H2.O/ D2.O ..SIGMA(E-E-PRIME)/ COMPILATION
67-WH-01 WHITEMORE D2.O/ H/ GRAPHITE ..CROSS SECTION EVALUATION/ LIQUID/ SOLID/ EXPERIMENT/ SCATTERING FUNCTION
68-GL-01 GLAESER H2.O/ ZR-H/ GRAPHITE/ D2.O/ BE/ BE.O ..COMPILATION/ SCATTERING FUNCTION/ CROSS SECTION EVALUATI
68-GL-02 GLAESER H2.O/ D2.O/ ZR-H/ GRAPHITE/ BE/ BE.O ..SCATTERING FUNCTION/ DIFFUSION PARAMETER/ COMPILATION
68-HA-01 HARLING D2.O ..SCATTERING FUNCTION/ LIQUID/ FREQUENCY DISTRIBUTION/ EXPERIMENT ..ROOM TEMP.
68-HA-02 HARLING H2.O/ D2.O ..EXPERIMENT/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION ..EPITHERMAL NEUTRONS
68-HA-03 HARLING H2.O/ D2.O ..EXPERIMENT/ TOF/ DIFFERENTIAL CROSS SECTION/ SPECTRAL DENSITY ..299DK/ 268DK
68-HA-06 HAYWOOD, PAGE H2.O/ D2.O ..EXPERIMENT/ SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION ..AT VAR
68-PA-01 PAGE, HAYWOOD H2.O/ D2.O/ GRAPHITE/ BE/ BE.O ..COMPILATION/ LIQUID/ SOLID/ FREQUENCY DISTRIBUTION ..MIXTURE OF H2.O AND D2.O/ 0-0.13EV/
68-PA-03 PAGE H2.O/ D2.O ..EXPERIMENT/ SCATTERING FUNCTION/ DIFFUSION PARAMETER
68-PA-05 PARKS, PELLARIN+ H2.O/ D2.O ..EXPERIMENT/ SCATTERING FUNCTION/ EXPERIMENT/ LIQUID ..300DK/ INCIDENT NEUTRO
68-WH-02 WHITEMORE D2.O ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID ..300DK/ INCIDENT NEUTRO
69-BU-02 BUTLAND, CHUDLEY HEAVY WATER ..TOTAL CROSS SECTION/ DIFFUSION COEFFICIENT
71-GH-01 GHEORGHE, RAPEANU+ D2.O ..SCATTERING LAW / COMPUTER CODE
71-GO-02 GOTOH, TAKAHSHI H2.O/ D2.O ..FREQUENCY DISTRIBUTION/ SCATTERING LAW
71-PA-01 PAGE, POWLES D2.O ..NEUTRON DIFFRACTION/ X-RAY/ STRUCTURE FACTOR/ MOLECULAR ORIENTATION
71-RE-02 RENKER D2.O ..EXPERIMENT/ ICE/ HEXAGONAL/ PHONON DISPERSION
71-RE-03 RENKER D2.O ..LATTICE DYNAMICS/ SOLID/ THEORY/ EXPERIMENT/ BORN-VON KARMAN MODEL/ DISPERSION RELATION/
72-LE-03 LEE, JONAS D2.O ..VISCOSECITY/ DENSITY
72-NA-05 NARTEN H2.O/ D2.O ..PAIR CORRELATION/ EXPERIMENT
72-PO-04 POWLES, DORE+ H2.O/ D2.O ..EXPERIMENT/ STRUCTURE FACTOR/ H2.O-D2.O MIXTURE/ ISOTOPIC SUBSTITUTION
72-PR-04 PRASK, TREVINO+ H2.O/ D2.O ..THEORY/ EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY RELATION/ DISPERSION RELATION
72-SH-04 SHAWYER, DEAN H2.O/ D2.O ..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..ICE/ DISORDERED SYSTE
76-CL-01 CLARKE, DORE+ D2.O ..EXPERIMENT/ LIQUID STRUCTURE

4,113 HEXAMMINECOBALT IODIDE

CO.(N.H3)6.12

69-JA-02 JANIK, JAKOB+ CO.(N.H3)6.12/ NI.(N.H3)6.12 ..EXPERIMENT/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION

- 4.114 HEXAMMINENICKEL CHLORATE (NI.(N,H3)6).(CL,O4)
77-JA-05 JANIK, JANIK+ (NI.(N,H3)6).(CL,O4)2 ..INCOHERENT SCATTERING/ N,H3-REORIENTATION MOTION
- 4.115 HEXAMMINENICKEL CHLORIDE NI.(N,H3)6.CL2
76-BA-06 BATES, CRICK+ NI.(N,H3)6.CL2/ NI.(N,H3)6.12 ..THEORY/ PHONON DISPERSION/ MULTIPOLE-MULTIPOLE FORCE CONSTAN
- 4.116 HEXAMMINENICKEL IODIDE NI.(N,H3)6.12
69-JA-02 JANIK, JAKOB+ CO.(N,H3)6.12/ NI.(N,H3)6.12 ..EXPERIMENT/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION
76-BA-06 BATES, CRICK+ NI.(N,H3)6.CL2/ NI.(N,H3)6.12 ..THEORY/ PHONON DISPERSION/ MULTIPOLE-MULTIPOLE FORCE CONSTAN
- 4.117 HOLMIUM CHROMIUM OXIDE HO.CR.O3
77-SH-01 SHAMIR, MELAMUD+ PR.CR.O3/ ND.CR.O3/ TB.CR.O3/ HO.CR.O3/ ER.CR.O3 ..EXPERIMENT/ MAGNETIC SCATTERING / R,CR
- 4.118 HYDROGEN BROMIDE H.BR
65-BO-04 HOUTIN, SAFFORD H.F/ H.CL/ H.BR ..EXPERIMENT/ LATTICE VIBRATION/ TOF SPECTRUM
- 4.119 HYDROGEN CHLORIDE H.CL
65-BO-04 HOUTIN, SAFFORD H.F/ H.CL/ H.BR ..EXPERIMENT/ LATTICE VIBRATION/ TOF SPECTRUM
66-AG-01 AGRAWAL, YIP C.H4/ H.CL/ N.H3 ..GAS/ THEORY/ CORRELATION FUNCTION ..INCOHERENT/ INTERMEDIATE SCATTERING FU
68-AG-03 AGRAWAL, YIP+ H.CL ..THEORY/ ROTATIONAL TIME CORRELATION FUNCTION
68-O-01 O'REILLY C.CL4/ C.H.CL3/ C6.H5.CL/ H.F/ H.CL/ N.H3/ H2.O ..CORRELATION FUNCTION/ MOLECULAR ROTATIONS/ LIQU
68-SU-03 SUMMERFIELD, ZWEIFEL H.CL/ H.F ..SCATTERING THEORY
68-TR-02 TREVING, PRASK+ H2.O/ H.CL ..THEORY/ LATTICE DYNAMICS ..HARMONIC SOLIDS
71-LU-01 LURIE, CARPENTER H.CL ..EXPERIMENT/ THEORY/ GAS STATE/ SCATTERING SIGMA
71-NI-07 NISHIGORI, SEKIYA NEUTRON-SCATTERING-IN-FLUIDS/ H.CL ..THEORY/ SCATTERING SIGMA/ GAS
73-NI-03 NIIMURA, FUJII+ H.CL ..EXPERIMENT/ D.CL/ MOLECULAR LIBRATION/ MEAN SQUARE ANGULAR DISPLACEMENT
74-GR-02 GROUT, LEECH H.CL ..DISPERSION-CURVES/ THEORY
74-GU-02 GUSSONI, ZEMBI H.CL ..THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..F-G MATRIX METHOD
75-GR-02 GROUT, LEECH H.CL ..THEORY/ GROUP THEORETICAL/ LATTICE DYNAMICS
75-HA-02 HARADA, FUJII+ H.CL ..EXPERIMENT/ SOLID/ DISPERSION RELATION/ BORN-VON-KARMAN MODEL/ TRIPLE-AXIS-SPECTROME
- 4.120 HYDROGEN CYANIDE H.C.N
72-RA-01 RAE H.C.N ..CALCULATION/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ PHASE CHANGE/ SOFT PHONON
75-DI-04 DIETRICH, MACKENZIE+ H.C.N ..EXPERIMENT/ PHASE TRANSITION/ PHONON SOFTENING
- 4.121 HYDROGEN FLUORIDE H.F
63-BO-02 ROUTIN, SAFFORD H.F/ K.H.F2/ K.H2.F3/ NA.H2.F3 ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS

65-B0-04	BOUTIN, SAFFORD	H.F/ H.CL/ H.BR	..EXPERIMENT/ LATTICE VIBRATION/ TOF SPECTRUM
67-K1-05	KITTELBERGER, HORNIG	H.F	..EXPERIMENT/ LATTICE DYNAMICS ..INFRARED EXPERIMENT
68-O--01	O-REILLY	C.CL4/ C.H.CL3/ C6.H5.CL/ H.F/ H.CL/ N.H3/ H2.O	..CORRELATION FUNCTION/ MOLECULAR ROTATIONS/ LIQUID
68-SU-03	SUMMERFIELD, ZWEIFEL	H.CL/ H.F	..SCATTERING THEORY
69-AX-02	AXMANN, BIEM+	H.F	..EXPERIMENT/ CALCULATION/ LATTICE DYNAMICS/ DISPERSION CURVE/ FREQUENCY SPECTRA
69-R1-02	RING, EDELSTAFF	H.F	..SCATTERING FUNCTION
76-G1-03	GILLAN, LARSEN+	CU.CL/ RE.F2/ H.F	..THEORY/ LIQUID/ PAIR-DISTRIBUTION FUNCTION ..MEAN SPHERICAL MODEL/ MIX
4.122 HYDROGEN SULFIDE			
		H2.S	
63-JA-02	JANIK, JANIK+	C.H4/ N.H3/ H2.S/ H2.O	..SIGMA(E)/ EXPERIMENT/ LIQUID
63-RZ-01	RZANY, SCIIESINSKI	H2.S	..EXPERIMENT/ TOTAL CROSS SECTION
65-ST-07	STRONG, HARKER+	AMMONIA/ HYDROGEN SULFIDE	..EXPERIMENT/ GAS/ CROSS SECTION EVALUATION ..MTR-PHASE-CHOPPER
4.123 HYDRONIUM NITRATE			
		H3.O.N.O3	
68-JA-02	JANIK	C.H4/ H2.O/ N.H3/ LI2.S.O4.H2.O/ H3.O.N.O3/ C.H3.I	..EXPERIMENT/ GAS/ LIQUID/ SOLID/ MOLECULAR
4.124 INDIUM PHOSPHIDE			
		IN.P	
75-B0-02	BORCHERDS, ALFLEY+	IN.P	..SOLID/ EXPERIMENT/ DISPERSION RELATION
4.125 IRON BROMIDE			
		FE.BR2	
75-YE-01	YELON, VETTIER	FE.BR2	..EXPERIMENT/ THEORY ..MAGNETIC SCATTERING/ SPIN WAVE SPECTRUM/ ANISOTROPY FIELD/ 2DK
4.126 IRON CHLORIDE			
		FE.CL2	
74-YE-01	YELON, SCHERM	FE.CL2	..EXPERIMENT/ PHONON DISPERSION
76-PA-07	PASTERNAK	FE.CL2	..THEORY/ PHONON DISPERSION/ STATIC-DISPLACED-SHELL MODEL
76-Z1-01	ZIEBECK, HOUMANN	FE.CL2	..EXPERIMENT/ PHONON-MAGNON DISPERSION
4.127 IRON FLUORIDE			
		FE.F2	
72-LO-01	LOVESEY	FE.F2	..THEORY
72-RA-03	RAINFORD, HOUMANN+	FE.F2	..EXPERIMENT/ PHONON AND MAGNON DISPERSION/ MAGNON-PHONON INTERACTION
4.128 IRON HYDROGEN CARBONYL			
		H2.FE.(C.O)4	
72-WH-03	WHITE, WRIGHT	H.CO.(C.O)4/ H2.FE.(C.O)4/ H.MN.(C.O)5/ K.H.FE.(C.O)4/ H3.MN3.(C.O)12/ CS.H.FE3.(C.O)11	..EX
4.129 IRON-LITHIUM OXIDE			
		(FE-LI).O4	
76-RA-02	RAKHECHA, RAO+	(FE-LI).O4	..EXPERIMENT/ MAGNON DISPERSION

- 4.130 IRON-MOLIBDENUM BORIC PHOSPHIDE (FE-MO).B.P
 77-AX-01 AXE, SHIRANE+ (FE-MO).B.P ..EXPERIMENT/ MAGNETIC SCATTERING/ MAGNON/ AMORPHOUS FERROMAGNET
- 4.131 IRON SESQUIOXIDE FE2.O3
 70-SA-03 SAMUELSEN, SHIRANE FE2.O3 ..EXPERIMENT/ SPIN WAVE DISPERSION/ 240, 290DK/ PARAMETE FITTING/ MAGNON DENSITY
- 4.132 KCP K2.PT.(C.N)4.BR0.3
 73-CO-02 COMES, LAMBERT+ KCP ..X-RAY DIFFUSE SCATTERING/ ONE-DIMENSIONAL CONDUCTOR/ PHASE TRANSITION
 73-CO-03 COMES, LAMBERT+ KCP ..EXPERIMENT/ X-RAY DIFFRACTION/ A LINEAR SUPERLATTICE DISTORTION
 73-RE-03 RENKER, RIETSCHEL+ KCP ..EXPERIMENT/ LONGITUDINAL ACOUSTIC PHONON/ DISPERSION/ KOHN ANOMALY
 73-ZE-01 ZELLER REVIEW-ARTICLES/ KCP/ TTF-TCNQ ..ONE-DIMENSIONAL CONDUCTOR/ KOHN-PEIERLS INSTABILITY
 74-GL-01 GLAESER REVIEW-ARTICLES/ KCP/ TTF-TCNQ ..ONE-DIMENSIONAL CONDUCTOR/ KOHN-PEIERLS INSTABILITY
 74-RE-01 RENKER, PINTSCHOVIOUS+ KCP ..EXPERIMENT/ CRITICAL SCATTERING/ BELOW 220K
 75-CO-01 COMES, RENKER+ KCP ..EXPERIMENT/ LONGITUDINAL ACOUSTIC DISPERSION/ C-DIRECTION/ ROOM TEMPERATURE, 60K
 75-CO-02 COMES, RENKER+ KCP ..EXPERIMENT/ INELASTIC NEUTRON SCATTERING/ DISPERSION RELATION ..KOHN ANOMALY
 75-EA-01 EAGEN, WERNER+ KCP ..EXPERIMENT/ DIFFRACTION/ DEUTERATED KCP/ CHARGE-DENSITY-WAVE IN ELECTRON GAS
 75-LY-01 LYNN, IIZUMI+ KCP ..EXPERIMENT/ SOLID/ KOHN EFFECT/ DISPERSION RELATION ..TRIPLE AXIS TECHNIQUE/ ONE-DIME
 76-CA-05 CARNEIRO, SHIRANE+ KCP ..EXPERIMENT/ PHONON DISPERSION/ ONE-DIMENSIONAL CONDUCTOR
 76-PI-01 PINTSCHOVIOUS, RENKER+ KCP ..EXPERIMENT/ DYNAMICAL STRUCTURE FACTOR/ 60-300DK
 78-CA-01 CARNEIRO, SHIRANE+ KCP ..EXPERIMENT/ PHONON DISPERSION/ 2KF ANOMALY
- 4.133 K(DEF)TCP K1.75.PT.(C.N)4*1.5C
 76-CA-08 CAVEIRO, ECKERT+ K1.75.PT.(C.N)4*1.5C ..DISPESION RELATION/ EXPERIMENT
- 4.134 LANTHANUM ALUMINATE LA.AL.O3
 69-AX-01 AXE, SHIRANE+ LA.AL.O3 ..EXPERIMENT/ PHONON DISPERSION/ PHASE TRANSITION/ PHONON INSTABILITY
 74-AX-03 AXE, SHAPIRO+ NB3.SN/ SR.TI.O3/ K.MN.F3/ LA.AL.O3 ..EXPERIMENT/ SOFT MODE/ CENTRAL PEAK PROBLEM
- 4.135 LANTHANUM CHLORIDE LA.CL3
 65-CA-01 CASPERS, MURPHY+ LA.CL3 ..LATTICE DYNAMICS
 69-SA-03 SAFFORD, LEUNG+ H2.O/ LA.CL3/ CS.I/ CS.CL/ K.I/ K.BR/ K.CL/ NA.CL ..EXPERIMENT/ TOF SPECTRA/ INTERMOLECULA
- 4.136 LANTHANUM TRIFLUORIDE LA.F3
 68-RA-07 RAST, CASPERS+ LA.F3 ..EXPERIMENT ..4.20K/ 77DK/ 373DK/ INFRARED REFLECTION/ KRAMERS-KRONIG METHOD
- 4.137 LEAD DIODIDE PB.I2

- 76-DO-01 DORNER, GHOSH+ PB.12 ..EXPERIMENT/ DISPERSION RELATION/ TRIPLE AXIS SPECTROMETER
 76-VA-01 VANDERVALK PB.12 ..STATIC DIELECTRIC CONSTANT
 77-VA-01 VAN-DEK-VALK, HAAS PB.12/ CD.12/ SN.S2/ SN.S2 ..THEORY/ SOLID/ LATTICE DYNAMICS ..POLARISABLE ION MODEL
 77-WA-02 WAKABAYASHI MO.S2/ GRAPHITE/ NB.S2/ PB.12 ..THEORY/ PHONON DISPERSION/ LAYERED STRUCTURES
- 4.138 LEAD FLUORIDE PB.F2
 70-DE-03 DENHAM, FIELD+ CA.F2/ SR.F2/ BA.F2/ CD.F2/ PB.F2 ..THEORY/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ DISPERSION
 76-SH-03 SHAPIRO BA.F2/ PB.F2/ AG.1 ..EXPERIMENT/ STRUCTURE ANALYSIS/ PHONON DISPERSION/ DIFFUSIVE MOTION
- 4.139 LEAD GERMANATE PB5.GE3.O11
 77-IW-01 IWATA PB5.GE3.O11 ..NEUTRON DIFFRACTION/ 200C
- 4.140 LEAD METATITANATE PB.TI.O3
 66-SO-01 SOLOVEV, KUKHTO+ SR.TI.O3/ BA.TI.O3/ PB.TI.O3 ..EXPERIMENT/ LATTICE VIBRATION ..POLYCRYSTAL/ ROOM TEMP/ 47
 70-SH-07 SHIRANE, AXE PB.TI.O3 ..EXPERIMENT/ DISPERSION RELATION/ FERROELECTRICITY
- 4.141 LEAD MOLYBDENUM SULFIDE PB.MO6.S8
 76-BA-01 BADER, SINHA+ SN.MO6.S8/ PB.MO6.S8/ MO6.S8 ..EXPERIMENT/ PHONON SPECTRA/ MOLECULAR-CRYSTAL
 76-BA-02 BADER, KNAPP+ LEAD MOLYBDENUM SULFIDE/ TIN MOLYBDENUM SULFIDE ..HEAT CAPACITY/ PHONON SPECTRA/ SUPERCONDUCT
 76-SI-04 SINHA, BADAR+ SN.MO6.S8/ PB.MO6.S8/ MO.SE8 ..EXPERIMENT/ PHONON SPECTRA
- 4.142 LEAD PHOSPHATE PB3.(P.O4)2
 77-JO-01 JOFFRIN, LAMBERT+ PB3.(P.O4)2 ..EXPERIMENT/ QUASI-ELASTIC PEAK/ DISPERSION RELATION ..(P.O4)2.PB3/ 3-AXIS
- 4.143 LEAD SULFIDE PB.S
 67-EL-02 ELCOMBE PB.S ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ MODEL FITTING/ FREQUENCY SPECTRUM
- 4.144 LEAD-TIN TELLURIDE (PB-SN).TE
 76-DA-04 DAUGHTON, GUERMENT+ (PB-SN).TE ..EXPERIMENT/ PHONON DISPERSION
- 4.145 LEAD ZIRCONATE PB.ZR.O3
 70-ZE-01 ZEIN, ZINENKO+ SR.TI.O3/ PB.ZR.O3 ..THEORY/ LATTICE DYNAMICS/ FERROELECTRICITY/ PHASE TRANSITION
- 4.146 LIGHT WATER H2O

40-DA-01 DARLING, DENNISON H2.O ..THEORY/ MOLECULAR DYNAMICS
41-SA-01 SACHS, TELLER NEUTRON-SCATTERING-IN-FLUIDS/ H2/ C.H4/ N.H3/ H2.O ..SCATTERING THEORY ..MOLECULAR GASES
54-FO-01 FÖRSLIND H2.O ..THEORY/ SOLID/ BORN-VON KARMAN MODEL/ CENTRAL FORCE MODEL/ DISPERSION RELATION/ HARMONIC
55-JA-01 JACROT, NETTER+ GRAPHITE/ H2.O/ D2.O ..EXPERIMENT/ LIQUID/ SOLID
57-KR-01 KRIEGER, NELKIN NEUTRON-SCATTERING-IN-FLUIDS/ C.H2/ H2.O ..SCATTERING THEORY ..MOLECULE
58-BR-02 BROCKHOUSE H2.O/ D2.O ..EXPERIMENT
58-MC-01 MCREYNOLDS, NELKIN+ H2.O/ POLYETHYLENE/ ZR-H/ MG-H/ GRAPHITE ..EXPERIMENT/ THEORY/ LIQUID/ SOLID
59-BR-04 BROCKHOUSE H2.O/ D2.O ..SCATTERING LAW/ EXPERIMENT ..QUASI ELASTIC SCATTERING/ ICE, 6DC, 24.5DC, 42DC, 60D
59-HU-01 HUGHES, PALEVSKY+ H2.O ..LIQUID/ EXPERIMENT ..BE-FILTER-TOF
60-CR-01 CRIBIER, JACROT H2.O ..EXPERIMENT/ LIQUID/ DISPERSION RELATION/ DIFFUSION PARAMETER
60-HU-01 HUGHES, PALEVSKY+ H2.O ..SIGMA(E, E-PRIME, THETA)
60-KH-01 KHUBCHANDARI, RAHMAN H2.O ..THEORY/ ELASTIC SCATTERING CROSS SECTION ..RIGID ASYMMETRIC ROTOR MODEL
60-LA-01 LARSSON, HOLMRYD+ H2.O/ D2.O ..EXPERIMENT/ FREQUENCY DISTRIBUTION ..LIQUID DYNAMICS
60-NE-02 NELKIN NEUTRON-SCATTERING-IN-FLUIDS/ H2.O ..THEORY/ MOLECULAR DYNAMICS ..DIFFERENTIAL AND TOTAL CROSS
60-SI-01 SINGWI, SJOELANDER H2.O ..THEORY/ MOLECULAR DYNAMICS ..LIQUID DYNAMICS/ QUASI-CRYSTALLINE MODEL
61-BR-03 BRUGGER ZR-H/ H2.O/ BENZENE/ PARAFFINE/ ALCOHOL ..SIGMA (E-E-PRIME, THETA)/ EXPERIMENT/ LIQUIDS/ TOF
61-CR-02 CRIBIER, JACROT H2.O ..EXPERIMENT ..QUASI ELASTIC SCATTERING/ 27DC/ 43DC
61-EG-01 EGELSTAFF, COCKING+ H2.O/ D2.O/ PB ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION
61-HE-01 HEINLOTH, SPRINGER H2.O ..SIGMA(E)/ EXPERIMENT ..-150DC--+200DC
61-HE-02 HEINLOTH, SPRINGER H2.O/ C.H6/ C.H2.O2 ..SIGMA(E)/ EXPERIMENT/ GAS/ LIQUID/ SOLID/ KRIEGER-NELKIN MODEL ..TRANSMI
61-LA-01 LARSSON, HOLMRYD+ H2.O/ D2.O ..EXPERIMENT
61-MI-01 MIKKE H2.O/ D2.O ..EXPERIMENT
61-PA-01 PALEVSKY H2.O/ PB/ SN ..EXPERIMENT/ LIQUID ..ROOM TEMP. 45DC FOR H2.O/ 462DC FOR PB/ 350DC FOR SN/ BE-F
61-SP-01 SPRINGER H2.O ..THEORY/ EXPERIMENT/ SOLID/ LIQUID/ GAS/ SIGMA (E)/ SIGMA (THETA)/ FREQUENCY SPECTRUM
61-SP-02 SPRINGER, WIEDMAN H2.O ..EXPERIMENT/ SIGMA(E)
61-ST-01 STILLER, DANNER H2.O ..EXPERIMENT/ SIGMA(THETA, E)
61-WH-01 WHITEMORE, MCREYNOLDS H2.O/ D2.O ..EXPERIMENT
61-WO-01 WOODS, BROCKHOUSE+ GRAPHITE/ H2.O/ D2.O/ ZR-H/ LI.H/ NA.H/ N.H4.CL ..EXPERIMENT/ CRYSTAL SPECTROMETER/ FRE
62-BR-02 BRUGGER METHANE/ H2.O/ D2.O/ PROPANE ..THEORY/ EXPERIMENT/ SCATTERING FUNCTION
62-BR-04 BRUGGER BE/ BE.O/ GRAPHITE/ H2.O/ D2.O/ METHANE/ PROPANE/ TERPHENYL/ COMPILATIONS ..SCATTERING FUNCTION
62-EG-01 EGELSTAFF NEUTRON-SCATTERING-IN-FLUIDS/ H2.O ..THEORY/ LIQUID ..LIQUID DYNAMICS
62-EG-03 EGELSTAFF, SCHOFIELD SCATTERING-THEORIES/ H2.O/ PB ..EXPERIMENT/ THEORY/ LIQUID/ DIFFUSION PARAMETER ..ROO
62-EG-04 EGELSTAFF H2.O/ D2.O/ GRAPHITE/ BE ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ THEORY ..EVALUATION
62-GO-01 GOESSMAN H2.O ..THEORY/ CROSS SECTION EVALUATION
62-HA-01 HAYWOOD, THORSON D2.O/ H2.O ..EXPERIMENT/ SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION ..20DC/ 150DC
62-LA-01 LARSSON, DAHLBORG H2.O/ D2.O ..EXPERIMENT/ LIQUID DYNAMICS ..10DC TO 95DC
62-LA-02 LARSSON, SINGWI H2.O ..LIQUID/ DIFFUSIVE MOTION/ THEORY
62-LI-02 LINDENMEIER H2.O ..THEORY/ CROSS SECTION EVALUATION
62-NE-01 NEMETHY, SCHRAGA H2.O ..THEORY/ MOLECULAR DYNAMICS ..LIQUID DYNAMICS
62-RO-01 ROSENBAUM, ZWEIFEL H2.O ..THEORY ..DIFFERENTIAL SCATTERING CROSS SECTION/ 295DK
62-SA-01 SAKAMOTO, BROCKHOUSE+ H2.O ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..25DC/ 75DC/ QUASI-ELASTIC SCATTERIN
62-SC-02 SCHOFIELD H2.O/ GRAPHITE ..THEORY/ COMPILATION
63-BA-01 BAJURIK, GOLIKOV+ H2.O
63-BR-02 BROCKHOUSE, BERGSM+ SN/ H2.O/ AR/ HE ..EXPERIMENT/ LIQUID
63-EG-01 EGELSTAFF, HAYWOOD+ H2.O ..EXPERIMENT ..150DC, 295DK, 425DK
63-GO-02 GOLDMAN, FEDERIGHI H2.O/ POLYETHYLENE ..CROSS SECTION EVALUATION
63-JA-02 JANIK, JANIK+ C.H4/ N.H3/ H2.S/ H2.O ..SIGMA(E)/ EXPERIMENT/ LIQUID
63-KO-02 KOTTWITS, LEONARD-JR+ H2.O ..EXPERIMENT/ LIQUIDS ..22DC
63-KO-03 KOTTWITZ, LEONARD-JR H2.O ..EXPERIMENT/ FREQUENCY DISTRIBUTION
63-LA-01 LARSSON, DAHLBORG D2.O/ GLYCELINE/ H2.O ..EXPERIMENT/ LIQUID/ FREQUENCY DISTRIBUTION/ TOF ..278, 295, 368,
63-LI-01 LINDENMEIER, MATSUMOTO+ H2.O/ POLYETHYLENE/ COMPUTER-CODES ..SCATTERING THEORY/ LIQUID/ SIGMA(E-E-PRIME, TH

63-SI-03 SINGWI, SJOELANDER+ NEUTRON-SCATTERING-IN-FLUIDS/ H2.O/ PB ..THEORY/ LIQUID/ FREQUENCY DISTRIBUTION/ SCATT
 63-YI-01 YIP, OSBORN H2.O ..THEORY/ MOLECULAR DYNAMICS/ SIGMA(E,E-PRIME,THETA)
 63-YI-02 YIP, OSBORN H2.O ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION ..SMALL ENERGY TRANSFER REGION
 64-BO-02 BOUTIN, PRASK H2.O/ WATER-SILICA/ WATER-ALUMINA/ ALCL3 ..EXPERIMENT/ MOLECULAR DYNAMICS ..H2.O VAPOR ADSO
 64-DA-01 DAHLBORG, GROSSHOEG+ H2.O/ D2.O
 64-KO-02 KOPPEL, YOUNG H2.O ..THEORY/ MOLECULAR DYNAMICS ..SCATTERING KERNEL/ ANISOTROPIC MODEL
 64-LA-01 LARSSON, DAHLBORG H2.O/ D2.O/ PENTANE/ GLYCELINE ..EXPERIMENT/ LIQUID/ FREQUENCY DISTRIBUTION
 64-MC-01 MCURRY, GANNON COMPUTER-CODES/ H2.O ..THEORY/ SCATTERING LAW/ SIGMA(E)/ SIGMA(E,E-PRIME)/ SIGMA-TRANSPORT
 64-MO-01 MOSTOVOY, DIKAREV+ H2.O/ BIPHENYL ..FREQUENCY SPECTRUM/ EXPERIMENT
 64-PA-01 PAGE H2.O ..EXPERIMENT/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION ..5500K/ 1200 PSI
 64-SP-01 SPRINGER, HOFMYER+ H2.O/ D2.O/ PHENYL/ ZR-H ..EXPERIMENT/ LIQUID/ DIFFUSION PARAMETER ..AVE-MU
 64-ST-01 STEIN, GOLDBERG+ H/ O/ H2.O/ D2.O/ HE/ LI/ BE/ GRAPHITE/ N/ O/ NE/ NA/ MG/ AL/ SI/ AR/ K/ COMPILATIONS ..S
 64-TE-01 TEUTSCH, MATEESCU+ H2.O/ D2.O ..LIQUID/ EXPERIMENT/ NEUTRON SCATTERING
 64-YO-03 YOUNG, HUFFMAN H2.O ..EXPERIMENT/ LIQUID/ NEUTRON SPECTRUM/ THEORY
 65-BE-01 BEYSTER, KOPPEL D2.O/ H2.O/ POLYETHYLENE/ BE ..THEORY/ EXPERIMENT/ LIQUID/ SOLID/ CROSS SECTION EVALUATION
 65-BE-02 BEYSTER, YOUNG+ H2.O/ D2.O/ ZR-H ..EXPERIMENT/ DIFFUSION PARAMETER ..AVE-MU
 65-BO-05 BOUTIN, PRASK+ H2.O ..TOF
 65-GL-03 GLAESER, EHRET+ C6,H6/ H2.O/ ZR-H ..SCATTERING LAW/ FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID ..20DC FOR
 65-GO-01 GOLIKOV, ZHOKORSKA+ C2,H6.O2/ H2.O/ C2,H4.O2/ C6,H6 ..EXPERIMENT/ LIQUID/ SOLID
 65-JA-01 JANIK H2.O ..SOLID/ LIQUID/ FREQUENCY DISTRIBUTION/ SIGMA(E,E-PRIME,THETA)
 65-LE-02 LEMMEL H2.O ..EXPERIMENT/ LIQUID/ DISPERSION PARAMETER/ SIGMA(THETA,E)
 65-PA-02 PALEVSKY PB/ H2.O/ SN ..EXPERIMENT/ LIQUID
 65-PO-01 POPE, NATION H2.O ..SCATTERING LAW/ CORRELATION FUNCTION
 65-TU-01 TURCHIN H2.O ..LIQUID/ SOLID/ SCATTERING LAW/ FREQUENCY DISTRIBUTION NG LAW/ FREQUENCY DISTRIBUTION
 65-YO-01 YOUNG, KOPPEL BE/ C/ H2.O/ D2.O/ C,H2/ H2/ D2 ..THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATION
 66-AN-03 ANTUNEZ, BEYSTER+ BE.O/ H2.O/ D2.O/ ZR-H ..EXPERIMENT/ THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATI
 66-BE-05 BEYSTER, CARRIVEAN H2.O ..LIQUID/ THEORY/ EXPERIMENT/ SIGMA (THETA,E) ..MULTIPLE SCATTERING CORRECTION
 66-BE-06 BEYSTER, NEILL+ H2.O/ D2.O/ ZR-H/ GRAPHITE/ BE.O ..NEUTRON SPECTRUM/ COMPILATION/ LIQUID/ GAS
 66-HA-02 HARLING H2.O ..EXPERIMENT/ SIGMA (E-E-PRIME,THETA)/ LIQUID
 66-HA-03 HARLING H2.O ..LIQUID/ EXPERIMENT/ SCATTERING LAW ..ROOM TEMP.
 66-KI-01 KIROUAC, MOORE+ H2.O/ POLYETHYLENE ..EXPERIMENT/ DOUBLE DIFFERENTIAL CROSS SECTION
 66-KI-02 KIROUAC, MOORE+ H2.O ..SCATTERING LAW/ SIGMA (E,E-PRIME,THETA)/ EXPERIMENT ..300DK
 66-KO-01 KOPPEL POLYETHYLENE/ ZR-H/ H2.O ..SCATTERING FUNCTION/ SCATTERING CROSS SECTION/ NEUTRON SPECTRUM
 66-KO-04 KOPPEL H2.O/ POLYETHYLENE/ ZR-H/ H ..CROSS SECTION EVALUATION/ SCATTERING FUNCTION/ THEORY/ LIQUID/ SO
 66-MC-01 MCMURRY, RUSSELL+ H2.O ..EXPERIMENT
 66-MC-03 MCMURRY H2.O ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION/ SIGMA(E)/ SCATTERING LAW ..4
 66-PE-01 PELAH, IMRY H2.O ..THEORY
 66-PR-01 PRASK, BOUTIN H2.O ..EXPERIMENT/ MOLECULAR DYNAMICS/ DIFFERENTIAL CROSS SECTION ..H2.O MOLECULES IN CRYSTA
 66-RU-04 RUSH, LEUNG+ H2.O ..INELASTIC SCATTERING SPECTRA
 66-SZ-01 SZKATULA, FULINSKI H2.O ..LIQUID/ MOLECULAR DYNAMICS
 66-WO-01 WORDEN, PURCELL+ H2.O/ D2.O/ GRAPHITE ..NEUTRON SPECTRUM/ SIGMA(E,E-PRIME)
 67-BI-01 BISCHOFF, BRYANT+ POLYETHYLENE/ H2.O/ ZR-H/ NB-H/ U.O2 ..EXPERIMENT
 67-GL-01 GLAESER REVIEW-ARTICLES/ H2.O/ ZR-H/ GRAPHITE/ D2.O/ BE/ BE.O ..INCOHERENT APPROXIMATION/ MULTIPLE SCATT
 67-GO-01 GOLAND, OTNES H2.O ..EXPERIMENT/ LIQUID ..QUASI-ELASTIC SCATTERING
 67-HA-03 HAYWOOD H2.O ..CROSS SECTION EVALUATION/ LIQUID/ THEORY/ FREQUENCY DISTRIBUTION/ SCATTERING FUNCTION/ S
 67-IB-01 IBARRA-JR, SHER H2.O ..EXPERIMENT/ NEUTRON SPECTRUM ..20DC
 67-KI-01 KIROUAC H2.O ..LIQUID/ SCATTERING FUNCTION
 67-MC-01 MCMURRY H2.O/ D2.O ..SIGMA(E,E-PRIME)/ COMPILATION
 67-NA-01 NAKAHARA, KATO BE/ H2.O/ COMPUTER-CODES ..SOLID/ THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
 67-SA-02 SAMOSVAT, SAYASON+ H2.O ..EXPERIMENT
 67-SK-01 SKOELD, KARLEN+ PENTANE/ H2.O ..MOLECULAR DYNAMICS/ SOLID/ EXPERIMENT/ FREQUENCY SPECTRUM
 67-SM-02 SMITH H2.O ..EXPERIMENT/ SCATTERING FUNCTION ..95DC/ TRIPLE AXIS SPECTROMETER

67-SZ-01 SZKATULA, FULJINSKI H2.O ..THEORY/ LIQUID/ FREQUENCY DISTRIBUTION
 68-AR-03 ARDENTE, GALLS H2.O ..SIGMA (E)/ NEUTRON SPECTRUM/ THEORY ..MODIFIED NELKIN MODEL
 68-BA-02 BAJOREK, JANIK+ H2.O ..EXPERIMENT/ MOLECULAR DYNAMICS ..WATER IN CRYSTAL
 68-BE-02 BEYSTER H2.O ..LIQUID/ EXPERIMENT
 68-BR-03 BRUGGER H2.O ..SCATTERING FUNCTION/ EXPERIMENT/ LIQUID ..TOF/ 16DC
 68-BR-04 BRUGGER, PLUMMER H2.O ..EXPERIMENT/ SCATTERING FUNCTION
 68-BU-03 BURGMAN, SCIESINSKI+ H2.O ..SOLID/ LIQUID/ EXPERIMENT/ FREQUENCY DISTRIBUTION ..COLD NEUTRON TOF/ 273.4DK/
 68-DA-05 DAUBERT, JEA+ H2.O ..SOLID/ EXPERIMENT/ SIGMA (E)
 68-ES-01 ESCH, MOORE+ H2.O ..LIQUID/ EXPERIMENT/ FREQUENCY DISTRIBUTION/ SCATTERING FUNCTION
 68-FA-01 FAURE, KAHANE H2.O ..FREQUENCY DISTRIBUTION/ DISPERSION RELATION/ LATTICE DYNAMICS/ THEORY/ SOLID
 68-GI-01 GIBBS, LINDEMETER H2.O ..SCATTERING THEORY/ LIQUID
 68-GL-01 GLAESER H2.O/ ZR-H/ GRAPHITE/ D2.O/ BE/ BE.O ..COMPIATION/ SCATTERING FUNCTION/ CROSS SECTION EVALUATI
 68-GL-02 GLAESER H2.O/ D2.O/ ZR-H/ GRAPHITE/ BE/ BE.O ..SCATTERING FUNCTION/ DIFFUSION PARAMETER/ COMPIATION
 68-HA-02 HARLING H2.O/ D2.O ..EXPERIMENT/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION ..EPITHERMAL NEUTRONS
 68-HA-03 HARLING H2.O/ D2.O ..EXPERIMENT/ TOF/ DIFFERENTIAL CROSS SECTION/ SPECTRAL DENSITY ..299DK/ 268DK
 68-HA-06 HAYWOOD, PAGE H2.O/ D2.O ..EXPERIMENT/ SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION
 68-JA-02 JANIK C.H4/ H2.O/ N.H3/ LI2.S.O4.H2.O/ H3.O.N.H3/ C.H3.I ..EXPERIMENT/ GAS/ LIQUID/ SOLID/ MOLECULAR
 68-JA-04 JARVIS H2.O ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ THEORY
 68-KI-01 KIROUAC, MOORE+ H2.O ..SCATTERING FUNCTION/ EXPERIMENT ..300DK
 68-NA-01 NAKAHARA H2.O ..FREQUENCY DISTRIBUTION/ THEORY/ SOLID/ LATTICE DYNAMICS
 68-NE-01 NEIL, RUSSELL-JR+ H2.O ..EXPERIMENT/ LIQUID/ TOTAL CROSS SECTION ..23DC/ LINAC
 68-PA-01 PAGE, HAYWOOD H2.O/ D2.O/ GRAPHITE/ BE/ BE.O ..COMPIATION/ LIQUID/ SOLID/ FREQUENCY DISTRIBUTION ..AT VAR
 68-PA-03 PAGE H2.O/ D2.O ..EXPERIMENT/ SCATTERING FUNCTION/ COMPIATION ..MIXTURE OF H2.O AND D2.O/ 0-0.13EV/
 68-PA-05 PARKS, PELLARIN+ H2.O/ D2.O ..EXPERIMENT/ DIFFUSION PARAMETER
 68-PR-01 PRASK, BOUTIN+ H2.O ..SOLID/ EXPERIMENT/ THEORY/ FREQUENCY DISTRIBUTION ..COLD NEUTRON TOF/ 150DK
 68-RO-01 ROSS, SZABO+ BENZENE/ H2.O ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID ..20DC FOR BE
 68-SA-03 SAMOSVAT, SAYASOV+ H2.O ..EXPERIMENT/ MOLECULAR DYNAMICS/ TOF ..RESONANT-DETECTOR METHOD
 68-SL-02 SLAGGIE H2.O/ ZP-H ..THEORY/ CROSS SECTION EVALUATION
 68-TR-02 TREVINO, PRASK+ H2.O/ H.C.L ..THEORY/ LATTICE DYNAMICS ..HARMONIC SOLIDS
 69-ES-01 ESCH, YEATER+ H2.O ..EXPERIMENT/ DOUBLE DIFFERENTIAL SCATTERING CROSS SECTION/ 27.170.270DC/ LINAC TOF
 69-FI-01 FISCHER BENZENE/ CYCLOHEXANE/ CYCLOHEXANOL/ PYRIDINE/ H2.O/ HEXANE/ METHANOL/ ACETONE/ ACETIC
 69-HA-04 HAKIDASAN, GOVINDARAJAN H2.O ..THEORY/ PHONON SPECTRA/ ICE
 69-HA-05 HARLING H2.O ..SCATTERING LAW/ FREQUENCY DISTRIBUTION
 69-KO-01 KOSALY, VALKO H2.O ..THEORY/ CROSS SECTION EVALUATION
 69-PR-03 PRASK, BOUTIN+ H2.O ..ICE/ MOLECULAR VIBRATION
 69-RE-01 REICHEL, MATER H2.O ..CALCULATION/ SINGLE DIFFERENTIAL CROSS SECTION
 69-RE-02 RENKER H2.O ..PHONON DISPERSION/ D2.O
 69-SA-02 SAFFORD, LEUNG+ H2.O ..IN IONIC SOLUTION/ EXPERIMENT/ TOF SPECTRUM ..ION-WATER INTERACTION
 69-SA-03 SAFFORD, LEUNG+ H2.O/ LA.CL3/ CS.I/ CS.CL/ K.I/ K.BR/ K.CL/ NA.CL ..EXPERIMENT/ TOF SPECTRA/ INTERMOLECULA
 69-SH-04 SHAWYER, DEAN H2.O ..THEORY/ LATTICE DYNAMICS/ FREQUENCY SPECTRA
 70-BA-05 RATES, LIPPINCOTT+ H2.O ..MOLECULAR VIBRATIONS
 70-BU-03 BUTLAND, CHUDLEY H2.O ..INTEGRAL DATA/ NEUTRON DIFFUSION COEFFICIENT/ TOTAL SIGMA/ EFFECTIVE WIDTH MODEL/
 70-CL-01 CLIFFORD H2.C ..SCATTERING LAW / LIQUID
 71-BI-02 BITSCHOFF, MOORE+ ZR-H/ H2.O/ C6.H7.N/ NA.N.H2 ..EXPERIMENT/ TOF SPECTRA/ PULSED NEUTRON SOURCE
 71-DA-01 DAY, SINCLAIR ZR-H/ H2.O/ SODAMIDE/ ANILINE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LINAC PULSED NEUTRON SOURCE
 71-DA-02 DAY, SINCLAIR H2.O ..EXPERIMENT/ DIFFERENTIAL CROSS SECTION/ 27.170, 270C/ LINAC
 71-ES-01 ESCH, YEATER+ H2.O ..FREQUENCY DISTRIBUTION/ SCATTERING LAW
 71-GO-02 GOTCH, TAKAHASHI H2.O/ D2.O ..COMPUTER SIMULATION/ CORRELATION FUNCTION/ SELF-DIFFUSION/ FREQUENCY SPECTRA
 71-RA-01 RAHMAN, STILLINGER H2.O ..SCATTERING MODEL CALCULATION/ INTEGRAL PARAMETER
 72-BU-03 BUTLAND, CHUDLEY H2.O ..SCATTERING MODEL CALCULATION/ INTEGRAL PARAMETER
 72-CH-01 CHAY, FRANK H2.O/ THEORY-OF-FLUIDS ..CORRELATION FUNCTION
 72-NA-05 NARTEN H2.O/ D2.O ..PAIR CORRELATION/ EXPERIMENT

72-PO-04	POWLES, DORE+	H2.O/ D2.O ..EXPERIMENT/ STRUCTURE FACTOR/ H2.C-D2.O MIXTURE/ ISOTOPIC SUBSTITUTION
72-PR-04	PPASK, TREVING+	H2.O/ D2.O ..THEORY/ EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY RELATION/ DISPERSION RELATION
72-SH-04	SHAWYER, DEAN	H2.O/ D2.O ..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..ICE/ DISORDERED SYSTE
73-HE-01	HERDADE, VINHAS+	POLYETHYLENE/ H2.O ..EXPERIMENT/ SOLID/ LIQUID/ T-O-F/ SIGMA (E)
74-DE-01	DENLEY, RICE	H2.O ..THEORY/ LIQUID WATER/ FREQUENCY SPECTRA
74-ST-03	STILLINGER, RAHMAN	H2.O ..LIQUID/ PAIR CORRELATION FUNCTION/ MOLECULAR DYNAMICS ..COMPUTER EXPERIMENT
74-WA-02	WATTS	LIGHT WATER/ THEORY-OF-FLUIDS ..RADIAL-DISTRIBUTION-FUNCTION/ MONTE-CARLO
77-DE-02	DEMICHIELIS, GIORDANA+	H2.O ..EXPERIMENT/ DIFFUSIVE MOTION
4,147	LITHIUM BROMIDE	LI.BR
73-MI-05	MITRA, SINGH	LI.H/ NA.I/ LI.F/ LI.CL/ LI.BR/ K.F/ K.CL/ K.BR/ K.I/ RB.I ..THEORY/ LATTICE DYNAMICS/ FORCE
74-RA-08	RASTOGI, HAWRANEK+	LI.BR/ LI.I/ LI.F/ LI.CL ..LATTICE DYNAMICS/ THEORY
74-SI-03	SINGH	LI.H/ LI.BR/ LI.I ..DISPERSION-CURVES/ DENSITY-OF-STATES
4,148	LITHIUM CHLORIDE	LI.CL
71-VE-01	VERMA, SINGH	LI.H/ LI.F/ LI.CL ..THEORY/ PHONON DISPERSION/ STATE DENSITY
73-MI-05	MITRA, SINGH	LI.H/ NA.I/ LI.F/ LI.CL/ LI.BR/ K.F/ K.CL/ K.BR/ K.I/ RB.I ..THEORY/ LATTICE DYNAMICS/ FORCE
74-RA-08	RASTOGI, HAWRANEK+	LI.BR/ LI.I/ LI.F/ LI.CL ..LATTICE DYNAMICS/ THEORY
76-DU-02	DURAI SWAMY, HARIDASAN	LI.CL ..FREQUENCY DISTRIBUTION/ THEORY/ MOMENT OF PHONON SPECTRUM
4,149	LITHIUM FLUORIDE	LI.F
68-DU-01	DOLLING, SMITH+	LI.F ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..3-AXIS
71-VE-01	VERMA, SINGH	LI.H/ LI.F/ LI.CL ..THEORY/ PHONON DISPERSION/ STATE DENSITY
72-BA-08	BASU, SENGUPTA	LI.F ..CALCULATION/ DEFORMABLE SHELL MODEL/ PHONON DISPERSION/ STATE DENSITY/ ELASTIC CONST
73-MI-05	MITRA, SINGH	LI.H/ NA.I/ LI.F/ LI.CL/ LI.BR/ K.F/ K.CL/ K.BR/ K.I/ RB.I ..THEORY/ LATTICE DYNAMICS/ FORCE
73-SA-03	SANGSTER	MG.O/ NA.CL/ LI.F/ K.I ..INTERIONIC FORCE/ PHONON DISPERSION/ DEFORMABLE SHELL MODEL
74-RA-08	RASTOGI, HAWRANEK+	LI.BR/ LI.I/ LI.F/ LI.CL ..LATTICE DYNAMICS/ THEORY
4,150	LITHIUM HYDRIDE	LI.H
61-WO-01	WOODS, BROCKHOUSE+	GRAPHITE/ H2.O/ D2.O/ ZR-H/ LI.H/ NA.H/ N.H4.CL ..EXPERIMENT/ CRYSTAL SPECTROMETER/ FRE
65-BR-02	BRODSKY, BURSTEIN	LI.H ..THEORY/ SOLID/ LATTICE DYNAMICS
65-ZE-01	ZEMLYANOV, BROVMAN+	LI.H ..THEORY/ BORN VON KARMAN MODEL/ SIGMA(E-E-PRIME, THETA)
65-ZE-03	ZEMLYANOV, BROVMAN+	LI.H ..EXPERIMENT/ CALCULATION/ FREQUENCY DISTRIBUTION
67-VE-02	VERBLE	LI.H ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION ..CONST.-Q/ ROOM TEMP./ LI-D CRYSTAL
68-NE-03	NERBLE, WARREN+	LI.H ..FREQUENCY DISTRIBUTION/ DISPERSION RELATION/ LATTICE DYNAMICS/ EXPERIMENT ..ROOM TE
68-VE-01	VERBLE, WARREN+	LI.H ..EXPERIMENT/ PHONON DISPERSION/ LI-D/ MODEL ANALYSIS/ FREQUENCY SPECTRUM
70-WI-01	WILSON, JOHNSON	LI.H ..THEORY/ PHONON DISPERSION
71-VE-01	VERMA, SINGH	LI.H/ LI.F/ LI.CL ..THEORY/ PHONON DISPERSION/ STATE DENSITY
72-SI-07	SINGH	LI.H ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
73-MI-05	MITRA, SINGH	LI.H/ NA.I/ LI.F/ LI.CL/ LI.BR/ K.F/ K.CL/ K.BR/ K.I/ RB.I ..THEORY/ LATTICE DYNAMICS/ FORCE
74-SI-03	SINGH	LI.H/ LI.BR/ LI.I ..DISPERSION-CURVES/ DENSITY-OF-STATES
77-LA-01	LAPLAZE	LI.H ..THEORY/ PHONON DISPERSION

- 4.151 LITHIUM HYDROXIDE
LI.O.H
65-PE-02 PELAH, KREBS+ CA.(O.H)2/ MG.(O.H)2/ LI.O.H ..EXPERIMENT/ LATTICE DYNAMICS ..TOF
66-SA-02 SAFFORD, LUSACCO LI.O.H ..EXPERIMENT/ TOF SPECTRUM/ MOLECULAR DYNAMICS
- 4.152 LITHIUM IODINE
LI.I
74-RA-08 RASTOGI, HARANEK+ LI.BR/ LI.I/ LI.F/ LI.CL ..LATTICE DYNAMICS/ THEORY
74-SI-03 SINGH LI.H/ LI.BR/ LI.I ..DISPERSION-CURVES/ DENSITY-OF-STATES
- 4.153 LITHIUM NITRIDE
LI3.N
77-CH-01 CHANDRASEKHAR, BHATTACHARYA+ LI3.N ..PHONON SPECTRA/ RIGID SHELL MODEL
- 4.154 LITHIUM NIOBATE
LI.NB.O3
71-DE-05 DEVINE, PECKHAM LI.NB.O3 ..THEORY/ GROUP THEORY/ INELASTIC NEUTRON SCATTERING
74-RO-02 ROS, SAUNDERSON LI.NB.O3 ..DISPERSION RELATION/ INELASTIC NEUTRON SCATTERING
- 4.155 LITHIUM SULFATE
LI2.S.O4.H2.O
68-JA-02 JANIK C.H4/ H2.O/ N.H3/ LI2.S.O4.H2.O/ H3.C.N.O3/ C.H3.I ..EXPERIMENT/ GAS/ LIQUID/ SOLID/ MOLECULAR
- 4.156 LITHIUM SULFATE MONOHYDRATE
LI2.S.O4.H2.O
69-TH-01 THAPER, SEQUEIRA+ K2.C2.O4.H2.O/ BA.(CL.O3)2.H2.O/ LI2.S.O4.H2.O/ CA.S.O4.H2.O/ CU.CL2.H2.O/ BE.S.O4
71-JA-02 JANIK, JANIK+ LI2.S.O4.H2.O ..INELASTIC SCATTERING SPECTRA/ H2.O IN CRYSTAL
72-MI-01 MIKULI, JANIK+ LI2.S.O4.H2.O ..EXPERIMENT/ FREQUENCY SPECTRUM
- 4.157 LITHIUM YTTRIUM TETRAFLUORIDE
LI.Y.F4
70-MI-01 MILLER, RAST+ LI.Y.F4 ..EXPERIMENT ..RAMAN SCATTERING
- 4.158 MAGNESIUM FLUORIDE
MG.F2
69-KA-02 KAHN, TROTIN+ MG.F2 ..EXPERIMENT/ 3-AXIS SPECTROMETER/ LATTICE DYNAMICS/ DISPERSION RELATION
70-KA-04 KATYAR MG.F2 ..THEORY/ LATTICE DYNAMICS
74-AL-05 ALMAIRAC, BENoit MG.F2 ..PHONON DISPERSION/ EXPERIMENT/ SHELL MODEL CALCULATION
- 4.159 MAGNESIUM HYDROXIDE
MG.(O.H)2
63-SA-01 SAFFORD, BRAJOVIC+ MG.(O.H)2/ CA.(O.H)2 ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS
65-PE-02 PELAH, KREBS+ CA.(O.H)2/ MG.(O.H)2/ LI.O.H ..EXPERIMENT/ LATTICE DYNAMICS ..TOF

4.160	MAGNESIUM OXIDE	MG.O	
65-PE-01	PECKHAM	MG.O	..LATTICE DYNAMICS
67-BU-01	BUCKLAND, SAUNDERSON	MG.O	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..TRIPLE AXIS SPECTROMETER
67-MA-02	MARTIN	MG.O	..SOLID/ EXPERIMENT ..DEFECT SCATTERING/ SCATTERING THEORY
67-PE-01	PECKHAM	MG.O	..LATTICE DYNAMICS/ EXPERIMENT/ THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..ROOM
67-HI-01	RIEDER, HOERL	MG.O	..EXPERIMENT/ SOLID/ LATTICE DYNAMICS ..SURFACE VIBRATION
67-VL-05	VERMA, DAYAL	MG.O	..THEORY/ PHONON DISPERSION/ COMBINED DENSITY-OF-STATES
68-BO-03	BORGONOVII, CARRIVEAU	MG.O	..EXPERIMENT/ ANGULAR DISTRIBUTION/ SHELL MODEL CALCULATION
68-MA-08	MARTIN	MG.O	..EXPERIMENT/ THEORY/ SOLID ..DEFECT SCATTERING
68-HI-04	RIEDER, HOERL	MG.O	..EXPERIMENT/ PHONON SPECTRA/ SURFACE MODE
70-SA-01	SABINE, SVENSON	MG.O	..EXPERIMENT/ TOTAL SCATTERING SIGMA ..DEFECT CLUSTER SCATTERING
70-SA-05	SANGSTER, PECKHAM+	MG.O	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES ..BREATHING SHELL MODEL/ FREQUEN
71-CA-01	CALTIER, MONTANER	MG.O/ CA.O/ SR.O/ BA.O	..THEORY/ PHONON DISPERSION
71-GI-02	GILLIS	MG.O	..THEORY/ LATTICE VIBRATION
72-GE-01	GENZEL, MARTIN	MG.O	..THEORY/ FREQUENCY SPECTRA/ RIGID ION MODEL/ SMALL CRYSTAL
72-SI-06	SINGH, UPADHYAYA	MG.O	..THEORY/ SHELL MODEL/ PHONON DISPERSION/ SPECIFIC HEAT
73-SA-03	SANGSTER	MG.O/ NA.CL/ LI.F/ K.I	..INTERIONIC FORCE/ PHONON DISPERSION/ DEFORMABLE SHELL MODEL
73-VE-02	VERMA, AGARWAL	MG.O	..LATTICE DYNAMICS/ DISPERSION RELATION/ THEORY
76-SA-01	SACCHETTI, SELLONI	MG.O	..THEORY/ SOLID/ FREQUENCY DISTRIBUTION
			NEUTRON-SCATTERING-IN-SOLIDS/
4.161	MAGNETITE	FE3.O4	
74-SA-03	SAMUELSEN, STEINSVOLL	MAGNETITE	..EXPERIMENT/ INELASTIC NEUTRON SCATTERING/ DISPERSION RELATION ..SPINEL S
76-RA-03	RAKHECHA, CHAKRAVARTHY+	FE3.O4	..POLARIZED NEUTRON DIFFRACTION
76-SH-04	SHAPIRO, IIZUMI+	MAGNETITE	..1-D CORRELATION/ 3-D INTERCHAIN-INTERACTION
76-SI-05	STEINSVOLL, MUSTOE+	FE3.O4	..EXPERIMENT/ MAGNETIC SCATTERING/ CRITICAL SCATTERING/ MAGNON
77-KE-01	KELBER, SHIRANE+	FE3.O4	..EXPERIMENT/ NEUTRON ELASTIC SCATTERING/ RESISTIVITY MEASUREMENT/ HEAT-CAPACITY A
4.162	MANGANESE FERRITE	MN.FE2.O4	
74-SC-01	SCHERLINCK, WEGENER+	MN.FE2.O4	..DISPERSION-CURVES
74-WE-02	WEGENER, SCHEERING+	MN.FE2.O4	..EXPERIMENT/ TOF/ DISPERSION RELATION ..SPIN WAVE SPECTRUM
4.163	MANGANESE FLUORIDE	MN.F2	
74-CR-01	CRAN, SANGSTER	MN.F2	..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..SHELL MODEL
4.164	MANGANESE HYDROGEN CARBONYL (1)	H.MN.(C.O)5	
72-WH-03	WHITE, WRIGHT	H.CO.(C.O)4/ H2.FE.(C.O)4/ H.MN.(C.O)5/ K.H.FE.(C.O)4/ H3.MN3.(C.O)12/ CS.H.FE3.(C.O)11	..EX
4.165	MANGANESE HYDROGEN CARBONYL (2)	H3.MN3.(C.O)12	
72-WH-03	WHITE, WRIGHT	H.CO.(C.O)4/ H2.FE.(C.O)4/ H.MN.(C.O)5/ K.H.FE.(C.O)4/ H3.MN3.(C.O)12/ CS.H.FE3.(C.O)11	..EX

- 4.166 MANGANESE MONOXIDE MN.O
- 69-HA-06 HAYWOOD, COLLINS MN.O ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..CONST.-0/ RIGID-ION AND SHELL
 70-UP-01 UPADHYAYA, SINGH MN.O ..THEORY/ DISPERSION RELATIONS
 71-HA-07 HAYWOOD, COLLINS MN.O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING
 72-UP-03 UPADHYAYA, SINGH MN.O ..THEORY/ PHONON DISPERSION
 74-SH-04 SHARMA MN.O ..DISPERSION-CURVES ..THEORY/ DEFORMATION-DIPOLE-MODEL
 74-UP-01 UPADHYAYA, SINGH MN.O/ CO.O/ NI.O ..THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS ..THREE-BODY FORCE SHELL
 76-SH-06 SHARMA MN.O ..LATTICE DYNAMICS/ DEFORMATION DIPOLE MODEL
 76-WA-01 WAGNER, REICHARDT+ MN.O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING
- 4.167 MOLYBDENUM DISULFIDE MO.S2
- 71-BR-03 BROMLEY MO.S2 ..THEORY/ PHONON DISPERSION
 75-WA-01 WAKABAYASHI, SMITH+ MO.S2 ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING
 77-WA-02 WAKABAYASHI MO.S2/ GRAPHITE/ NB.S2/ PB.S2/ PB.12 ..THEORY/ PHONON DISPERSION/ LAYERER STRUCTURES
- 4.168 MOLYBDENUM SULFIDE MO6.S8
- 76-BA-01 BADER, SINHA+ SN.MO6.S8/ PB.MO6.S8/ MO6.S8 ..EXPERIMENT/ PHONON SPECTRA/ MOLECULAR-CRYSTAL
- 4.169 NEODYMIUM CHROMIUM OXIDE ND.CR.O3
- 77-SH-01 SHAMIR, MELAMUD+ PR.CR.O3/ ND.CR.O3/ TB.CR.O3/ HO.CR.O3/ ER.CR.O3 ..EXPERIMENT/ MAGNETIC SCATTERING / R.CR
- 4.170 NICKEL CHLORIDE NI.CL2
- 77-QU-01 QUIRKE, SOPER NI.CL2 ..NICKEL-NICKEL PARTIAL STRUCTURE FACTOR/ HARD SPHERE POTENTIAL/ SOLUTION IN D2.O
 77-SO-01 SOPER, NIELSEN+ NI.CL2/ NA.CL ..NEUTRON DIFFRACTION EXPERIMENT/ HYDRATION NUMBER
- 4.171 NICKEL MONOSULFIDE NI.S
- 72-BR-02 BRIGGS, DUFFILL+ NI.S ..EXPERIMENT/ PHONON AND MAGNON DISPERSION
- 4.172 NICKEL OXIDE NI.O
- 74-UP-01 UPADHYAYA, SINGH MN.O/ CO.O/ NI.O ..THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS ..THREE-BODY FORCE SHELL
 75-RE-01 REICHARDT, WAGNER+ NI.O ..EXPERIMENT/ SOLID/ DISPERSION RELATION/ NEUTRON INELASTIC SCATTERING/ TRIPLE AXI
 76-CO-16 COY, TOMPSON+ NI.O ..DISPERSION RELATION/ COHERENT INELASTIC NEUTRON SCATTERING
 76-CO-17 COY, TOMPSON+ NI.O ..EXPERIMENT/ PHONON DISPERSION/ THREE BODY FORCE SHELL MODEL FITTING
 77-GO-07 GOYAL, GOYAL CO.O/ NI.O ..THEORY/ FREQUENCY SPECTRUM
- 4.173 NIOBIUM CARBIDE NB.C

- 71-SM-01 SMITH, GLAESER TA,C/ HF,C/ NB,C ..EXPERIMENT/ PHONON DISPERSION/ SUPERCONDUCTIVITY
 72-MO-02 MOSTOLLER U,C/ HF,C/ TA,C/ NB,C ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH
 72-SM-02 SMITH, WAKABAYASHI+ NB,C/ ZR,C/ TC/ ZR/ Y ..EXPERIMENT/ SUPERCONDUCTIVITY/ ELECTRON-PHONON INTERACTION
 73-WE-02 WEBER TI,C/ ZR,C/ V,C/ NB,C/ TA,C/ U,C ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION/ FREQUE
 76-GU-01 GUPTA, FREEMAN ZR,C/ HF,C/ NB,C/ TA,C ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ APW ENERGY BAND CALCULA
 76-GU-03 GUPTA, FREEMAN NB,C/ TA,C/ ZR,C/ HF,C ..THEORY/ PHONON ANOMALY/ GENERALIZED SUSCEPTIBILITY
 76-HA-03 HANKE, HAFNER+ THEORY-OF-SOLIDS/ NB,C ..THEORY/ TRANSITION METAL COMPOUND/ PHONON DISPERSION
 76-KL-01 KLEIN, BOYER+ TA,C/ NB,C/ HF,C ..APW MUFFIN-TIN CALCULATION/ FERMI SURFACE/ PHONON FREQUENCY
 77-GO-08 GOYAL, GOYAL NB,C ..PHONON DISPERSION CURVES/ PSEUDOPOTENTIAL MODEL/ MODIFIED SHELL MODEL
 77-SP-02 SPLETTSTOSSER NB,C ..THEORY/ SOLID/ DISPERSION RELATION ..SHELL MODEL/ ONE-PHONON CROSS SECTION/ VIRTUAL C
- 4,174 NIOBIUM OXIDE NB.O2
- 4,175 NIOBIUM SULFIDE NB.S2
- 77-WA-02 WAKABAYASHI MC.S2/ GRAPHITE/ NB.S2/ PB.12 ..THEORY/ PHONON DISPERSION/ LAYERER STRUCTURES
- 4,176 PLUTONIUM PHOSPHIDE PU.P
- 76-LA-01 LANDER, REDDY PU,P/ PU-FE ..POLARIZED NEUTRON DIFFRACTION
- 4,177 POTASSIUM ACID FLUORIDE K.H.F2
- 63-BO-02 BOUTIN, SAFFORD H.F/ K.H.F2/ K.H2.F3/ NA.H2.F3 ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS
 70-CO-02 COLLINS, HAYWOOD+ K.H.F2/ CS.H.CL2/ NA.H.C.O3/ K.C2.CL3.O2/ K.C2.F3.O2 ..EXPERIMENT/ MOLECULAR DYNAMICS/ F
 72-RU-01 RUSH, SCHROEDER+ K.H.F2/ NA.H.F2 ..NEUTRON SPECTROSCOPY/ RAMAN, INFRARED SPECTROSCOPY
 72-SA-01 SAKAMOTO, IIZUMI+ K.H.F2/ (N.H4)2.S.O4/ POLYETHYLENE ..EXPERIMENT/ BE-FILTER-DETECTOR/ MOLECULAR DYNAMICS
 73-SM-02 SMITH, TEMME+ NA.H.F2/ K.H.F2/ CS.H.CL2/ CS.H.BR2 ..EXPERIMENT/ FREQUENCY SPECTRA/ TOF SPECTRA
- 4,178 POTASSIUM AMMONIUM CHLORIDE K.N.H4.CL
- 72-SM-01 SMITH, WAKABAYASHI+ K.N.H4.CL ..EXPERIMENT/ LOCALIZED PHONON
- 4,179 POTASSIUM AZIDE K.N3
- 69-GO-01 GOVINDARAJAN, HARIDASAN K.N3/ RB.N3/ CS.N3 ..THEORY/ LATTICE VIBRATION ..RIGID ION MODEL/ BODY CENTERED TE
 70-RA-04 RAO, TREVINO K.N3 ..THEORY/ LATTICE DYNAMICS/ GROUP-THEORETICAL ANALYSIS
 71-RA-04 RAO, TREVINO+ K.N3 ..EXPERIMENT/ PHONON DISPERSION/ RIGID-ION MODEL FITTING
 71-RA-05 RAO, TREVINO+ K.N3 ..EXPERIMENT/ PHONON DISPERSION/ RIGID ION MODEL CALCULATION
- 4,180 POTASSIUM BROMIDE K.BR
- 63-CO-03 COCHRAN, COWLEY+ K.BR/ NA.I ..THEORY/ PHONON DISPERSION
 63-WO-02 WOODS, BROCKHOUSE+ K.BR/ NA.I ..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS ..90DK

66-CO-03 COWLEY, COWLEY K.BR/ NA.1/ THEORY-OF-SOLIDS ..THEORY/ ANHARMONICITY/ PHONON DISPERSION
 68-BU-04 BUYERS, COWLEY K.BR/ R3.BR ..EXPERIMENT/ LATTICE DYNAMICS ..MIXED CRYSTAL
 68-BU-06 BUYERS, SMITH K.CL/ K.BR/ NA.1/ NA.CL/ NA.BR/ NA.F ..THEORY/ DEBYE-WALLER FACTOR ..TEMPERATURE DEPENDENCE/
 68-CO-11 COWLEY, BUYERS+ K.BR/ SR.TI.03 ..THEORY/ EXPERIMENT/ LATTICE DYNAMICS/ ELASTIC CONSTANT ..NEUTRON MEASUREM
 68-CO-13 COWLEY, SVENSSON+ K.BR/ SR.TI.03/ K.H2.P.04 ..ELASTIC CONSTANT/ SOUND VELOCITY/ ANHARMONICITY
 68-SV-01 SVENSSON, BUYERS K.BR ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION ..3-AXIS-SPECTROMETER/ 95DK/ 463
 70-LO-02 LOWDES K.BR ..ANHARMONICITY ..DIELECTRIC CONSTANT
 73-BA-03 BASU, SENGUPTA NA.CL/ NA.BR/ K.1/ K.CL/ K.BR ..THEORY/ DEFORMABL SHELL MODEL/ PHONON DISPERSION/ FREQUENCY
 75-BL-02 BLASCHKO, ERNST+ K.BR ..EXPERIMENT/ PHONON FREQUENCY SHIFT/ PRESSURE EFFECT
 76-FA-02 FARR, TREVING K.BR ..EXPERIMENT/ PHONON DISPERSION/ 1BAR.6.4KBAR/ BREATHING SHELL MODEL

4.181 POTASSIUM CHLORIDE

K.CL

67-IV-01 IVERONOVA, PARANGTOPO+ K.CL/ K.1 ..LATTICE DYNAMICS/ DISPERSION RELATION ..X-RAY EXPERIMENT
 67-ST-01 STARTSEV, BRAUD K.CL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..X-RAY EXPERIMENT
 68-BE-01 BENEDEK, NARDELLI NA.CL/ K.CL ..DISPERSION RELATION/ THEORY/ LATTICE DYNAMICS
 68-BU-06 BUYERS, SMITH K.CL/ K.BR/ NA.1/ NA.CL/ NA.BR/ NA.F ..THEORY/ DEBYE-WALLER FACTOR ..TEMPERATURE DEPENDENCE/
 69-CO-05 COPLEY, MACPHERSON+ K.CL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ FREQUENCY SPECTRA/ DEBYE TEMP./
 69-RA-03 RAUNIO, AUMAVIST K.CL ..EXPERIMENT/ PHONON DISPERSION RELATION/ 80, 300DK/ COMPARED WITH BREATHING SHELL M
 69-RA-04 RAUNIO NA.CL/ K.CL/ RB.CL ..EXPERIMENT/ PHONON WIDTH/ 80, 300DK
 70-JA-03 JAYALAKSHMI, VISWAMITRA K.CL ..EXPERIMENT/ X-RAY SCATTERING
 70-RA-07 RAUNIO, ROLANDSON NA.CL/ K.CL/ RB.CL/ RB.F ..SHELL MODEL FITTING/ FREQUENCY SPECTRUM/ DEBYE TEMPERATURE
 70-RA-09 RAUNIO, ROLANDSON NA.CL/ K.CL/ RB.CL/ RB.F ..THEORY/ DISPERSION CURVES/ SHELL MODEL
 70-RE-02 REID, SMITH NA.F/ NA.CL/ NA.BR/ NA.1/ K.CL/ K.BR ..THEORY/ SOLID/ DEBYE-WALLER FACTOR ..SHELL MODEL/ ROOT
 73-BA-03 BASU, SENGUPTA NA.CL/ NA.BR/ K.1/ K.CL/ K.BR ..THEORY/ DEFORMABL SHELL MODEL/ PHONON DISPERSION/ FREQUENCY
 74-RO-01 ROMANO, MARGHERITIS K.CL ..IONIC POLARIZATION/ ALKALI HALIDE
 76-BU-04 BOLONIN NA.CL/ K.CL ..THEORY/ PHONON DISPERSION
 77-BU-02 BOLONIN NA.BR/ K.1/ NA.CL/ K.CL ..DISPERSION RELATION/ EXPERIMENT/ ELASTIC CONSTANT
 77-MA-02 HARDY, KARG NA.CL/ K.CL/ RB.CL ..THEORY/ LATTICE DYNAMICS/ CENTRAL-FORCE MODELS ..THERMAL EXPANSION/ HEAT

4.182 POTASSIUM CHLOROSTANNATE

K2.SN.CL6

76-BU-05 BOYSER, IHRINGER+ K2.SN.CL6 ..NEUTRON DIFFRACTION

4.183 POTASSIUM(2) COBALT FLUORIDE

K2.CO.F4

76-SH-09 SHIRANE, BIRGENEAU K2.CO.F4/ K2.NI.F4/ RB2.MN0.5.NI0.5.F4/ RB2.MN0.5.MG0.5.F4/ TMMC ..EXPERIMENT/ MAGNETIC

4.184 POTASSIUM COBALT TRIFLUORIDE

K.CO.F3

71-BU-03 BUYERS, HOLDEN+ K.CO.F3 ..THEORY/ MAGNON DISPERSION/ PHONON-MAGNON INTERACTION
 71-HO-01 HOLDEN, BUYERS+ K.CO.F3 ..EXPERIMENT/ PHONON DISPERSION/ MAGNON DISPERSION

4.185 POTASSIUM COPPER FLUORIDE

K.CU.F3

- 4.186 POTASSIUM(2) COPPER FLUORIDE K2.CU.F4
76-MO-05 MOUSSA, VILLAIN K2.CU.F4 ..EXPERIMENT/ THEORY/ MAGNETIC SCATTERING/ SPIN-WAVE
- 4.187 POTASSIUM CYANIDE K.C.N
75-RO-03 ROWE, RUSH+ K.C.N/ NA.C.N ..EXPERIMENT/ PHONON DISPERSION
76-JI-01 BILL, JEX+ K.C.N/ NA.C.N ..DISPERSION RELATION/ SHELL MODEL/ ROTATIONAL EFFECT
76-DA-03 DAUBERT, KNORR+ K.C.N ..EXPERIMENT/ PHONON DISPERSION/ 215K
- 4.188 POTASSIUM DIHYDROGEN FLUORIDE K.H2.F3
63-BO-02 BOUTIN, SAFFORD H.F/ K.H.F2/ K.H2.F3/ NA.H2.F3 ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS
- 4.189 POTASSIUM DIHYDROGEN PHOSPHATE K.H2.P.O4
61-RU-01 RUSH, TAYLOR+ K.H2.P.O4/ (N.H4)2.CR.04/ (N.H4)2.CR2.07/ N.H4.C.N.S/ N.H4.CL.O4 ..EXPERIMENT/ MOLECULAR DYN
63-PA-01 PALEVSKY, OTNES+ K.H2.P.O4 ..EXPERIMENT/ TOF
65-IM-01 IMRY, PELAH+ K.H2.P.O4/ K2.H.P.O4/ K3.P.O4 ..EXPERIMENT/ LATTICE DYNAMICS ..TOF
65-PE-03 PELAH, WIENER+ K.H2.P.O4/ K2.H.P.O4/ K3.P.O4 ..EXPERIMENT/ LATTICE DYNAMICS ..TOF
67-BL-02 BLINC, DIMIC+ K.H2.P.O4 ..MOLECULAR DYNAMICS/ SOLID/ EXPERIMENT
67-TH-01 THAPER, ROY+ K.H2.P.O4 ..EXPERIMENT/ FREQUENCY SPECTRA
68-BU-05 BUYERS, COWLEY+ K.H2.P.O4 ..EXPERIMENT/ QUASI-ELASTIC SCATTERING ..34DC - -49.6DC
68-CO-13 COWLEY, SVENSSON+ K.BR/ SR.TI.O3/ K.H2.P.O4 ..ELASTIC CONSTANT/ SOUND VELOCITY/ ANHARMONICITY
68-SC-01 SCHENK, WIENER+ K.H2.P.O4 ..EXPERIMENT/ LATTICE DYNAMICS ..PHASE TRANSITION
68-SC-02 SCHENK, WIENER+ K.H2.P.O4 ..EXPERIMENT/ TOF/ SINGLE CRYSTAL ..AS A FUNCTION OF TEMPERATURE/ PHASE TRANSITI
68-SH-02 SHENK, WIENER+ K.H2.P.O4 ..INCOHERENT SCATTERING SPECTRA/ PHASE TRANSITION/ LATTIC VIBRATION
68-ST-03 STEINMAN, SUMMERFIELD K.H2.P.O4 ..INCOHERENT SCATTERING
69-CO-01 COCHRAN NEUTRON-SCATTERING-IN-SOLIDS/ BA.TI.O3/ K.H2.P.O4/ NA.N.O2 ..THEORY/ DIELECTRIC/ CRITICAL SCATT
69-ST-01 STEINMAN, SUMMERFIELD K.H2.P.O4 ..THEORY/ INCOHERENT SCATTERING ..SINGLE CRYSTAL/ TUNNELING MOTION
70-PA-06 PAUL, COCHRAN+ K.H2.P.O4 ..EXPERIMENT/ THEORY/ PHASE TRANSITION/ NEUTRON SCATTERING
70-SK-01 SKALYO-JR, FRAZER+ K.H2.P.O4 ..EXPERIMENT/ OVERDAMPED PHONON MODE/ K.D2.P.O4
72-AN-04 ANTONINI, SOSNOWSKA+ K.H2.P.O4/ N.H4.H2.P.O4 ..ELASTIC SCATTERING/ INTERFERENCE EFFECT/ PARAELECTRIC PHASE
72-AR-01 ARSIC-ESKINJA, GRIMM+ K.H2.P.O4 ..EXPERIMENT/ ELASTIC SCATTERING/ PHASE TRANSITION
76-CO-12 COWLEY K.H2.P.O4 ..EXPERIMENT/ CRITICAL SCATTERING/ PHASE TRANSITION
76-CO-14 COWLEY K.H2.P.O4 ..THEORY/ PHASE TRANSITION/ CLASSICAL LANDAU THEORY
76-ZE-01 ZEVEN, MEISTER K.H2.P.O4 ..EXPERIMENT/ PHASE TRANSITION
- 4.190 POTASSIUM FERROCYANIDE K4.FE.(C.N)6
65-RU-02 RUSH, TAYLOR K4.FE.(C.N)6/ (N.H4)2.S.O4/ N.H4.H.S.O4/ (N.H4)2.BE.F4 ..EXPERIMENT/ MOLECULAR LATTICE DYNAMI
- 4.191 POTASSIUM FLUOGERMANATE K2.GE.F6
76-CH-07 CHODOS, BLACK+ CS2.MN.F6/ K2.SI.F6/ RB2.SI.F6/ CS2.SI.F6/ K2.GE.F6 ..EXPERIMENT/ THEORY/ DIPERSION RELATIO

- 4.192 POTASSIUM FLUORIDE K.F
70-BU-02 BUEHRER K.F ..EXPERIMENT/ PHONON DISPERSION/ ELEVEN PARAMETER FITTING/ FREQUENCY SPECTRUM
- 4.193 POTASSIUM FLUOSILICATE K2.SI.F6
76-CH-07 CHODOS, BLACK+ CS2.MN.F6/ K2.SI.F6/ RB2.SI.F6/ CS2.SI.F6/ K2.GE.F6 ..EXPERIMENT/ THEORY/ DISPERSION RELATIO
- 4.194 POTASSIUM HYDROGEN IRON CARBONYL K.H.FE.(C.O)4
72-WH-03 WHITE, WRIGHT H.CO.(C.O)4/ H2.FE.(C.O)4/ H.MN.(C.O)5/ K.H.FE.(C.O)4/ H3.MN3.(C.O)12/ CS.H.FE3.(C.O)11 ..EX
- 4.195 POTASSIUM HYDROGEN TRICHLOROACETATE K.H.(C.CL3.C.O2)2
72-GH-02 GHOSH, WADDINGTON+ NA.H.F2/ CS.H.CL2/ H.CR.O2/ H.CO.O2/ K.H.(C.CL3.C.O2)2 ..EXPERIMENT/ NEUTRON SPECTROSCO
- 4.196 POTASSIUM IODIDE K.I
65-MI-01 MIKKE, DORZYNSKI N.H4.I/ K.I ..FREQUENCY SPECTRA/ SOLID SOLUTION
66-DO-01 DOLLING, COWLEY+ K.I ..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS
67-IV-01 IVERONOVA, PARANGTOPO+ K.CL/ K.I ..LATTICE DYNAMICS/ DISPERSION RELATION ..X-RAY EXPERIMENT
69-SA-03 SAFFORD, LEUNG+ H2.O/ LA.CL3/ CS.I/ CS.CL/ K.I/ K.BR/ K.CL/ NA.CL ..EXPERIMENT/ TOF SPECTRA/ INTERMOLECULA
69-SI-01 SINGH, VERMA K.I ..PHONON DISPERSION
73-BA-03 BASU, SENGUPTA NA.CL/ NA.BR/ K.I/ K.CL/ K.BR ..THEORY/ DEFORMABL SHELL MODEL/ PHONON DISPERSION/ FREQUENCY
73-SA-03 SANGSTER MG.O/ NA.CL/ LI.F/ K.I ..INTERIONIC FORCE/ PHONON DISPERSION/ DEFORMABLE SHELL MODEL
77-BU-02 HOLUNIN NA.BR/ K.I/ NA.CL/ K.CL ..DISPERSION RELATION/ EXPERIMENT/ ELASTIC CONSTANT
- 4.197 POTASSIUM MANGANESE-IRON FLUORIDE K2.(MN-FE).F4
76-BE-08 BEVAART, FRIKKEE+ K2.(MN-FE).F4 ..NEUTRON DIFFRACTION/ SPIN ANISOTROPY
- 4.198 POTASSIUM(2) MANGANESE FLUORIDE K2.MN.F4
76-ST-10 STROBEL, GEICK K2.MN.F4/ RB2.MN.CL4 ..RIGID-ION MODEL/ CALCULATION/ LATTICE DYNAMICS/ SHORT-RANGE FORCE CO
- 4.199 POTASSIUM MANGANESE TRIFLUORIDE K.MN.F3
69-MI-02 MINKIEWICZ, SHIRANE K.MN.F3 ..EXPERIMENT/ DISPERSION RELATION/ TEMPERATURE DEPENDENCE
70-SH-09 SHIRANE, MINKIEWICZ+ K.MN.F3 ..PHONON DISPERSION/ PHASE TRANSITION
72-GE-02 GESI, AXE+ K.MN.F3 ..EXPERIMENTS/ SOFT PHONON/ DISPERSION RELATION/ CURIE-WEISS LAW/ DAMPING PARAMETER/ DI
72-GE-03 GESI K.MN.F3 ..EXPERIMENT/ SOFT PHONON/ PHASE TRANSITION
72-SH-03 SHAPIRO, AXE+ SR.TI.O3/ K.MN.F3 ..EXPERIMENT/ CRITICAL SCATTERING/ PHASE TRANSITION
73-SH-01 SHAPIRO, AXE+ K.MN.F3 ..EXPERIMENT/ SOFT MODE DYNAMICS
74-AX-03 AXE, SHAPIRO+ NB3.SN/ SK.TI.O3/ K.MN.F3/ LA.AL.O3 ..EXPERIMENT/ SOFT MODE/ CENTRAL PEAK PROBLEM
74-SH-03 SHAPIRO, AXE+ K.MN.F3 ..EXPERIMENT/ PHONON LINE SHAPE/ PHASE TRANSITION

4.200 POTASSIUM MANGANESE-ZINC FLUORIDE K.(MN-ZN).F3

4.201 POTASSIUM MONOHYDROGEN PHOSPHATE K2.H.P.O4
 65-JM-01 IMRY, PELAH+ K.H2.P.O4/ K2.H.P.O4/ K3.P.O4 ..EXPERIMENT/ LATTICE DYNAMICS ..TOF
 65-PE-03 PELAH, WIENER+ K.H2.P.O4/ K2.H.P.O4/ K3.P.O4 ..EXPERIMENT/ LATTICE DYNAMICS ..TOF

4.202 POTASSIUM(2) NICKEL FLUORIDE K2.NI.F4
 76-SH-09 SHIRANE, BIRGENEAU K2.CO.F4/ K2.NI.F4/ RB2.MNO.5.NI0.5.F4/ RB2.MNO.5.MGO.5.F4/ TMMC ..EXPERIMENT/ MAGNETIC

4.203 POTASSIUM NIOBATE K.NB.O3
 74-ZA-01 ZACCAI, HEWAT K.NR.O3/ K.TA.O3 ..X-RAY AND NEUTRON DIFFRACTION/ DIFFUSE STREAK/ PHONON DISPERSION

4.204 POTASSIUM OXALATE HYDRATE K2.C2.O4*H2.O
 69-TH-01 THAPER, SEQUEIRA+ K2.C2.O4*H2.O/ BA.(CL.O3)2*H2.O/ LI2.S.O4*H2.O/ CA.S.O4*2(H2.O)/ CU.CL2*2(H2.O)/ BE.S.O4
 70-TH-01 THAPER, DASANNACHARYA+ BA.(CL.O3)2*H2.O/ K2.C2.O4*H2.O ..EXPERIMENT/ HYDRATES/ LIBRATION OF H2.O IN HYDRAT

4.205 POTASSIUM PHOSPHATE K3.P.O4
 65-JM-01 IMRY, PELAH+ K.H2.P.O4/ K2.H.P.O4/ K3.P.O4 ..EXPERIMENT/ LATTICE DYNAMICS ..TOF
 65-PE-03 PELAH, WIENER+ K.H2.P.O4/ K2.H.P.O4/ K3.P.O4 ..EXPERIMENT/ LATTICE DYNAMICS ..TOF

4.206 POTASSIUM RHENIUM CHLORIDE K2.RE.CL6
 74-DU-01 DUROCHER, DARAIN K2.RE.CL6 ..DENSITY-OF-STATES/ CALCULATION

4.207 POTASSIUM RHENIUM HYDRIDE K2.RE.H9
 72-WH-02 WHITE, WRIGHT K2.RE.H9/ NA2.RE.H9 ..EXPERIMENT/ N-SPECTROSCOPY/ MOLECULAR VIBRATION

4.208 POTASSIUM-RUBIDIUM IODIDE (K-RB).I
 76-AS-02 ASLAM, ROLANDSON+ (K-RB).I ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING

4.209 POTASSIUM SELENATE K2.SE.O4
 76-II-02 IIZUMI, AXE+ K2.SE.O4 ..EXPERIMENT/ PHASE TRANSITION/ PHONON SOFTENING

76-11-03	IIZUMI, AXE+	K2,SE.04	..EXPERIMENT/ INCOMENSURATE/ PHONON DISPERSION/ SOFTENING
4.210	POTASSIUM TANTALATE	K.TA.03	
67-SH-01	SHIRANE, NATHANS+	K.TA.03	..EXPERIMENT/ PHASE TRANSITION/ SOFT MODE/ LATTICE DYNAMICS
70-AX-02	AXE, HARADA+	K.TA.03	..PHONON DISPERSION/ CRITICAL PHENOMENA
70-HA-01	HARADA, AXE+	K.TA.03/ SR.TI.03/ RB.MN.F3	..EXPERIMENT/ INELASTIC STRUCTURE FACTOR/ PHONON EIGENVECTOR/ FERR
72-CO-03	COMES, SHIRANE	K.TA.03	..EXPERIMENT/ PHONON DISPERSION/ ANISOTROPY
74-ZA-01	ZACCAI, HEWAT	K.NB.03/ K.TA.03	..X-RAY AND NEUTRON DIFFRACTION/ DIFFUSE STREAK/ PHONON DISPERSION
4.211	PRASEODYMIUM ALUMINATE	PR.AL.03	
74-BI-02	BIRGENEAU, KJEMS+	PR.AL.03	..JAHN-TELLER/ STRUCTURAL-PHASE-TRANSITION
4.212	PRASEODYMIUM CHROMIUM OXIDE	PR.CR.03	
77-SH-01	SHAMIR, MELAMUD+	PR.CR.03/ ND.CR.03/ TB.CR.03/ HO.CR.03/ ER.CR.03	..EXPERIMENT/ MAGNETIC SCATTERING / R.CR
4.213	PRASEODYMIUM FLUORIDE	PR.F3	
76-SH-01	SHAMIR, MELAMUD+	PR.F3	..EXPERIMENT/ CRYSTAL-ELECTRIC-FIELD SPLIT
4.214	PRASEODYMIUM GALLIUM OXIDE	PR.GA.03	
76-HE-04	HENNIG, KAUN+	PR.FE.03/ PR.GA.03/ PR.AL2/ PR3.AL	..EXPERIMENT/ CRYSTALLINE FIELD LEVEL
4.215	PRASEODYMIUM IRON OXIDE	PR.FE.03	
76-HE-04	HENNIG, KAUN+	PR.FE.03/ PR.GA.03/ PR.AL2/ PR3.AL	..EXPERIMENT/ CRYSTALLINE FIELD LEVEL
4.216	QUARTZ	SI.O2	
67-EL-01	ELCOMBE	QUARTZ	..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
69-LE-01	LEADBETTER	SILICA/ QUARTZ	..EXPERIMENT/ COLLECTIVE VIBRATION/ AMORPHOUS SOLID ..TOF/ SILICA/
70-AX-01	AXE, SHIRANE	QUARTZ	..EXPERIMENT/ PHONON/ CRITICAL SCATTERING ..PHASE TRANSFORMATION/ ABOVE 573DC/ CONST.-
75-ST-05	STRIEFER, HARSCH	QUARTZ	..DISPERSION/ ELASTIC CONST./ DEBYE TEMP./ THEORY/ MODELED RIGID-ION MODEL
76-BA-05	BARRON, HUANG+	QUARTZ	..THEORY/ PHONON DISPERSION
4.217	RUBIDIUM AZIDE	RB.N3	
69-GO-01	GOVINDARAJAN, HARIDASAN	K.N3/ RB.N3/ CS.N3	..THEORY/ LATTICE VIBRATION ..RIGID ION MODEL/ BODY CENTERED TE
4.218	RUBIDIUM BROMIDE	RB.BR	

68-BU-04 BUYERS, COWLEY K.BR/ RB.BR ..EXPERIMENT/ LATTICE DYNAMICS ..MIXED CRYSTAL
 71-RO-02 ROLANDSON, RAUNIO RB.BR ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING/ ELASTIC CONSTANT/ DIELECTRIC
 72-LA-02 LAL, VERMA RB.F/ RB.CL/ RB.BR/ RB.I ..THEORY/ PHONON DISPERSION/ SHELL MODEL
 75-PR-02 PRICE, COPLEY RB.BR ..EXPERIMENT/ COMPUTER SIMULATION/ LIQUID/ 986DK
 76-CO-07 COPLEY, RAHMAN RB.BR / NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS/ SCATTERING-FUNCTION/ PAIR-CORREL
 77-GO-03 GOEL, DAYAL RB.F/ RB.CL/ RB.BR/ RB.I ..PHONON DISPERSION CURVE/ THREE-BODY FORCE SHELL MODEL
 77-KA-02 KAHOL, CHATURVEDI+ RB.BR ..THEORY/ MOLECULAR DYNAMICS/ DYNAMICAL STRUCTURE FACTOR

4.219 RUBIDIUM CALCIUM TRIFLUORIDE RB.CA.F3

75-KA-02 KAMITAKAHARA, ROTTÉ RB.CA.F3 ..EXPERIMENT/ SOLID/ MONOCHROMETER/ DISPERSION RELATION/ FREQUENCY DISTRIBUT

4.220 RUBIDIUM CHLORIDE RB.CL

69-RA-04 RAUNIO NA.CL/ K.CL/ RB.CL ..EXPERIMENT/ PHONON WIDTH/ 80, 300DK
 70-RA-07 RAUNIO, ROLANDSON NA.CL/ K.CL/ RB.CL/ RB.F ..SHELL MODEL FITTING/ FREQUENCY SPECTRUM/ DEBYE TEMPERATURE
 70-RA-08 RAUNIO, ROLANDSON RB.CL/ RB.F ..EXPERIMENT/ CONST.-Q/ LATTICE DYNAMICS/ DISPERSION RELATION ..80DK/ DEFORM
 70-RA-09 RAUNIO, ROLANDSON NA.CL/ K.CL/ RB.CL/ RB.F ..THEORY/ DISPERSION CURVES/ SHELL MODEL
 72-LA-02 LAL, VERMA RB.F/ RB.CL/ RB.BR/ RB.I ..THEORY/ PHONON DISPERSION/ SHELL MODEL
 72-PA-02 PANDEY, DAYAL RB.CL ..THEORY/ PHONON DISPERSION/ SHELL MODEL
 77-DI-01 DIXON, SANGSTER RB.CL ..MOLTEN R.CL/ MOLECULAR DYNAMICS/ RIGID ION-POLARIZABLE MODEL
 77-GO-03 GOEL, DAYAL RB.F/ RB.CL/ RB.BR/ RB.I ..PHONON DISPERSION CURVE/ THREE-BODY FORCE SHELL MODEL
 77-HA-02 HARDY, KARO NA.CL/ K.CL/ RB.CL ..THEORY/ LATTICE DYNAMICS/ CENTRAL-FORCE MODELS ..THERMAL EXPANSION/ HEAT

4.221 RUBIDIUM CHROMIUM CHLORIDE RB2.CR.CL4

76-HU-01 HUTCHINGS, FAIR+ RB2.CR.CL4 ..EXPERIMENT/ MAGNON DISPERSION/ FERROMAGNETIC PHASE/ 4.5K

4.222 RUBIDIUM FLUOMANGANATE RB.MN.F3

70-HA-01 HARADA, AXE+ K.TA.O3/ SR.TI.O3/ RB.MN.F3 ..EXPERIMENT/ INELASTIC STRUCTURE FACTOR/ PHONON EIGENVECTOR/ FERR

4.223 RUBIDIUM FLUORIDE RB.F

70-RA-07 RAUNIO, ROLANDSON NA.CL/ K.CL/ RB.CL/ RB.F ..SHELL MODEL FITTING/ FREQUENCY SPECTRUM/ DEBYE TEMPERATURE
 70-RA-08 RAUNIO, ROLANDSON RB.CL/ RB.F ..EXPERIMENT/ CONST.-Q/ LATTICE DYNAMICS/ DISPERSION RELATION ..80DK/ DEFORM
 70-RA-09 RAUNIO, ROLANDSON NA.CL/ K.CL/ RB.CL/ RB.F ..THEORY/ DISPERSION CURVES/ SHELL MODEL
 72-LA-02 LAL, VERMA RB.F/ RB.CL/ RB.BR/ RB.I ..THEORY/ PHONON DISPERSION/ SHELL MODEL
 75-JA-01 JAIN, SRIVASTAVA RB.F ..THEORY/ PHONON DISPERSION
 75-SN-01 SNEH, DAYAL NA.F/ RB.F ..THEORY/ PHONON DISPERSION/ SIMPLE SHELL MODEL
 77-GO-03 GOEL, DAYAL RB.F/ RB.CL/ RB.BR/ RB.I ..PHONON DISPERSION CURVE/ THREE-BODY FORCE SHELL MODEL

4.224 RUBIDIUM FLUOSILICATE RB2.SI.F6

76-CH-07 CHODOS, BLACK+ CS2.MN.F6/ K2.SI.F6/ RB2.SI.F6/ K2.GE.F6 ..EXPERIMENT/ THEORY/ DISPERSION RELATIO

4.225	RUBIDIUM HYDROSULFIDE	RB.S.H	CS.S.H/ RB.S.H ..EXPERIMENT/ QUASI-ELASTIC PEAK/ MOLECULAR ROTATIONS/ MEAN SQUARE DISPLA
73-RO-02	ROWE, LIVINGSTON+		
4.226	RUBIDIUM IODIDE	RB.I	
60-SA-01	SAUNDERSON	RB.I ..EXPERIMENT/ LATTICE DYNAMICS	
65-HA-02	HARDY, KARO	RB.I ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS	
66-SA-05	SAUNDERSON	RB.I ..EXPERIMENT/ PHONON FREQUENCY/ PRESSURE EFFECT	
70-RA-10	RAUNIO, ROLANDSON	RB.I ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING	
72-LA-02	LAL, VERMA	RB.F/ RB.CL/ RB.BR/ RB.I ..THEORY/ PHONON DISPERSION/ SHELL MODEL	
74-KR-01	KRESS	RB.I ..THEORY/ PHONON DISPERSION/ GRUENEISEN CONSTANT/ BREATHING SHELL MODEL	
75-BL-01	BLASCHKO, ERNST+	RB.I ..PHONON FREQUENCY/ PRESSURE EFFECT/ GRUENEISEN PARAMETER	
77-GO-03	GOEL, DAVAL	RB.F/ RB.CL/ RB.BR/ RB.I ..PHONON DISPERSION CURVE/ THREE-BODY FORCE SHELL MODEL	
4.227	RUBIDIUM MANGANESE CHLORIDE	RB2.MN.CL4	
76-ST-10	STROBEL, GEICK	K2.MN.F4/ RB2.MN.CL4 ..RIGID-ION MODEL/ CALCULATION/ LATTICE DYNAMICS/ SHORT-RANGE FORCE CO	
4.228	RUBIDIUM MANGANESE-MAGNESIUM FLUORIDE	RB2.MN0.5.MG0.5.F4	
76-SH-09	SHIRANE, BIRGENEAU	K2.CO.F4/ K2.NI.F4/ RB2.MN0.5.NI0.5.F4/ RB2.MN0.5.MG0.5.F4/ TMMC ..EXPERIMENT/ MAGNETIC	
4.229	RUBIDIUM MANGANESE-NICKEL FLUORIDE	RB2.MN0.5.NI0.5.F4	
76-SH-09	SHIRANE, BIRGENEAU	K2.CO.F4/ K2.NI.F4/ RB2.MN0.5.NI0.5.F4/ RB2.MN0.5.MG0.5.F4/ TMMC ..EXPERIMENT/ MAGNETIC	
4.230	RUTILE	TI.O2	
70-KA-03	KATIYAR	RUTILE ..THEORY/ LATTICE DYNAMICS ..MULTIPLIER GROUP APPROACH	
70-TR-01	TRYLOR	TI.O2 ..EXPERIMENT/ DISPERSION RELATION/ RIGID ION MODEL/ SHELL MODEL/ FREQUENCY SPECTRUM/ DIELECTRIC	
71-KA-01	KATIYAR	TI.O2 ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ SHELL MODEL	
71-TR-01	TRAYLOR, SMITH+	TI.O2 ..EXPERIMENT/ DISPERSION CURVE/ NEUTRON SCATTERING/ THEORY/ FREQUENCY SPECTRUM ..TEMP	
4.231	RUTHENIUM TETROXIDE	RU.O4	
72-MC-01	MCQUEWELL, ASPREY+	RU.O4 ..EXPERIMENT ..INFRARED AND RAMAN SPECTRA/ VAPOR AND LIQUID PHASE/ ANHARMONICITY/	
4.232	SILANE	SI.H4	
72-HA-04	HAUTECLER, VORDERWISCH	SI.H4 ..EXPERIMENT/ TOF SPECTRA/ GAS AND LIQUID STATE	

- 4.233 SILICA
SI.O2
69-LE-01 LEADBETTER SILICA/ QUARTZ/ CRISTOBALITE ..EXPERIMENT/ COLLECTIVE VIBRATION/ AMORPHOUS SOLID ..TOF/ SILICA/
- 4.234 SILICON CARBIDE
SI.C
69-HO-01 HODGES SI.C ..THEORY/ SOLID/ LATTICE DYNAMICS
69-VE-01 VETELINO, MITRA SI.C ..LATTICE DYNAMICS/ SOLID/ THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
71-BA-05 BANERJEE, VARSHNI ZN.S/ GA.P/ SI.C ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA/ DEBYE TEMPERATURE
74-PA-04 PANDEY SI.C/ ZN.S ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..POLYTYPE/ FORCE CONSTANT MODEL
75-KU-05 KUNC, BALKANSKI+ THEORY-OF-SOLIDS/ ZN.S/ SI.C/ AL.SB/ GA.SB/ IN.SB/ ZN.SE/ CD.TE/ CU.I/ CU.B
77-SI-03 SINGH, ROY SI.C ..THEORY/ PHONON DISPERSION/ SIX-PARAMETER RIGID ION MODEL
- 4.235 SILICON NITRIDE
SI3.N4
76-JO-01 JORGENSEN, WORLTON+ SI3.N4 ..NEUTRON DIFFRACTION/ HIGH PRESSURE
- 4.236 SILICON TETRACHLORIDE
SI.CL4
76-CL-03 CLARKE, DORE+ C.CL4/ SI.CL4/ TI.CL4/ GE.CL4/ SN.CL4/ SI.CL4-TI.CL4/ SN.CL4-TI.CL4..LIQUID STRUCTURE/ NEUTR
- 4.237 SILVER BROMIDE
AG.BR
72-FI-01 FISCHER, BILZ+ AG.CL/ AG.BR ..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ SHELL MODEL
72-HA-06 HAWRANEK, LOWNDES AG.BR ..THEORY/ PHONON DISPERSION/ STATE DENSITY/ DEFORMATION DIPOLE MODEL
74-KA-03 KANZAKI, SAKURAGI+ AG.BR ..DISPERSION-CURVES ..(111)-DIRECTION
75-BU-02 BUEHRER AG.BR ..EXPERIMENT/ PHONON DISPERSION/ 80 AND 295K/ 12-PARAMETER MODEL FITTING/ FREQUENCY DISTR
75-VO-01 VON-DER-OSTEN, DORNER AG.BR ..DISPERSION REACTION
76-DO-02 DORNER, VON-DER-OSTEN+ AG.BR ..EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ SOLID ..850K
76-SI-02 SINGH, SINGH AG.BR ..THEORY/ THREE-BODY-FORCE SHELL MODEL/ PHONON DISPERSION
76-WO-01 WOOD, MOSTOLLER AG.CL/ AG.BR ..THEORY/ PHONON/ EFFECTS OF INTERSTITIAL ATOMS
77-FU-01 FUJII, HOSHINO+ AG.BR ..PHONON-DISPERSION-CURVE/ DENSITY-OF-STATES ..4.4K
- 4.238 SILVER CHLORIDE
AG.CL
70-VI-01 VIJAYARAGHAVAN, NICKLOW+ SILVER CHLORIDE ..EXPERIMENT/ LATTICE DYNAMICS/ 70DK/ DISPERSION CURVE/ DENSITY S
72-FI-01 FISCHER, BILZ+ AG.CL/ AG.BR ..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ SHELL MODEL
72-SI-08 SINGH AG.CL ..MODIFIED SHELL MODEL/ THEORY
74-FI-01 FISCHER AG.CL ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ ANHARMONICITY/ FREQUENCY SPECTRUM
76-BE-03 BELLOMONTE AG.CL ..THEORY/ LATTICE DYNAMICS/ OVERLAP CHARGE/ DISPERSION CURVE
76-WO-01 WOOD, MOSTOLLER AG.CL/ AG.BR ..THEORY/ PHONON/ EFFECTS OF INTERSTITIAL ATOMS
- 4.239 SILVER GALLIUM SULFIDE
AG.GA.S2
74-HO-01 HOLAH, WEBB+ AG.GA.S2 ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION

4.240	SILVER IODIDE	AG.1	
75-BU-01	BUEHRER, BRUEESCH	AG.1 ..EXPERIMENT/ SOLID/ DISPERSION RELATION	
75-FU-01	FUESS, FUNKE+	AG.1 ..EXPERIMENT/ NEUTRON DIFFUSE SCATTERING/ DISORDER SCATTERING	
76-BU-01	BUEHRER	AG.1/ CU.1/ CU.BR ..NEUTRON DIFF./ SUPERIONIC CONDUCTOR	
76-SH-03	SHAPIRO	BA.F2/ PB.F2/ AG.1 ..EXPERIMENT/ STRUCTURE ANALYSIS/ PHONON DISPERSION/ DIFFUSIVE MOTION	
77-AL-01	ALBEN, BURNS	SILVER IODIDE/ COPPER IODIDE ..EXPERIMENT/ HARMONIC LATTICE-DYNAMICS/ DENSITY OF STATES/ INFR	
4.241	SILVER TRIHYDROGEN PARAPERIODATE	AG2.H3.I.06	
76-RO-01	ROOS, KIND+	AG2.H3.I.06/ (N.H4)2.H3.I.06 ..LATTICE DYNAMICS/ PHASE TRANSITION/ THEORY	
4.242	SODAMIDE	NA.N.H2	
71-DA-01	DAY, SINCLAIR	ZR-H/ H2.O/ C6.H7.N/ NA.N.H2 ..EXPERIMENT/ TOF SPECTRA/ PULSED NEUTRON SOURCE	
71-DA-02	DAY, SINCLAIR	ZR-H/ H2.O/ SODAMIDE/ ANILINE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LINAC PULSED NEUTRON SOURCE	
4.243	SODIUM AZIDE	NA.N3	
70-RA-05	RAG, TREVINO	NA.N3 ..THEORY/ LATTICE DYNAMICS/ GROUP-THEORETICAL ANALYSIS	
72-RA-02	RAFIZADEH, YIP+	NA.N3 ..EXPERIMENT/ THEORY/ TIME OF FLIGHT/ DISPERSION RELATION/ FREQUENCY/ DISTRIBUTION	
77-KA-03	KANNEY, GILLIS+	SODIUM AZIDE ..CALCULATION/ ZONE CENTER FREQUENCY/ DISPERSION CURVE/ FREQUENCY DISTRIBUTION	
4.244	SODIUM BROMIDE	NA.BR	
68-RU-06	BUYERS, SMITH	K.CL/ K.BR/ NA.1/ NA.CL/ NA.BR/ NA.F ..THEORY/ DEBYE-WALLER FACTOR ..TEMPERATURE DEPENDENCE/	
68-WE-01	MELVIN, PIRIE+	NA.F/ NA.CL/ NA.BR/ NA.1 ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE ..SHELL MODEL/ IONIC	
70-RE-01	REID, SMITH	NA.BR ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTR...295DK/ RIGID SHE	
70-RE-02	REID, SMITH	NA.F/ NA.CL/ NA.BR/ NA.1/ K.CL/ K.BR ..THEORY/ SOLID/ DEBYE-WALLER FACTOR ..SHELL MODEL/ ROOT	
70-SI-05	SINGH, VERMA	NA.F/ NA.BR/ NA.CL/ NA.1 ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..MODIFIED SHE	
71-NA-03	NAMJOSHI, MITRA	NA.BR ..THEORY/ PHONON DISPERSION/ BREATHING SHELL MODEL	
73-BA-03	BASU, SENGUPTA	NA.CL/ NA.BR/ K.1/ K.CL/ K.BR ..THEORY/ DEFORMABL SHELL MODEL/ PHONON DISPERSION/ FREQUENCY	
77-RO-02	BOLNIN	NA.BR/ K.1/ NA.CL/ K.CL ..DISPERSION RELATION/ EXPERIMENT/ ELASTIC CONSTANT	
4.245	SODIUM CHLORIDE	NA.CL	
68-AL-01	ALMQUIST, RAUNIO+	NA.CL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..80DK	
68-RE-01	BENEDEK, NARDELLI	NA.CL/ K.CL ..DISPERSION RELATION/ THEORY/ LATTICE DYNAMICS	
68-BU-06	BUYERS, SMITH	K.CL/ K.BR/ NA.1/ NA.CL/ NA.BR/ NA.F ..THEORY/ DEBYE-WALLER FACTOR ..TEMPERATURE DEPENDENCE/	
68-WE-01	MELVIN, PIRIE+	NA.F/ NA.CL/ NA.BR/ NA.1 ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE ..SHELL MODEL/ IONIC	
69-RA-02	RAUNIO, ALMQUIST+	NA.CL ..DISPERSION RELATION/ EXPERIMENT/ SOLID ..80DK/ 300DK	
69-RA-04	RAUNIO	NA.CL/ K.CL/ RB.CL ..EXPERIMENT/ PHONON WIDTH/ 80, 300DK	
70-KU-02	KUCHER, SHCHUR	NA.CL ..PHONON DISPERSION	
70-RA-07	RAUNIO, ROLANDSON	NA.CL/ K.CL/ RB.CL/ RB.F ..SHELL MODEL FITTING/ FREQUENCY SPECTRUM/ DEBYE TEMPERATURE	
70-RA-09	RAUNIO, ROLANDSON	NA.CL/ K.CL/ RB.CL/ RB.F ..THEORY/ DISPERSION CURVES/ SHELL MODEL	
70-RE-02	REID, SMITH	NA.F/ NA.CL/ NA.BR/ NA.1/ K.CL/ K.BR ..THEORY/ SOLID/ DEBYE-WALLER FACTOR ..SHELL MODEL/ ROOT	

- 70-SC-01 SCHUNK NA,CL ..LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ THEORY/ SOLID
70-SC-02 SCHUNK, WINDER NA,CL ..PHONON DISPERSION
70-SI-05 SINGH, VERMA NA,F/ NA,BR/ NA,CL/ NA,I ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..MODIFIED SHE
71-NA-02 NAMJOSHI, MITRA+ THEORY-OF-SOLIDS/ NA,F/ NA,CL ..LATTICE DYNAMICS/ DISPERSION RELATION/ RIGID ION MODEL US
73-BA-03 BASU, SENGUPTA NA,CL/ NA,BR/ K,I/ K,CL/ K,BR ..THEORY/ DEFORMABLE SHELL MODEL/ PHONON DISPERSION/ FREQUENCY
73-SA-03 SANGSTER MG,O/ NA,CL/ LI,F/ K,I ..INTERIONIC FORCE/ PHONON DISPERSION/ DEFORMABLE SHELL MODEL
74-AB-01 ABRAMO, PARRINELLO+ NA,CL ..SCATTERING THEORY/ MOLTEN SALTS
74-LA-01 LANTELME, TURQ+ NA,CL ..THEORY/ FUSED SALT/ RADIAL DISTRIBUTION FUNCTION
76-BG-04 BOLONIN NA,CL/ K,CL ..THEORY/ PHONON DISPERSION
76-CO-09 COWLEY, JACUCCI+ SODIUM CHLORIDE ..THEORY/ ANHARMONIC EFFECT/ MODEL CALCULATION/ DYNAMICAL STRUCTURE FACTO
77-BG-02 BOLONIN NA,BR/ K,I/ NA,CL/ K,CL ..DISPERSION RELATION/ EXPERIMENT/ ELASTIC CONSTANT
77-HA-02 HARDY, KARO NA,CL/ K,CL/ R8,CL ..THEORY/ LATTICE DYNAMICS/ CENTRAL-FORCE MODELS ..THERMAL EXPANSION/ HEAT
77-SO-01 SOPER, NIELSEN+ NI,CL2/ NA,CL ..NEUTRON DIFFRACTION EXPERIMENT/ HYDRATION NUMBER
- 4.246 SODIUM CYANIDE NA,C.N
- 75-RO-03 ROWE, RUSH+ K,C.N/ NA,C.N ..EXPERIMENT/ PHONON DISPERSION
76-BI-01 BILL, JEX+ K,C.N / NA,C.N ..DISPERSION RELATION/ SHELL MODEL/ ROTATIONAL EFFECT
- 4.247 SODIUM DIHYDROGEN FLUORIDE NA,H2.F3
- 63-BO-02 BOUTIN, SAFFORD H,F/ K,H.F2/ K,H2.F3/ NA,H2.F3 ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS
- 4.248 SODIUM FLUORIDE NA,F
- 67-BU-02 BUYERS NA,F ..EXPERIMENT/ PHONON DISPERSION/ MODEL CALCULATION
68-ME-01 MELVIN, PIRIE+ NA,F/ NA,CL/ NA,BR/ NA,I ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE ..SHELL MODEL/ IONIC
69-HA-03 HARDY, KARO+ NA,F ..LATTICE DYNAMICS/ THEORY/ EXPERIMENT ..RAMAN SPECTRUM/ 300K
69-KA-03 KARO, HARDY NA,F ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY SPECTRA ..RIGID-ION MODEL/ DEF
70-RE-02 REID, SMITH NA,F/ NA,CL/ NA,BR/ NA,I/ K,CL/ K,BR ..THEORY/ SOLID/ DEBYE-WALLER FACTOR ..SHELL MODEL/ ROOT
70-SI-05 SINGH, VERMA NA,F/ NA,CL/ NA,BR/ NA,I ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..MODIFIED SHE
71-NA-02 NAMJOSHI, MITRA+ THEORY-OF-SOLIDS/ NA,F/ NA,CL ..LATTICE DYNAMICS/ DISPERSION RELATION/ RIGID ION MODEL US
74-GH-01 GHOSH, BASU+ NA,F ..DISPERSION-CURVES/ DENSITY-OF-STATES/ THEORY
75-SN-01 SNEH, DAYAL NA,F/ R8,F ..THEORY/ PHONON DISPERSION/ SIMPLE SHELL MODEL
76-LO-02 LOIDL, DAUBERT+ NA,F ..EXPERIMENT/ TRIPLE-AXIS SPECTROMETER/ SOLID/ ANHARMONICITY ..295,500,600,700K
76-LO-03 LOIDL, DAUBERT+ NA,F ..EXPERIMENT/ PHONON DISPERSION/ FIRST SOUND REGION/ 295,500,600,700K
77-YO-04 YOSHIZAWA, HIRAKAWA NA,F ..EXPERIMENT/ PHONON DISPERSION/ MELTING TEMPERATURE
- 4.249 SODIUM HYDROGEN CARBONATE NA,H.C.O3
- 70-CO-02 COLLINS, HAYWOOD+ K,H.F2/ CS,H.CL2/ NA,H.C.O3/ K,C2.CL3.O2/ K,C2.F3.O2 ..EXPERIMENT/ MOLECULAR DYNAMICS/ F
- 4.250 SODIUM HYDROGEN FLUORIDE NA,H.F2
- 72-GH-02 GHOSH, WADDINGTON+ NA,H.F2/ CS,H.CL2/ H,CR.O2/ H,CO.O2/ K,H,CC.CL3.C.O2J2 ..EXPERIMENT/ NEUTRON SPECTROSCO
72-RU-01 RUSH, SCHROEDER+ K,H.F2/ NA,H.F2 ..NEUTRON SPECTROSCOPY/ RAMAN, INFRARED SPECTROSCOPY
73-SM-02 SMITH, TEMME+ NA,H.F2/ K,H.F2/ CS,H.CL2/ CS,H.BR2 ..EXPERIMENT/ FREQUENCY SPECTRA/ TOF SPECTRA

4.251	SODIUM HYDROSULFIDE	NA.S.H	NA.S.H/ CS.S.H ..THEORY/ EXPERIMENT/ QUASI-ELASTIC PEAK/ SIGMA (THETA,E) ..SH-ION LIBRATIO
73-RU-02	RUSH, DE-GRAFF+	NA.S.H	
4.252	SODIUM HYPEROXIDE	NA.O2	
76-BR-03	BRUESCH, BOSCH+	NA.O2	..EXPERIMENT/ CALCULATION
4.253	SODIUM IODIDE	NA.I	
60-WO-01	WOODS, COCHHAN+	NA.I	..EXPERIMENT/ DISPERSION RELATION
63-CO-03	COCHRAN, COWLEY+	K.BR/ NA.I	..THEORY/ PHONON DISPERSION
63-WO-02	WOODS, BROCKHOUSE+	K.BR/ NA.I	..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS ..90DK
66-CO-03	COWLEY, COWLEY	K.BR/ NA.I/ THEORY-OF-SOLIDS	..THEORY/ ANHARMONICITY/ PHONON DISPERSION
68-BU-06	BUYERS, SMITH	K.CL/ K.BR/ NA.I/ NA.CL/ NA.BR/ NA.F	..THEORY/ DEBYE-WALLER FACTOR ..TEMPERATURE DEPENDENCE/
68-ME-01	MELVIN, PIRIE+	NA.F/ NA.CL/ NA.BR/ NA.I	..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE ..SHELL MODEL/ IONIC
68-GU-01	QUITTNER, VUKOVICH+	NA.I	..EXPERIMENT/ LATTICE DYNAMICS ..PRESSURE EFFECTS/ 3000 ATM
70-KU-01	KUCHER, TOMASEVICH	NA.I	..THEORY/ SOLID/ FREQUENCY DISTRIBUTION
70-RE-02	REID, SMITH	NA.F/ NA.CL/ NA.BR/ NA.I/ K.CL/ K.BR	..THEORY/ SOLID/ DEBYE-WALLER FACTOR ..SHELL MODEL/ ROOT
70-SI-05	SINGH, VERMA	NA.F/ NA.BR/ NA.CL/ NA.I	..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..MODIFIED SHE
73-MI-05	MITRA, SINGH	LI.H/ NA.I/ LI.F/ LI.CL/ LI.BR/ K.F/ K.CL/ K.BR/ K.I/ RB.I	..THEORY/ LATTICE DYNAMICS/ FORCE
75-BI-04	BILZ, BUCHANAN+	NA.I	..THEORY/ OVERLAP POLARIZATION/ SHELL MODEL
76-DI-02	DIXON, SANGSTER	NA.I	..THEORY/ MOLECULAR DYNAMICS/ DISPERSION RELATION/ DIFFUSION PARAMETER/ PAIR-DISTRIBUT
4.254	SODIUM NITRATE	NA.N.O3	
70-RA-03	RAG, TREVINO+	NA.N.O3	..THEORY/ GROUP-THEORETICAL ANALYSIS/ LATTICE DYNAMICS
70-SA-02	SAKURAI, COWLEY+	NA.N.O3	..EXPERIMENT/ 3-AXIS SPECTROMETER/ DISPERSION RELATION
71-LO-01	LOGAN, TREVINO+	NA.N.O3	..EXPERIMENT/ PHONON DISPERSION
73-PL-02	PLIHAL	NA.N.O3	..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ SPECIFIC HEAT
4.255	SODIUM NITRITE	NA.N.O2	
69-CO-01	COCHRAN	NEUTRON-SCATTERING-IN-SOLIDS/ 6A.TI.O3/ K.H2.P.O4/ NA.N.O2	..THEORY/ DIELECTRIC/ CRITICAL SCATT
70-DO-04	DOLLING, SAKURAI+	NA.N.O2	..PHONON DISPERSION
75-BO-01	RONILLA, RUTT	NA.N.O2	..RAMAN SPECTRA/ ANGULAR DISPERSION/ INTERNAL PHONON
4.256	SODIUM NITRATE	NA.NB.O3	
72-AH-02	AHTEE, GLAZER+	NA.NB.O3	..THEORY/ PHASE TRANSITION/ SOFT PHONON
76-DE-02	DENOYER, LAMBERP+	NA.NB.O3	..EXPERIMENT/ SOLID/TRIPLE AXIS SPECTROMETER ..PHASE TRANSITION/ 620-710DC
4.257	SODIUM RHENIUM HYDRIDE	NA2.RE.H9	

- 72-WH-02 WHITE, WRIGHT K2.RE.H9/ NA2.RE.H9 ..EXPERIMENT/ N-SPECTROSCOPY/ MOLECULAR VIBRATION
- 4.258 STRONTIUM CHLORIDE SR.CL2
- 73-DE-01 DENHAM, MORSE+ SR.CL2 ..INFRA-RED, RAMAN SPECTRA/ PHONON DISPERSION, FREQUENCY SPECTRA CALCULATION
- 76-SA-02 SADOC, PEPE SR.CL2 ..EXPERIMENT/ DISPERSION RELATION/ SOLID/ TRIPLE AXIS SPECTROMETER/ INELASTIC NEUTRON
- 4.259 STRONTIUM FLUORIDE SR.F2
- 70-DE-03 DENHAM, FIELD+ CA.F2/ SR.F2/ BA.F2/ CD.F2/ PB.F2 ..THEORY/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ DISPERSION
- 71-MA-04 MAIR, BARNEA SR.F2 ..ANHARMONIC EFFECT
- 72-EL-01 ELCOMBE SR.F2 ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING/ STATE DENSITY
- 72-KU-01 KUEHNER, WAGNER SR.F2/ BA.F2 ..THEORY/ PHONON DISPERSION/ GENERALIZED SHELL MODEL/ VIBRONIC SPECTRA
- 76-TH-01 THOMAS BA.F2/ SR.F2 ..NEUTRON DIFFRACTION/ TEMPERATURE EFFECT
- 4.260 STRONTIUM OXIDE SR.O
- 71-CA-01 CALTIER, MONTANER MG.O/ CA.O/ SR.O/ BA.O ..THEORY/ PHONON DISPERSION
- 75-RI-01 RIEDER, MIGONI SR.O ..EXPERIMENT/ SOLID/ INELASTIC NEUTRON SCATTERING/ DISPERSION RELATION/ LATTICE DYNAMICS
- 75-UP-02 UPADHYAYA, SINGH CA.O/ SR.O ..THEORY/ LATTICE DYNAMICS/ THREE BODY FORCE SHELL MODEL/ PHONON DISPERSION/ D
- 75-UP-04 UPADHYAYA, SINGH CA.O/ SR.O ..THEORY/ LATTICE DYNAMICS/ THREE-BODY FORCE SHELL MODEL/ PHONON DISPERSION/ D
- 77-AG-01 AGARWAL SR.O ..THEORY/ PHONON DISPERSION/ THREE BODY FORCE SHELL MODEL
- 4.261 STRONTIUM TITANATE SR.TI.O3
- 62-CO-05 COWLEY SR.TI.O3 ..EXPERIMENT/ DISPERSION RELATION
- 63-CO-08 COWLEY SR.TI.O3 ..DISPERSION RELATION/ EXPERIMENT/ LATTICE DYNAMICS ..TEMPERATURE DEPENDENCE
- 64-CO-02 COWLEY SR.TI.O3 ..DISPERSION RELATION/ EXPERIMENT/ LATTICE DYNAMICS
- 66-SO-01 SOLOVEV, KUKHTO+ SR.TI.O3/ BA.TI.O3/ PB.TI.O3 ..EXPERIMENT/ LATTICE VIBRATION ..POLYCRYSTAL/ ROOM TEMP/ 47
- 68-CO-11 COWLEY, BUYERS+ K.BR/ SR.TI.O3 ..THEORY/ EXPERIMENT/ LATTICE DYNAMICS/ ELASTIC CONSTANT ..NEUTRON MEASUREM
- 68-CO-13 COWLEY, SVENSSON+ K.BR/ SR.TI.O3/ K.H2.P.O4 ..ELASTIC CONSTANT/ SOUND VELOCITY/ ANHARMONICITY
- 68-FL-01 FLEURY, SCOTT+ SR.TI.O3 ..RAMAN SPECTROSCOPY
- 69-CO-09 COWLEY, BUYERS+ SR.TI.O3 ..PHASE TRANSITION/ LATTICE VIBRATION
- 69-MO-01 MONTGOMERY ZN.S/ DIAMOND/ SR.TI.O3 ..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY PROPERTIES
- 69-SH-06 SHIRANE, YAMADA SR.TI.O3 ..EXPERIMENT/ LATTICE DYNAMICS/ PHASE TRANSITION ..SOFT PHONON MODE
- 69-YA-01 YAMADA, SHIRANE SR.TI.O3 ..EXPERIMENT/ CONST.-Q/ DISPERSION RELATION/ TEMPERATURE DEPENDENCE ..4.5DK-300DK
- 70-HA-01 HARADA, AXE+ K.TA.O3/ SR.TI.O3/ RB.MN.F3 ..EXPERIMENT/ INELASTIC STRUCTURE FACTOR/ PHONON EIGENVECTOR/ FERR
- 70-ZE-01 ZEIN, ZINENKO+ SR.TI.O3/ PB.ZR.O3 ..THEORY/ LATTICE DYNAMICS/ FERROELECTRICITY/ PHASE TRANSITION
- 71-IS-01 ISHIBASHI, TAKAGI BA.TI.O3/ SR.TI.O3 ..THEORY/ CALCULATION/ FORCE CONSTANT ANALYSIS
- 71-OT-01 OTNES, RISTE+ SR.TI.O3 ..EXPERIMENT/ SOFT PHONON/ CURIE-WEISS LAW/ PHASE TRANSITION
- 71-RI-01 RISTE, SAMUELSEN+ SR.TI.O3 ..PHASE TRANSITION/ CRITICAL SCATTERING/ SOFT PHONON/ CENTRAL PEAK
- 72-EN-01 ENZ SR.TI.O3 ..THEORY/ SOFT MODE/ CENTRAL PEAK S(Q,0)/ PHASE TRANSITION
- 72-11-02 IIZUMI, GESI+ SR.TI.O3 ..EXPERIMENT/ PHONON DISPERSION
- 72-15-02 ISHIBASHI BA.TI.O3/ SR.TI.O3 ..THEORY/ FORCE CONSTANT
- 72-SH-03 SHAPIRO, AXE+ SR.TI.O3/ K.MN.F3 ..EXPERIMENT/ CRITICAL SCATTERING/ PHASE TRANSITION
- 72-SI-01 SILBERGLITT SR.TI.O3 ..THEORY/ SOFT MODE
- 72-ST-05 STIRLING SR.TI.O3 ..EXPERIMENT/ PHONON DISPERSION/ VARIOUS MODEL FITTING/ FREQUENCY DISTRIBUTION/ SPECIF
- 73-AX-01 AXE, SHAPIRO+ NB3.SN/ SR.TI.O3 ..EXPERIMENT/ PHASE TRANSITION/ SOFT MODE

73-II-02 IIZUMI, GESI+ SR.TI.O3 ..PHONON DISPERSION
 73-WE-01 MEIER NB3.SN/ SR.TI.O3/ THEORY-OF-SOLIDS ..THEORY/ ANHARMONICITY ..SINGULAR WIDTH GAMMA/ QUASI-PARTIC
 74-AX-03 AXE, SHAPIRO+ NB3.SN/ SR.TI.O3/ K.MN.F3/ LA.AL.O3 ..EXPERIMENT/ SOFT MODE/ CENTRAL PEAK PROBLEM
 76-ST-07 STIRLING, CURRAT SR.TI.O3 ..EXPERIMENT/ PHONON DISPERSION
 77-TO-01 TOEPLER, ALEFELD+ SR.TI.O3 ..EXPERIMENT/ SOLID/ QUASI-ELASTIC PEAK ..ANTIFERRODISTORTIVE PHASE TRANSITION/

4.262 SULFUR NITRIDE S.N
 77-WE-05 WENDEL SULFUR NITRIDE ..VALENCE FORCE MODEL/ PHONON SPECTRA/ EXPERIMENT/ SOUND VELOCITY/ RAMAN STUDY

4.263 TANTALUM CARBIDE TA.C
 70-SM-01 SMITH, GLAESER TA.C/ HF.C ..EXPERIMENT/ DISPERSION RELATION
 71-SM-01 SMITH, GLAESER TA.C/ HF.C/ NB.C ..EXPERIMENT/ PHONON DISPERSION/ SUPERCONDUCTIVITY
 72-MO-02 MOSTOLLER U.C/ HF.C/ TA.C/ NB.C ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH
 72-SM-03 SMITH TA.C ..PHONON DISPERSION
 73-WE-02 WEBER TI.C/ ZR.C/ V.C/ NB.C/ TA.C/ U.C ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION/ FREQUE
 75-VE-01 VERMA, GUPTA TA.C/ HF.C ..THEORY/ DISPERSION RELATION/ SOLID ..THREE-BODY-FORCE SHELL MODEL/ LONG-RANGE IO
 76-GU-01 GUPTA, FREEMAN ZR.C/ HF.C/ NB.C/ TA.C ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ APW ENERGY BAND CALCULA
 76-GU-03 GUPTA, FREEMAN NB.C/ TA.C/ ZR.C/ HF.C ..THEORY/ PHONON ANOMALY/ GENERALIZED SUSCEPTIBILITY
 76-KL-01 KLEIN, BOYER+ TA.C/ NB.C/ HF.C ..APW MUFFIN-TIN CALCULATION/ FERMI SURFACE/ PHONON FREQUENCY

4.264 TANTALUM SULFIDE TA.S2
 77-ZI-01 ZIEBECK, DORNER+ TA.S2 ..EXP./ PHONON DISPERSION/ KOHN ANOMALY
 4.265 TELLURIUM DIOXIDE TE.O2
 75-MC-03 MCWHAN, BIRGENEAU+ TE.O2 ..PHONON DISPERSION/ PRESSURE EFFECT/ PHASE TRANSITION

4.266 TERBIUM CHROMIUM OXIDE TB.CR.O3
 77-SH-01 SHAMIR, MELAMUD+ PR.CR.O3/ ND.CR.O3/ TB.CR.O3/ HG.CR.O3/ ER.CR.O3 ..EXPERIMENT/ MAGNETIC SCATTERING / R.CR

4.267 TERBIUM VANADATE TB.V.O4
 75-HU-02 HUTCHINGS, SCHERM+ TB.V.O4 ..INELASTIC NEUTRON SCATTERING/ JAHN-TELLER PHASE TRANSITION

4.268 THALLOUS CHLORIDE TL.CL
 69-KA-01 KAMAL, MENDIRATTA TL.CL ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION/ SPECIFIC HEAT

4.269 THALLOUS BROMIDE TL.BR

67-CO-03	COWLEY, OKAZAKI	TL, BR	..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
75-SR-01	SRINIVASAN, LAKSHMI+	TL, BR	..THEORY/ PHONON DISPERSION/ SHELL-MODEL
75-SR-02	SRINIVASAN, LAKSHMI+	TL, BR	..THEORY/ GRUENEISEN PARAMETER/ SHELL MODEL
4,270	THIOUREA		S.C.(N,H2)2
75-MC-01	MCKENZIE	THIOUREA	..SOLID/ EXPERIMENT/ TRIPLE-AXIS-SPECTROMETER/ DISPERSION RELATION/ DEUTERATED THIOUREA
75-MC-02	MCKENZIE	THIOUREA	..EXPERIMENT/ TRIPLE-AXIS-SPECTROMETER/ SOLID/ DEUTERATED THIOUREA ..ANTIFEROELECTRIC T
4,271	THORIUM DIOXIDE		TH.O2
66-BE-03	BESHA1	U/	U.O2/ TH.O2 ..EXPERIMENT/ TOTAL CROSS SECTION/ TOF
4,272	THULIUM IRON OXIDE		TM.FE.O3
4,273	TIN DIOXIDE		SN.O2
67-BR-02	BROVMAN, KAGAN	SN/	SN.O2 ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ THEORY/ LATTICE DYNAMICS/ BORN-VON
71-KA-02	KATIYAR, DAWSON+	SN.O2	..EXPERIMENT/ INFRARED/ RAMAN/ OPTICAL FREQUENCY/ DIELECTRIC CONSTANT/ THEORY/ DISP
4,274	TIN MOLYBDENUM SULFIDE		SN.MO6.S8
76-BA-01	BADER, SINHA+	SN.MO6.S8/	P8.MO6.S8/ MO6.S8 ..EXPERIMENT/ PHONON SPECTRA/ MOLECULAR-CRYSTAL
76-BA-02	BADER, KNAPP+	LEAD	MOLYBDENUM SULFIDE/ TIN MOLYBDENUM SULFIDE ..HEAT CAPACITY/ PHONON SPECTRA/ SUPERCONDUCT
76-SI-04	SINHA, BADAR+	SN.MO6.S8/	P8.MO6.S8/ MO6.S8 ..EXPERIMENT/ PHONON SPECTRA
4,275	TIN SULFIDE		SN.S2
77-VA-01	VAN-DE-VALK, HAAS	PB.12/	CD.12/ SN.S2/ SN.SE2 ..THEORY/ SOLID/ LATTICE DYNAMICS ..POLARISABLE ION MODEL
4,276	TIN TETRACHLORIDE		SN.CL4
76-CL-03	CLARKE, DORE+	C.CL4/	SI.CL4/ TI.CL4/ GE.CL4/ SN.CL4/ SI.CL4-TI.CL4/ SN.CL4-TI.CL4..LIQUID STRUCTURE/ NEUTR
4,277	TITANIUM CARBIDE		TI.C
73-WE-01	WEBER	TI.C/	ZR.C/ HF.C ..THEORY/ SOLID/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS ..SUPERCONDUCTOR/ ST
73-WE-02	WEBER	TI.C/	ZR.C/ V.C/ NB.C/ TA.C/ U.C ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION/ FREQUE
4,278	TITANIUM OXIDE		TI.O
77-AR-01	ARAI, HIRABAYASHI	TI.O	..DIFFUSE SCATTERING/ TI.O(0,42)

4.279	TITANIUM SELENIDE	TI, SE2	
77-MO-02	MONCTON, DI-SALVO+	TI, SE2 ..EXPERIMENT/ PHONON DISPERSION/ LAYERED SEMI-METAL	
4.280	TITANIUM TETRACHLORIDE	TI, CL4	
76-CL-03	CLARKE, DONE+	C, CL4/ SI, CL4/ TI, CL4/ GE, CL4/ SN, CL4/ SI, CL4-TI, CL4/ SN, CL4-TI, CL4 ..LIQUID STRUCTURE/ NEUTR	
4.281	TMMC	(C, H3)4, N, MN, CL3	
76-SH-09	SHIRANE, BIRGENEAU	K2, CO, F4/ K2, NI, F4/ R82, MN, O, S, NI, O, S, F4/ R82, MN, O, S, F4/ TMMC ..EXPERIMENT/ MAGNETIC	
77-HU-02	HUTCHINGS, WINDSOR	TMMC ..EXPERIMENT/ SPIN-WAVE/ MAGNETIC SCATTERING	
4.282	TUNGSTATE	CA, W, O4	
72-ST-04	STEINMAN, KING+	CA, W, O4 ..EXPERIMENT/ PHONON DISPERSION/ RIGID-ION, SHELL MODEL CALCULATION	
4.283	URANIUM CARBIDE	U, C	
67-PA-04	PAN, YEATER+	ZR-H/ NB-H/ TI-H/ U, C ..EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION	
68-BO-02	BORGONOV, CARRIVEAU	U, C ..SOLID/ SIGMA (E) ..ROOM TEMPERATURE	
68-LA-01	LAJEUNESSE, MOORE+	U, C ..THEORY/ EXPERIMENT/ CROSS SECTION/ FREQUENCY DISTRIBUTION	
68-PU-01	PURKHIT, PAN+	U, C/ U, O2/ ZR-H/ TI-H/ NB-H/ TH-H ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT	
68-SL-03	SLAGGIE	U, C ..THEORY/ SOLID/ LATTICE DYNAMICS/ CENTRAL-FORCE MODELS/ BORN-VON KARMAN MODEL/ FREQUENCY D	
72-MO-02	MOSTOLLER	U, C/ HF, C/ TA, C/ NB, C ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH	
76-GO-08	GOYAL, GOYAL	U, C ..THEORY/ PHONON DISPERSION/ THREE-BODY-FORCE SHELL MODEL	
4.284	URANIUM DIOXIDE	U, O2	
63-TH-02	THORSON, HAYWOOD	U, O2 ..EXPERIMENT/ SOLID/ SCATTERING LAW/ FREQUENCY DISTRIBUTION/ TOF ..22 DC	
65-DO-01	DOLLING, COWLEY+	U, O2 ..EXPERIMENT/ THEORY/ DISPERSION RELATION ..296DK/ 7-PARAMETER RIGID ION MODEL/ TRIP	
65-WO-04	WOODS, DOLLING+	U, O2 ..CRYSTAL DYNAMICS/ DISPERSION RELATION/ EXPERIMENT	
66-AD-01	ADKINS, PERSTANI+	U, O2 ..THEORY/ LATTICE DYNAMIC/ FREQUENCY DISTRIBUTION ..RESONANCE LINE SHAPES	
66-BE-03	BESHAJ	U/ U, O2/ TH, O2 ..EXPERIMENT/ TOTAL CROSS SECTION/ TOF	
67-BI-01	BISCHOFF, BRYANT+	POLYETHYLENE/ H2, O/ ZR-H/ NB-H/ U, O2 ..EXPERIMENT	
68-BE-03	BEYSTER, BORGONOV+	BIPHENYL/ ZR-H/ U, O2 ..LATTICE DYNAMICS/ SCATTERING FUNCTION	
68-PU-01	PURKHIT, PAN+	U, C/ U, O2/ ZR-H/ TI-H/ NB-H/ TH-H ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT	
68-TH-01	THORSON	ZR-H/ U, O2 ..SCATTERING FUNCTION/ EXPERIMENT/ SOLID ..DIFFERENTIAL SCATTERING CROSS SECTION	
4.285	UREA	C, O, (N, H2)2	
67-RU-03	RUSH	UREA ..INELASTIC SCATTERING SPECTRA	
68-TR-03	TREVINO	UREA ..THEORY/ SOLID	
71-MC-01	MCKENZIE, PRYOR	UREA ..THEORY/ PHONON DISPERSION	

73-LE-01	LEFEBVRE	UREA ..PHONON DISPERSION/ X-RAY EXPERIMENT
75-LE-02	LEFEBRE, MORE+	UREA ..EXPERIMENT/ SOLID/ COHERENT SCATTERING/ DISPERSION RELATION/ DEUTERATED UREA
4.286	VANADIUM CARBIDE	V.C
73-WE-02	WEBER	Tl.C/ Zr.C/ V.C/ Nb.C/ Ta.C/ U.C ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION/ FREQUE
4.287	VANADIUM HEPTOXIDE	V4.O7
4.288	VANADIUM OXIDE	V.O2
72-HE-01	HEARN	V.O2 ..THEORY/ METAL-NONMETAL PHASE TRANSITION/ SOFT PHONON
4.289	VANADIUM PENTOXIDE	V3.O5
4.290	VANADIUM SILICIDE	V3.Si
71-DI-01	DIETERICH, SCHUSTER	V3.Si ..THEORY/ PHONON DISPERSION/ SOFT PHONON
71-SH-05	SHIRANE, AXE+	V3.Si ..EXPERIMENT/ PHONON DISPERSION/ TEMPERATURE DEPENDENCE
76-AC-01	ACHAR, BARSCH	V3.Si
76-AC-02	ACHAR	V3.Si ..THEORY/ PHONON DISPERSION/ TWO BAND MODEL
76-SC-03	SCHNEIDER, SCHWEISS+	V3.Si/ V3.Ge/ V3.Ga/ Nb3.Sn/ Nb3.Al ..EXPERIMENT/ PHONON STATE DENSITY
77-RU-01	RUMYANTSEV, ZEMLYANOV+	V3.Si ..PHONON DISPERSION RELATION/ EXPERIMENT/ BORN-VON KARMAN MODEL/ TWO-BAND MOD
4.291	VANADIUM TRIOXIDE	V2.O3
77-PA-01	PARETTE, RAO	V2.O3 ..EXPERIMENT/ NEUTRON SMALL-ANGLE SCATTERING/ MAGNETIC MOMENT DENSITY/ MOTT TRANSITION
4.292	XENON TETROXIDE	XE.O4
72-MC-02	MCDOWELL, ASPREY	XE.O4 ..EXPERIMENT ..VAPOR/ FREQUENCY SHIFT AND ANHARMONICITY CORRECTIONS/ INFRARED AND R
4.293	YTTERBIUM IRON OXIDE	YB.FE.O3
76-PA-04	PARANJPE, BEGUN	YB.FE.O3 ..NEUTRON DIFFRACTION/ MAGNETIC FORM FACTOR
4.294	YTTRIUM ALUMINUM GARNET	Y3.AL5.O12
76-VA-04	VASILKEVICH, GORBACHEV+	Y3.AL5.O12 ..YTTRIUM ALUMINIUM GARNET/ INELASTIC NEUTRON SCATTERING/ FREQUENCY DST

- 4.295 YTTRIUM VANADATE Y.V.O4
- 68-MI-03 MILLER, CASPERS+ Y.V.O4 ..EXPERIMENT/ LATTICE DYNAMICS ..INFRARED AND RAHMAN SPECTROSCOPY
- 4.296 ZINC-MANGANESE FERRITE (ZN-MN).FE2.O4
- 76-LI-01 LIGENZA (ZN-MN).FE2.O4 ..EXPERIMENT/ MAGNETIC INTERACTION
- 4.297 ZINC OXIDE ZN.O
- 70-HE-01 HEWAT ZN.O/ BE.O ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVES
- 70-WE-01 WEGENER, HAUTECLER ZN.O ..EXPERIMENT/ TOF/ DISPERSION RELATION
- 70-WE-02 WEGNER ZN.O ..DISPERSION RELATION
- 74-TH-02 THOMA, DORNER+ ZN.O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING WITH 10 PARAMETERS
- 76-KU-03 KUNG, BILZ ZN.SI/ ZN.O/ GA.P/ GA.AS/ GA.SB ..CALCULATION/ SHELL MODEL/ PHONON DISPERSION
- 4.298 ZINC SILICON PHOSPHIDE ZN.SI.P2
- 75-PO-01 POPLAVNOK, TYNTEREV ZN.SI.P2 ..THEORY/ PHONON DISPERSION/ RIGID ION MODEL
- 4.299 ZINC SULFIDE ZN.S
- 69-FE-01 FELDKAMP, VENKATARAMAN+ ZN.S ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES ..CONST.-0/ SIX-PARAMETER V
- 69-MO-01 MONTGOMERY ZN.S/ DIAMOND/ SR.TI.O3 ..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY PROPERTIES
- 69-VE-02 VETELINO, MITRA+ ZN.S ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVES ..RIGID ION MODEL
- 70-BE-04 BERGSMAN MG2.SN/ ZN.S ..EXPERIMENT/ TRIPLE AXIS SPECTROMETER/ PHONON DISPERSION RELATION
- 70-BE-05 BERGSMAN ZN.S ..EXPERIMENT/ DISPERSION CURVES ..RIGID ION MODEL/ SHELL MODEL
- 70-KU-03 KUNG, BALKANSKI+ ZN.S ..THEORY/ LATTICE DYNAMICS
- 70-KU-04 KUNG, BALKANSKI+ ZN.S ..THEORY/ PHONON DISPERSION AND SPECTRUM/ TEN PARAMETER DEFORMED ION MODEL
- 71-BA-05 BANERJEE, VARSHNI ZN.S/ GA.P/ SI.C ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA/ DEBYE TEMPERATURE
- 71-FE-01 FELDKAMP, STEINMAN+ ZN.S ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING
- 74-AL-06 ALTSCHULER, VEKILOU+ ZN.S ..THEORY/ PHONON DISPERSION/ RIGID ION MODEL
- 74-PA-04 PANDEY SI.C/ ZN.S ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..POLYTYPIC/ FORCE CONSTANT MODEL
- 74-VA-01 VAGELATORS, WEHE+ ZN.S/ ZN.TE ..PHONON DISPERSION/ FREQUENCY DISTRIBUTION/ INELASTIC NEUTRON SCATTERING
- 75-AL-02 ALTSCHULER, VEKILOV+ SI/ GA.AS/ ZN.S ..THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL METH
- 75-KU-03 KUNG, BALKANSKI+ ZN.S/ ZN.SI ..THEORY/ PARAMETER OF DEFORMATION-DIPOL MODEL
- 75-KU-04 KUNG, BALKANSKI+ ZN.S/ ZN.SI/ GA.P/ GA.AS/ IN.SB/ SI.C/ CU.CL/ CU.I ..PHONON DISPERSION/ DENSITY OF PHONON
- 75-KU-05 KUNG, BALKANSKI+ THEORY-OF-SOLIDS/ ZN.S/ SI.C/ AL.SB/ GA.AS/ GA.SB/ IN.SB/ ZN.SI/ ZN.TE/ CD.TE/ CU.I/ CU.B
- 77-WE-04 WEINSTEIN ZN.TE/ ZN.SI/ ZN.S/ SI/ GA.P ..RAMAN SPECTRA/ METALLIC PHASE TRANSITION/ PHONON DISPERSION RELA
- 4.300 ZINC SULFIDE-SELENIDE ZN.(S-SE)
- 75-VA-03 VARSHNEY, VETELINO+ ZN.(S-SE)/ GA.(P-AS) ..THEORY/ MIXED CRYSTAL/ PHONON DISPERSION/ STATE DENSITY
- 4.301 ZIRCONIUM CARBIDE ZR.C

72-SM-02	SMITH, WAKABAYASHI+	NB.C/ ZR.C/ TC/ ZR/ Y ..EXPERIMENT/ SUPERCONDUCTIVITY/ ELECTRON-PHONON INTERACTION
73-WE-01	WEBER	TI.C/ ZR.C/ HF.C ..THEORY/ SOLID/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS ..SUPERCONDUCTOR/ ST
73-WE-02	WEBER	TI.C/ ZR.C/ V.C/ NB.C/ TA.C/ U.C ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION/ FREQUE
76-GU-01	GUPTA, FREEMAN	ZR.C/ HF.C/ NB.C/ TA.C ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ APW ENERGY BAND CALCULA
76-GU-02	GUPTA, VERMA	ZR.C ..THEORY/ THREE BODY FORCE SHELL MODEL/ PHONON DISPERSION
76-GU-03	GUPTA, FREEMAN	NB.C/ TA.C/ ZR.C/ HF.C ..THEORY/ PHONON ANOMALY/ GENERALIZED SUSCEPTIBILITY

5 INTERMETALLIC COMPOUNDS

5. 1 ALUMINIUM ANTIMONIDE
AL.SB
75-KU-05 KUNC, BALKANSKI+ THEORY-OF-SOLIDS/ ZN.S/ SI.C/ AL.SB/ GA.AS/ IN.SB/ ZN.SE/ CD.TE/ CU.I/ CU.B
5. 2 ARSENIC SELENIDE
AS2.SE3
76-KU-01 KUKHTO, MIKHAILOV+ AS2.S3/ AS2.SE3 ..EXPERIMENT/ PHONON FREQUENCY SPECTRA
5. 3 CADMIUM TELLURIDE
CD.TE
73-TA-02 TALWAR, AGRAWAL ZN.TE/ CD.TE ..CALCULATION/ SECOND-NEIGHBOR-IONIC MODEL
74-RO-04 ROWE, NICKLOW+ CD.TE ..EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..14PARAMETER SHELL MODEL
76-PL-01 PLUMELLE, VANDEVYVER ZN.TE/ CD.TE ..THEORY/ PHONON DISPERSION/ PHONON STATE DENSITY/ SHELL MODEL
5. 4 CALCIUM MAGNESIUM2
CA.MG2
76-ES-01 ESCHRIG, FELDMANN+ CA.MG2 ..EXPERIMENT/ CALCULATION/ PHONON SPECTRA
77-ES-01 ESCHRIG, FELDMANN+ CA.MG2 ..THEORY/ PSEUDOPOTENTIAL MODEL/ PHONON DISPERSION/ DENSITY OF STATES
5. 5 CERIUM ALUMINIUM3
CE.AL3
76-AL-03 ALEKSEEV, SADIKOV+ CE.AL3 ..EXPERIMENT/ TOF/ THEORY/ SIGMA(THETA.E) ..MAGNETIC SCATTERING/ EFFECTIVE POINT
76-ED-01 EDELSTEIN, MAJEWSKI+ CE.AL3/ CE-TH ..EXPERIMENT/ QUASIELASTIC
5. 6 CESIUM RUBIDIUM
CS.RB
77-EL-02 ELLENSON, SEMMINGS+ CS.RB ..EXPERIMENT/ PHONON DISPERSION
5. 7 (CHROMIUM-IRON), ANTIMONIDE
(CR-FE).SB
76-HE-03 HELLNER, HEGER+ (CR-FE).SB ..NEUTRON DIFFRACTION/ CR, FE DISTRIBUTION
5. 8 COPPER2 MANGANESE ALUMINIUM
CU2.MN.AL
76-KR-01 KRASNICKI CU2.MN.AL ..EXPERIMENT/ MAGNON DISPERSION
77-TA-01 TAJIMA, ISHIKAWA+ CU2.MN.AL ..EXPERIMENT/ MAGNON DISPERSION/ TEMPERATURE EFFECT
5. 9 DYSPROSIUM ANTIMONIDE
DY.SB

5. 10 ERBIUM, ALUMINIUM³ ER, AL₃
5. 11 ERBIUM, IRON² ER, FE₂
- 76-HH-01 RHYNE, KOON+ ER, FE₂ ..EXPERIMENT/ MAGNON DISPERSION
5. 12 GALLIUM ANTIMONIDE GA, SB
- 73-FA-01 FARR GA, SB ..THESIS/ LATTICE DYNAMICS/ DISPERSION/ PHONON SPECTRA/ DEBYE TEMP.
- 75-FA-01 FARR, TRAYLOR+ GA, SB ..LATTICE DYNAMICS/ COHERENT INELASTIC SCATTERING
- 76-KU-03 KUNC, BILZ ZN, SE/ ZN, O/ GA, P/ GA, AS/ GA, SB ..CALCULATION/ SHELL MODEL/ PHONON DISPERSION
5. 13 GALLIUM ARSENIDE GA, AS
- 63-WA-01 WAUGH, DOLLING GA, AS ..EXPERIMENT/ DISPERSION RELATION
- 65-DO-03 DOLLING, WAUGH GA, AS ..EXPERIMENT/ DISPERSION RELATION
- 66-DO-02 DOLLING, COWLEY GE/ SI/ DIAMOND/ GA, AS ..COHERENT INELASTIC SCATTERING STUDIES/ PHONON DISPERSION
- 70-KO-03 KOROL GA, AS ..THEORY/ PHONON DISPERSION
- 75-AL-02 ALTSHULER, VEKILOV+ SI/ GA, AS/ ZN, S ..THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL METH
- 75-KU-04 KUNC, BALKANSKI+ ZN, S/ ZN, SE/ GA, P/ GA, AS/ IN, SB/ SI, C/ CU, CL/ CU, I ..PHONON DISPERSION/ DENSITY OF PHONON
- 75-KU-05 KUNC, BALKANSKI+ THEORY-OF-SOLIDS/ ZN, S/ SI, C/ AL, SB/ GA, AS/ GA, SB/ IN, SB/ ZN, SE/ ZN, TE/ CD, TE/ CU, I/ CU, B
- 76-KU-03 KUNC, BILZ ZN, SE/ ZN, O/ GA, P/ GA, AS/ GA, SB ..CALCULATION/ SHELL MODEL/ PHONON DISPERSION
5. 14 GALLIUM MONOSELENIDE GA, SE
- 76-JA-04 JANDL, BREBNER+ GA, SE ..EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ BORN-VON KARMAN MODEL/ DE
5. 15 GALLIUM SESQUISELENIDE GA₂SE₃
- 75-FI-03 FINKMAN, TAUC+ IN₂TE₃/ GA₂SE₃/ GA₂S₃ ..INFRARED, RAMAN SPECTRA/ DEFECT STRUCTURE/ DISPERSION CURVES
5. 16 HOLMIUM, ALUMINIUM² HO, AL₂
- 76-BA-03 BARBARA, BOUCHERLE+ HO, AL₂ ..POLARIZED NEUTRON DIFFRACTION
5. 17 HOLMIUM ANTIMONIDE HO, SB
5. 18 HOLMIUM, COBALT² HO, CO₂
- 77-GI-01 GIGNOUX, GIVORD+ HO, CO₂ ..NEUTRON DIFFRACTION/ POLARISED NEUTRON

5. 19 (HOLMIUM-TERBIUM).IRON2 (HO-TB).FE2
75-DU-01 DUBLON, SHAKED (HO-TB).FE2 ..NEUTRON DIFFRACTION
5. 20 HOLMIUM.ZINC HO.ZN
77-PJ-02 PIERRE, SCHMITT+ HO.ZN ..EXP./ MAGNON DISPERSION/ 4.2K
5. 21 INDIUM ANTIMONIDE IN.SB
71-PR-04 PRICE, ROWE+ SN/ IN.SB ..EXPERIMENT/ PHONON DISPERSION CURVE ..90DK FOR SN/ 300DK FOR IN.SB
71-PR-05 PRICE, ROWE SN/ IN.SB ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL CALCULATION
72-TA-03 TALWAR, AGRAWAL ZN.SE/ IN.SB ..THEORY/ PHONON DISPERSION
75-RU-04 KUNC, BALKANSKI+ ZN.S/ ZN.SE/ GA.P/ GA.AS/ IN.SB/ SI.C/ CU.CL/ CU.I ..PHONON DISPERSION/ DENSITY OF PHONON
5. 22 INDIUM TELLURIDE IN2.TE3
75-FI-03 FINKMAN, TAUC+ IN2.TE3/ GA2.SE3/ GA2.S3 ..INFRARED, RAMAN SPECTRA/ DEFECT STRUCTURE/ DISPERSION CURVES
5. 23 IRON3.ALUMINIUM FE3.AL
76-FR-03 FRIKKEE, MIKKE FE3.AL ..EXPERIMENT/ MAGNON DISPERSION
5. 24 LANTHANUM.COBALTS LA.CO5
5. 25 LANTHANUM.COBALTT13 LA.CO13
5. 26 LEAD SELENIDE PB.SE
74-RU-01 BURKHARD, GEICK+ PB.SE ..EXPERIMENT ..KRAMERS-KRONIG ANALYSIS/ PHONON-PLASMON INTERACTION
5. 27 LEAD TELLURIDE PB.TE
66-CO-01 COCHRAN, COWLEY+ PB.TE ..EXPERIMENT/ MODEL CALCULATION/ PHONON DISPERSION/ FREQUENCY SPECTRA/ SPECIFIC HEA
72-AL-08 ALPENIN, PICANT+ PB.TE ..EXPERIMENT/ DISPERSION RELATION/ SOFT PHONON/ CURIE LAW/ TEMPERATURE CHANGE
5. 28 (MANGANESE-COPPER) ANTIMONIDE (MN-CU).SB
76-FU-03 FUNAHASHI, KAZAMA (MN-CU).SB ..EXPERIMENT/ MAGNON DISPERSION/ TEMPERATURE EFFECT

5. 29 MAGNESIUM2.LEAD MG2.PB
72-WA-02 WAKABAYASHI, AHMAD+ MG2.PB ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ FREQUENCY SPECTRA
5. 30 MAGNESIUM2.TIN MG2.SN
70-BE-04 BERGSMAG2.SN/ ZN.S ..EXPERIMENT/ TRIPLE AXIS SPECTROMETER/ PHONON DISPERSION RELATION
70-KE-01 KEARNEY, WORLTON+ MG2.SN ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES ..ROOM TEMP./ 3-AXIS SPECTROMET
70-KE-02 KEARNEY, WORLTON+ MG2.SN ..THEORY/ LATTICE DYNAMICS/ GROUP THEORETICAL TECHNIQUES
5. 31 MAGNESIUM,ZINC2 MG.ZN2
72-ES-01 ESCHRIG, URWANK+ MG.ZN2 ..THEORY/ EXPERIMENT/ MODEL-POTENTIAL/ PHONON DISPERSION/ FREQUENCY DISTRIBUTION
72-ES-02 ESCHRIG, FELDMANN+ MG.ZN2 ..CALCULATION/ MODEL POTENTIAL THEORY/ EXPERIMENT/ PHONON DENSITY
72-ES-03 ESCHRIG, URWANK+ MG.ZN2 ..THEORY/ PHONON SPECTRA/ A.B2 TYPE INTERMETALLIC COMPOUNDS
72-ES-04 ESCHRIG, URWANK+ MG.ZN2 ..THEORY
73-ES-01 ESCHRIG, FELDMANN+ MG.ZN2 ..EXPERIMENT/ PHONON DENSITY/ COHERENT SCATTERER/ POWDER SAMPLE
5. 32 MOLYBDENUM SELENIDE MO.SE8
76-SI-04 SINHA, BADAR+ SN.MO6.S8/ PB.MO6.S8/ MO.SE8 ..EXPERIMENT/ PHONON SPECTRA
5. 33 NEODYMIUM ANTIMONIDE ND.SB
76-WA-02 WAKABAYASHI, FURRER ND.SB ..PHONON-DISPERSION-CURVES/ DENSITY-OF-STATES ..SCREENED-COULOMB-FORCE-MODEL
5. 34 NICKEL2.MANGANESE.TIN NI2.MN.SN
76-NO-02 NODA, ISHIKAWA NI2.MN.SN ..EXPERIMENT/ MAGNON DISPERSION
5. 35 NIOBIUM3.ALUMINIUM NB3.AL
76-SC-03 SCHNEIDER, SCHWEISS+ V3.SI/ V3.GE/ V3.GA/ NB3.SN/ NB3.AL ..EXPERIMENT/ PHONON STATE DENSITY
5. 36 NIOBIUM SELENIDE NB.SE2
77-MO-01 MONCTON, AXE+ TA.SE2/ NB.SE2 ..CHARGE-DENSITY-WAVE
5. 37 NIOBIUM3.TIN NB3.SN
71-SH-06 SHIRANE, AXE NB3.SN ..EXPERIMENT/ PHONON DISPERSION/ SOFT PHONON/ PHASE TRANSITION
72-SH-02 SHAM NB3.SN/ THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS

73-AX-01	AXE, SHAPIRO+	NB3.SN/ SR.TI.O3 ..EXPERIMENT/ PHASE TRANSITION/ SOFT MODE
73-AX-02	AXE, SHIRANE	NB3.SN ..PHONON LINEWIDTHS
73-ME-01	MEIER	NB3.SN/ SR.TI.O3/ THEORY-OF-SOLIDS ..THEORY/ ANHARMONICITY ..SINGULAR WIDTH GAMMA/ QUASI-PARTIC
74-AX-03	AXE, SHAPIRO+	NB3.SN/ SR.TI.O3/ K.Mn.F3/ LA.AL.O3 ..EXPERIMENT/ SOFT MODE/ CENTRAL PEAK PROBLEM
76-SC-03	SCHNEIDER, SCHWEISS+	V3.Si/ V3.GE/ V3.GA/ NB3.SN/ NB3.AL ..EXPERIMENT/ PHONON STATE DENSITY
5. 38	PALLADIUM3, IRON	PD3.FE
77-HO-01	HOLDEN, STIRLING	PD3.FE ..EXP./ POLARIZED NEUTRON/ INELASTIC SCATTERING
5. 39	PALLADIUM2, MANGANESE, TIN	PD2.MN.SN
76-NO-01	NODA, ISHIKAWA	PD2.MN.SN ..EXPERIMENT/ MAGNON DISPERSION/ TEMPERATURE EFFECT/ PARAMAGNETIC SCATTERING
5. 40	PRASEODYMIUM3, ALUMINIUM	PR3.AL
76-HE-04	HENNIG, KAUN+	PR.FE.O3/ PR.GA.O3/ PR.AL2/ PR3.AL ..EXPERIMENT/ CRYSTALLINE FIELD LEVEL
5. 41	PRASEODYMIUM, ALUMINIUM2	PR.AL2
76-HE-04	HENNIG, KAUN+	PR.FE.O3/ PR.GA.O3/ PR.AL2/ PR3.AL ..EXPERIMENT/ CRYSTALLINE FIELD LEVEL
5. 42	SELENIUM TELLURIDE	SE.TE
69-GI-03	GILLIS	SE.TE ..THEORY/ SOLID
5. 43	TANTALUM SELENIDE	TA.SE2
77-MO-01	MONCTON, AXE+	TA.SE2/ NB.SE2 ..CHARGE-DENSITY-WAVE
5. 44	THORIUM, COBALT5	TH.CO5
5. 45	TIN SELENIDE	SN.SE2
77-BR-01	BREBNER, JANDL+	SN.SE2 ..EXP./ PHONON DISPERSION/ LAYERED STRUCTURE
77-VA-01	VAN-DER-VALK, HAAS	PB.I2/ CO.I2/ SN.S2/ SN.SE2 ..THEORY/ SOLID/ LATTICE DYNAMICS ..POLARISABLE ION MODEL
5. 46	TIN TELLURIDE	SN.TE
66-PA-04	PAWLEY, COCHRAN+	SN.TE ..EXPERIMENT/ PHONON DISPERSION/ TEMPERATURE DEPENDENCE
69-CO-06	COWLEY, DARBY+	SN.TE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..1000K
70-LE-04	LEFKOWITZ, SHIELDS+	SN.TE ..EXPERIMENT/ SNO.94.GEO.05.TE/ PHONON DISPERSION

5. 47	VANDIUM ³ , GALLIUM	V3.GA	
76-SC-03	SCHNEIDER, SCHWEISS+	V3.SI/ V3.GE/ V3.GA/ NB3.SN/ NB3.AL	..EXPERIMENT/ PHONON STATE DENSITY
5. 48	VANADIUM ³ , GERMANIUM	V3.GE	
76-SC-03	SCHNEIDER, SCHWEISS+	V3.SI/ V3.GE/ V3.GA/ NB3.SN/ NB3.AL	..EXPERIMENT/ PHONON STATE DENSITY
5. 49	YTRIUM, COBALTS	Y.CO5	
5. 50	ZINC SELENIDE	ZN.SE	
71-HE-01	HENNION, MOUSSA+	ZN.SE	..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ PHONON DENSITY
71-KU-01	KUNC, BALKANSKI+	ZN.SE	..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT/ DEFORMABLE BOND MODEL
72-IR-01	IRWIN, LACOMBE	ZN.SE	..RAMAN SPECTRA/ MODEL FITTING/ STATE DENSITY/ SPECIFIC HEAT
72-TA-03	TALWAR, AGRAWAL	ZN.SE/ IN.SB	..THEORY/ PHONON DISPERSION
75-KU-03	KUNC, BLAKANSKI+	ZN.SI/ ZN.SE	..THEORY/ PARAMETER OF DEFORMATION-DIPOL MODEL
75-KU-04	KUNC, BALKANSKI+	ZN.SI/ ZN.SE/ GA.P/ GA.AS/ IN.SB/ SI.C/ CU.CL/ CU.I	..PHONON DISPERSION/ DENSITY OF PHONON
76-KU-03	KUNC, BILZ	ZN.SE/ ZN.O/ GA.P/ GA.AS/ GA.SB	..CALCULATION/ SHELL MODEL/ PHONON DISPERSION
77-WE-04	WEINSTEIN	ZN.TE/ ZN.SE/ ZN.SI/ GA.P	..RAMAN SPECTRA/ METALLIC PHASE TRANSITION/ PHONON DISPERSION RELA
5. 51	ZINC TELLURIDE	ZN.TE	
70-VE-02	VETELINO, MITRA+	ZN.TE	..DISPERSION RELATION, FREQUENCY SPECTRUM, DEBYE TEMPERATURE, MULTI PHONON INFRARED
73-TA-02	TALWAR, AGRAWAL	ZN.TE/ CD.TE	..CALCULATION/ SECOND-NEIGHBOR-IONIC MODEL
74-VA-01	VAGELATORS, WEHE+	ZN.SI/ ZN.TE	..PHONON DISPERSION/ FREQUENCY DISTRIBUTION/ INELASTIC NEUTRON SCATTERING
76-PL-01	PLUMELLE, VANDEVYVER	ZN.TE/ CD.TE	..THEORY/ PHONON DISPERSION/ PHONON STATE DENSITY/ SHELL MODEL
77-WE-04	WEINSTEIN	ZN.TE/ ZN.SE/ ZN.SI/ GA.P	..RAMAN SPECTRA/ METALLIC PHASE TRANSITION/ PHONON DISPERSION RELA

6 ORGANIC COMPOUNDS

6. 1 ACENAPHTHENE C12.H10
70-LU-01 LUTY, JANIK+ ACENAPHTHENE ..EXPERIMENT/ THEORY/ FREQUENCY SPECTRUM/ LATTICE DYNAMICS
6. 2 ACETIC ACID C2.H4.O2
65-GO-01 GOLIKOV, ZHOKORSKJA+ C2.H6.O2/ H2.O/ C2.H4.O2/ C6.H6 ..EXPERIMENT/ LIQUID/ SOLID
67-AL-01 ALDRED, EDEN+ ACETIC ACID/ ALCOHOL ..MOLECULAR DYNAMICS/ LIQUID/ EXPERIMENT
67-AL-02 ALDRED, EDEN+ ACETIC ACID/ METHANOL ..EXPERIMENT/ TOF SPECTRUM/ QUASI-ELASTIC PEAK WIDTH
67-AL-03 ALDRED, EDEN+ ACETIC ACID/ METHANOL ..EXPERIMENT/ SUBSTITUTION OF DEUTERIUM AND FLUORINE
70-CO-03 COLLINS, HAYWOOD FORMIC ACID/ ACETIC ACID/ PROPIONIC ACID/ OXALIC ACID/ MALONIC ACID/ SUCCINIC ACID/ MONOC
6. 3 ACETONITRILE C.H3.C.N
71-ZE-01 ZEIDLER ACETONITRILE ..QUASIELASTIC SCATTERING/ LIQUID
6. 4 ACETYLENE C2.H2
64-VA-01 VAN-DINGENEN, NEVEDE-MEVERGIES ACETYLENE/ AMMONIA/ METHANE ..TOTAL CROSS SECTION/ EXPERIMENT/ SOLID ..LON
67-VE-03 VERDAN METHANE/ ACETYLENE/ ETHYLENE ..EXPERIMENT/ ADSORBED MOLECULES
6. 5 ADAMANTANE C10.H16
67-ST-05 STOCKMEYER, STILLER ADAMANTANE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS/ SOLID/ FREQUENCY DISTRI
68-CH-01 CHEN, DVORAK HEXAMETHYLENETETRAHIME/ ADAMANTANE/ N.H4.CL ..THEORY/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS/ D
68-ST-04 STOCKMEYER, STILLER ADAMANTANE ..EXPERIMENT/ PHONON SPECTRUM/ FITTED BY CALCULATIONS
69-ST-02 STOCKMEYER, HOSSFELD+ ADAMANTANE ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION ..COMPUTER CALCULATION
75-TH-01 THOMAS ADAMANTANE/ HEXAMETHYLENETETRAHIME ..EXPERIMENT/ FREQUENCY SPECTRA/ 200-800 CM-1
76-LE-02 LECHNER ADAMANTANE ..EXPERIMENT/ QUASIELASTIC/ ROTATIONAL JUMP MODEL
6. 6 ALCOHOL
61-BR-03 BRUGGER ZR-H/ H2.O/ BENZENE/ PARAFFINE/ ALCOHOL ..SIGMA (E-E-PRIME, THETA)/ EXPERIMENT/ LIQUIDS/ TOF
63-SA-03 SAUNDENSON, RAINEY ALCOHOL ..LIQUID AND GAS/ EXPERIMENT
66-LA-01 LARON, HERGSTEDT ALCOHOL/ PENTANE ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ NEUTRON SPECTRA/ DIFFERENTIAL CROS
66-LA-02 LARSSON, AMARAL+ ALCOHOL/ PENTANE ..EXPERIMENT/ LIQUID/ MOLECULAR DYNAMICS/ DIFFERENTIAL CROSS SECTION ..1
67-AL-01 ALDRED, EDEN+ ACETIC ACID/ ALCOHOL ..MOLECULAR DYNAMICS/ LIQUID/ EXPERIMENT
68-SA-04 SAMPSON, CARPENTER ALCOHOL/ MERCAPTAN ..EXPERIMENT/ MOLECULAR DYNAMICS
6. 7 ALPHA-AMINO-ISOBUTYRIC-ACID AAIA

- 72-DA-04 DAVIDOVIC, RATOKOVIC+ TAURINE/ ALPHA-AMINO-ISOBUTYRIC-ACID ..EXPERIMENT/ VIBRATIONAL SPECTRUM
6. 8 ANILINE C₆H₇N
- 71-DA-01 DAY, SINCLAIR ZR-H/ H₂O/ C₆H₇N/ NA.N.H₂ ..EXPERIMENT/ TOF SPECTRA/ PULSED NEUTRON SOURCE
- 71-DA-02 DAY, SINCLAIR ZR-H/ H₂O/ SODAMIDE/ ANILINE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LINAC PULSED NEUTRON SOURCE
6. 9 ANNULENE
- 73-FI-01 FILIPPINI, GRAMACCIOLI+ NAPHTHALENE/ ANTHRACENE/ PHENANTHRACENE/ PYRENE/ ANNULENE ..THEORY/ LATTICE DYNAMIC
6. 10 ANTHRACENE C₁₄H₁₀
- 67-PA-06 PAWLEY NAPHTHALENE/ ANTHRACENE ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA/ DEBYE TEMP./ DEBYE-WALL
- 67-PA-07 PAWLEY NAPHTHALENE/ ANTHRACENE ..THEORY/ PHONON DISPERSION/ PHONON SPECTRUM/ 6-EXP FORCE
- 70-LU-02 LUTZ, HAEIG ANTHRACENE ..THEORY/ EXPERIMENT/ SOLID ..COHERENT INELASTIC NEUTRON SCATTERING/ PHONON DISPERS
- 70-LU-03 LUTZ ANTHRACENE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ FREQUENCY SPECTRUM
- 73-FI-01 FILIPPINI, GRAMACCIOLI+ NAPHTHALENE/ ANTHRACENE/ PHENANTHRACENE/ PYRENE/ ANNULENE ..THEORY/ LATTICE DYNAMIC
- 73-GR-01 GRAMACCIOLI, SIMONETTA+ ANTHRACENE/ NAPHTHALENE/ BUTANOANNULENE ..THEORY/ AROMATIC HYDROCARBON/ VIBRATION
- 74-PA-10 PAWLEY, MIKA NAPHTHALENE/ ANTHRACENE/ SULPHUR ..THEORY/ PRESSURE EFFECT/ LATTICE DYNAMICS/ PHONON DISPERSI
6. 11 ANTHRAQUINONE ANTHRAQUINONE
- 75-MI-02 MIYAZAKI, ITO ANTHRAQUINONE ..EXPERIMENT/ NEUTRON SCATTERING SPECTRA/ PHONON DENSITY CALCULATION
6. 12 BENZENE C₆H₆
- 61-BR-03 BRUGGER ZR-H/ H₂O/ BENZENE/ PARAFFINE/ ALCOHOL ..SIGMA (E-E-PRIME,THETA)/ EXPERIMENT/ LIQUIDS/ TOF
- 61-HE-02 HEINLOTH H₂O/ C₆H₆/ C.H₂O₂ ..SIGMA(E)/ EXPERIMENT/ GAS/ LIQUID/ SOLID/ KRIEGER-NELKIN MODEL ..TRANSMI
- 62-BO-01 BOFFI, MOLINARI+ BENZENE ..THEORY/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION ..SCATTERING CROSS SECTION/
- 62-RU-01 RUSH, TAYLOR+ N.H₄CL/ N.H₄I/ N.H₄F/ N.H₄BR/ BENZENE/ TOLUENE/ MESITYLENE/ XYLENE ..EXPERIMENT/ TOTAL C
- 62-ZE-01 ZEMLYANOV, CHERNOPOLEKOV POLYETHYLENE/ BENZENE/ BIPHENYL ..EXPERIMENT/ MOLECULAR DYNAMICS
- 63-BO-01 BOFFI, MOLINARI+ C₆H₆ ..SIGMA(E)/ SCATTERING LAW/ FREQUENCY DISTRIBUTION/ THEORY/ GAS/ MOLECULAR DYNAMICS
- 63-ZE-02 ZEMLYANOV, CHERNOPOLEKOV BENZENE/ BIPHENYL/ POLYETHYLENE ..INELASTIC SCATTERING SPECTRA
- 64-GL-01 GLAESER, BECRUITS BENZENE/ BIPHENYL/ BIPHYLE ..EXPERIMENT/ SOLID/ LIQUID ..2ND MOMENT OF ENERGY TRANSFER
- 65-GL-02 GLAESER BENZENE/ BIPHENYL/ BIPHYLE ..EXPERIMENT/ MOLECULAR DYNAMICS/ SCATTERIN LAW/ SIGMA (E-E-PRIME,TH
- 65-GL-03 GLAESER, EHRET+ C₆H₆/ H₂O/ ZR-H ..SCATTERING LAW/ FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID ..20DC FOR
- 65-GO-01 GOLIKOV, ZHOKORSKJA+ C₂H₆O₂/ H₂O/ C₂H₄O₂/ C₆H₆ ..EXPERIMENT/ LIQUID/ SOLID
- 65-HO-01 HOFMEYER BENZENE/ BIPHENYL/ TERPHENYL ..EXPERIMENT ..21DC-150DC 10X.23H DATA END IN GTMIN RTN.)
- 65-ZE-02 ZEMLYANOV, CHERNDLEKOV+ C₆H₆ ..SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ LIQUID ..290DK
- 66-AN-02 ANTONINI, PAOLETTI+ BENZENE/ BIPHENYL ..EXPERIMENT/ SOLID/ LIQUID/ SIGMA(E)
- 66-BO-01 BOFFI, MARSICO+ BENZENE ..SIGMA-TRANSPORT(E)/ SIGMA(E-E-PRIME,THETA)/ THEORY/ GAS/ LIQUID/ DIFFUSION PARAM
- 66-SC-02 SCHMIDT, SAAD BENZENE/ BIPHENYL/ TERPHENYL/ CYCLOHEXANE ..EXPERIMENT
- 67-BE-03 BEYSTER, BORGONOV+ C.H₂/ C₆H₆/ ZR-H ..EXPERIMENT
- 67-GE-01 GEE, ROBINSON BENZENE ..MOLECULAR DYNAMICS ..RAMAN SPECTRUM
- 67-NE-02 NEILL BENZENE ..SIGMA (E)/ EXPERIMENT
- 67-RU-01 RUSH BENZENE ..MOLECULAR DYNAMICS/ LIQUID/ SOLID/ EXPERIMENT/ NEUTRON SPECTRUM/ FREQUENCY SPECTRUM

- 68-AR-02 ARDENTE, CUNIBERTI+ BIPHENYL/ BENZENE ..CROSS SECTION EVALUATION/ MOLECULAR DYNAMICS/ GAS/ THEORY
 68-BE-04 BEYSTER, BORGONOV+ C.H2/ ZR-H/ C6.H6 ..EXPERIMENT/ MOLECULAR DYNAMICS
 68-HE-01 HENRY, SIEBRAND BENZENE ..FREQUENCY SPECTRUM/ THEORY/ LIQUID/ MOLECULE DYNAMICS
 68-HO-02 HOLMRYD, NELIN BENZENE/ TOLUENE ..EXPERIMENT/ TOF ..DIFFUSIVE MOTION/ QUASI-ELASTIC
 68-MA-04 MARSDEN, MCMURRY C6.H6 ..SIGMA (E)/ SIGMA (E-E-PRIME)/ SCATTERING FUNCTION/ NEUTRON SPECTRUM/ THEORY/ GAS/
 68-NA-02 NARTEN BENZENE ..LIQUID/ EXPERIMENT/ MOLECULAR DYNAMICS ..X-RAY DIFFRACTION/ 250C
 68-RO-01 ROSS, SZABO+ BENZENE/ H2.O ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID ..20DC FOR BE
 68-SP-01 SPREYAK, KOPPEL+ BENZENE ..THEORY/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION/ CROSS SECTION EVALUATION
 68-SP-02 SPREYAK, BORGONOV+ BENZENE ..SCATTERING FUNCTION/ LIQUID/ NEUTRON SPECTRUM/ SCATTERING THEORY ..ROOM TEMP
 68-TR-01 TREPADUS, BALLY+ BENZENE ..EXPERIMENT/ MOLECULAR DYNAMICS
 69-FI-01 FISCHER BENZENE/ CYCLOHEXANE/ CYCLOHEXANOL/ PYRIDINE/ H2.O/ HEXANE/ METHANOL/ ETHANOL/ ACETONE/ ACETIC
 69-MA-03 MARSDEN BENZENE ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING LAW
 69-RE-03 REYNOLDS, WHITE BENZENE ..EXPERIMENT/ TOF SPECTRUM/ MOLECULAR DYNAMICS
 70-GU-03 GUPTA, DEOPURA BENZENE ..EXPERIMENT/ FREQUENCY SPECTRUM
 70-LO-01 LOGAN, TREVINO+ BENZENE ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION ..77.K TO 270.K
 72-WI-01 WINFIELD, ROSS C6.H6 ..EXPERIMENT/ TIME OF FLIGHT/ QUASIELASTIC SCATTERING ..MEAN INTERVAL BETWEEN JUMP
 73-BO-02 BONADEO, TADDEI BENZENE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION FUNCTION
 73-TA-01 TADDEI, BONADEO+ C6.H6 ..THEORY/ LATTICE DYNAMICS ..F AND G MATRIX METHOD
6. 13 BIPHENYL C12.H10
- 62-ZE-01 ZEMLYANOV, CHERNOPOLEKOV POLYETHYLENE/ BENZENE/ BIPHENYL ..EXPERIMENT/ MOLECULAR DYNAMICS
 63-GI-01 GLASER BIPHENYL ..EXPERIMENT/ SCATTERING LAW/ MIXTURE OF BIPHENYL AND BIPHENYLOXYD
 63-ZE-02 ZEMLYANOV, CHERNOPOLEKOV BENZENE/ BIPHENYL/ POLYETHYLENE ..INELASTIC SCATTERING SPECTRA
 64-GL-01 GLAESER, BECRURTS BENZENE/ BIPHENYL/ BIPHYLE ..EXPERIMENT/ SOLID/ LIQUID ..2ND MOMENT OF ENERGY TRANSFER
 64-MO-01 MOSTOVOY, DIKAREV+ H2.O/ BIPHENYL ..FREQUENCY SPECTRUM/ EXPERIMENT
 65-GL-02 GLAESER BENZENE/ BIPHENYL/ BIPHYLE ..EXPERIMENT/ MOLECULAR DYNAMICS/ SCATTERIN LAW/ SIGMA (E-E-PRIME, TH
 65-HO-01 HOFMEYER BENZENE/ BIPHENYL/ TERPHENYL ..EXPERIMENT ..21DC-150DC 10X.23H DATA END IN GTMIN RTN.)
 66-AN-02 ANTONINI, PAOLETTI+ BENZENE/ BIPHENYL/ BIPHENYL ..EXPERIMENT/ MOLECULAR DYNAMICS/ GAS/ THEORY
 66-SC-02 SCHMIDT, SAAD BENZENE/ BIPHENYL/ TERPHENYL/ CYCLOHEXANE ..EXPERIMENT
 67-NE-01 NEILL, ANTUNEZ+ BIPHENYL ..EXPERIMENT
 68-AR-02 ARDENTE, CUNIBERTI+ BIPHENYL/ BENZENE ..CROSS SECTION EVALUATION/ MOLECULAR DYNAMICS/ GAS/ THEORY
 68-BE-03 BEYSTER, BORGONOV+ BIPHENYL/ ZR-H/ U.O2 ..LATTICE DYNAMICS/ SCATTERING FUNCTION
 69-SP-02 SPREYAK, KOPPEL BIPHENYL ..THEORY/ SCATTERING LAW/ SIGMA (E)/ LIQUID

6. 14 BIPHYLE

- 64-GL-01 GLAESER, BECRURTS BENZENE/ BIPHENYL/ BIPHYLE ..EXPERIMENT/ SOLID/ LIQUID ..2ND MOMENT OF ENERGY TRANSFER
 65-GL-02 GLAESER BENZENE/ BIPHENYL/ BIPHYLE ..EXPERIMENT/ MOLECULAR DYNAMICS/ SCATTERIN LAW/ SIGMA (E-E-PRIME, TH

6. 15 BROMOPENTANE

BROMOPENTANE

- 76-SH-07 SHARMA, DANNER+ BROMOPENTANE ..EXPERIMENT/ TOF SPECTRA

6. 16 BUTANE

C4.H10

- 68-HO-03 HOYLAND C4.H10 ..THEORY/ MOLECULE DYNAMICS

6. 17 BUTANOANNULENE
BUTANOANNULENE
73-GR-01 GRAMACCIOLI, SIMONETTA+ ANTHRACENE/ NAPHTHALENE/ BUTANOANNULENE ..THEORY/ AROMATIC HYDROCARBON/ VIBRATION
6. 18 BUTANOL
C4.H10.O
70-BA-03 BATA, JOVIC C4.H10.O ..EXPERIMENT/ LIQUID-GAS PHASE
72-RO-01 RODRIGUES, VINHAS+ METHANOL/ ETHANOL/ PROPANOL/ BUTANOL/ ETHANEDIOL/ PROPANETRIOL ..EXPERIMENT/ TOTAL SIGM
74-AM-01 AMARAL, FULFARO+ BUTANOL ..EXPERIMENT/ TRANSMISSION/ MOLECULAR DYNAMICS
75-AM-01 AMARAL, FULFARO+ BUTANOL ..EXPERIMENT/ TOTAL CROSS SECTION/ TEMPERATURE EFFECT
6. 19 BUTYL CHLORIDE
BUTYL CHLORIDE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ THEORETICAL CALCULATION/ PLASTIC C
6. 20 BUTYRIC ACID
BUTYRIC ACID
72-DA-05 DAVIDOVIC, RATKOVIC+ TAURINE/ BUTYRIC ACID ..INELASTIC NEUTRON SCATTERING/ INCOHERENT
6. 21 C5.H5.N.H.AG5.16
C5.H5.N.H.AG5.16
77-BR-04 BRUESCH, BUEHER+ C5.H5.N.H.AG5.16 ..EXPERIMENT/ FREQUENCY SPECTRA
6. 22 CARBONYL SULPHIDE
C.O.S
77-SA-01 SALVI, RIGHINI+ CARBONYL SULPHIDE ..EXPERIMENT/ DISPERSION CURVE/ PHONON DENSITY OF STATES
6. 23 CARBOXYLIC ACID
CARBOXYLIC ACID
71-LU-02 LURIE, DANNER CARBOXYLIC ACID ..VIBRATIONAL SPECTRA/ LIQUID DYNAMICS/ DISPERSION RELATION
6. 24 CELLULOSE
(C6.H10.O5)N
76-AH-01 AHMED, AHMED+ CELLULOSE ..NEUTRON DIFFRACTION/ CELL DIMENSION
6. 25 CHLOROBENZENE
C6.H5.CL
68-O-01 O-REILLY C.CL4/ C.H.CL3/ C6.H5.CL/ H.F/ H.CL/ N.H3/ H2.O ..CORRELATION FUNCTION/ MOLECULAR ROTATIONS/ LIQU
69-RE-04 REYNOLDS, WHITE CHLOROBENZENE
6. 26 CHLOROETHANE
C2.H5.CL

- 71-BR-01 BRIER, HIGGINS+ CHLOROETHANE ..THEORY/ EXPERIMENT/ LIQUID/ TIME.OF.FLIGHT TECHNIQUES
6. 27 CHLORONAPHTHALENE C10.H7.CL
- 68-EI-01 EISENTHAL, DOWLEY+ CHLORONAPHTHALENE ..EXPERIMENT/ LIQUID ..TWO-PHONON SPECTRUM
6. 28 CYANAMIDE C.H2.N2
- 68-DU-01 DURIG, WALKER+ CYANAMIDE ..FREQUENCY DISTRIBUTION/ EXPERIMENT/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS
6. 29 CYCLOHEXANE C6.H12
- 63-BE-01 BECKA CYCLOHEXANE/ DIMETHYLBUTANE/ DIAZOBICYCLOOCTANE ..EXPERIMENT/ TOF
- 65-BR-04 BRUGGER, STRONG+ CYCLOHEXANE ..EXPERIMENT
- 65-DE-02 DE-GRAAF CYCLOHEXANE ..INELASTIC SCATTERING SPECTRA/ LIQUID AND SOLID
- 66-SC-02 SCHMIDT, SAAD BENZENE/ BIPHENYL/ TERPHENYL/ CYCLOHEXANE ..EXPERIMENT
- 68-TA-03 TARINA CYCLOHEXANE ..EXPERIMENT/ SIGMA(E)/ DIFFERENTIAL CROSS SECTION ..SOLID-LIQUID TRANSITION/ -20DC
- 69-DE-01 DE-GRAAF CYCLOHEXANE ..LIQUID/ SOLID/ EXPERIMENT/ TIME OF FLIGHT ..HINDERED ROTATION OF RIGID MOLECULE/
- 69-FI-01 FISCHER BENZENE/ CYCLOHEXANE/ CYCLOHEXANOL/ PYRIDINE/ H2.O/ HEXANE/ METHANOL/ ETHANOL/ ACETONE/ ACETIC
- 70-DI-01 DIACONESCU, NAHORNIAK+ METHANOL/ CYCLOHEXANE ..INELASTIC SCATTERING SPECTRA
- 70-PI-01 PICKETT, STRAUSS CYCLOHEXANE ..EXPERIMENT/ THEORY/ MOLECULAR VIBRATION/ INTERATOMIC FORCE CONSTANT..FG-MET
6. 30 CYCLOHEXANOL C6.H12.O
- 69-FI-01 FISCHER BENZENE/ CYCLOHEXANE/ CYCLOHEXANOL/ PYRIDINE/ H2.O/ HEXANE/ METHANOL/ ETHANOL/ ACETONE/ ACETIC
- 70-DE-02 DE-MUL, BERGMAN CYCLOHEXANOL ..EXPERIMENT/ TOF/ LIQUID/ QUASI-ELASTIC PEAK ..JUMP-DIFFUSION/ INCOHERENT NE
- 72-DE-04 DE-MUL CYCLOHEXANOL ..CRYSTAL/ MOLECULAR ROTATION
- 76-FU-02 FULFARO, VINHAS+ CYCLOHEXANOL ..TOTAL CROSS SECTION
6. 31 DIAMMINETETRACHLORODIMETHYLCADMIUM (C.H3.N.H3)2.CD.CL4
- 77-GE-01 GEICK, STROBEL (C.H3.N.H3)2.MN.CL4/ (C.H3.N.H3)2.CD.CL4/ (C.H3.N.H3)2.CU.CL4 ..SYMMETRY OF LATTICE VIBRATI
6. 32 DIAMMINETETRACHLORODIMETHYLCOPPER (C.H3.N.H3)2.CU.CL4
- 77-GE-01 GEICK, STROBEL (C.H3.N.H3)2.MN.CL4/ (C.H3.N.H3)2.CD.CL4/ (C.H3.N.H3)2.CU.CL4 ..SYMMETRY OF LATTICE VIBRATI
6. 33 DIAMMINETETRACHLORODIMETHYLMANGANESE (C.H3.N.H3)2.MN.CL4
- 75-PE-01 PEIZELT (C.H3.N.H3)2.MN.CL4 ..THEORY/ SOLID/ LATTICE DYNAMICS ..PHASE TRANSITION
- 76-HE-01 HEGER, MULLER (C.H3.N.H3)2.MN.CL4 ..PHASE TRANSITION
- 77-GE-01 GEICK, STROBEL (C.H3.N.H3)2.MN.CL4/ (C.H3.N.H3)2.CD.CL4/ (C.H3.N.H3)2.CU.CL4 ..SYMMETRY OF LATTICE VIBRATI
6. 34 DIAZOBICYCLOOCTANE

- 63-BE-01 BECKA CYCLOHEXANE/ DIMETHYLBUTANE/ DIAZOBICYCLOOCTANE ..EXPERIMENT/ TOF
6. 35 DIBROMOBENZENE C6.H4.BR2
- 72-RE-02 REYNOLDS, KJEMS+ C6.H4.CL2/ C6.H4.BR2 ..NEUTRON SPECTRUM/ THEORY/ EXPERIMENT/ INELASTIC NEUTRON SCATTERING
6. 36 DICALCIUM LEAD PROPIONATE (C3.H5.O2)6.CA2.P5
 72-QU-01 QUILCHINI, POULET DICALCIUM LEAD PROPIONATE ..EXPERIMENT/ FREQUENCY DISTRIBUTION FUNCTION ..PHASE TRANSIT
 75-DI-05 DIMIC, OSREDKAR DICALCIUM LEAD PROPIONATE ..EXPERIMENT/ SOLID/ LIQUID/ ROTATING CRYSTAL SPECTROMETER/ DEBY
6. 37 DICALCIUM STRONTIUM PROPIONATE CA2.SR.(C3.H5.O2)6
 73-VA-01 VAN-TRICHT, DE-MUL+ DICALCIUM STRONTIUM PROPIONATE ..EXPERIMENT/ VIBRATION SPECTRA/ PARA-ELECTRIC PHASE TR
6. 38 DICHLOROETHANE DICHLOROETHANE
- 73-OZ-01 OZORA, ITO+ DICHLOROETHANE ..EXPERIMENT/ FREQUENCY SPECTRUM/ PHASE TRANSITION
6. 39 DICHLOROBENZENE C6.H4.CL2
- 72-RE-02 REYNOLDS, KJEMS+ C6.H4.CL2/ C6.H4.BR2 ..NEUTRON SPECTRUM/ THEORY/ EXPERIMENT/ INELASTIC NEUTRON SCATTERING
 72-RE-03 REYNOLDS, KJEMS+ C6.H4.CL2 ..EXPERIMENT/ PHONON DISPERSION/ TRICLINIC PHASE/ 295K TO 90K
 74-RE-02 REYNOLDS, KJEMS+ DICHLOROBENZENE ..EXPERIMENT/ CALCULATION/ PHONON DISPERSION
6. 40 DIMETHYLACETYLENE DNA
 62-RU-02 RUSH, SAFFORD+ N.H4.P.F6/ (N.H4)2.S2.O8/ (N.H4)2.CR.O4/ N.H4.S.O3.F/ DIMETHYLACETYLENE ..EXPERIMENT/ MOLEC
 64-JA-01 JANIK, JANIK+ C.H4/ C.H3.I/ DIMETHYLACETYLENE/ N.H4.CL.O4/ N.H4.P.F6/ H3.O.CL.O4/ DIMETHOXYAZOXYBENZENE
 76-KO-04 KOLLMAR, ALEFFELD DIMETHYLACETYLENE/ TETRAMETHYLLEAD ..EXPERIMENT/ ROTATIONAL MOTION
6. 41 DIMETHYLBUTANE
- 63-BE-01 BECKA CYCLOHEXANE/ DIMETHYLBUTANE/ DIAZOBICYCLOOCTANE ..EXPERIMENT/ TOF
6. 42 DIMETHYLSULPHONE
- 69-SA-01 SAFFORD, SCHAFFER+ DIMETHYLSULPHOXIDE/ DIMETHYLSULPHONE ..SIGMA (E-E-PRIME,THETA)/ EXPERIMENT/ LIQUID
 69-SA-04 SAFFORD, SCHAFFER+ DIMETHYLSULPHOXIDE/ DIMETHYLSULPHONE ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS/ SEL
6. 43 DIMETHYLSULPHOXIDE

69-SA-01	SAFFORD, SCHAFER+	DIMETHYLSULPHOXIDE/ DIMETHYLSULPHONE ..SIGMA (E-E-PRIME,THETA)/ EXPERIMENT/ LIQUID
69-SA-04	SAFFORD, SCHAFER+	DIMETHYLSULPHOXIDE/ DIMETHYLSULPHONE ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS/ SEL
6. 44	DIPULMITOYL PHOSPHATIDYL CHOLINE	DPPC
76-BU-02	BUELDT, SEELIG+	DPPC ..NEUTRON DIFFRACTION/ LIPID MEMBRANS
6. 45	DNA	DNA
74-FU-02	FULFARO, WALDER+	DNA ..EXPERIMENT/ TOTAL CROSS SECTION/ WATER IN DNA AND DNA
6. 46	DODECANE	C12,H26
70-EG-01	EDELSTAFF, HARRIS	PENTANE/ HEPTANE/ DODECANE ..EXPERIMENT/ QUASI-ELASTIC/ DIFFUSION CONSTANT
6. 47	DTPO SUBERATE	C26,H46,N2,O6
76-BR-02	BROWN, CAPIOMONT+	C26,H46,N2,O6 ..POLARIZED NEUTRON DIFFRACTION
6. 48	EABAC	EABAC
76-LE-01	LEADRETT, RICHARDSON+	EABAC ..EXPERIMENT/ QUASI-ELASTIC
6. 49	EICOSANE	C20,H42
72-BA-07	BAKES	NONADECANE/ EICOSANE ..EXPERIMENT/ QUASI-ELASTIC PEAK/ ROTATIONAL DIFFUSION/ PLASTIC CRYSTAL
6. 50	ETHANE	C2,H6
65-GA-01	GANNON, MCMURRY	C,H4/ C2,H6/ COMPUTER-CODES ..THEORY/ MOLCULAR DYNAMICS/ SCATTERING FUNCTION
65-ST-05	STRAKER	C2,H6 ..SCATTERING LAW
65-ST-06	STRAKER, KING+	ETHANE ..EXPERIMENT/ PRESSURIZED ETHANE
66-BR-05	BRUGGER	METHANE/ ETHANE/ AL/ NA/ PB/ AR ..COMPLATION/ SCATTERING FUNCTION
67-RU-02	RUSH	METHYLCHLOROFORM/ PENTANE/ ETHANE ..COLD-NEUTRON/ FREQUENCY SPECTRUM
67-ST-06	STRONG, BRUGGER	ETHANE ..MOLECULAR DYNAMICS/ GAS/ EXPERIMENT/ FREQUENCY DISTRIBUTION ..ROOM TEMPERATURE
68-BU-02	BULAVIN, VORONEL+	ETHANE ..EXPERIMENT/ QUASI-ELASTIC/ LIQUID/ GAS
75-OL-01	OLSSON, LARSSON	ETHANE ..EXPERIMENT/ ROTATIONAL-DIFFUSIVE MOTION
6. 51	ETHANEDIOL	
72-RO-01	RODRIGUES, VINHAS+	METHANOL/ ETHANOL/ PROPANOL/ BUTANOL/ ETHANEDIOL/ PROPANETRIOL ..EXPERIMENT/ TOTAL SIGM
6. 52	ETHANOL	C2,H5,O

- 72-RO-01 RODRIGUES, VINHAS+ METHANOL/ ETHANOL/ PROPANOL/ BUTANOL/ ETHANEDIOL/ PROPANETRIOL ..EXPERIMENT/ TOTAL SIGM
6. 53 ETHYL CHLORIDE C2.H5.CL
70-ST-03 STRONG, BRUGGER+ ETHYL CHLORIDE ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ LIQUID/ SOLID
6. 54 ETHYL ETHER (C2.H5)2.O
65-BA-03 BATA, KOSZO+ ETHYL ETHER ..INELASTIC SCATTERING SPECTRA
6. 55 ETHYLENE C2.H4
63-BA-02 BALLY, TARINA+ H2/ ETHYLENE ..EXPERIMENT
65-BA-02 BALLY, TODIREANU+ ETHYLENE ..EXPERIMENT/ SCATTERING LAW ..GAS TARGET/ TRIPLE-AXIS SPECTROMETER
67-BA-02 BALLY, TODIREANU+ METHANE/ ETHYLENE ..GAS/ EXPERIMENT
67-VE-03 VERDAN METHANE/ ACETYLENE/ ETHYLENE ..EXPERIMENT/ ADSORBED MOLECULES
6. 56 ETHYLENE GLYCOL C2.H6.O2
65-GO-01 GOLIKOV, ZHOKORSKJA+ C2.H6.O2/ H2.O/ C2.H4.O2/ C6.H6 ..EXPERIMENT/ LIQUID/ SOLID
6. 57 FIBRINOGEN FIBRINOGEN
76-MA-03 MARGUERIE, STUHRMANN FIBRINOGEN ..SMALL-ANGLE SCATTERING/ BOVINE FIBRINOGEN/ BANANA-SHAPED MODEL
6. 58 FLUORINATED CYCLOHEXANE
72-LE-01 LEADBETTER, LITCHINSKY+ FLUORINATED CYCLOHEXANE ..EXPERIMENT/ MOLECULAR ROTATION/ QUASI-ELASTIC SCATTERING
6. 59 FORMIC ACID C.H2.O2
61-HE-02 HEINLOTH H2.O/ C6.H6/ C.H2.O2 ..SIGMAE)/ EXPERIMENT/ GAS/ LIQUID/ SOLID/ KRIEGER-NELKIN MODEL ..TRANSMI
70-CO-03 COLLINS, HAYWOOD FORMIC ACID/ ACETIC ACID/ PROPIONIC ACID/ OXALIC ACID/ MALONIC ACID/ SUCCINIC ACID/ MONOC
76-BE-06 BERNEY, JOHNSON+ FORMIC ACID ..THEORY/ PHONON STATE DENSITY
6. 60 GLYCELINE C3.H6.O3
63-LA-01 LARSSON, DAHLBORG D2.O/ GLYCELINE/ H2.O ..EXPERIMENT/ LIQUID/ FREQUENCY DISTRIBUTION/ TOF ..278, 295, 368,
63-RA-02 RAPEANU GLYCELINE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING
64-LA-01 LARSSON, DAHLBORG H2.O/ D2.O/ PENTANE/ GLYCELINE ..EXPERIMENT/ LIQUID/ FREQUENCY DISTRIBUTION
68-RA-06 RAPEANU GLYCELINE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING
70-BI-02 BIRR GLYCELINE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ DIFFUSION CONSTANT

6. 61 GLYCINE
70-GU-05 GUPTA, SINGH GLYCINE ..EXPEMIMENT/ FREQUENCY SPECTRUM
C7.H16
6. 62 HEPTANE
70-EG-01 EGELSTAFF, HARRIS PENTANE/ HEPTANE/ DODECANE ..EXPERIMENT/ QUASI-ELASTIC/ DIFFUSION CONSTANT
73-LO-02 LOGAN, DANNER+ PENTANE/ HEXANE/ HEPTANE/ OCTANE ..EXPERIMENT/ INCOHERENT/ T-O-F SPECTRA/ PHONON DISPERSION
6. 63 HEXAMETHYLBENZENE
C12.H18
64-RU-01 RUSH, TAYLOR HEXAMETHYLBENZENE/ AMMONIUM PERCHLORATE ..EXPERIMENT/ ROTATIONAL MOTION
66-RU-01 RUSH, TAYLOR HEXAMETHYLBENZENE ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION ..LOW-FREQUENCY MOTION/ NEAR 11
69-HA-02 HAMILTON, EDMONDS+ HEXAMETHYLBENZENE ..EXPERIMENT/ TOF SPECTRUM/ NEUTRON DIFFRACTION
6. 64 HEXAMETHYLENETETRAMINE
C6.H12.N4
62-BE-01 BECKA HEXAMETHYLENETETRAMINE ..EXPERIMENT/ NEUTRON SPECTROMETRY ..80DK/ 300DK/
64-CO-01 COCHRAN, PAWLEY HEXAMETHYLENETETRAMINE ..THEORY/ LATTICE DYNAMICS/ DISPERSION/ FREQUENCY DISTRIBUTION ..X-
68-CH-01 CHEN, DVORAK HEXAMETHYLENETETRAMINE/ ADAMANTANE/ N.H4.CL ..THEORY/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS/ D
68-PO-02 POWELL HEXAMETHYLENETETRAMINE ..EXPERIMENT/ CONST.-W/ DISPERSION CURVES/ FREQUENCY DISTRIBUTION ..296D
69-PA-03 PAWLEY C6.H12.N4 ..THEORY/ MODEL FITTING/ LATTICE DYNAMICS
70-DO-03 DOLLING, POWELL HEXAMETHYLENETETRAMINE ..EXPERIMENT/ PHONON DISPERSION/ DHMT/ MODEL FITTING/ PHONON DENSIT
70-PO-01 POLLING, POWELL HEXAMETHYLENETETRAMINE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..MODEL FITTING
70-RA-01 RAFIZADEH, YIP HEXAMETHYLENETETRAMINE ..THEORY/ LATTICE DYNAMICS
71-MC-02 MCMULLAN, HOGAN HEXAMETHYLENETETRAMINE ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE/ SOLID/ MOLECULAR CRY
73-DO-01 DOLLING, PAWLEY+ HEXAMETHYLENETETRAMINE ..THEORY/ PHONON DISPERSION/ AS MODEL TENSOR FORCE MODEL
75-TH-01 THOMAS ADAMANTANE/ HEXAMETHYLENETETRAMINE ..EXPERIMENT/ FREQUENCY SPECTRA/ 200-800 CM-1
6. 65 HEXANE
C6.H14
73-LO-02 LOGAN, DANNER+ PENTANE/ HEXANE/ HEPTANE/ OCTANE ..EXPERIMENT/ INCOHERENT/ T-O-F SPECTRA/ PHONON DISPERSION
6. 66 IODOFORM
C.H.13
73-NE-01 NETO, OEHLEH+ IODOFORM ..THEORY/ EXPERIMENT/ DISPERSION RELATION/ LATTICE VIBRATION ..F.G-MATRIX METHOD/ I
6. 67 LYSOZYME
C3.H4.O4
76-ST-11 STUHRMANN, FUESS LYSOZYME ..SMALL ANGLE SCATTERING/ HEN EGG-WHITE LYSOZYME IN SOLUTION
6. 68 MALONIC ACID
C3.H4.O4
70-CO-03 COLLINS, HAYWOOD FORMIC ACID/ ACETIC ACID/ PROPIONIC ACID/ OXALIC ACID/ MALONIC ACID/ SUCCINIC ACID/ MONOC

6. 69 MDIG C13.H22.06
76-JA-03 JAMES, OLLIS+ C13.H22.06 ..NEUTRON DIFFRACTION/ STRUCTURE STUDIES

6. 70 MERCAPTAN C2.H6.S
68-SA-04 SAMPSON, CARPENTER ALCOHOL/ MERCAPTAN ..EXPERIMENT/ MOLECULAR DYNAMICS

6. 71 MESITYLEN C6.H3.(C.H3)3
76-UT-01 UTSURO XYLENE/ MESITYLEN ..EXPERIMENT/ TOF/ SIGMA(E)/ MOLECULA ROTATION ..100DK/ ELECTRON LIINA/ EFFECT

6. 72 METHANE C.H4
41-SA-01 SACHS, TELLER NEUTRON-SCATTERING-IN-FLUIDS/ H2/ C.H4/ N.H3/ H2.O ..SCATTERING THEORY ..MOLECULAR GASES
49-ME-01 MELKONIAN C.H4 ..SIGMA(E)/ EXPERIMENT
51-ME-01 MESSTAH H/ C.H4 ..THEORY/ SCATTERING THORY ..ROOM TEMP.
52-PO-01 POPE C.H4/ C.F4 ..MOLECULAR DYNAMICS/ THEORY
56-ZE-02 ZEMACH, GLAUBER METHANE ..SIGMA (THETA,E)/ THEORY/ GAS
61-GR-01 GRIFFING C.H4 ..THEORY/ MOLECULAR DYNAMICS/ GAS/ DIFFERENTIAL CROSS SECTION
61-RA-02 RAHMAN NEUTRON-SCATTERING-IN-FLUIDS/ METHANE ..THEORY/ SCATTERING FUNCTION
61-RA-04 RANDOLPH, BRUGGER+ METHANE ..GAS/ SCATTERING LAW/ EXPERIMENT/ TOF/ MOLECULE DYNAMICS ..ROOM TEMP.
62-BR-02 BRUGGER METHANE/ H2.O/ D2.O/ PROPANE ..THEORY/ EXPERIMENT/ SCATTERING FUNCTION
62-GR-01 GRIFFING METHANE ..GAS/ EXPERIMENT/ CALCULATION
62-MC-01 MCMURRY, GANNON+ METHANE/ PROPANE ..THEORY/ GAS/ DIFFERENTIAL CROSS SECTION
62-ST-01 STILLER, HAUTECLER METHANE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LIQUID
63-GR-01 GRIFFING C.H4 ..SIGMA(E-E-PRIME,THETA)/ SCATTERING FUNCTION/ THEORY/ GAS/ CROSS SECTION
63-HA-03 HAUTECLER, STILLER C.H4 ..SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ MOLECULAR DYNAMICS
63-JA-01 JANIK C.H4/ N.H4.1/ N.H4.CL/ N.H4.BR/ N.H4.S.O3.F ..SIGMA(E)/ SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ THE
63-JA-02 JANIK, JANIK+ C.H4/ N.H3/ H2.S/ H2.O ..SIGMA(E)/ EXPERIMENT/ LIQUID
63-RO-01 ROGALSKA METHANE ..SIGMA(E)/ EXPERIMENT/ LIQUID ..-156DC/ 0.0057 TO 0.101EV
63-RO-02 ROGALSKA METHANE ..EXPERIMENT/ TOTAL SCATTERING CROSS SECTION VS. NEUTRON ENERGY/ LIQUID STATE
63-ST-01 STILLER, HAUTECLER METHANE ..SOLID/ EXPERIMENT
63-WE-01 WEBB C.H4/ N.H3/ H2 ..SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ GAS ..ROOM TEMPERATURE
64-BR-05 BRUGGER, RAINEY+ C.H4 ..EXPERIMENT/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION
64-DO-02 DORNER, STILLER METHANE ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION ..6.5DK/ BE DETECTOR METHOD
64-JA-01 JANIK, JANIK+ C.H4/ C.H3.1/ DIMETHYLACETYLENE/ N.H4.CL.O4/ N.H4.P.F6/ H3.O.CL.O4/ DIMETHOXYAZOXYBENZENE
64-OT-01 OTNES, MELLOR+ C.H4 ..EXPERIMENT/ LIQUID
64-VA-01 VAN-DINGENEN, NEVEDE-MEVERGNIES ACETYLENE/ AMONIA/ METHANE ..TOTAL CROSS SECTION/ EXPERIMENT/ SOLID ..LON
64-WH-01 WHITEMORE C.H4/ H ..EXPERIMENT/ LIQUID/ MOLECULAR DYNAMICS ..NEUTRON SPECTRA/ TOTAL CROSS SECTION
65-DA-02 DASANNACHARYA, VENKATARAMAN+ C.H4 ..SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ LIQUID ..E=4.87 MILLI-V/ 97.5DK
65-DO-06 DORNER, STILLER C.H4 ..SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ SOLID/ MOLECULAR DYNAMICS
65-GA-01 GANNON, MCMURRY C.H4/ C2.H6/ COMPUTER-CODES ..THEORY/ MOLCULAR DYNAMICS/ SCATTERING FUNCTION
65-GR-01 GRIFFING C.H4 ..THEORY/ LIQUID ..LANGEVIN EQUATION/ COMPARED WITH EXPERIMENT
65-GR-02 GRIFFING METHANE ..THEORY/ LIQUID METHANE
65-GR-03 GRIFFING METHANE ..GAS DYNAMICS/ C.D4
65-HA-03 HARKER, BRUGGER METHANE ..SOLID/ LIQUID/ GAS/ SCATTERING LAW/ EXPERIMENT/ TOF/ MOLECULAR DYNAMICS ..125DK/

65-RO-01 ROSALSKA METHANE ..EXPERIMENT/ SOLID/ LIQUID/ TOTAL CROSS SECTION ..105DK/ 80DK/ 1.5MEV-4.5MEV
65-WH-01 WHITEMORE POLYETHYLENE/ GRAPHITE/ METHANE/ 2R-H/ Y-H/ LA-H ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ SCATTERI
66-BR-05 BRUGGER METHANE/ ETHANE/ AL/ NA/ PB/ AR ..COMPILATION/ SCATTERING FUNCTION
66-DO-04 DORNER, STILLER C.H4 ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ SOLID ..6.5DK/ 2.7DK/ INVERSE-FILTER-METHOD
66-DO-05 DORNER, STILLER C.H4 ..EXPERIMENT/ 6.5, 2.7, 18DK/ INVERTED FILTER METHOD
66-HA-01 HARKER METHANE ..SIGMA(E, E-PRIME, THETA)/ EXPERIMENT/ SOLID ..5DK, 9DK, 18DK, 22DK/ E=34.7MV, THETA=48,
66-KO-05 KOSALY, SOLT C.H4/ N.H4.1 ..THEORY/ DIFFERENTIAL CROSS SECTION ..86DK FOR C.H4/ ROOM TEMP. FOR N.H4.1
66-SI-03 SINHA, VENKATARAMAN NEUTRON-SCATTERING-IN-FLUIDS/ METHANE ..MOLECULAR DYNAMICS ..DIFFERENTIAL CROSS SECTIO
66-VE-01 VENKATARAMAN, DASANNACHARYA+ METHANE ..LIQUID/ EXPERIMENT/ MOLECULAR DYNAMICS/ TOF ..COHERENT
66-VE-03 VENKATARAMAN, RAO+ AMMONIA/ METHANE ..THEORY/ CALCULATION/ CROSS SECTION/ GAS PHASE
66-WE-01 WEST, BRUGGER+ METHANE ..SCATTERING LAW/ EXPERIMENT/ THEORY/ GAS ..306DK/ C.D4
66-WE-02 WEST, BRUGGER+ C.H4 ..EXPERIMENT/ SCATTERING FUNCTION/ THEORY/ GAS ..306DK/ C.D4
67-AG-02 AGRAWAL, YIP C.H4 ..THEORY/ LIQUID/ CROSS SECTION EVALUATION
67-BA-01 BAJOREK, NATKANIEC+ METHANE ..EXPERIMENT/ GAS/ SOLID/ CRYSTAL SPECTROMETER
67-BA-02 BALLY, TODIREANU+ METHANE/ ETHYLENE ..GAS/ EXPERIMENT
67-DA-02 DASANNACHARYA, VENKATARAMAN C.H4 ..CROSS SECTION EVALUATION/ LIQUID/ EXPERIMENT/ DIFFUSION PARAMETER/ FREQ
67-HA-01 HARKER, BRUGGER METHANE ..EXPERIMENT/ SOLID/ TOF/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION ..5DK/ 9.1DK/ 18
67-RA-08 RAO, VENKATARAMAN+ C.H4 ..THEORY/ LIQUID ..COMPARED WITH EXPERIMENT
67-SE-01 SEARS METHANE ..THEORY/ LIQUID ..COMPARED WITH EXPERIMENT
67-SO-01 SOLT METHANE ..MOLECULAR DYNAMICS/ SCATTERING FUNCTION/ SOLID
67-VE-01 VENKATARAMAN, DASANNACHARYA+ METHANE ..LIQUID/ EXPERIMENT/ THEORY ..COHERENT EFFECT
67-VE-03 VERDAN METHANE/ ACETYLENE/ ETHYLENE ..EXPERIMENT/ ADSORBED MOLECULES
67-WE-01 WEBB METHANE/ AMMONIA ..GAS/ EXPERIMENT/ NEUTRON SPECTRUM ..20DK
68-AG-01 AGRAWAL, YIP C.H4/ H.CL/ N.H3 ..GAS/ EXPERIMENT/ CORRELATION FUNCTION ..INCOHERENT/ INTERMEDIATE SCATTERING FU
68-AG-02 AGRAWAL, DESAI+ NEUTRON-SCATTERING-IN-FLUIDS/ AR/ NA/ PB/ METHANE ..THEORY ..MODEL CALCULATION
68-BA-01 BAJOREK, NATKANIEC+ C.H4 ..EXPERIMENT/ GAS/ SOLID/ MOLECULAR DYNAMICS ..TOF METHOD/ 1BR PULSED REACTOR, DU
68-CA-03 CARPENTER, LURIE C2.F6/ C.H4 ..EXPERIMENT/ GAS/ SCATTERING FUNCTION
68-ED-01 EDER, EGELSTAFF METHANE ..EXPERIMENT/ SOLID/ LIQUID/ THEORY/ MOLECULAR DYNAMICS ..METHANE IN ARGON
68-FU-01 FULINSKI, ZGIERSKI METHANE ..EXPERIMENT/ GAS
68-JA-02 JANIK C.H4/ H2.O/ N.H3/ LI2.S.O4.H2.O/ H3.O.N.O3/ C.H3.1 ..EXPERIMENT/ GAS/ LIQUID/ SOLID/ MOLECULAR
68-SK-01 SKOELD METHANE ..SCATTERING FUNCTION/ SOLID/ MOLECULAR DYNAMICS/ THEORY ..22.1DK/ ORIENTATIONAL JUMP D
69-FU-01 FULINSKI, JANIK+ METHANE ..THEORY/ MOLECULAR INTERACTION
69-JA-03 JANIK, OTNES+ METHANE ..EXPERIMENT/ SPECTRUM AGAINST WAVELENGTH/ SOLID
69-JA-04 JANIK, OTNES+ C.H4 ..EXPERIMENT/ TOF SPECTRA
70-BA-01 BANSAL, KOTHARI+ METHANE ..THEORY/ SOLID/ LATTICE VIBRATION/ FREQUENCY DISTRIBUTION
70-KA-02 KAPULLA, GLAESER C.H4 ..EXPERIMENT
71-HA-02 HAMA, NAKAMURA NEUTRON-SCATTERING-IN-FLUIDS/ METHANE ..THEORY/ MOLECULE/ GAS/ ROTATIONAL CORRELATION/ CROS
71-PR-02 PRESS, DORNER+ C.H4 ..EXPERIMENT/ SOLID C.D4/ PHONON DISPERSION
71-PR-03 PRESS C.H4 ..EXPERIMENT/ SOLIDS/ LATTICE DYNAMICS/ DISPERSION RELATION/ MOLECULAR VIBRATIONS
71-RA-03 RAO, DASANNACHARYA+ METHANE ..MULTIPLE SCATTERING/ CALCULATION/ CORRECTION
71-TI-01 TIITTA, TUNKALO METHANE ..LIQUID/ MULTIPLE SCATTERING
72-HU-01 HULLER, PRESS C.H4 ..CRITICAL SCATTERING/ C.D4
72-IN-01 INOUE, OTOMO+ METHANE ..NEUTRON SPECTRA
72-KA-07 KAPULLA C.H4 ..EXPERIMENT/ SOLID/ ROTATING CRYSTAL SPECTROMETER/ SIGMA (E, E-PRIME, THETA)
72-KA-08 KAPULLA, GLAESER METHANE ..EXPERIMENT/ SOLID METHANE/ SMALL ENERGY PEAKS
72-TI-01 TIITTA, TUNKALO METHANE ..MULTIPLE SCATTERING
72-WA-03 WASIUTYNSKI, LUTY C.H4 ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..SP
73-HA-01 HAMA, MIYAGI METHANE ..THEORY/ NUCLEA SPIN CORRELATION EFFECT/ ZEMACH-GLAUBER APPROXIMATION
74-OL-01 OLSSON, LARSSON C.H4/ AR ..NEUTRON SCATTERING/ DIFFUSION CONSTANT
74-PR-03 PRESS, HUELLE C.H4 ..PHASE TRANSITION/ QUASIELASTIC SCATTERING
74-RA-03 RAO, MURTHY METHANE ..EXPERIMENT/ X-RAY/ STRUCTURE FACTOR/ DIRECT CORRELATION FUNCTION
75-KA-01 KAHN C.H4 ..INELASTIC NEUTRON SCATTERING/ LOW TEMPERATURE/ EXPERIMENT

76-CA-01	CARELLI, DE-SANTIS+	KR/ C.H ₄ ..EXPERIMENT/ DIFFUSION PARAMETER ..LENARD-JONES FLUID/ HARD-SPHERE FLUID/220
76-DE-01	DE-RAEDT, MICHEL	C.H ₄ ..THEORY/ MOLECULAR DYNAMICS
77-LU-01	LUSHINGTON, MORRISON	C.H ₄ ..EXPERIMENT/ TOTAL CROSS SECTION/ EFFECT OF SPIN CONVERSION
77-ST-01	STIRLING, PRESS+	C.H ₄ ..EXPERIMENT/ PHONON DISPERSION
6. 73	METHANETELLUROL	C.H ₄ ,TE
72-SI-09	SINK, HARVEY	C.H ₄ ,TE ..EXPERIMENT ..INFRARED AND RAMAN SPECTRA
6. 74	METHANOL	C.H ₄ ,O
67-AL-02	ALDRED, EDEN+	ACETIC ACID/ METHANOL ..EXPERIMENT/ TOF SPECTRUM/ QUASI-ELASTIC PEAK WIDTH
67-AL-03	ALDRED, EDEN+	ACETIC ACID/ METHANOL ..EXPERIMENT/ SUBSTITUTION OF DEUTERIUM AND FLUORINE
69-SA-06	SAMPSON, CARPENTER	METHANOL/ METHYLMERCAPTAN ..INELASTIC SCATTERING SPECTRA
70-DI-01	DIACONESCU, NAHORNIAK+	METHANOL/ CYCLOHEXANE ..INELASTIC SCATTERING SPECTRA
71-DE-02	DEMPSTER, ZERBI	METHANOL ..THEORY/ EXPERIMENT/ LATTICE DYNAMICS
72-AL-01	ALDRED, STIRLING+	METHANOL/ TOLUENE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ LIQUID/ DEUTERIUM SUBSTITUTION
72-AL-02	ALDRED, STIRLING+	METHANOL/ TOLUENE ..QUASIELASTIC/ MODEL ANALYSIS/ DIFFUSION
72-RO-01	RODRIGUES, VINHAS+	METHANOL/ ETHANOL/ PROPANOL/ BUTANOL/ ETHANEDIOL/ PROPANETRIOL ..EXPERIMENT/ TOTAL SIGM
72-RO-02	RODRIGUEZ, DO-AMARAL+	METHANOL ..EXPERIMENT/ QUASIELASTIC SCATTERING/ MOLECULAR MOTION/ DIFFUSION
6. 75	METHOXYBENZYLIDENE-BUTYLANILINE	NBBA
6. 76	METHYL CHLORIDE	C.H ₃ ,CL
74-MA-01	MALM, DANNER+	C.H ₃ ,I/ C.H ₃ ,F/ C.H ₃ ,CL ..TIME-FLIGHT-SPECTRA
6. 77	METHYLCHLOROFORM	METHYLCHLOROFORM
67-RU-02	RUSH	METHYLCHLOROFORM/ PENTANE/ ETHANE ..COLD-NEUTRON/ FREQUENCY SPECTRUM
6. 78	METHYL FLUORIDE	C.H ₃ ,F
74-MA-01	MALM, DANNER+	C.H ₃ ,I/ C.H ₃ ,F/ C.H ₃ ,CL ..TIME-FLIGHT-SPECTRA
6. 79	METHYL IODIDE	C.H ₃ ,I
64-JA-01	JANIK, JANIK+	C.H ₄ / C.H ₃ ,I/ DIMETHYLACETYLENE/ N.H ₄ ,CL.O ₄ / N.H ₄ ,P.F ₆ / H ₃ ,O,CL.O ₄ / DIMETHOXYAZOXYBENZENE
66-BA-01	BAJOREK, JANIK+	METHYL IODIDE ..MOLECULAR DYNAMICS/ EXPERIMENT
74-MA-01	MALM, DANNER+	C.H ₃ ,I/ C.H ₃ ,F/ C.H ₃ ,CL ..TIME-FLIGHT-SPECTRA
6. 80	METHYLMERCAPTAN	C.H ₃ ,S,H

- 69-SA-06 SAMPSON, CARPENTER METHANOL/ METHYLMERCAPTAN ..INELASTIC SCATTERING SPECTRA
6. 81 METHYLENE
C.H2
57-KR-01 KRIEGER, NELKIN NEUTRON-SCATTERING-IN-FLUIDS/ C.H2/ H2.O ..SCATTERING THEORY ..MOLECULE
65-YO-01 YOUNG, KOPPEL BE/ C/ H2.O/ D2.O/ C.H2/ H2/ D2 ..THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATION
67-BE-03 BEYSTER, BORGONOVII+ C.H2/ C6.H6/ ZR-H ..EXPERIMENT
68-BE-04 BEYSTER, BORGONOVII+ C.H2/ ZR-H/ C6.H6 ..EXPERIMENT/ MOLECULAR DYNAMICS
68-HE-02 HERDADE METHYLENE ..EXPERIMENT/ SIGMA(E) ..METHYL GROUPS IN ORGANIC COMPOUNDS
6. 82 METHYLENE CHLORIDE
C.H2,CL2
72-BR-01 BRIER, HIGGINS C.H2,CL2 ..EXPERIMENT/ MOLECULAR LIQUID/ TOF SPECTRA/ MODEL ANALYSIS
6. 83 METHYLZINC BOROHYDRIDE
C.H3,ZN.B.H4
73-NI-01 NIBLER, COOK C.H3.ZN.B.H4 ..EXPERIMENT/ SOLID/ LATTICE VIBRATION ..F.G-MATRIX METHOD/ INFRARED AND RAMAN S
6. 84 MYOGLOBIN
MYOGLOBIN
75-IB-01 IBEL, STUHRMANN MYOGLOBIN ..SMALL-ANGLE SCATTERING/ STRUCTURE OF PROTEIN
6. 85 NAPHTHALENE
C10.H8
67-PA-06 PAWLEY NAPHTHALENE/ ANTHRACENE ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA/ DEBYE TEMP./ DEBYE-WALL
67-PA-07 PAWLEY NAPHTHALENE/ ANTHRACENE ..THEORY/ PHONON DISPERSION/ PHONON SPECTRUM/ 6-EXP FORCE
69-PA-04 PAWLEY, YEATS NAPHTHALENE ..EXPERIMENT/ PHONON DISPERSION/ DEUTERATED SAMPLE
70-PA-07 PAWLEY, CYVIN NAPHTHALENE ..THEORY/ DISPERSION RELATION/ MOLECULAR DYNAMICS/ SOLID
71-PA-03 PAWLEY, REYNOLDS+ NAPHTHALENE ..THEORY/ POLYCRYSTAL/ LATTICE DYNAMICS
73-FI-01 FILIPPINI, GRAMACCIOLI+ NAPHTHALENE/ ANTHRACENE/ PHENANTHRENE/ PYRENE/ ANNULENE ..THEORY/ LATTICE DYNAMIC
73-GR-01 GRAMACCIOLI, SIMONETTA+ ANTHRACENE/ NAPHTHALENE/ BUTANOANNULENE ..THEORY/ AROMATIC HYDROCARBON/ VIBRATION
74-PA-10 PAWLEY, MIKA NAPHTHALENE/ ANTHRACENE/ SULPHUR ..THEORY/ PRESSURE EFFECT/ LATTICE DYNAMICS/ PHONON DISPERSI
76-BO-03 BOKHENKOV, NATKANIEC+ NAPHTHALENE ..INCOHERENT NEUTRON SCATTERING/ EXPERIMENT
77-BO-01 BOKHENKOV, SHEKA+ C10.H8 ..EXPERIMENT/ INELASTIC NEUTRON SCATTERING/ DISPERSION CURVE
77-CH-03 CHEN, PRASAD C10.H8 ..RAMAN PHONON SPECTRA
77-MA-02 MACKENZIE, PAWLEY+ NAPHTHALENE ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING
6. 86 NONADECANE
C19.H40
72-BA-07 BARNES NONADECANE/ EICOSANE ..EXPERIMENT/ @EASI-ELASTIC PEAK/ ROTATIONAL DIFFUSION/ PLASTIC CRYSTAL
6. 87 NYLON
65-SA-01 SAFFORD, LOSACCO NYLON ..EXPERIMENT/ TOF SPECTRA/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS

- 6, 95 PHENYL
64-SP-01 SPRINGER, HOFMYER+ H2.O/ D2.O/ PHENYL/ ZR-H ..EXPERIMENT/ LIQUID/ DIFFUSION PARAMETER ..AVE-MU
- 6, 96 P-AZOXYANISOLE PAA
70-BL-01 BLINC, DIMIC P-AZOXYANISOLE ..EXPERIMENT/ TOF ..PIFFUSION CONSTANT/ LIQUID CRYSTAL
70-BL-02 BLINC, DIMIC P-AZOXYANISOLE ..EXPERIMENT/ DIFFUSION BROADENING/ NEMATIC AND ISOTROPIC LIQUID
71-JA-03 JANIK, JANIK+ PAA ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ NEMATIC PHASE/ DIFFUSION COEFFICIENT
72-JA-04 JANIK, JANIK+ P-AZOXYANISOLE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ NEMATIC LIQUID CRYSTAL/ 396-399K/ EXT
72-PY-02 PYN, OTNES+ P-AZOXYANISOLE ..EXPERIMENT/ NEUTRON DIFFRACTION/ PHASE DIAGRAM
74-BA-05 BATA, VIZI+ P-AZOXYANISOLE ..EXPERIMENT/ LIQUID CRYSTAL PHASE/ QUASI-ELASTIC SPECTRUM/ ROTATIONAL DIFFUSION
74-PY-02 PYN, RISTE PAA ..EXPERIMENT/ NEUTRON DIFFRACTION
75-MO-01 MOELLER, RISTE P-AZOXYANISOLE ..EXPERIMENT/ NEMATIC LIQUID/ ONSET OF CONVECTION AND TURBULENCE
76-CO-03 CONRAD, STILLER+ P-AZOXYANISOLE ..EXPERIMENT/ PHONON-LIKE EXCITATION/ DISPERSION
76-CO-04 CONRAD, STILLER+ P-AZOXYANISOLE ..EXPERIMENT/ LIQUID CRYSTAL/ PHONON-LIKE EXCITATION
76-HE-06 HERVET, DIANOUX+ P-AZOXYANISOLE ..EXPERIMENT/ QUASIELASTIC/ UNIAXIAL ROTATIONAL JUMP
76-KO-03 KOHLI, OTNES+ P-AZOXYANISOLE ..THEORY/ EXPERIMENT/ NEMATIC PHASE/ ORDER PARAMETER/ COHERENT CROSS SECTION
77-BR-03 BROUDE, KROO+ PAA ..EXPERIMENT/ PHONON-LIKE EXCITATION/ LIQUID CRYSTAL
77-JA-04 JANIK, JANIK+ P-AZOXYANISOLE ..EXPERIMENT/ QUASIELASTIC/ ROTATIONAL DIFFUSION
- 6, 97 POLYACETALDEHYDE
68-LO-02 LONGSTER, WHITE POLYACETALDEHYDE/ POLYTRIFLUOROACETALDEHYDE ..EXPERIMENT/ TOF/ NEUTRON SPECTRUM ..ROOM TEM
- 6, 98 POLYACRYLONITRILE
67-TR-01 TREVINO, BOUTIN POLYETHYLENE/ POLYETHYLENEOXIDE/ POLYACRYLONITRILE/ POLYOXYMETHYLENE ..REVIEW/ TOF SPECTRA
- 6, 99 POLYALANINE POLYALANINE
70-KR-01 KRISHNAN, GUPTA POLYALANINE ..THEORY/ PHONON DISPERSION/ G.F MATRIX/ ALPHA-HELIX
70-KR-02 KRISHNAN, GUPTA POLYALANINE ..THEORY/ PHONON DISPERSION/ G.F MATRIX METHOD/ BETA-STRUCTURE
- 6,100 POLYDIMETHYLSILOXANE
69-HE-01 HENRY, SAFFORD POLYDIMETHYLSILOXANE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS ..25DC/ -123DC
72-AL-06 ALLEN, BRIER+ POLYDIMETHYLSILOXANE ..EXPERIMENT/ QUASI-ELASTIC/ RUBBER STATE/ DOPPLER BROADENING/ INTERNAL
72-AL-07 ALLEN, BRIER+ POLYDIMETHYLSILOXANE ..QUASIELASTIC/ DIFFUSION
73-AM-01 AMARAL, VINHAS+ NEUTRON-SCATTERING-IN-SOLIDS/ POLYDIMETHYLSILOXANE ..EXPERIMENT/ SOLID/ T-O-F/ SIGMA (E)
74-AL-03 ALLEN, GHOSH+ POLYDIMETHYLSILOXANE ..QUASIELASTIC SCATTERING
74-AL-04 ALLEN, GHOSH+ POLYDIMETHYLSILOXANE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ RUBBER STATE/ DOPPLER BROADENING
- 6,101 POLYETHYLENE
58-MC-01 MCKEYNOLDS, NELKIN+ H2.O/ POLYETHYLENE/ ZR-H/ MG-H/ GRAPHITE ..EXPERIMENT/ THEORY/ LIQUID/ SOLID

62-GO-02 GOLDMAN, FEDERIGHI POLYETHYLENE ..SCATTERING THEORY/ NEUTRON SPECTRUM/ FREQUENCY DISTRIBUTION
62-LI-01 LIN, KOENIG POLYETHYLENE ..THEORY/ SOLID/ MOLECULAR DYNAMICS
62-TA-01 TASUMI, SHIMANOUCCHI+ POLYETHYLENE ..THEORY/ SOLID/ MOLECULAR DYNAMICS
62-ZE-01 ZEMLYANOV, CHERNOPEKOV POLYETHYLENE/ BENZENE/ BIPHENYL ..EXPERIMENT/ MOLECULAR DYNAMICS
63-GO-01 GOLDMAN, FEDERIGHI POLYETHYLENE ..LIQUID/ THEORY/ SIGMA (E-E-PRIME, THETA)/ NEUTRON SPECTRUM
63-GO-02 GOLDMAN, FEDERIGHI H2.O/ POLYETHYLENE ..CROSS SECTION EVALUATION
63-LI-01 LINDENMEIER, MATSUMOTO+ H2.O/ POLYETHYLENE/ COMPUTER-CODES ..SCATTERING THEORY/ LIQUID/ SIGMA (E-E-PRIME, THETA)
63-ZE-02 ZEMLYANOV, CHERNOPEKOV BENZENE/ BIPHENYL/ POLYETHYLENE ..INELASTIC SCATTERING SPECTRA
64-DA-02 DANNER, SAFFORD+ POLYETHYLENE/ PARAFFINE ..FREQUENCY SPECTRUM/ EXPERIMENT/ SOLID/ MOLECULAR DYNAMICS
64-DA-03 DANNER, BOUTIN+ POLYETHYLENE ..EXPERIMENT/ FREQUENCY DISTRIBUTION ..TOF/ 125, 178 AND 293DK
65-AR-01 ARMSTRONG POLYETHYLENE ..EXPERIMENT/ SOLID
65-BE-01 BEYSTER, KOPPEL D2.O/ H2.O/ POLYETHYLENE/ BE ..THEORY/ EXPERIMENT/ LIQUID/ SOLID/ CROSS SECTION EVALUATION
65-BO-03 BOUTIN, PRASK+ POLYETHYLENE/ PARAFFINE ..FREQUENCY SPECTRUM/ EXPERIMENT/ SOLID
65-KI-01 KITAGAWA, MIYAZAWA POLYETHYLENE ..THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS/ MOLECULAR DYNAMICS ..S
65-MY-01 MYERS, DONOVAN+ POLYETHYLENE ..SIGMA (E-E-PRIME, THETA)/ FREQUENCY SPECTRUM/ EXPERIMENT/ SOLID
65-MY-02 MYERS, SUMMERFIELD+ POLYETHYLENE ..FREQUENCY SPECTRA
65-SU-01 SUMMERFIELD POLYETHYLENE ..THEORY ..SCATTERING CROSS SECTION FOR POLYETHYLENE
65-TA-01 TASUMI, SHIMANOUCCHI POLYETHYLENE ..THEORY/ MOLECULAR DYNAMICS/ DISPERSION RELATION
65-WH-01 WHITEMORE POLYETHYLENE/ GRAPHITE/ METHANE/ ZR-H/ Y-H/ LA-H ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ SCATTERI
66-KI-01 KIROUAC, MOORE+ H2.O/ POLYETHYLENE ..EXPERIMENT/ DOUBLE DIFFERENTIAL CROSS SECTION
66-KI-03 KIROUAC, MOORE+ POLYETHYLENE ..EXPERIMENT/ SCATTERING FUNCTION
66-KO-01 KOPPEL POLYETHYLENE/ ZR-H/ H2.O ..SCATTERING CROSS SECTION/ NEUTRON SPECTRUM
66-KO-04 KOPPEL H2.O/ POLYETHYLENE/ ZR-H/ H ..CROSS SECTION EVALUATION/ SCATTERING FUNCTION/ THEORY/ LIQUID/ SO
66-MY-01 MYERS, SUMMERFIELD+ POLYETHYLENE ..MOLECULAR DYNAMICS/ EXPERIMENT/ SIGMA (E)/ FREQUENCY SPECTRUM
66-SA-01 SAFFORD, HAJMANN+ POLYETHYLENE ..FREQUENCY SPECTRUM/ NEUTRON SPECTRUM/ EXPERIMENT/ LIQUID ..NEUTRON SCATTE
66-TR-01 TREVINO WHITEMORE POLYETHYLENE ..EXPERIMENT/ NEUTRON SPECTROSCOPY ..TOF/ ORIENTED SAMPLE
66-WH-01 WHITEMORE POLYETHYLENE ..EXPERIMENT
67-BI-01 BISCHOFF, BRYANT+ POLYETHYLENE/ H2.O/ ZR-H/ NB-H/ U.O2 ..EXPERIMENT
67-KI-02 KITAGAWA, MIYAZAWA POLYETHYLENE ..THEORY/ FREQUENCY DISTRIBUTION/ SIGMA (E-E-PRIME, THETA)
67-KI-03 KITAGAWA, MIYAZAWA POLYETHYLENE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..DIFFERENTIAL CROSS SE
67-MO-01 MOORE, KIROUAC+ POLYETHYLENE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS ..300DK
67-SC-01 SCHAUFEL, SHIMANOUCCHI POLYETHYLENE ..LATTICE DYNAMICS/ MOLECULAR DYNAMICS/ THEORY/ OPTICAL EXPERIMENT
67-TA-01 TASUMI, KRIMM POLYETHYLENE ..MOLECULAR DYNAMICS/ THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
67-TR-01 TREVINO, BOUTIN POLYETHYLENE/ POLYETHYLENEOXIDE/ POLYACRYLONITRILE/ POLYOXYMETHYLENE ..REVIEW/ TOF SPECTRA
67-TU-01 TUCKER, REESE POLYETHYLENE ..EXPERIMENT
68-BA-03 BANK, KRIMM POLYETHYLENE/ PARAFFINE ..FREQUENCY DISTRIBUTION/ SOLID/ EXPERIMENT ..INFRARED ABSORPTION SPEC
68-FE-01 FELDKAMP, VENKATARAMAN+ POLYETHYLENE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ CONST.-0
68-KI-02 KITAGAWA, MIYAZAWA POLYETHYLENE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
68-KI-03 KITAGAWA, MIYAZAWA POLYETHYLENE ..THEORY/ FREQUENCY DISTRIBUTION ..ONE, TWO, THREE-PHONON SCATTERING/ 100D
68-LY-01 LYNCH-JR, SUMMERFIELD+ POLYETHYLENE ..SOLID/ EXPERIMENT/ THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS
68-MY-01 MYERS, RANDOLPH POLYETHYLENE ..EXPERIMENT/ LATTICE DYNAMICS ..DIFFERENTIAL CROSS SECTION/ 300DK/ 77DK/ 4.2
68-MY-02 MYERS POLYETHYLENE ..FREQUENCY DISTRIBUTION/ EXPERIMENT/ SOLID ..TOF/ SPECIFIC HEAT
68-PI-01 PISERI, ZERBI POLYETHYLENE ..THEORY/ PHONON SPECTRA/ ZIG-ZAG CHAIN
69-CH-01 CHANG, SUMMERFIELD POLYETHYLENE ..SOLID/ THEORY/ FREQUENCY DISTRIBUTION
69-FE-02 FELDKAMP, KING POLYETHYLENE ..CRYSTAL DYNAMICS/ POLYMER
69-IV-01 IVANITSKII, KROTENKO+ POLYETHYLENE ..FREQUENCY SPECTRA
69-KI-02 KIROUAC, JERNOW+ POLYETHYLENE ..THEORY/ MOLECULAR DYNAMICS ..SCATTERING CROSS SECTION EVALUATION
69-MA-04 MATSUURA, MIYAZAWA POLYETHYLENE ..FREQUENCY DISTRIBUTION/ MOLECULAR DYNAMICS/ THEORY/ DISPERSION RELATION
69-MO-02 MOORE, KIROUAC+ POLYETHYLENE ..FREQUENCY SPECTRA
70-SP-01 SPREYAK, KOPPEL POLYETHYLENE ..THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ SIGMA (E) ..SCATTERING
70-DO-02 DOI, SAKAMOTO+ POLYETHYLENE ..EXPERIMENT/ FREQUENCY DISTRIBUTION
70-KI-03 KITAGAWA AR/ KR/ POLYETHYLENE ..REVIEW/ LATTICE DYNAMICS

- 70-K1-04 KITAGAWA, MIYAZAWA POLYETHYLENE ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ PERDEUTERATED PE
 70-MA-01 MACHIDA POLYETHYLENE ..THEORY/ EFFECT OF END GROUP VIBRATION/ DISPERSION CURVES
 71-BE-02 BERGHMANS, SAFFORD+ POLYETHYLENE ..EXPERIMENT/ FREQUENCY SPECTRA/ LOW-FREQUENCY MOTION/ VARIOUS TEMPERATUR
 71-BR-02 BROADHURST, MOPSIK POLYETHYLENE ..THEORY/ FREQUENCY SPECTRA/ LINEAR POLYMER
 71-ZE-02 ZERBI, PISERI+ POLYETHYLENE ..THEORY/ FREQUENCY SPECTRA/ PERFECT AND IRREGULAR POLYMER CHAIN
 72-MA-01 MARSH, MARTIN POLYETHYLENE ..THEORY/ PHONON DISPERSION/ PHONON SPECTRUM/ PROPAGATING TRASVERSELY TO CHAIN
 72-SA-01 SAKAMOTO, IIZUMI+ K.H.F2/ (N.H4)2.S.O4/ POLYETHYLENE ..EXPERIMENT/ BE-FILTER-DETECTOR/ MOLECULAR DYNAMICS
 72-TW-01 TUISLETON, WHITE POLYETHYLENE ..EXPERIMENT/ PHONON DISPERSION/ PERPENDICULAR TO CHAIN AXES
 73-HA-02 HARLEY, HAYES+ POLYETHYLENE ..EXPERIMENT/ RAMAN/ LOW-FREQUENCY PHONON/ 4.2-373K
 73-HE-01 HERDADE, VINHAS+ POLYETHYLENE/ H2.O ..EXPERIMENT/ SOLID/ LIQUID/ T-O-F/ SIGMA (E)
 73-WU-01 WU, NICOL POLYETHYLENE/ PARAFFINE ..EXPERIMENT/ RAMAN SPECTRA/ PRESSURE EFFECT/ LATTICE MODE
 73-WU-02 WU, NICOL POLYETHYLENE ..EXPERIMENT/ RAMAN SPECTR./ LOW FREQUENCY/ PRESSURE EFFECT
 75-SW-01 SWANINATHAN, TEWARI+ POLYETHYLENE ..THEORY/ LATTICE DYNAMICS/ MODEL
 76-PE-02 PETERLIN-NEUMATER, SPRINGER POLYETHYLENE ..EXP./ QUASI-ELASTIC/ DIFFUSION MOTION
 77-UL-01 ULLMAN, SUMMERFIELD+ POLYETHYLENE ..SMALL ANGLE SCATTERING/ HETEROGENEITY
 77-YO-01 YOON, FLORY POLYETHYLENE ..SMALL ANGLE SCATTERING
- 6.102 POLYETHYLENEOXIDE
- 67-TR-01 TREVINO, BOUTIN POLYETHYLENE/ POLYETHYLENEOXIDE/ POLYACRYLONITRILE/ POLYOXYMETHYLENE ..REVIEW/ TOF SPECTRA
 74-AL-01 ALLEN, HIGGINS+ POLYMETHYLPHENYLSILOXANE/ POLYPROPYLENE OXIDE/ POLYISOBUTYLENE/ POLYETHYLENEOXIDE ..EXPERI
- 6.103 POLYETHYLENE TEREPHTHALATE
- 75-BE-02 BERGHMANS, GROENINCKX POLYETHYLENE TEREPHTHALATE ..EXPERIMENT/ PHONON SPECTRA/ EFFECT OF CRYSTALLINITY
- 6.104 POLYGLUTAMIC ACID
- 66-BG-03 BOUTIN, WHITEMORE POLYGLUTAMIC ACID ..EXPERIMENT/ FREQUENCY SPECTRUM/ MOLECULAR DYNAMICS
 68-WH-03 WHITEMORE POLYPEPTIDE/ POLYGLUTAMIC ACID ..EXPERIMENT/ TOF/ FREQUENCY DISTRIBUTION
 77-RI-02 RINAUDO, DOMARD POLYGLUTAMIC ACID ..EXP./ SMALL-ANGLE/ INTERCHAIN CORRELATION
- 6.105 POLYGLYCINE
- 63-FU-01 FUKUSHIMA, IDEGUCHI+ POLYGLYCINE ..THEORY/ NORMAL VIBRATION
 68-GU-01 GUPTA, TREVINS+ POLYGLYCINE ..FREQUENCY DISTRIBUTION/ THEORY/ LATTICE DYNAMICS
 71-SI-02 SINGH, GUPTA POLYGLYCINE ..THEORY/ DISPERSION CURVE/ PHONON SPECTRA
 72-FA-01 FANCONI POLYGLYCINE ..THEORY/ DISPERSION RELATION ..2-DIMENSIONAL LATTICE VIBRATION
- 6.106 POLYISOBUTYLENE
- 74-AL-01 ALLEN, HIGGINS+ POLYMETHYLPHENYLSILOXANE/ POLYPROPYLENE OXIDE/ POLYISOBUTYLENE/ POLYETHYLENEOXIDE ..EXPERI
- 6.107 POLYMETHYLPHENYLSILOXANE
- 74-AL-01 ALLEN, HIGGINS+ POLYMETHYLPHENYLSILOXANE/ POLYPROPYLENE OXIDE/ POLYISOBUTYLENE/ POLYETHYLENEOXIDE ..EXPERI

6.108 POLYOXYMETHYLENE

66-KI-04 KITAGAWA, MIYAZAWA POLYOXYMETHYLENE ..THEORY/ FREQUENCY DISTRIBUTION/ SOLID ..SPECIFIC HEAT
 66-TR-02 TREVINO, BOUTIN POLYOXYMETHYLENE ..EXPERIMENT/ FREQUENCY SPECTRA/ LATTICE DYNAMICS
 67-TR-01 TREVINO, BOUTIN POLYETHYLENE/ POLYETHYLENEOXIDE/ POLYACRYLONITRILE/ POLYOXYMETHYLENE ..REVIEW/ TOF SPECTRA
 72-BO-02 BORIO, CORNELL POLYOXYMETHYLENE ..THEORY/ DISPERSION CURVE/ FREQUENCY SPECTRA/ RAMAN EXPERIMENT
 74-SA-02 SAKAMOTO, MASAKI+ POLYOXYMETHYLENE ..EXPERIMENT/ ORIENTED CRYSTAL/ FREQUENCY SPECTRUM

6.109 POLYPEPTIDE

68-WH-03 WHITEMORE POLYPEPTIDE/ POLYGLUTAMIC ACID ..EXPERIMENT/ TOF/ FREQUENCY DISTRIBUTION

6.110 POLYPROPYLENE

POLYPROPYLENE

63-MI-03 MIYAZAWA, FUKUSHIMA+ POLYPROPYLENE ..EXPERIMENT/ FAR-INFRARED SPECTROMETRY
 63-MI-04 MIYAZAWA, IDEGUCHI+ POLYPROPYLENE ..THEORY/ INFRARED SPECTRA/ INFINITE HELICAL CHAIN POLYMER/ NORMAL MODE
 64-SA-01 SAFFORD, DANNER+ POLYPROPYLENE ..EXPERIMENT/ TOF SPECTRA/ FREQUENCY SPECTRA/ LATTICE DYNAMICS
 68-ZE-02 ZERBI, PISERI POLYPROPYLENE ..FREQUENCY DISTRIBUTION/ DIFFERENTIAL CROSS SECTION/ CRYSTAL/ THEORY..F.G.MET
 71-YA-01 YASUKAWA, KIMURA+ POLYPROPYLENE ..EXPERIMENT/ TOF SPECTRUM/ FREQUENCY DISTRIBUTION

6.111 POLYPROPYLENE OXIDE

74-AL-01 ALLEN, HIGGINS+ POLYMETHYLPHENYLSILOXANE/ POLYPROPYLENE OXIDE/ POLYISOBUTYLENE/ POLYETHYLENEOXIDE ..EXPERI
 76-HI-01 HIGGINS POLYPROPYLENE OXIDE ..EXPERIMENT/ QUASIELASTIC SCATTERING

6.112 POLYSTYRENE

76-BE-05 BENoit, DECKER+ POLYSTYRENE ..EXP./ SMALL-ANGLE SCATT./ POLYMERIC NETWORKS
 76-CO-08 COTTON, NIERLICH+ POLYSTYRENE ..SMALL-ANGLE SCATTERING/ CORRELATION LENGTH/ RADIUS OF GYRATION/ SCREENING
 77-AK-01 AKCASU, HIGGINS POLYSTYRENE/ POLYTETRAHYDROFURAN ..THEORY/ SCATTERING LAW/ QUASIELASTIC
 77-AK-02 AKCASU, HIGGINS POLYTETRAHYDROFURAN/ POLYSTYRENE ..CALCULATION/ SCATTERING LAW/ DILUTE SOLUTION
 77-SP-01 SPELLS, SHEPHERD+ POLYSTYRENE ..EXPERIMENT/ FREQUENCY SPECTRUM

6.113 POLYTETRAHYDROFURAN

(C4.H8.O)N

77-AK-01 AKCASU, HIGGINS POLYSTYRENE/ POLYTETRAHYDROFURAN ..THEORY/ SCATTERING LAW/ QUASIELASTIC
 77-AK-02 AKCASU, HIGGINS POLYTETRAHYDROFURAN/ POLYSTYRENE ..CALCULATION/ SCATTERING LAW/ DILUTE SOLUTION

6.114 POLYTETRAFLUOROETHYLENE

TEFLON

69-LA-02 LA6ARDE, PRASK+ TEFLON ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE
 73-PI-01 PISERI, POWELL+ TEFLON ..EXPERIMENT/ CALCULATION/ PHONON DISPERSION
 73-SA-01 SAKAMOTO, IIZUMI+ POLYTETRAFLUOROETHYLENE ..EXPERIMENT/ PHONON DISPERSION/ PHASE TRANSITION

- 6.115 POLYTRIFLUOROACETALDEHYDE
68-LO-02 LONGSTER, WHITE POLYACETALDEHYDE/ POLYTRIFLUOROACETALDEHYDE ..EXPERIMENT/ TOF/ NEUTRON SPECTRUM ..ROOM TEM
- 6.116 POLYVINYL CHLORIDE
68-LY-02 LYNCH-JR, SUMMERFIELD POLYVINYL CHLORIDE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRI
- 6.117 POTASSIUM TRICHLOROACETATE K.C2.CL3.O2
70-CO-02 COLLINS, HAYWOOD+ K.H.F2/ CS.H.CL2/ NA.H.C.O3/ K.C2.CL3.O2/ K.C2.F3.O2 ..EXPERIMENT/ MOLECULAR DYNAMICS/ F
- 6.118 POTASSIUM TRIFLUOROACETATE K.C2.F3.O2
70-CO-02 COLLINS, HAYWOOD+ K.H.F2/ CS.H.CL2/ NA.H.C.O3/ K.C2.CL3.O2/ K.C2.F3.O2 ..EXPERIMENT/ MOLECULAR DYNAMICS/ F
- 6.119 PROPANE C3.H8
62-BR-02 BRUGGER METHANE/ H2.O/ D2.O/ PROPANE ..THEORY/ EXPERIMENT/ SCATTERING FUNCTION
62-MC-01 MCMURRY, GANNON+ METHANE/ PROPANE ..THEORY/ GAS/ DIFFERENTIAL CROSS SECTION
62-ST-02 STRONG, MARSHALL+ PROPANE
70-GR-01 GRANT, PUGMIRE+ PROPANE ..EXPERIMENT/ MOLECULAR DYNAMICS/ TOF
- 6.120 PROPANOL C3.H8.O
72-RO-01 RODRIGUES, VINHAS+ METHANOL/ ETHANOL/ PROPANOL/ BUTANOL/ ETHANEDIOL/ PROPANETRIOL ..EXPERIMENT/ TOTAL SIGM
- 6.121 PROPIONIC ACID C3.H6.O2
70-CO-03 COLLINS, HAYWOOD FORMIC ACID/ ACETIC ACID/ PROPIONIC ACID/ OXALIC ACID/ MALONIC ACID/ SUCCINIC ACID/ MONOC
- 6.122 PROTEIN PROTEIN
75-BA-03 BARTUNIK, JACOBE INSTRUMENTS-AND-METHODS/ PROTEIN ..MULTI-DETECTOR SYSTEM/ ILL,GRENOBLE
- 6.123 PYRAZINE C4.H4.N2
68-GE-01 GERBAUX, HAONI PYRAZINE ..FREQUENCY DISTRIBUTION/ EXPERIMENT/ SOLID
- 6.124 PYRENE C16.H10
73-FI-01 FILIPPINI, GRAMACCIOLI+ NAPHTHALENE/ ANTHRACENE/ PHENANTHRENE/ PYRENE/ ANNULENE ..THEORY/ LATTICE DYNAMIC

- 6.125 PYRIDINE
 69-FI-01 FISCHER BENZENE/ CYCLOHEXANE/ CYCLOHEXANOL/ PYRIDINE/ H₂O/ HEXANE/ METHANOL/ ETHANOL/ ACETONE/ ACETIC
- 6.126 RESIN
 66-GR-01 GRAFFSTEIN, RZESSOT+ RESIN ..EXPERIMENT ..NEUTRON DIFFUSION PARAMETER
- 6.127 RUBBER
 68-TU-02 TUNKALO, BAJOREK+ RUBBER ..EXPERIMENT/ TOF/ FREQUENCY DISTRIBUTION
 74-AL-02 ALLEN, HIGGINS+ RUBBER ..QUASIELASTIC/ SEGMENTAL DIFFUSION
- 6.128 TAURINE
 72-DA-04 DAVIDOVIC, RATKOVIC+ TAURINE/ ALPHA-AMINO-ISOBUTYRIC-ACID ..EXPERIMENT/ VIBRATIONAL SPECTRUM
 72-DA-05 DAVIDOVIC, RATKOVIC+ TAURINE/ BUTYRIC ACID ..INELASTIC NEUTRON SCATTERING/ INCOHERENT
- 6.129 TEREPHTHAL-BIS-P-BUTYLANILINE TBBA
 74-HE-02 HERVET, VOLINO+ TEREPHTHAL-BIS-P-BUTYLANILINE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ LIQUID CRYSTAL/ PART
 74-HE-03 HERVET, VOLINO+ TBBA ..EXPERIMENT/ QUASIELASTIC/ ROTATIONAL DIFFUSION
- 6.130 TERPHENYL C18.H14
 62-BR-03 BRUGGER TERPHENYL ..SCATTERING LAW/ EXPERIMENT/ SOLID/ LIQUID ..23DC/ 207DC
 65-HO-01 HOFMEYER BENZENE/ BIPHENYL/ TERPHENYL ..EXPERIMENT ..21DC-150DC 10X.23H DATA END IN GTMIN RTN.)
 66-SC-02 SCHMIDT, SAAD BENZENE/ BIPHENYL/ TERPHENYL/ CYCLOHEXANE ..EXPERIMENT
 72-RE-04 REYNOLDS, WHITE TERPHENYL ..EXPERIMENT/ NEUTRON SPECTROSCOPY/ MOLECULAR VIBRATION
- 6.131 TETRAMETHYLLEAD TML
 76-KO-04 KOLLMAR, ALEFELD DIMETHYLACETYLENE/ TETRAMETHYLLEAD ..EXPERIMENT/ ROTATIONAL MOTION
- 6.132 TETRATHIAFULVALENE-TETRACYANOQUINODIMETH TTF-TCNQ
 73-ZE-01 ZELLER REVIEW-ARTICLES/ KCP/ TTF-TCNQ ..ONE-DIMENSIONAL CONDUCTOR/ KOHN-PEIERLS INSTABILITY
 74-GL-01 GLAESER REVIEW-ARTICLES/ KCP/ TTF-TCNQ ..ONE-DIMENSIONAL CONDUCTOR/ KOHN-PEIERLS INSTABILITY
 75-CO-03 COMES, SHAPIRO+ TTF-TCNQ ..EXPERIMENT/ NEUTRON ELASTIC SCATTERING/ SOLID
 76-CA-02 CARNEIRO TTF-TCNQ ..THEORY/ DYNAMICAL STRUCTURE FACTOR
 76-CO-02 COMES, SHIRANE+ TTF-TCNQ ..EXPERIMENT/ ELASTIC SCATTERING/ CRITICAL SCATTERING/ CRYSTAL MODULATION STRUCTU
 76-EL-01 ELLENSON, COMES+ TTF-TCNQ ..ELASTIC NEUTRON SCATTERING/ PHASE TRANSITION
 76-MO-01 MOOK, WATSON-JR TETRATHIAFULVALENE-TETRACYANOQUINODIMETHANE ..EXPERIMENT/ DISPERSION RELATION/ KOHN EFFECT

76-SH-08 SHIRANE, SHAPIRO+ TTF-TCNQ ..EXPERIMENT/ PHONON DISPERSION/ ONE-DIMENSIONAL CONDUCTOR/ DEUTERATED SAMPLE/ 6
 77-EL-01 ELLENSON, SHAPIRO+ TTF-TCNQ ..EXPERIMENT/ PHASE TRANSITION

6.133 TOLUENE

C7.H8

68-HO-02 HOLMRYD, NELIN BENZENE/ TOLUENE ..EXPERIMENT/ TOF ..DIFFUSIVE MOTION/ QUASI-ELASTIC
 71-WI-01 WINFIELD TOLUENE ..LIQUID/ QUASI-ELASTIC PEAK/ EXPERIMENT.
 72-AL-01 ALDRED, STIRLING+ METHANOL/ TOLUENE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ LIQUID/ DEUTERIUM SUBSTITUTION
 72-AL-02 ALDRED, STIRLING+ METHANOL/ TOLUENE ..QUASIELASTIC/ MODEL ANALYSIS/ DIFFUSION

6.134 TRICHLOROMETHANE

C.H.CL3

68-O--01 O-REILLY C.CL4/ C.H.CL3/ C6.H5.CL/ H.F/ H.CL/ N.H3/ H2.O ..CORRELATION FUNCTION/ MOLECULAR ROTATIONS/ LIQUID

6.135 TRIFLUOROETHANE

C.H3.C.F3

70-BR-02 BRIER, HIGGINS C.H3.C.F3 ..EXPERIMENT/ SCATTERING LAW/ ..TORSIONAL OSCILLATION/ SPHERICAL TOP MOLECULE

6.136 TRIMETHYLAMMONIUM CHLORIDE

(C.H3)3.N.H.CL

77-SC-03 SCHLAACK, COUZI+ (C.H3)3.N.H.CL ..EXPERIMENT/ VIBRATIONAL LEVEL

6.137 XYLENE

C6.H4.(C.H3)2

76-UT-01 UTSURO XYLENE/ MESITYLEN ..EXPERIMENT/ TOF/ SIGMA(E)/ MOLECULAR ROTATION ..100K/ ELECTRON LIINA/ EFFECT

7 ADSORPTIONS AND SOLUTIONS

7. 1 ACETYLENE-CHARCOAL C₂H₂-CHARCOAL
67-VE-04 VERDAN H₂-CHARCOAL/ C₂H₄-CHARCOAL/ C₂H₄-CHARCOAL/ C₂H₂-CHARCOAL ..EXPERIMENT/ FREQUENCY SPECTRA/ ADS
7. 2 ALCOHOL-WATER
70-FR-02 FRANKS, RAVENHILL+ ALCOHOL-WATER ..EXPERIMENT/ NEUTRON SPECTROSCOPY ..DIFFUSION OF WATER IN AQUEOUS SOLUTION
7. 3 AMMONIA-ZEOLITE
66-DO-06 DOWNES, WHITE+ METHANE-QUINOL/ METHYL CYANIDE-QUINOL/ METHANOL-QUINOL/ WATER-QUINOL/ AMMONIA-ZEOLITE ..EXP
7. 4 AMMONIUM FLUORIDE-WATER N₂H₄F-H₂O
65-ST-04 STILLER H₂F-H₂O/ N₂H₄F-H₂O ..EXPERIMENT/ SOLUTION/ BE-FILTER DETECTOR SPECTRUM
7. 5 ARGON-GRAPHITE AR-GRAPHITE
75-TA-02 TAUB, PASSELL+ AR-GRAPHITE ..EXPERIMENT/ AR-FILM/ ADSORBED ON GRAPHITE/ 5DK
7. 6 CESIUM CHLORIDE-WATER CS₂CL-H₂O
70-LE-05 LEUNG, SAFFORD LI₂CL-H₂O/ MG₂CL₂-H₂O/ CS₂CL-H₂O/ K₂CL-H₂O/ NA₂CL-H₂O/ LA₂(N₂O₃)₃-H₂O/ ..EXPERIMENT/
7. 7 CHROMIUM CHLORIDE-WATER CR₂CL₃-H₂O
70-LE-06 LEUNG, SANBORN+ LA₂(N₂O₃)₃-H₂O/ CR₂CL₃-H₂O/ LA₂CL₃-H₂O ..EXPERIMENT/ H₂O MOTION IN SOLUTION AND GLASS
7. 8 DIETHYL DIETHYLENE GLYCOL-CARBON DISULFIDE
71-DE-03 DENIZ, JANNIK+ ETHYL ETHER-CARBON DISULFIDE/ DIETHYL DIETHYLENE GLYCOL-CARBON DISULFIDE ..THEORY/ EXPERIMENT
7. 9 ETHYL ETHER-CARBON DISULFIDE (C₂H₅)₂O-C₂S₂
71-DE-03 DENIZ, JANNIK+ ETHYL ETHER-CARBON DISULFIDE/ DIETHYL DIETHYLENE GLYCOL-CARBON DISULFIDE ..THEORY/ EXPERIMENT
7. 10 ETHYLENE-CHARCOAL C₂H₄-CHARCOAL

67-VE-04	VERDAN	H ₂ -CHARCOAL/ C ₂ H ₄ -CHARCOAL/ C ₂ H ₄ -CHARCOAL/ C ₂ H ₂ -CHARCOAL	..EXPERIMENT/ FREQUENCY SPECTRA/ ADS
7. 11	ETHYLENE OXIDE-CLATHRATE	(C.H ₂) ₂ -CLATHRATE	
76-VA-02	VANDERHAEGHEN, WEGENER+	ETHYLENE OXIDE-CLATHRATE/ TETRAHYDROFURAN-CLATHRATE	..EXPERIMENT/ QUASIELASTIC SCA
7. 12	HYDROGEN-ALUMINA	H ₂ -ALUMINA	
76-SI-01	SILVERA, NIELSEN	H ₂ -ALUMINA ..EXPERIMENT/ ADSORBED H ₂ / ROTATIONAL STATE	
7. 13	HYDROGEN-CHARCOAL	H ₂ -CHARCOAL	
67-VE-04	VERDAN	H ₂ -CHARCOAL/ C ₂ H ₄ -CHARCOAL/ C ₂ H ₄ -CHARCOAL/ C ₂ H ₂ -CHARCOAL	..EXPERIMENT/ FREQUENCY SPECTRA/ ADS
7. 14	HYDROGEN FLUORIDE-WATER	H ₂ F-H ₂ O	
65-ST-04	STILLER	H ₂ F-H ₂ O/ N.H ₄ F-H ₂ O ..EXPERIMENT/ SOLUTION/ BE-FILTER DETECTOR SPECTRUM	
7. 15	HYDROGEN-NICKEL	H-NI	
75-ST-04	STOCKMEYER, KONRAD+	H-NI ..EXPERIMENT/ FREQUENCY SPECTRUM/ CHEMISORBED	
77-RE-01	RENOUPREZ, FOUILLOUX+	H-NI ..EXPERIMENT/ DIFFUSION/ QUASIELASTIC	
77-RE-02	RENOUPREZ, FOUILLOUX+	H-NI ..EXPERIMENT/ VIBRATION LEVEL	
7. 16	HYDROGEN-NITROGEN-NIOBIUM	H-N-NB	
76-RI-01	RICHTER, KEHR+	H-N-NB ..QUASIELASTIC SCATTERING/ HYDROGEN DIFFUSION	
7. 17	HYDROGEN-PLATINUM	H-PT	
75-AS-01	ASADA, TOYA+	H-PT ..INELASTIC NEUTRON SCATTERING EXPERIMENT/ HYDROGEN ADSORBED ON PLATINUM	
76-MA-02	MAHANTY, RICHARDSON+	HYDROGEN-PLATINUM ..THEORY/ ADSORBED HYDROGEN ON A PT SURFACE/ VIBRATIONAL FREQUENCY/	
7. 18	KRYPTON-GRAPHITE	KR-GRAPHITE	
76-TH-02	THOREL, CROSET+	KR-GRAPHITE ..NEUTRON DIFFRACTION/ ABSORBED KR/ GRAPHITE	
7. 19	LANTHANUM CHLORIDE-WATER	LA.CL ₃ -H ₂ O	
70-LE-06	LEUNG, SANBURN+	LA.(N.O ₃) ₃ -H ₂ O/ CR.CL ₃ -H ₂ O ..EXPERIMENT/ H ₂ O MOTION IN SOLUTION AND GLASS	
7. 20	LANTHANUM NITRATE-WATER	LA.(N.O ₃) ₃ -H ₂ O	

70-LE-06	LEUNG, SANBORN+	LA.(N.O3)3-H2.O/ CR.CL3-H2.O/ LA.CL3-H2.O ..EXPERIMENT/ H2.O MOTION IN SOLUTION AND GLASS
7. 21	LITHIUM CHLORIDE-WATER	LI.CL-H2.O
70-LE-05	LEUNG, SAFFORD	LI.CL-H2.O/ MG.CL2-H2.O/ CS.CL-H2.O/ K.CL-H2.O/ NA.CL-H2.O/ LA.(N.O3)3-H2.O/ ..EXPERIMENT/
7. 22	MAGNESIUM CHLORIDE-WATER	MG.CL2-H2.O
70-LE-05	LEUNG, SAFFORD	LI.CL-H2.O/ MG.CL2-H2.O/ CS.CL-H2.O/ K.CL-H2.O/ NA.CL-H2.O/ LA.(N.O3)3-H2.O/ ..EXPERIMENT/
7. 23	METHANE-CHARCOAL	C.H4-CHARCOAL
67-VE-04	VERDAN	H2-CHARCOAL/ C.H4-CHARCOAL/ C2.H4-CHARCOAL/ C2.H2-CHARCOAL ..EXPERIMENT/ FREQUENCY SPECTRA/ ADS
69-TO-01	TODIREANU	C.H4-CHARCOAL ..EXPERIMENT/ TOTAL SCATTERING CROSS SECTION
7. 24	METHANE-QUINOL	C.H4-C6.H4.(O.H)2
66-DO-06	DOWNES, WHITE+	METHANE-QUINOL/ METHYL CYANIDE-QUINOL/ METHANOL-QUINOL/ WATER-QUINOL/ AMMONIA-ZEOLITE ..EXP
7. 25	METHANOL-QUINOL	C.H4.O-C6.H4.(O.H)2
66-DO-06	DOWNES, WHITE+	METHANE-QUINOL/ METHYL CYANIDE-QUINOL/ METHANOL-QUINOL/ WATER-QUINOL/ AMMONIA-ZEOLITE ..EXP
7. 26	METHYL CYANIDE-QUINOL	C.H3.C.N-C6.H4.(O.H)
66-DO-06	DOWNES, WHITE+	METHANE-QUINOL/ METHYL CYANIDE-QUINOL/ METHANOL-QUINOL/ WATER-QUINOL/ AMMONIA-ZEOLITE ..EXP
7. 27	NITROGEN-GRAPHITE	N-GRAPHITE
74-KJ-01	KJEMES, PASSELL+	N-GRAPHITE ..EXPERIMENT/ NEUTRON DIFFRACTION/ NITROGEN ADSORBED
7. 28	POLYSTYRENE-CARBON DISULFIDE	POLYSTYRENE-C.S2
76-FA-01	FARNOUX	POLYSTYRENE-CARBON DISULFIDE ..SMALL ANGLE SCATTERING
76-GH-01	GHOSH, HIGGINS	POLYTETRAHYDROFURANE-CARBON DISULFIDE/ POLYSTYRENE-CARBON DISULFIDE..SCATTERING LAW/ EXPERI
7. 29	POLYTETRAHYDROFURANE-CARBON DISULFIDE	(C4.H8.O)N-C.S2
76-GH-01	GHOSH, HIGGINS	POLYTETRAHYDROFURANE-CARBON DISULFIDE/ POLYSTYRENE-CARBON DISULFIDE..SCATTERING LAW/ EXPERI
7. 30	POTASSIUM CHLORIDE-WATER	K.CL-H2.O

70-LE-05	LEUNG, SAFFORD	LI.CL-H2.O/ MG.CL2-H2.O/ CS.CL-H2.O/ K.CL-H2.O/ NA.CL-H2.O/ LA.(N.O3)3-H2.O/ ..EXPERIMENT/
7. 31	SODIUM CHLORIDE-WATER	NA.CL-H2.O
70-LE-05	LEUNG, SAFFORD	LI.CL-H2.O/ MG.CL2-H2.O/ CS.CL-H2.O/ K.CL-H2.O/ NA.CL-H2.O/ LA.(N.O3)3-H2.O/ ..EXPERIMENT/
7. 32	TETRAHYDROFURAN-CLATHRATE	C4.H8.O-CLATHRATE
76-VA-02	VANDERHAEGHEN, WEGENER+	ETHYLENE OXIDE-CLATHRATE/ TETRAHYDROFURAN-CLATHRATE ..EXPERIMENT/ QUASIELASTIC SCA
7. 33	WATER-ALUMINA	H2.O-AL2.O3
64-BO-02	BOUTIN, PRASK	H2.O/ WATER-SILICA/ WATER-ALUMINA/ AL.CL3 ..EXPERIMENT/ MOLECULAR DYNAMICS ..H2.O VAPOR ADSO
7. 34	WATER-BERYL	H2.O-BE3.AL2.SI6.O18
65-BO-06	BOUTIN, PRASK+	WATER-BERYL ..EXPERIMENT/ TOF SPECTRA/ ADSORBED WATER
7. 35	WATER-POTASSIUM FERROCYANIDE TRIHYDRATE	
66-RU-05	RUSH, LEUNG+	WATER-POTASSIUM FERROCYANIDE TRIHYDRATE ..EXPERIMENT/ MOLECULAR MOTION/ FERROELECTRIC TRANSIT
7. 36	WATER-QUINOL	H2.O-C6.H4.(O.H)2
66-DO-06	DOWNES, WHITE+	METHANE-QUINOL/ METHYL CYANIDE-QUINOL/ METHANOL-QUINOL/ WATER-QUINOL/ AMMONIA-ZEOLITE ..EXP
7. 37	WATER-SILICA	H2.O-SI.O2
64-BO-02	BOUTIN, PRASK	H2.O/ WATER-SILICA/ WATER-ALUMINA/ AL.CL3 ..EXPERIMENT/ MOLECULAR DYNAMICS ..H2.O VAPOR ADSO

DIFFRACTION

- 37-SC-01 SCHWINGER, J./ TELLER, E.
THE SCATTERING OF NEUTRONS BY ORTHO-AND PARAHYDROGEN
PHYS. REV., V.52, P.286-P.295 (1937)
H2 ..THEORY/ TOTAL CROSS SECTION
- 40-DA-01 DARLING, B.T./ DENNISON, D.M.
THE WATER VAPOR MOLECULE
PHYS. REV., V.57, P.128-P.139 (1940)
H2.O ..THEORY/ MOLECULAR DYNAMICS
- 41-SA-01 SACHS, R.G./ TELLER, E.
THE SCATTERING OF SLOW NEUTRONS BY MOLECULAR GASES
PHYS. REV., V.60, P.18-P.27 (1941)
NEUTRON-SCATTERING-IN-FLUIDS/ H2/ C.H4/ N.H3/ H2.O ..SC
ATTERING THEORY ..MOLECULAR GASES
- 44-WE-01 WEINSTOCK, R.
INELASTIC SCATTERING OF SLOW NEUTRONS
PHYS. REV., V.65, P.1-P.20 (1944)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ LATTICE D
YNAMICS ..INELASTIC SCATTERING
- 47-HA-01 HAMMERSH, M./ SCHWINGER, J.
NEUTRON SCATTERING IN ORTHO-AND PARAHYDROGEN
PHYS. REV., V.71, P.678-P.680 (1947)
H2 ..THEORY/ GAS/ SCATTERING CROSS SECTION
- 47-ME-01 MEHRINGER, W.
MODEL CALCULATION OF DISPERSION OF PHONON-LIKE EXCITATI
ONS IN LIQUID ARGON
PHYS. LETT., A, V.49, P.27-P.28 (1947)
AR ..MODEL CALCULATION/ PHONON-LIKE EXCITATION/ DISPERS
ION CURVE
- 49-ME-01 MELKONIAN, E.
SLOW NEUTRON VELOCITY SPECTROMETER STUDIES OF O2.N2.AR,
H2.O AND SEVEN HYDROCARBONS
PHYS. REV., V.76, P.1750 (1949)
C.H4 ..SIGMA(E)/ EXPERIMENT
- 50-CA-01 CASSELS, J.M.
THE SCATTERING OF NEUTRONS BY CRYSTALS
PROGRESS IN NUCLEAR PHYSICS, V.1, P.185-P.215 (195
0)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY
- 50-FR-01 FROEMAN, P.O.
ON NEUTRON DIFFRACTION PHENOMENA ACCORDING TO THE KINEM
ATICAL THEORY, 2.
ARK, FYS., V.4, P.191-P.202 (1950)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLIDS ..NEUTRON
- 50-WA-01 WALLER, I./ FROEMAN, P.O.
ON NEUTRON DIFFRACTION PHENOMENA ACCORDING TO THE KINEM
ATICAL THEORY, 1.
ARK, FYS., V.4, P.183-P.189 (1950)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLIDS ..NEUTRON
DIFFRACTION
- 51-EG-01 EGELSTAFF, P.A.
INELASTIC SCATTERING OF COLD NEUTRONS
NATURE, V.168, P.290 (1951)
H/ BE/ V/ SE/ MO/ FE ..SOLID/ EXPERIMENT/ TRANSMISSION
- 51-KO-01 KOMATSU, K./ NAGAMIYA, T.
THEORY OF THE SPECIFIC HEAT OF GRAPHITE
J. PHYS. SOC. JAP., V.6, P.436-P.444 (1951)
GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBU
TION
- 51-MC-01 MCREYNOLDS, A.W./ WEISS, R.J.
COHERENT NEUTRON SCATTERING CROSS SECTION OF V-51
PHYS. REV., V.83, P.171-P.172 (1951)
V ..EXPERIMENT/ TOTAL CROSS SECTION ..TOTAL REFLECTION
FROM MIRROR SURFACE OF V
- 51-ME-01 MESSIAH, A.M.L.
SCATTERING OF SLOW NEUTRONS BY H2 AND C.H4
PHYS. REV., V.84, P.204 (1951)
H/ C.H4 ..THEORY/ SCATTERING THORY ..ROOM TEMP.
- 51-PL-01 PLACZEK, G./ NIJBOER, B.R.A./ VAN-HOVE, L.
EFFECT OF SHORT WAVELENGTH INTERFERENCE ON NEUTRON SCAT
TERING BY DENSE SYSTEMS OF HEAVY NUCLEI
PHYS. REV., V.82, P.392 (1951)
NEUTRON-SCATTERING-IN-FLUIDS/ HG ..THEORY/ SIGMA(E)-E-PR
IME,THETA)/ SOLID/ LIQUID/ SCATTERING THEORY/ SIGMA(E)
..FCC-LATTICE/ HCP-LATTICE
- 52-PL-01 PLACZEK, G.
THE SCATTERING OF NEUTRONS BY SYSTEMS OF HEAVY NUCLEI
PHYS. REV., V.86, P.377-P.388 (1952)
SCATTERING-THEORIES ..TOTAL AND DIFFERENTIAL CROSS SECT
ION
- 52-PO-01 POPE, N.K.
THE THEORY OF NEUTRON DIFFRACTION BY GASES, 1
CAN, J. PHYS., V.30, P.597 (1952)
C.H4/ C.F4 ..MOLECULAR DYNAMICS/ THEORY
- 53-KR-01 KRAMHANSL, J./ BROOKS, H.
THE LATTICE VIBRATION SPECIFIC HEAT OF GRAPHITE

- J. CHEM. PHYS., V.21, P.1663-P.1669 (1953)
GRAPHITE ..THEORY/ SOLID/ LATTICE DYNAMICS
- 53-RO-01 ROSENSTOCK, H.B.,
DYNAMICS OF THE GRAPHITE LATTICE
J. CHEM. PHYS., V.21, P.2064-P.2069 (1953)
GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
- 54-EG-01 EGELSTAFF, P.A.,
INELASTIC SCATTERING OF COLD NEUTRONS BY LIQUID ACTA CRYSTALLOGR., V.7, P.673 (1954)
PB ..EXPERIMENT/ LIQUID
- 54-EG-02 EGELSTAFF, P.A./ SCHOFIELD, P.,
THE STRUCTURE AND THERMAL MOTION OF SIMPLE LIQUIDS - 1
CONTEMP. PHYS., V.6, P.274-P.284 (1954)
REVIEW-ARTICLES ..REVIEW/ LIQUID DYNAMICS/ EXPERIMENTAL PRINCIPLES
- 54-FO-01 FORSLIND, E.,
LATTICE DYNAMICS OF ICE AND A CASE OF DIFFUSE X-RAY SCATTERING
SWED. CEMENT CONCRETE INS., ROY. INST. TECHNOL., P. ROC., NO.21, P.1 (1954)
H2O ..THEORY/ SOLID/ BORN-VON KARMAN MODEL/ CENTRAL FORCE MODEL/ DISPERSION RELATION/ HARMONIC APPROXIMATION/ INTERATOMIC FORCE CONSTANTS/ LATTICE DYNAMICS ..ICE/ DIFFUSE X-RAY SCATTERING/ TETRAHEDRAL STRUCTURE
- 54-PL-01 PLACZEK, G./ VAN-HOVE, L.,
CRYSTAL DYNAMICS AND INELASTIC SCATTERING OF NEUTRONS
PHYS. REV., V.93, P.1207-P.1214 (1954)
NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ SOLID / LATTICE VIBRATION
- 54-VA-01 VAN-HOVE, L.,
CORRELATION IN SPACE AND TIME AND BORN APPROXIMATION SCATTERING IN SYSTEMS OF INTERACTING PARTICLES
PHYS. REV., V.95, P.249-P.262 (1954)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
- 54-VI-01 VINEYARD, G.H.,
MULTIPLE SCATTERING OF NEUTRONS
PHYS. REV., V.96, P.93-P.98 (1954)
SCATTERING-THEORIES ..THEORY/ MULTIPLE SCATTERING
- 54-VI-02 VINEYARD, G.H.,
NEUTRON DIFFRACTION STUDY OF LIQUID MERCURY
J. CHEM. PHYS., V.22, P.1665-P.1667 (1954)
HG ..EXPERIMENT/ STRUCTURE FACTOR/ LIQUID METAL
- 54-WI-01 WICK, G.C.,
THE SCATTERING OF NEUTRONS BY SYSTEMS CONTAINING LIGHT NUCLEI
PHYS. REV., V.94, P.1228-P.1242 (1954)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ MOLECULAR DYNAMICS
- 55-BR-01 BROCKHOUSE, B.N.,
SLOW NEUTRON SPECTROMETRY
PHYS. REV., V.98, P.1171 (1955)
PB ..EXPERIMENT/ LIQUID
- 55-GL-01 GLAUBER, R.J.,
TIME-DEPENDENT DISPLACEMENT CORRELATIONS AND INELASTIC SCATTERING BY CRYSTALS
PHYS. REV., V.98, P.1692-P.1698 (1955)
NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ SOLID
- 55-JA-01 JACROT, B./ NETTER, F./ GALULA, M.,
TIME-OF-FLIGHT SPECTROMETRY EQUIPMENT FOR SLOW NEUTRONS IN USE AT THE SACLAY REACTOR - ITS APPLICATION TO A STUDY OF THE INELASTIC SCATTERING OF COLD NEUTRONS
PROCEEDING OF THE INTERNATIONAL CONFERENCE ON THE PEACEFUL USES OF ATOMIC ENERGY, UNITED NATIONS, GENEVA, V.5, P.77-P.81 (1955)
GRAPHITE/ H2O/ D2O ..EXPERIMENT/ LIQUID/ SOLID
- 55-KO-01 KOMATSU, K.,
THEORY OF THE SPECIFIC HEAT OF GRAPHITE 2
J. PHYS. SOC. JAP., V.10, P.346-P.356 (1955)
GRAPHITE ..THEORY/ LATTICE DYNAMICS ..SPECIFIC HEAT
- 55-KO-02 KOTHARI, L.S./ SINGWI, K.S.,
THERMAL INELASTIC SCATTERING OF COLD NEUTRONS IN POLYCRYSTALLINE SOLIDS
PROC. ROY. SOC., LONDON, SER. A, V.231, P.293 (1955)
NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ SOLID
- 55-PL-01 PLACZEK, G./ VAN-HOVE, L.,
INTERFERENCE EFFECTS IN THE TOTAL NEUTRON SCATTERING CROSS SECTION OF CRYSTAL
NUOVO CIM., V.1, P.233 (1955)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY
- 56-BA-01 BALDOCK, G.R.,
LATTICE VIBRATIONS AND SPECIFIC HEAT OF GRAPHITE
PHIL. MAG., V.1, P.789 (1956)
GRAPHITE ..FREQUENCY SPECTRUM/ THEORY/ SOLID/ LATTICE DYNAMICS

- 56-KO-01 KOTHARI, L.S./ SINGWI, K.S./ VISVANATHAN, S.
SCATTERING OF COLD NEUTRONS IN LIQUID METALS AND THE EN-
TROPY OF DISORDER
PHIL. MAG., V.1, P.560-P.567 (1956)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID METAL/ QU
ASI-CRYSTALLINE MODEL
- 56-SO-01 SQUIRES, G.L.
RELATION BETWEEN THE VIBRATION FREQUENCIES OF A CRYSTAL
AND THE SCATTERING OF SLOW NEUTRONS
PHYS. REV., V.103, P.304-P.312 (1956)
NEUTRON-SCATTERING-IN-SOLIDS/ AL ..THEORY/ LATTICE VIBR
ATION/ FREQUENCY DISTRIBUTION ..ENERGY DISTRIBUTION OF
NEUTRONS COHERENTLY SCATTERED IN A ONE PHONON PROCESS
- 56-YO-01 YOSHIMORI, A./ KITANO, Y.
THEORY OF LATTICE VIBRATION OF GRAPHITE
J. PHYS. SOC. JAP., V.11, P.352-P.361 (1956)
GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBU
TION
- 56-ZE-01 ZEMACH, A.C./ GLAUBER, R.J.
DYNAMICS OF NEUTRON SCATTERING BY MOLECULES
PHYS. REV., V.101, P.118-P.129 (1956)
NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS/ SCAT
TERING THEORY
- 56-ZE-02 ZEMACH, A.C./ GLAUBER, R.J.
NEUTRON DIFFRACTION BY GASES
PHYS. REV., V.101, P.129-P.136 (1956)
METHANE ..SIGMA (THETA.E)/ THEORY/ GAS
- 57-AN-01 ANDERSON, A./ MCREYNOLDS, A.W./ NELKIN, M./ ROSEN-
LUTH, M./ WHITMORE, W.
NEUTRON INVESTIGATION OF OPTICAL VIBRATION LEVELS IN ZI
RCONIUM HYDRIDE
PHYS. REV., V.108, P.1092-P.1093 (1957)
ZR-H ..EXPERIMENT/ SIGMA (E.E-PRIME,THETA)
- 57-BR-01 BROCKHOUSE, B.N./ IYENGAR, P.K.
NORMAL VIBRATIONS OF GERMANIUM BY NEUTRON SPECTROMETRY
PHYS. REV., V.108, P.894-P.895 (1957)
GE ..EXPERIMENT/ PHONON DISPERSION
- 57-CA-01 CARTER, R.S./ PALEVSKY, H./ HUGHES, D.J.
INELASTIC SCATTERING OF SLOW NEUTRONS BY LATTICE VIBRAT
IONS IN ALUMINUM
PHYS. REV., V.106, P.1168 (1957)
AL ..EXPERIMENT/ LATTICE VIBRATION/ DISPERSION RELATION
- 57-CO-01 COHEN, M./ FEYNMANN, R.P.
THEORY OF INELASTIC SCATTERING OF COLD NEUTRONS FROM LI
QUID HELIUM
PHYS. REV., V.107, P.13-P.24 (1957)
HE ..THEORY/ SCATTERING BY ROTON
- 57-EG-01 EGELSTAFF, P.A./ LONDON, H.
THE SCATTERING OF COLD NEUTRONS BY LIQUID HELIUM
PROC. ROY. SOC., LONDON, SER. A, V.242, P.374 (195
7)
HE ..LIQUID/ EXPERIMENT / SIGMA(E)/ SIGMA(E, THETA) ..L
IQUID HELIUM
- 57-KR-01 KRIEGER, T.J./ NELKIN, M.S.
SLOW NEUTRON SCATTERING BY MOLECULES
PHYS. REV., V.106, P.290-P.295 (1957)
NEUTRON-SCATTERING-IN-FLUIDS/ C.H2/ H2.O ..SCATTERING T
HEORY ..MOLECULE
- 57-PA-01 PALEVSKY, H./ OTNES, K./ LARSSON, K.E./ PAULI, R./
STEDMAN, R.
EXCITATION OF ROTONS IN HELIUM-2 BY COLD NEUTRONS
PHYS. REV., V.108, P.1346-P.1347 (1957)
HE ..EXPERIMENT/ ROTON
- 57-SJ-01 SJOELANDER, A.
ON TWO-PHONON PROCESSES IN NEUTRON DIFFRACTION AGAINST
CRYSTALS
ARK. FYS., V.13, P.215-P.228 (1957)
NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ SOLID
S/ LATTICE VIBRATION
- 57-TU-01 TURCHIN, V.F.
MANY-PHONON PROCESS IN CRYSTALS
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.33 (V.6)
..P.124-P.131 (P.96-P.102) (1957 (1958))
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID
- 58-BR-01 BRIMBERG, S.
ON THE SCATTERING OF SLOW NEUTRONS BY HYDROGEN MOLECULE
S
PROC. 2ND. INTERN. CONF. PEACEFUL USES ATOMIC ENER
GY, GENEVA, V.15, P.79-P.98 (1958)
H ..THEORY/ MOLECULAR DYNAMICS/ SIGMA(E)
- 58-BR-02 BROCKHOUSE, B.N.
STRUCTURAL DYNAMICS OF WATER BY NEUTRON SPECTROMETRY
NUOVO CIM., V.9, P.45 (1958)
H2.O/ D2.O ..EXPERIMENT
- 58-BR-03 BROCKHOUSE, B.N./ STEWART, A.T.
NORMAL MODES OF ALUMINUM BY NEUTRON SPECTROMETRY

REV. MOD. PHYS., V.30, P.236 (1958)

AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION

58-BR-04 BROCKHOUSE, B.N./ IYENGER, P.K.,
NORMAL MODES OF GERMANIUM BY NEUTRON SPECTROMETRY

PHYS. REV., V.111, P.747 (1958)
GE ..EXPERIMENT/ DISPERSION RELATION

58-EG-01 EGELSTAFF, P.A.,
INELASTIC SCATTERING OF COLD NEUTRON BY CRYSTALS, PART I
, 11

AERE-N/R-1164, AERE-N/R-1165 (1958)
BE/ MG/ SCATTERING-THEORIES ..THEORY/ EXPERIMENT/ SOLID
/ SIGMA(E, E-PRIME, THETA)/ SIGMA(E) ..ONE-PHONON CROSS
SECTION/ TWO-PHONON CROSS SECTION/ COHERENT CROSS SECTION

58-EI-01 EISENHAUER, C.M./ PELAH, I./ HUGHES, D.J./ PALEVSK
Y, H.,
MEASUREMENT OF LATTICE VIBRATIONS IN VANADIUM BY NEUTRON
SCATTERING

PHYS. REV., V.109, P.1046 (1958)
V ..EXPERIMENT/ FREQUENCY DISTRIBUTION

58-HE-01 HENSHAW, D.G.,
ENERGY-MOMENTUM RELATION IN LIQUID HELIUM BY INELASTIC
SCATTERING OF NEUTRONS
PHYS. REV. LETT., V.1, P.127 (1958)
HE ..EXPERIMENT/ LIQUID/ DISPERSION RELATION

58-MA-01 MAZO, R.M./ ZEMACH, A.C.,
DIFFRACTION OF NEUTRONS BY IMPERFECT GASES
PHYS. REV., V.109, P.1564-P.1572 (1958)
SCATTERING-THEORIES ..THEORY/ SCATTERING CROSS SECTION
..IMPERFECT GAS/ ELASTIC AND INELASTIC SCATTERING

58-MC-01 MCREYNOLDS, A.W./ NELKIN, M.S./ ROSENBLETH, M.N.,
NEUTRON THERMALIZATION BY CHEMICALLY-BOUND HYDROGEN AND
CARBON

PROCEEDING OF THE INTERNATIONAL CONFERENCE ON THE
PEACEFUL USES OF ATOMIC ENERGY, UNITED NATION, GEN
EVA, V.16, P.297 (1958)
H2.O/ POLYETHYLENE/ 2R-H/ MG-H/ GRAPHITE ..EXPERIMENT/
THEORY/ LIQUID/ SOLID

58-PA-01 PALEVSKY, H./ OTNES, K./ LARSSON, K.E.,
EXCITATION OF ROTONS IN HELIUM-2 BY COLD NEUTRONS
PHYS. REV., V.112, P.11-P.18 (1958)
HE ..EXPERIMENT/ ROTON/ DISPERSION RELATION

58-SJ-01 SJOELANDER, A.,
MULTI-PHONON PROCESS IN SLOW NEUTRON SCATTERING BY CRYSTALS

TALS

ARK, FYS., V.14, P.315-P.371 (1958)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS ..SC
ATTERING CROSS SECTION

58-ST-01 STEWART, A.T./ BROCKHOUSE, B.N.,
VIBRATION SPECTRA OF VANADIUM AND A MN-CO ALLOY BY NEUTRON
SPECTROSCOPY
REV. MOD. PHYS., V.30, P.250 (1958)
V/ MN-CO ..EXPERIMENT/ FREQUENCY DISTRIBUTION

58-TO-01 TOYA, T.,
NORMAL VIBRATIONS OF COPPER
PROGR. THEORET. PHYS., KYOTO, V.20, P.974 (1958)
CU ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION

58-TO-02 TOYA, T.,
NORMAL VIBRATIONS OF SODIUM
J. RES. INST. CATALYSIS, HOKKAIDO UNIV., V.4, P.18
3 (1958)

NA ..THEORY/ SOLID/ LATTICE DYNAMICS

58-VA-01 VAN-HOVE, L.,
A REMARK ON THE TIME-DEPENDENT PAIR DISTRIBUTION
PHYSICA, V.24, P.404-P.408 (1958)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ LIQUID
D/ GAS

58-VI-01 VINEYARD, G.H.,
SCATTERING OF SLOW NEUTRON BY A LIQUID
PHYS. REV., V.110, P.999-P.1010 (1958)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID DYNAMICS
..CONVOLUTION APPROXIMATION

58-YA-01 YARNELL, J.L./ ARNOLD, G.P./ BENDT, P.J./ KERR, E.,
C.,
ENERGY VS MOMENTUM RELATION FOR THE EXCITATIONS IN LIQUID
ID HELIUM

PHYS. REV. LETT., V.1, P.9-P.11 (1958)
HE ..EXPERIMENT/ ROTON/ DISPERSION CURVE/ LIQUID ..1.40
K

59-BR-01 BROCKHOUSE, B.N./ POPE, N.K.,
TIME-DEPENDENT PAIR CORRELATIONS IN LIQUID LEAD
PHYS. REV. LETT., V.3, P.259 (1959)
PB ..EXPERIMENT/ LIQUID

59-BR-02 BROCKHOUSE, B.N.,
LATTICE VIBRATIONS OF SEMICONDUCTORS BY NEUTRON SPECTROMETRY

J. PHYS. CHEM. SOLIDS, V.8, P.400 (1959)
GE ..EXPERIMENT/ DISPERSION RELATION

- 59-BR-03 BROCKHOUSE, B.N.
LATTICE VIBRATIONS IN SILICON AND GERMANIUM
PHYS. REV. LETT., V.2, P.256 (1959)
GE/ SI ..EXPERIMENT/ DISPERSION RELATION
- 59-BR-04 BROCKHOUSE, B.N.
DIFFUSIVE MOTIONS IN LIQUIDS AND NEUTRON SCATTERING
PHYS. REV. LETT., V.2, P.287 (1959)
H2.O/ D2.O ..SCATTERING LAW/ EXPERIMENT ..QUASI ELASTIC
SCATTERING/ ICE, 6DC, 24.5DC, 42DC, 60DC/ DIFFUSION BR
OADENING
- 59-BU-01 BURAS, B./ O-CONNER, D.
THE NEUTRON-PHONON INTERACTION IN SOLIDS
NUKLEONIKA, V.4, P.119-P.140 (1959)
NEUTRON-SCATTERING-IN-SOLIDS ..REVIEW/ NEUTRON SPECTROS
COPY
- 59-DE-01 DE-GENNES, P.G.
LIQUID DYNAMICS AND INELASTIC SCATTERING OF NEUTRONS
PHYSICA, V.25, P.825-P.839 (1959)
NEUTRON-SCATTERING-IN-FLUIDS/ AR ..SCATTERING THEORY/
LIQUID DYNAMICS/ MOMENTS METHOD
- 59-EG-01 EGELSTAFF, P.A.
SOLID AND LIQUID STATE RESEARCH WITH COLD NEUTRONS
BRIT. J. APPL. PHYS., V.10, P.1-P.9 (1959)
REVIEW-ARTICLES ..NEUTRON SPECTROSCOPY
- 59-GH-01 GHOSE, A./ PALEVSKY, H./ HUGHES, D.J./ PELAH, I./
EISENHAUER, C.M.
LATTICE VIBRATIONS IN GERMANIUM BY SCATTERING OF COLD N
EUTRONS
PHYS. REV., V.113, P.49 (1959)
GE ..EXPERIMENT/ DISPERSION RELATION
- 59-HU-01 HUGHES, D.J./ PALEVSKY, H./ KLEY, W./ TUNKALO, E.
ATOMIC MOTIONS IN WATER BY SCATTERING OF COLD NEUTRONS
PHYS. REV. LETT., V.3, P.91-P.93 (1959)
H2.O ..LIQUID/ EXPERIMENT ..BE-FILTER-TOF
- 59-KO-01 KOTHARI, L.S./ SINGWI, K.S.
INTERACTION OF THERMAL NEUTRONS WITH SOLIDS
SOLID STATE PHYSICS (ED. BY SEITZ AND TURNBULL), V
.8, P.109 (1959)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ DISPERSIO
N RELATION/ LATTICE DYNAMICS/ SIGMA(E-E-PRIME)/ FREQUEN
CY SPECTRUM/ CORRELATION FUNCTION/ SCATTERING THEORY
- 59-MC-01 MCCALL, D.W./ DOUGLASS, D.C./ ANDERSON, E.W.
SELF-DIFFUSION IN LIQUIDS, PARAFFIN HYDROCARBONS
- PHYS. FLUIDS, V.2, P.87 (1959)
PARAFFINE ..DIFFUSION PARAMETER/ EXPERIMENT/ LIQUID
- 59-PE-01 PELAH, I./ WHITEMORE, W.L./ MC-REYNOLDS, A.W.
ENERGY DISTRIBUTION OF NEUTRONS SCATTERED BY LIQUID LEA
D
PHYS. REV., V.113, P.767-P.768 (1959)
PB ..EXPERIMENT/ LIQUID/ SOLID/ TOF/ NEUTRON SPECTRUM/
QUASI-ELASTIC PEAK
- 59-SW-01 SWALIN, R.A.
ON THE THEORY OF SELF-DIFFUSION IN LIQUID METALS
ACTA MET., V.7, P.736-P.740 (1959)
THEORY-OF-FLUIDS ..DIFFUSION/ FLUCTUATION THEORY
- 59-VO-01 VOLKIN, H. C.
SLOW NEUTRON SCATTERING BY ROTATORS
PHYS. REV., V.113, P.866-P.874 (1959)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ GAS/ MOLECULAR R
OTATIONS/ SCATTERING THEORY
- 59-YA-01 YARNELL, J.L./ ARNOLD, G.P./ BENDT, P.J./ KERR, E.
C.
EXCITATIONS IN LIQUID HELIUM, NEUTRON SCATTERING MEASUR
EMENTS
PHYS. REV., V.113, P.1379-P.1386 (1959)
HE ..EXPERIMENT/ LIQUID/ ROTON EXCITATION/ DISPERSION R
ELATION ..1.1DK
- 60-CO-01 COHEN, M.
RELATION BETWEEN INELASTIC NEUTRON SCATTERING AND THERM
ODYNAMIC FUNCTIONS OF LIQUID HELIUM
PHYS. REV., V.118, P.27-P.41 (1960)
HE ..THEORY/ LIQUID
- 60-CO-02 COHEN, M.
RELATION BETWEEN INELASTIC NEUTRON SCATTERING AND THERM
ODYNAMIC FUNCTIONS OF LIQUID HELIUM
PHYS. REV., V.118, P.27-P.41 (1960)
HE ..THEORY/ NEUTRON SCATTERING/ THERMODYNAMICS
- 60-CR-01 CRIER, D./ JACROT, B.
QUASI-ELASTIC SCATTERING OF COLD NEUTRONS BY WATER AND
SELF-DIFFUSION COEFFICIENT OF THE LIQUIDS (IN FRENCH)
J. PHYS., PARIS, V.21, P.69-P.71 (1960)
H2.O ..EXPERIMENT/ LIQUID/ DISPERSION RELATION/ DIFFUSI
ON PARAMETER
- 60-EG-01 EGELSTAFF, P.A.
THE MEASUREMENT OF THE SCATTERING LAW FOR A MODERATOR
AERE-R-3593 (1960)
REVIEW-ARTICLES ..EXPERIMENTAL ARRANGEMENTS AND METHOD/

SCATTERING LAW MEASUREMENTS

- 60-HU-01 HUGHES, O.J./ PALEVSKY, H./ KLEY, W./ TUNKALO, E.
ATOMIC MOTIONS IN WATER BY SCATTERING OF COLD NEUTRONS
PHYS. REV., V.119, P.872-P.881 (1960)
H2.O ..SIGMA(E,E-PRIME,THETA)
- 60-KH-01 KHUBCHANDARI, P.G./ RAHMAN, A.
SCATTERING OF SLOW NEUTRONS BY THE WATER MOLECULE
J. NUCL. ENERGY, PT. A, V.11, P.89-P.94 (1960)
H2.O ..THEORY/ ELASTIC SCATTERING CROSS SECTION ..RIGID
ASYMMETRIC ROTOR MODEL
- 60-LA-01 LARSSON, K.E./ HOLMRYD, S./ OTNES, K.
AN EXPERIMENTAL STUDY OF THE SCATTERING OF SLOW NEUTRON
S FROM H2.O AND D2.O
AE-47 (1960)
H2.O/ D2.O ..EXPERIMENT/ FREQUENCY DISTRIBUTION ..LIQUID
DYNAMICS
- 60-LA-02 LARSSON, K.E./ DAHLBORG, U./ HOLMRYD, S.
A STUDY OF SOME TEMPERATURE EFFECTS ON THE PHONONS IN A
LUMINUM BY USE OF COLD NEUTRONS
ARK. FYS., V.17, P.369 (1960)
AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
..293-932DK
- 60-NE-01 NELKIN, M.S.
EFFECTS OF CHEMICAL BINDING ON NUCLEAR RECOIL
PHYS. REV., V.119, P.1060-P.1068 (1960)
SCATTERING-THEORIES ..SIGMA(E) ..DOPPLER-BROADENING OF
ABSORPTION RESONANCE/ SLOW NEUTRON SCATTERING
- 60-NE-02 NELKIN, M.
SCATTERING OF SLOW NEUTRONS BY WATER
PHYS. REV., V.119, P.741-P.746 (1960)
NEUTRON-SCATTERING-IN-FLUIDS/ H2.O ..THEORY/ MOLECULAR
DYNAMICS ..DIFFERENTIAL AND TOTAL CROSS SECTION
- 60-RU-01 RUSH, J.J./ TAYLOR, T.I./ HAVENS-JR., W.W.
PROTON MOTIONS IN AMMONIUM HALIDES BY SLOW NEUTRON CROSS
SECTION MEASUREMENTS
PHYS. REV. LETT., V.5, P.507-P.509 (1960)
N.H3/ N.H4.17 N.H4.BR/ N.H4.CL/ N.H4.F ..EXPERIMENT/ MO
LECULAR DYNAMICS ..TOTAL CROSS SECTION VS. NEUTRON WAVE
LENGTH
- 60-SA-01 SAUNDERSON, D.H.
PRESSURE DEPENDENCE OF THE TA(100) ZONE-BOUNDARY PHONON
FREQUENCY IN RUBIDIUM IODIDE
PHYS. REV. LETT., V.17, P.530 (1960)
RB.I ..EXPERIMENT/ LATTICE DYNAMICS

- 60-SC-01 SCHOFIELD, P.
SPACE-TIME CORRELATION FUNCTION FORMALISM FOR SLOW NEUTRON
SCATTERING
PHYS. REV. LETT., V.4, P.239-P.240 (1960)
SCATTERING-THEORIES ..SCATTERING THEORY
- 60-SI-01 SINGWI, K.S./ SJOELANDER, A.
DIFFUSIVE MOTIONS IN WATER AND COLD NEUTRON SCATTERING
PHYS. REV., V.119, P.863 (1960)
H2.O ..THEORY/ MOLECULAR DYNAMICS ..LIQUID DYNAMICS/ QU
ASI-CRYSTALLINE MODEL
- 60-SI-02 SINGWI, K.S./ SJOELANDER, A.
RESONANCE ABSORPTION OF NUCLEAR GAMMA RAYS AND THE DYNAMICS
OF ATOMIC MOTIONS
PHYS. REV., V.120, P.1093-P.1102 (1960)
MISCELLANEOUS ..THEORY/ MOESSBAUER EFFECT
- 60-VI-01 VINEYARD, G.H.
NEUTRON SCATTERING BY FLUIDS AND THE LAW OF CORRESPONDING
STATE
PHYS. REV., V.119, P.1150-P.1153 (1960)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
- 60-VI-02 VINEYARD, G.H.
MOLECULAR DISTRIBUTION FUNCTIONS INVOLVING TWO TIMES
PHYS. FLUIDS, V.3, P.339-P.345 (1960)
THEORY-OF-FLUIDS ..KINETIC THEORY/ TWO TIMES/ TWO BODIES
- 60-VO-01 VOLKIN, H.C.
SLOW-NEUTRON SCATTERING BY ROTATORS II
PHYS. REV., V.117, P.1029 (1960)
SCATTERING-THEORIES ..MOLECULAR DYNAMICS/ THEORY/ SIGMA
(E, E-PRIME, THETA) ..MOLECULAR ROTATOR
- 60-WO-01 WOODS, A.D.B./ COCHRAN, W./ BROCKHOUSE, B.N.
LATTICE DYNAMICS OF ALKALI HALIDE CRYSTAL
PHYS. REV., V.119, P.980 (1960)
NA.I ..EXPERIMENT/ DISPERSION RELATION
- 61-BA-01 BAYM, G.
THERMODYNAMIC GREEN-S FUNCTION METHODS IN NEUTRON SCATTERING
BY CRYSTALS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.53-P.59 (1961)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ LATTICE DYNAMICS
/ SCATTERING FUNCTION
- 61-BE-01 BELL, J.
SUMMIT, AN IBM-7090 PROGRAM FOR THE COMPUTATION OF CRYSTAL
LATTICE DYNAMICS

TALLINE SCATTERING KERNELS
GA-2492 (1961)
COMPUTER-CODES

61-BE-02 BERGSMÄ, J./ GOEDKOOP, J.A.
INELASTIC NEUTRON SCATTERING EXPERIMENTS ON A FEW METAL
HYDRIDES
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, P.501 (1961)
PD-H/ AL-TH-H/ CA-H ..EXPERIMENT/ FREQUENCY DISTRIBUTIO
N

61-BR-01 BROCKHOUSE, B.N./ RAO, K.R./ WOODS, A.D.B.
IMAGE OF THE FERMI SURFACE IN THE LATTICE VIBRATIONS OF
LEAD

PHYS. REV. LETT., V.7, P.93 (1961)
PB ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION

61-BR-02 BROCKHOUSE, B.N./ ARASE, T./ CAGLIOTI, G./ SAKAMOT
O, M./ SINCLAIR, R.N./

CRYSTAL DYNAMICS OF LEAD
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, P.531-P.548 (1961)

PB ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/
PHONON LIFE TIME

61-BR-03 BRUGGER, R.M.
SLOW NEUTRON INELASTIC SCATTERING MEASUREMENTS AT MTR
INELASTIC SCATTERING OF NEUTRON IN SOLIDS AND LIQ
UIDS, IAEA, P.277 (1961)

ZR-H/ H2.O/ BENZENE/ PARAFFINE/ ALCOHOL ..SIGMA (E.E-PR
IME, THETA)/ EXPERIMENT/ LIQUIDS/ TOF

61-CH-01 CHUDLEY, C.T./ ELLIOTT, R.J.
NEUTRON SCATTERING FROM A LIQUID ON A JUMP DIFFUSION MO
DEL

PROC. PHYS. SOC., LONDON, V.77, P.353-P.361 (1961)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS
/ JUMP DIFFUSION MODEL

61-CL-01 CLAYTON, G.T./ HEATON, L.
NEUTRON DIFFRACTION STUDY OF KRYPTON IN THE LIQUID STAT
E

PHYS. REV., V.121, P.649-P.653 (1961)
KR ..EXPERIMENT/ STRUCTURE FACTOR/ LIQUID/ RADIAL DISTR
IBUTION ..117,133,153,183 AND 2100K

61-CR-01 CRIBIER, D./ JACROT, B./ SAINT-JAMES, D.
NEUTRON SCATTERING BY PHONON IN A SINGLE CRYSTAL (IN FR
ENCH)
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, P.549 (1961)

CU ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION

61-CR-02 CRIBIER, D./ JACROT, B.
QUASI-ELASTIC SCATTERING OF COLD NEUTRONS BY WATER AND
SELF-DIFFUSION COEFFICIENT OF THE LIQUIDS (IN FRENCH)
INELASTIC SCATTERING OF NEUTRON IN SOLIDS AND LIQU
IDS, IAEA, P.347 (1961)
H2.O ..EXPERIMENT ..QUASI ELASTIC SCATTERING/ 27DC/ 43D
C

61-DE-01 DE-GENNES, P.G.
NEUTRON SCATTERING BY 'NORMAL' LIQUIDS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, P.239-P.249 (1961)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ NORMAL LIQUIDS

61-DO-01 DOLLING, G.
PHONON DISPERSION RELATIONS FOR A SILICON SINGLS CRYSTA
L
INELASTIC SCATTERING OF NEUTRON IN SOLIDS AND LIQU
IDS, IAEA, P.563 (1961)
SI ..EXPERIMENT/ DISPERSION RELATION

61-EG-01 EGELSTAFF, P.A./ COCKING, S.J./ ROYSTON, R.
THE THERMAL NEUTRON SCATTERING LAW FOR LIGHT AND HEAVY
WATER
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, P.309 (1961)
H2.O/ D2.O/ PB ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTIO
N/ FREQUENCY DISTRIBUTION

61-EG-02 EGELSTAFF, P.A./ COCKING, S.J.
THE PHONON FREQUENCY DISTRIBUTION IN GRAPHITE AT SEVERA
L TEMPERATURE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, P.569 (1961)
GRAPHITE ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY SPECTR
UM ..24DC/ 336DC/ 425DC/ 610DC/ TOF

61-EG-03 EGELSTAFF, P.A.
THE TREATMENT OF THERMAL NEUTRON SCATTERING LAW DATA
AERE-R-3622 (1961)
SCATTERING-THEORIES ..SCATTERING THEORY ..DATA TREATMEN
T

61-EG-04 EGELSTAFF, P.A.
THE THEORY OF THE THERMAL-NEUTRON SCATTERING LAW
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, P.25-P.38 (1961)
SCATTERING-THEORIES ..SCATTERING THEORY/ SCATTERING FUN
CTION

- 61-EL-01 ELLIOTT, R.J./ STERN, H.
LINE WIDTHS IN NEUTRON-PHONON AND NEUTRON-MAGNON SCATTERING
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.61-P.74 (1961)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID ..PHONON LIFE-TIME
- 61-GI-01 GISSLER, W./ REINSCH, C./ SPRINGER, T.
INVESTIGATION OF NEUTRON SCATTERING CROSS SECTION FOR HEAVY ICE NEAR THE BRAGG CUT-OFF WAVELENGTH (IN GERMANY)
Z. KRISTALLOGR., V.116, P.328-P.344 (1961)
D2.O ..EXPERIMENT/ THEORY/ SIGMA(E) ..4DK/ 77DK
- 61-GR-01 GRIFFING, G.W.
INFLUENCE OF THE ROTATIONAL LEVELS ON THE SCATTERING OF SLOW-NEUTRONS BY GASEOUS METHANE
PHYS. REV., V.124, P.1489 (1961)
C.H4 ..THEORY/ MOLECULAR DYNAMICS/ GAS/ DIFFERENTIAL CROSS SECTION
- 61-HE-01 HEINLOTH, K./ SPRINGER, T.
THE MEASUREMENT OF THE TOTAL CROSS SECTION OF H2.O BETWEEN -150 AND +200DC WITH VERY SLOW NEUTRONS
INELASTIC SCATTERING OF NEUTRON IN SOLIDS AND LIQUIDS, IAEA, P.323 (1961)
H2.O ..SIGMA(E)/ EXPERIMENT ..-150DC--+200DC
- 61-HE-02 HEINLOTH, K.
SCATTERING OF SUBTHERMAL NEUTRONS ON H2.O, C.H2.O2 AND C6.H6
Z. PHYS., V.163, P.218 (1961)
H2.O/ C6.H6/ C.H2.O2 ..SIGMA(E)/ EXPERIMENT/ GAS/ LIQUID/ SOLID/ KRIEGER-NELKIN MODEL ..TRANSMISSION
- 61-HE-03 HENSHAW, D.G./ WOODS, A.D.B.
MODES OF ATOMIC MOTIONS IN LIQUID HELLIUM BY INELASTIC SCATTERING OF NEUTRONS
PHYS. REV., V.121, P.1266-P.1274 (1961)
HE ..EXPERIMENT/ LIQUID/ DISPERSION RELATION ..1.78-4.2 1DK
- 61-HO-01 HONECK, H.C.
GAKER
BNL-5826 (1961)
COMPUTER-CODES
- 61-IV-01 IYENGAR, P.K./ SATYA-MURTHY, N.S./ DASANNACHARYA, B.A.
INELASTIC SCATTERING OF NEUTRONS FROM IRON
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.555 (1961)
- FE ..EXPERIMENT/ DISPERSION RELATION
- 61-KR-01 KRIEGER, T.J.
INFLUENCE OF ERGODIC BEHAVIOR ON THE SCATTERING OF SLOW NEUTRONS BY HARMONIC OSCILLATOR
PHYS. REV., V.121, P.1388-P.1390 (1961)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY
- 61-LA-01 LARSSON, K.E./ HOLMRYD, S./ OTNES, K.
COLD NEUTRON SCATTERING EXPERIMENTS ON LIGHT AND HEAVY WATER
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.329 (1961)
H2.O/ D2.O ..EXPERIMENT
- 61-LA-02 LARSSON, K.E./ HOLMRYD, S./ DAHLBORG, V.
MEASUREMENTS OF THE TEMPERATURE DEPENDENCE OF THE PHONONS IN ALUMINIUM
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.1, P.587 (1961)
AL ..EXPERIMENT/ SOLID/ DISPERSION RELATION
- 61-MA-01 MARSHALL, W./ STUART, R.
THE SCATTERING OF NEUTRONS FROM POLYCRYSTALLINE MATERIALS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.75-P.84 (1961)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SIGMA(E) ..PLACZ EK-S INCOHERENT APPROXIMATION
- 61-MC-01 MCLATCHIE, R.C.F./ HEARD, C./ EGELSTAFF, P.A./ SCHOFIELD, P.
EXAMPLES OF THE THERMAL NEUTRON SCATTERING LAW
AERE-R-3847 (1961)
SCATTERING-THEORIES ..SCATTERING LAW/ DEBYE APPROXIMATION/ SOLID/ LIQUID/ THEORY
- 61-MI-01 MIKKE, K.
THE SCATTERING OF SLOW NEUTRONS BY LIGHT AND HEAVY WATER
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.351-P.356 (1961)
H2.O/ D2.O ..EXPERIMENT
- 61-MO-01 MORALES-AMADO, A./ OSBORN, R.K.
SLOW NEUTRON SCATTERING BY NORMAL LIQUIDS ACCORDING TO THE SMEARED POTENTIAL MODEL
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.251-P.256 (1961)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
- 61-NE-01 NELKIN, M.

- SLOW-NEUTRON INELASTIC SCATTERING AND NEUTRON THERMALIZATION
- INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.3-P.24 (1961)
- REVIEW-ARTICLES ..SCATTERING THEORY ..NEUTRON THERMALIZATION
- 61-PA-01 PALEVSKY, H.
A STUDY OF THE DIFFUSIVE MOTIONS OF LIQUIDS BY MEANS OF COLD-NEUTRON SCATTERING EXPERIMENTS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.265 (1961)
H₂O/ PB/ SN ..EXPERIMENT/ LIQUID ..ROOM TEMP.. 45DC FOR H₂O/ 462DC FOR PB/ 350DC FOR SN/ BE-FILTER METHOD/ QUASI ELASTIC SCATTERING
- 61-PA-02 PALEVSKY, H.
COLD-NEUTRON SCATTERING EXPERIMENTS WITH LIQUID HELIUM
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.223 (1961)
HE ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
- 61-PA-03 PARKS, D.E.
RELATION OF CRYSTAL SYMMETRY IN GRAPHITE TO LATTICE VIBRATIONS ON THEIR INTERACTION WITH SLOW NEUTRONS
GA-2125 (1961)
GRAPHITE ..LATTICE DYNAMICS
- 61-PA-04 PARKS, D.E.
THE CALCULATION OF THERMAL-NEUTRON SCATTERING KERNELS IN GRAPHITE
GA-2488 (1961)
GRAPHITE ..THEORY ..SCATTERING KERNELS
- 61-PE-01 PELAH, I./ LEEKOWITE, I.
INELASTIC NEUTRON SPECTRA FROM FERRO-ELECTRIC AND PARAELECTRIC Ba,TiO₃
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.601 (1961)
Ba,TiO₃ ..FERROELECTRICITY/ PARAELECTRICITY/ EXPERIMENT
- 61-RA-01 RAHMAN, A./ SINGWI, K.S./ SJOELANDER, A.
DYNAMICS OF ATOMIC MOTIONS IN LIQUIDS AND COLD NEUTRON SCATTERING
PHYS. REV., V.122, P.9-P.12 (1961)
NEUTRON-SCATTERING-IN-FLUIDS/ PB ..THEORY ..LIQUID DYNAMICS
- 61-RA-02 RAHMAN, A.
SCATTERING OF SLOW NEUTRONS BY MOLECULES
J. NUCL. ENERGY, PT. A, V.13, P.128-P.132 (1961)
- NEUTRON-SCATTERING-IN-FLUIDS/ METHANE ..THEORY/ SCATTERING FUNCTION
- 61-RA-03 RAHMAN, A.
SCATTERING OF SLOW NEUTRONS BY MOLECULES
J. NUCL. ENERGY, PT. A, V.13, P.128-P.132 (1961)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ MOLECULAR DYNAMICS/ C,H₄
- 61-RA-04 RANDOLPH, P.D./ BRUGGER, R.M./ STRONG, K.A./ SCHMUNK, R.E.
INELASTIC SCATTERING OF SLOW NEUTRONS FROM METHANE
PHYS. REV., V.124, P.460-P.469 (1961)
METHANE ..GAS/ SCATTERING LAW/ EXPERIMENT/ TOF/ MOLECULAR DYNAMICS ..ROOM TEMP.
- 61-RI-01 RICE, S.A./ ALLNATT, A.R.
ON THE KINETIC THEORY OF DENSE FLUIDS. 4. SINGLET DISTRIBUTION FUNCTION FOR RIGID SPHERES WITH AN ATTRACTIVE POTENTIAL
J. CHEM. PHYS., V.34, P.2144-P.2155 (1961)
THEORY-OF-FLUIDS ..LIQUID DYNAMICS
- 61-RU-01 RUSH, J.J./ TAYLOR, T.I./ HAVENS-JR, W.W.
PROTON MOTIONS IN SOLIDS BY SLOW NEUTRON SCATTERING CROSS SECTIONS
J. CHEM. PHYS., V.35, P.2265-P.2266 (1961)
K.H₂P.O₄/ (N.H₄)₂CR₂O₄/ (N.H₄)₂CR₂O₇/ N.H₄C.N.S/N ..H₄CL.O₄ ..EXPERIMENT/ MOLECULAR DYNAMICS ..TOTAL CROSS SECTION VS. NEUTRON WAVELENGTH
- 61-SA-01 SARMA, G.
SCATTERING OF SLOW NEUTRONS BY LIQUID HYDROGEN (IN FRENCH)
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.397-P.408 (1961)
H₂ ..THEORY/ MOLECULAR DYNAMICS/ LIQUID
- 61-SC-01 SCALETTAR, R.
THE EFFECT OF CRYSTAL ANHARMONICITIES ON NEUTRON SCATTERING
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.101-P.107 (1961)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SCATTERING FUNCTION
- 61-SC-02 SCHOFIELD, P.
SOME PROPERTIES OF THE SPACE-TIME CORRELATION FUNCTION
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.39-P.50 (1961)
SCATTERING-THEORIES ..SCATTERING THEORY ..SPACE-TIME CORRELATION FUNCTION

- 61-SP-01 SPRINGER, T.
SCATTERING OF SLOW NEUTRON IN WATER, ICE AND WATER VAPOUR
NUKLEONIK, V.3, P.110 (1961)
H₂O ..THEORY/ EXPERIMENT/ SOLID/ LIQUID/ GAS/ SIGMA (E)/ SIGMA (THETA)/ FREQUENCY SPECTRUM
- 61-SP-02 SPRINGER, T./ WIEDMAN, W.
INVESTIGATIONS OF THE SCATTERING CROSS SECTION IN ICE F OR VERY SLOW NEUTRONS AT 40K
Z. PHYS., V.164, P.111-P.119 (1961)
H₂O ..EXPERIMENT/ SIGMA(E) ..ICE
- 61-ST-01 STILLER, H.H./ DANNER, H.R.
QUASI-ELASTIC AND INELASTIC SCATTERING OF COLD NEUTRONS FROM WATER
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.1, P.363-P.373 (1961)
H₂O ..EXPERIMENT/ SIGMA(THETA), E
- 61-TU-01 TURBERFIELD, K.C./ EGELSTAFF, P.A.
THE PHONON FREQUENCY DISTRIBUTION IN VANADIUM AT SEVERAL TEMPERATURES
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.1, P.581 (1961)
V ..EXPERIMENT/ SOLID/ FREQUENCY SPECTRUM
- 61-TU-02 TURNER, R.E.
THE QUASI-CLASSICAL APPROXIMATION FOR NEUTRON SCATTERING
PHYSICA, V.27, P.260-P.264 (1961)
SCATTERING-THEORIES ..THEORY/
- 61-WH-01 WHITMORE, W.L./ MCREYNOLDS, A.W.
INELASTIC SCATTERING OF THERMAL NEUTRONS PRODUCED BY AN ELECTRON ACCELERATOR
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, P.511-P.529 (1961)
H₂O/ D₂O ..EXPERIMENT
- 61-WO-01 WOODS, A.D.B./ BROCKHOUSE, B.N./ SAKAMOTO, M./ SINCLAIR, R.N.
ENERGY DISTRIBUTIONS OF NEUTRON SCATTERED FROM GRAPHITE, LIGHT AND HEAVY WATER, ICE, ZIRCONIUM HYDRIDE, LITHIUM HYDRIDE, SODIUM HYDRIDE AND AMMONIUM CHLORIDE BY THE BERYLLIUM DETECTOR METHOD
INELASTIC SCATTERING OF NEUTRON IN SOLIDS AND LIQUIDS, IAEA, P.487 (1961)
GRAPHITE/ H₂O/ D₂O/ ZR-H/ LI-H/ NA-H/ N.H₄CL ..EXPERIMENT/ CRYSTAL SPECTROMETER/ FREQUENCY DISTRIBUTION ..B E-DETECTOR METHOD
- 62-AA-01 AAMODT, P./ CASE, K.M./ ROSENBAUM, M./ ZWEIFEL, P.
QUASI-CLASSICAL TREATMENT OF NEUTRON SCATTERING
PHYS. REV., V.126, P.1165-P.1167 (1962)
SCATTERING-THEORIES ..SCATTERING THEORY
- 62-BE-01 BECKA, L.N.
FREQUENCY DISTRIBUTION OF HEXAMETHYLENETETRAMINE CRYSTALS
J. CHEM. PHYS., V.37, P.431-P.432 (1962)
HEXAMETHYLENETETRAMINE ..EXPERIMENT/ NEUTRON SPECTROMETER ..80DK/ 300DK/
- 62-BO-01 BOFFI, V.C./ MOLINARI, V.C./ PARKS, D.E.
SLOW NEUTRON SCATTERING AND THERMALIZATION BY BENZENE AND OTHER POLYPHENYLS
BNL-719 (C-32), V.1, P.69 (1962)
BENZENE ..THEORY/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION ..SCATTERING CROSS SECTION/ NEUTRON SPECTRUM
- 62-BR-01 BROCKHOUSE, B.N./ ARASE, T./ CAGLIOTI, G./ RAO, K.R./ WOODS, A.D.B.
CRYSTAL DYNAMICS OF LEAD 1, DISPERSION CURVES AT 100DK
PHYS. REV., V.128, P.1099 (1962)
P8 ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..CRYSTAL SPECTROMETER/ 100DK
- 62-BR-02 BRUGGER, R.M.
EXPERIMENTAL INFORMATION FOR THERMALIZATION PROBLEMS
BNL-719 (C-32), V.1, P.1 (1962)
METHANE/ H₂O/ D₂O/ PROPANE ..THEORY/ EXPERIMENT/ SCATTERING FUNCTION
- 62-BR-03 BRUGGER, R.M.
SCATTERING OF SLOW NEUTRONS BY SOLID AND LIQUID TERPHENYL
PHYS. REV., V.126, P.29 (1962)
TERPHENYL ..SCATTERING LAW/ EXPERIMENT/ SOLID/ LIQUID ..23DC/ 207DC
- 62-BR-04 BRUGGER, R.M.
COMPILATION OF REDUCED SLOW NEUTRON PARTIAL DIFFERENTIAL SCATTERING CROSS SECTIONS
BNL-719 (C-32), V.1, P.3 (1962)
BE/ BE.O/ GRAPHITE/ H₂O/ D₂O/ METHANE/ PROPANE/ TERPHENYL/ COMPILATIONS ..SCATTERING FUNCTION/ SIGMA(E-E-PRIME, THETA)
- 62-CA-01 CAGLIOTI, G./ RICCI, F.P.
THE STRUCTURE OF LIQUID BROMINE
NUOVO CIM., V.24, P.103 (1962)

BR ..LIQUID/ EXPERIMENT

- 62-CO-01 COCKING, S.J./ TURBERFIELD, K.C.
THE DYNAMICS OF LIQUID SODIUM BY NEUTRON SCATTERING
PROC. PHYS. SOC., LONDON, V.80, P.1201-P.1204 (1962)
- NA ..EXPERIMENT/ TOF SPECTRA ..110DC/ 80DC
- 62-CO-02 COLE, G.H.A.
SCATTERING OF SMALL WAVE LENGTH NEUTRONS BY A GAS OF HARD SPHERES
PHYS. REV., V.126, P.393-P.388 (1962)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ ELASTIC CROSS SECTION
- 62-CO-03 COLLINS, M.F.
LATTICE DYNAMICS OF MAGNESIUM
PROC. PHYS. SOC., LONDON, V.80, P.362 (1962)
MG ..EXPERIMENT/ SOLID/ DISPERSION RELATION
- 62-CO-04 COTTER, M.J.
INELASTIC SCATTERING OF COLD NEUTRONS BY SOLID AND LIQUID LEAD
PB ..EXPERIMENT/ LIQUID/ SOLID/ FREQUENCY DISTRIBUTION
DISSERTATION, FORDHAM UNIVERSITY, NEW YORK (1962)
- 62-CO-05 COWLEY, R.A.
TEMPERATURE DEPENDENCE OF A TRANSVERSE OPTIC MODE IN STRONTIUM TITANATE
PHYS. REV. LETT., V.9, P.159 (1962)
SR, TI, O3 ..EXPERIMENT/ DISPERSION RELATION
- 62-DO-01 DOLLING, G./ BROCKHOUSE, B.N.
LATTICE VIBRATIONS IN PYROLITIC GRAPHITE
PHYS. REV., V.128, P.1120-P.1123 (1962)
GRAPHITE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
- 62-EG-01 EGELSTAFF, P.A.
NEUTRON SCATTERING STUDIES IN LIQUID DIFFUSION
ADVAN. PHYS., V.11, P.203 (1962)
NEUTRON-SCATTERING-IN-FLUIDS/ H₂O ..THEORY/ LIQUID ..LIQUID DYNAMICS
- 62-EG-02 EGELSTAFF, P.A.
COMPILATION OF EARLY SCATTERING LAW DATA
AERE-3931 (1962)
GRAPHITE/ H₂O/ D₂O/ COMPILATIONS ..SCATTERING LAW ..24DC, 380DC, 600DC FOR GRAPHITE/ 24DC FOR H₂O/ 24DC FOR D₂O
- 62-EG-03 EGELSTAFF, P.A./ SCHOFIELD, P.

ON THE EVALUATION OF THE THERMAL NEUTRON SCATTERING LAW
NUCL. SCI. ENG., V.12, P.260 (1962)
SCATTERING-THEORIES/ H₂O/ PB ..EXPERIMENT/ THEORY/ LIQUID/ DIFFUSION PARAMETER ..ROOM TEMPERATURE FOR H₂O/ MEASURING POINT FOR PB

62-EG-04 EGELSTAFF, P.A.
THE SCATTERING OF THERMAL NEUTRONS BY MODERATORS
NUCL. SCI. ENG., V.12, P.250-P.259 (1962)
H₂O/ D₂O/ GRAPHITE/ BE ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ THEORY ..EVALUATION

62-EG-05 EGELSTAFF, P.A.
THE SCATTERING OF COLD NEUTRONS BY METALS
AERE-R-4101 (1962)
MG/ BE/ PB ..THEORY/ SOLID/ LIQUID/ SIGMA(E, E-PRIME, T-META) ..METAL/ LIQUID METAL

62-FE-01 FERZIGAR, J.H./ LEONARD, A.
MULTIPLE SCATTERING OF NEUTRONS IN THE STATIC APPROXIMATION
PHYS. REV., V.128, P.2168-P.2190 (1962)
SCATTERING-THEORIES ..THEORY/ DIFFRACTION

62-FU-01 FURUKAWA, K.
THE RADIAL DISTRIBUTION CURVES OF LIQUIDS BY DIFFRACTION METHODS
REP. PROGR. PHYS., V.25, P.395 (1962)

REVIEW-ARTICLES ..LIQUID/ EXPERIMENT/ NEUTRON SCATTERING
G ..RADIAL DISTRIBUTION/ X-RAY SCATTERING/ POLYATOMIC LIQUIDS/ ELECTRON SCATTERING/ LIQUID METAL/ VAN DER WAALS LIQUIDS

62-GI-01 GINGRICH, N.S./ TOMPSON, C.W.
ATOMIC DISTRIBUTION IN LIQUID ARGON NEAR THE TRIPLE POINT
J. CHEM. PHYS., V.36, P.2398-P.2400 (1962)
ARGON ..EXPERIMENT/ LIQUID ..X-RAY

62-GL-01 GLAUBER, R.J.
SCATTERING OF NEUTRONS BY STATISTICAL MEDIA
LECTURES IN THEORETICAL PHYSICS (ED. BY BRITTIN, W.E, ET.AL.), V.4, P.571-P.615 (1962)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY

62-GO-01 GOESSMAN, G.
CALCULATION OF THE TOTAL CROSS SECTION FOR THE SCATTERING OF SUBTHERMAL NEUTRONS IN WATER AND ICE BY A CRYSTAL MODEL (IN GERMANY)
NUKLEONIK, V.4, P.110 (1962)
H₂O ..THEORY/ CROSS SECTION EVALUATION

- 62-GO-02 GOLDMAN, D.T./ FEDERIGHI, F.D.
CALCULATION OF THERMAL NEUTRON FLUX SPECTRA IN AN INFINITE POLYETHYLENE MODERATED MEDIUM WITH VARYING AMOUNTS OF ABSORPTION
BNL-719 (C-32), V.1, P.100 (1962)
POLYETHYLENE ..SCATTERING THEORY/ NEUTRON SPECTRUM/ FREQUENCY DISTRIBUTION
- 62-GR-01 GRIFFING, G.W.
INFLUENCE OF INTERFERENCE SCATTERING ON THE SCATTERING OF SLOW NEUTRONS BY GASEOUS METHANE
PHYS. REV., V.127, P.1179-P.1181 (1962)
METHANE ..GAS/ EXPERIMENT/ CALCULATION
- 62-HA-01 HAYWOOD, B.C./ THORSON, I.M.
THE SCATTERING LAW FOR LIGHT AND HEAVY WATER AT 20DC AND 150DC
BNL-719 (C-32), V.1, P.26 (1962)
D2.O/ H2.O ..EXPERIMENT/ SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION ..20DC/ 150DC
- 62-HO-01 HONECK, B.C.
AN INCOHERENT THERMAL SCATTERING MODEL FOR HEAVY WATER
TRANS. AM. NUCL. SOC., V.5, P.47-P.48 (1962)
D2.O ..SIGMAE) ..CALCULATION
- 62-KO-01 KOKKEDDEE, J.J.J.
INFLUENCE OF ELECTRON-PHONON INTERACTION ON THE SCATTERING OF NEUTRONS BY CONDUCTING CRYSTALS
PHYSICA, V.28, P.893-P.907 (1962)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ ELECTRON-PHONON INTERACTIONS
- 62-KO-02 KOKKEDDEE, J.J.J.
ANHARMONIC EFFECTS IN THE COHERENT SCATTERING OF NEUTRONS BY CRYSTALS
PHYSICA, V.28, P.374-P.408 (1962)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY, CRYSTAL, COHERENT SCATTERING, ANHARMONICITY
- 62-KO-03 KOSALY, G./ TURNER, R.E.
QUASI-CLASSICAL APPROXIMATION IN NEUTRON SCATTERING
PHYS. LETT., V.2, P.266-P.268 (1962)
SCATTERING-THEORIES ..QUASI-CLASSICAL APPROXIMATION
- 62-KO-04 KOTHARI, L.S.
THERMAL NEUTRON SCATTERING IN GRAPHITE
BNL-719 (C-32), V.1, P.117 (1962)
GRAPHITE ..DIFFUSION PARAMETER
- 62-LA-01 LARSSON, K.E./ DAHLBORG, U.
SOME VIBRATIONAL PROPERTIES OF SOLID AND LIQUID H2.O AND D2.O DERIVED FROM EXPERIMENTAL CROSS-SECTION MEASUREMENTS
J. NUCL. ENERGY, V.16, P.81-P.89 (1962)
H2.O/ D2.O ..EXPERIMENT/ LIQUID DYNAMICS ..10DC TO 95DC
- 62-LA-02 LARSSON, K.E./ SINGWI, K.S.
COLD NEUTRON SCATTERING AND DIFFUSIVE MOTIONS IN HYDROGEN BOND LIQUIDS
PHYS. LETT., V.3, P.145 (1962)
H2.O ..LIQUID/ DIFFUSIVE MOTION/ THEORY
- 62-LE-01 LEHMAN, G.W./ WOLFRAM, T./ DE-WAMES, R.E.
AXIALLY SYMMETRIC MODEL FOR LATTICE DYNAMICS OF METALS WITH APPLICATION TO CU, AL AND ZR-H2
PHYS. REV., V.128, P.1593 (1962)
CU/ AL/ ZR-H ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
- 62-LI-01 LIN, T.P./ KOENIG, J.L.
A METHOD FOR THE COMPLETE VIBRATIONAL ANALYSIS OF THE ISOLATED POLYETHYLENE CHAIN
J. MOL. SPECTROSC., V.9, P.228 (1962)
POLYETHYLENE ..THEORY/ SOLID/ MOLECULAR DYNAMICS
- 62-LI-02 LINDENMEYER, C.W.
COMPARISON OF NEUTRON-S WATER KERNEL WITH EXPERIMENTS
HW-75228 (1962)
H2.O ..THEORY/ CROSS SECTION EVALUATION
- 62-LO-01 LOW, G.G.E.
SOME MEASUREMENTS OF PHONON DISPERSION RELATIONS IN IRON
PROC. PHYS. SOC., LONDON, V.79, P.479 (1962)
FE ..EXPERIMENT/ SOLID/ DISPERSION RELATION
- 62-MA-01 MACDOUGALL, J.D.
APPLICATION OF SCATTERING LAW DATA TO THE CALCULATION OF THERMAL NEUTRON SPECTRA
BNL-719 (C-32), V.1, P.121 (1962)
GRAPHITE ..THEORY/ NEUTRON SPECTRUM/ SCATTERING FUNCTION/ CROSS SECTION EVALUATION
- 62-MA-02 MACLATCHI, R.C.F.
LEAP, AN IBM-7090 FORTRAN II CODE FOR THE EVALUATION OF THE THERMAL NEUTRON SCATTERING LAW
HARWELL INTERNAL REPORT (1962)
COMPUTER-CODES
- 62-MA-03 MARADUDIN, A.A./ FEIN, A.E.
SCATTERING OF NEUTRONS BY ANHARMONIC CRYSTALS
PHYS. REV., V.128, P.2589-P.2608 (1962)

- NEUTRON-SCATTERING-IN-SOLIDS .,THEORY,ANHARMONICITY .,ON
E PHONON COHERENT SCATTERING/ PHONON PEAK WIDTH AND SHI
FT/ CUBIC CRYSTAL
- 62-MC-01 MCMURRY, H.L./ GANNON, L.J./ HESTIR, W.A.
EVALUATION OF TECHNIQUES FOR COMPUTING DIFFERENTIAL SCA
TTERING CROSS SECTION
BNL-719 (C-32), V.1, P.172 (1962)
METHANE/ PROPANE .,THEORY/ GAS/ DIFFERENTIAL CROSS SECT
ION
- 62-MC-02 MCMURRY, H.L.
CALCULATION OF DIFFERENTIAL SCATTERING CROSS SECTIONS F
OR SLOW NEUTRONS
BNL-719 (C-32), V.1, P.144 (1962)
NEUTRON-SCATTERING-IN-FLUIDS .,SCATTERING THEORY/ GAS/
SCATTERING FUNCTION
- 62-MC-03 MCMURRY, H.L.
DIFFERENTIAL SCATTERING CROSS SECTIONS OF MODERATORS IN
THE SHORT COLLISION TIME APPROXIMATION PART I, THEORET
ICAL
IDO-16749 (1962)
SCATTERING-THEORIES .,THEORY/ MOLECULAR ROTATIONS/ MOLE
CULAR VIBRATIONS/ SIGMA(E-E-PRIME,THETA)/ MOLECULAR DYN
AMICS
- 62-MO-01 MOZER, B./ OTNES, K./ MYERS, V.M.
MEASUREMENTS OF A SIMPLE DEFECT MODE OF VIBRATION
PHYS. REV., V.8, P.278 (1962)
NI-PD .,EXPERIMENT/ LATTICE VIBRATION .,DEFECT MODE/ DI
SORDERED ALLOYS
- 62-NE-01 NEMETHY, G./ SCHRAGA, H.A.
STRUCTURE OF WATER AND HYDROPHOBIC BONDING IN PROTEINS,
1, A MODEL FOR THE THERMODYNAMICS PROPERTIES OF LIQUID
WATER
J. CHEM. PHYS., V.36, P.3382-P.3400 (1962)
H2.O .,THEORY/ MOLECULAR DYNAMICS .,LIQUID DYNAMICS
- 62-PA-01 PARKS, D.E./ BEYSTER, J.R./ WIKNER, N.F.
THERMAL NEUTRON SPECTRA IN GRAPHITE
NUCL. SCI. ENG., V.13, P.306 (1962)
GRAPHITE .,EXPERIMENT/ NEUTRON SPECTRA
- 62-PA-02 PARRY, W.E./ TURNER, R.E.
TEMPERATURE-DEPENDENT GREEN FUNCTIONS AND NEUTRON SCATT
ERING IN LIQUID HELIUM II
ANN. PHYS., N.Y., V.17, P.301-P.317 (1962)
HE/ NEUTRON-SCATTERING-IN-FLUIDS .,THEORY/ LIQUID/ SCAT
TERING LAW/ CORRELATION FUNCTION .,LIQUID HELIUM
- 62-PU-01 PUROHIT, S.N./ ROJAGOPAL, A.K.
SCATTERING OF THERMAL NEUTRONS IN DOPPLER APPROXIMATION
NUCL. SCI. ENG., V.13, P.250-P.260 (1962)
SCATTERING-THEORIES .,SCATTERING THEORY/ SIGMA(E)
- 62-PU-02 PUROHIT, S.N./ ROJAGOPAL, A.K.
SCATTERING OF THERMAL NEUTRONS IN THE DOPPLER APPROXIMA
TION
BNL-719 (C-32), V.1, P.238 (1962)
SCATTERING-THEORIES .,SCATTERING THEORY
- 62-PU-03 PUROHIT, S.N.
NEUTRON THERMALIZATION IN A CRYSTALLINE MEDIUM IN INCOH
ERENT APPROXIMATION
BNL-719 (C-32), V.1, P.203 (1962)
NEUTRON-SCATTERING-IN-SOLIDS .,THEORY/ NEUTRON SPECTRUM
..CRYSTAL
- 62-RA-01 RAHMAN, A./ SINGWI, K.S./ SJOELANDER, A.
THEORY OF SLOW NEUTRON SCATTERING BY LIQUIDS. 1,
PHYS. REV., V.126, P.986-P.996 (1962)
NEUTRON-SCATTERING-IN-FLUIDS .,THEORY .,LIQUID DYNAMICS
- 62-RA-02 RAHMAN, A./ SINGWI, K.S./ SJOELANDER, A.
STOCHASTIC MODEL OF A LIQUID AND COLD NEUTRON SCATTERIN
G. 2,
PHYS. REV., V.126, P.997-P.1004 (1962)
NEUTRON-SCATTERING-IN-FLUIDS .,THEORY .,LIQUID DYNAMICS
- 62-RO-01 ROSENBAUM, M./ ZWEIFEL, P.F.
COMPARISON OF CLASSICAL AND QUASI-CLASSICAL CROSS SECTI
ONS FOR SOME SIMPLE SYSTEMS
BNL-719 (C-32), V.1, P.276 (1962)
H2.O .,THEORY .,DIFFERENTIAL SCATTERING CROSS SECTION/
295DK
- 62-RU-01 RUSH, J.J./ TAYLOR, T.I./ HAVENS-JR, W.W.
ROTATIONAL FREEDOM OF AMMONIUM IONS AND METHYL GROUPS B
Y CROSS-SECTION MEASUREMENTS WITH SLOW NEUTRONS
J. CHEM. PHYS., V.37, P.234-P.238 (1962)
N.H4.CL/ N.H4.I/ N.H4.F/ N.H4.BR/ BENZENE/ TOLUENE/ MES
ITYLENE/ XYLENE .,EXPERIMENT/ TOTAL CROSS SECTION VS. N
EUTRON WAVELENGTH
- 62-RU-02 RUSH, J.J./ SAFFORD, G.J./ TAYLOR, T.I./ HAVENS-JR
W.W.
THE EFFECT OF ROTATIONAL FREEDOM IN SEVERAL AMMONIUM SA
LTS AND DIMETHYL ACETYLENE ON THE INELASTIC SCATTERING
OF SLOW NEUTRONS
NUCL. SCI. ENG., V.14, P.339-P.345 (1962)

N.H₄P.F6/ (N,H₄)₂S₂O₈/ (N,H₄)₂CR₂O₄/ N.H₄S.O₃.F/ D
IMETHYLACETYLENE ..EXPERIMENT/ MOLECULAR DYNAMICS ..CRO
SS SECTION VS. NEUTRON WAVELENGTH

62-SA-01 SAKAMOTO, M./ BROCKHOUSE, B.N./ JOHNSON, R.H./ POP
E, N.K.

NEUTRON INELASTIC SCATTERING STUDY OF WATER
J. PHYS. SOC. JAP., V.17, SUPPL. B2, P.370 (1962)
H₂O ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..25DC/
75DC/ QUASI-ELASTIC SCATTERING/ DIFFUSION BROADENING

62-SC-01 SCHMUNK, R.E./ BRUGGER, R.M./ RANDOLPH, P.D./ STRO
NG, K.A.

LATTICE DYNAMICS OF BERYLLIUM
PHYS. REV., V.128, P.562 (1962)
BE ..EXPERIMENT/ SOLID/ DISPERSION RELATION

62-SC-02 SCHOFIELD, R.P.
THEORETICAL ASPECTS OF THE SCATTERING LAW
BNL-719 (C-32), V.1, P.1 (1962)
H₂O/ GRAPHITE ..THEORY/ COMPILATION

62-SO-01 SOSNOWSKI, J./ KOZUBOWSKY, J.
PHONON DISPERSION RELATIONS FOR COPPER SINGLE CRYSTAL I
N THE (100) DIRECTION
J. PHYS. CHEM. SOLIDS, V.23, P.1021 (1962)
CU ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION

62-ST-01 STILLER, H./ HAUTECLER, S.
ENERGY DISTRIBUTIONS OF COLD NEUTRONS SCATTERED FROM LI
QUID METHANE
Z. PHYS., V.166, P.393-P.405 (1962)
METHANE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LIQUID

62-ST-02 STRONG, K.A./ MARSHALL, G.D./ BRUGGER, R.M./ RANDO
LPH, P.D.
SCATTERING OF SLOW NEUTRONS FROM PROPANE GAS
PHYS. REV., V.125, P.933 (1962)
PROPANE

62-TA-01 TASUMI, M./ SHIMANOCHI, T./ MIYAZAWA, T.
NORMAL VIBRATIONS AND FORCE CONSTANTS OF POLYMETHYLENE
CHAIN

J. MOL. SPECTROSC., V.9, P.261 (1962)
POLYETHYLENE ..THEORY/ SOLID/ MOLECULAR DYNAMICS

62-TU-01 TURBERFIELD, K.C.
THE ATOMIC MOTIONS IN LIQUID LEAD
PROC. PHYS. SOC., LONDON, V.80, P.395 (1962)
PB ..EXPERIMENT/ LIQUID ..340DC/ 520DC/ 324DC

62-TU-02 TURBERFIELD, K.C./ EGELSTAFF, P.A.

PHONON FREQUENCY IN VANADIUM AT SEVERAL TEMPERATURES
PHYS. REV., V.127, P.1017 (1962)
V ..EXPERIMENT

62-WO-01 WOODS, A.D.B./ BROCKHOUSE, B.N./ MARCH, R.H./ BOWE
RS, R.
NORMAL VIBRATIONS OF SODIUM
PROC. PHYS. SOC., LONDON, V.79, P.440 (1962)
NA ..EXPERIMENT/ SOLID/ DISPERSION RELATION

62-WO-02 WOODS, A.D.B./ BROCKHOUSE, B.N./ MARCH, R.H./ STEW
ART, A.T./ BOWERS, R.
CRYSTAL DYNAMICS OF SODIUM AT 90 DK
PHYS. REV., V.128, P.1112 (1962)
NA ..EXPERIMENT/ SOLID/ DISPERSION RELATION ..90 DK

62-YI-01 YIP, S./ OSBORN, R.K.
HINDERED ROTATION IN LIQUIDS AND SLOW-NEUTRON SCATTERIN
G
BNL-719 (C-32), V.1, P.289 (1962)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ LIQUID

62-ZE-01 ZEMLYANOV, M.G./ CHERNOPOLEKOV, N.A.
INVESTIGATION OF INELASTIC SCATTERING OF COLD NEUTRONS
BY CERTAIN HYDROGEN-CONTAINING SUBSTANCES
BNL-719 (C-32), V.1, P.66 (1962)
POLYETHYLENE/ BENZENE/ BIPHENYL ..EXPERIMENT/ MOLECULAR
DYNAMICS

63-AK-01 AKHIEZER, A.I./ AKHIEZER, I.A./ POMERANCHUK, I.Y.
ON SCATTERING OF SLOW NEUTRONS IN A FERMI LIQUID
NUCL. PHYS., V.40, P.139 (1963)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID ..FERMI L
IQUID/ ZERO-SOUND/ SPIN

63-AR-01 ARNOLD, G.P./ NERESON, N.G.
NEUTRON COHERENT-SCATTERING AMPLITUDES OF GA, IN, AS AN
D SB
PHYS. REV., V.131, P.2098 (1963)
GA/ IN/ SB/ AS ..EXPERIMENT/ SCATTERING AMPLITUDE

63-BA-01 BAJORIK, A./ GOLIKOV, V.V./ ZHUKOVSKAJA, I./ SHAPI
RO, A./ SHKATULA, A.
QUASI ELASTIC SCATTERING OF COLD NEUTRONS IN WATER
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS. IAEA, V.2, P.383-P.388 (1963)
H₂O

63-BA-02 BALLY, D./ TARINA, V./ TODIREANU, S.
THE SCATTERING OF SLOW NEUTRONS FROM HYDROGEN AND ETHYL
ENE

- INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.451 (1963)
H2/ ETHYLENE ..EXPERIMENT
- 63-BA-03 BARGONOV, G./ CAGLIOTI, G./ ANTAL, J.J.
A STUDY OF THE CRYSTAL DYNAMICS OF ZINC
PHYS. REV., V.132, P.683 (1963)
ZN ..EXPERIMENT/ SOLID/ DISPERSION RELATION
- 63-BA-04 BARRON, T.H.K./ LEADBETTER, A.J./ MORRISON, J.A./
SALTER, L.S.
THE CALCULATION OF DEBYE-WALLER FACTORS FROM THERMODYNA
MIC DATA
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.49 (1963)
THEORY-OF-SOLIDS ..DEBYE-WALLER FACTOR/ THEORY
- 63-BE-01 BECKA, L.N.
NEUTRON INELASTIC SCATTERING STUDIES OF GLOBULAR COMPOU
NDS
J. CHEM. PHYS., V.38, P.1685-P.1688 (1963)
CYCLOHEXANE/ DIMETHYLBUTANE/ DIAZOBICYCLOOCTANE ..EXPER
IMENT/ TOF
- 63-BO-01 BOFFI, V.C./ MOLINARI, V.G./ PARKS, D.E.
SLOW NEUTRON SCATTERING BY BENZEN
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.285 (1963)
C6.H6 ..SIGMA(E)/ SCATTERING LAW/ FREQUENCY DISTRIBUTIO
N/ THEORY/ GAS/ MOLECULAR DYNAMICS
- 63-BO-02 BOUTIN, H./ SAFFORD, G.J.
STUDY OF LOW-FREQUENCY MOLECULAR MOTIONS IN H.F. K.H.F2
K.H2.F3 AND NA.H2.F3
J. CHEM. PHYS., V.39, P.3135-P.3140 (1963)
H.F/ K.H.F2/ K.H2.F3/ NA.H2.F3 ..EXPERIMENT/ TOF SPECTR
A/ MOLECULAR DYNAMICS
- 63-BR-01 BRAJOVIC, V./ BOUTIN, H./ SAFFORD, G.J./ PALEVSKY,
H.
A STUDY OF ROTATIONAL FREEDOM IN SEVERAL AMMONIUM SALTS
BY SLOW NEUTRON INELASTIC SCATTERING
J. PHYS. CHEM. SOLIDS, V.24, P.617-P.624 (1963)
N.H4.P.F6/ N.H4.I/ (N.H4)2.S2.O8/ N.H4.S.O3.F ..EXPERIM
ENT/ TOF SPECTRA/ MOLECULAR DYNAMICS
- 63-BR-02 BROCKHOUSE, B.N./ BERGSMAN, J./ DASANNACHARYA, B.A./
POPE, N.K.
LIQUID DYNAMICS FROM NEUTRON SPECTROMETRY
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.189-P.202 (1963)
SN/ H2.O/ AR/ HE ..EXPERIMENT/ LIQUID

- 63-BR-03 BROCKHOUSE, B.N./ BECKA, L.N./ RAO, K.R./ WOODS, A
D.B.
DETERMINATION OF POLARIZATION VECTORS FROM NEUTRON GROU
P INTENSITIES
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.23 (1963)
GE ..EXPERIMENT/ LATTICE DYNAMICS
- 63-BR-04 BROCKHOUSE, B.N./ DASANNACHARYA, B.A.
TEMPERATURE EFFECTS ON LATTICE VIBRATIONS IN GERMANIUM
SOLID STATE COMMUN., V.1, P.205 (1963)
GE ..EXPERIMENT/ DISPERSION RELATION ..TEMPERATURE EFTE
CTS
- 63-BU-01 BUTLER, D.
THE SCATTERING OF SLOW NEUTRONS BY HEAVY WATER, 2. INTE
RMOLECULAR SCATTERING
PROC. PHYS. SOC., LONDON, V.81, P.294-P.299 (1963)
D2.O ..LIQUID/ THEORY/ SIGMA (E)
- 63-BU-02 BUTLER, D.
THE SCATTERING OF SLOW NEUTRONS BY HEAVY WATER, 1. INTR
AMOLECULAR SCATTERING
PROC. PHYS. SOC., LONDON, V.81, P.276-P.293 (1963)
D2.O ..LIQUID/ THEORY/ SCATTERING LAW
- 63-CA-01 CAGLIOTI, G./ ASCARELLI, P.
NEUTRON SPECTROSCOPY WORK AT THE CNEN
INELASTIC SCATTERING OF NEUTRON IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.259 (1963)
BR ..LIQUID/ EXPERIMENT
- 63-CH-01 CHERNOPLEKOV, N.A./ ZEMLYANOV, M.G./ BROVMAN, E.G.
/ CHICKERIN, A.G.
A STUDY OF THE INELASTIC SCATTERING OF NEUTRONS IN A TI
-ZR ALLOY
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.173 (1963)
TI-ZR ..FREQUENCY DISTRIBUTION/ EXPERIMENT ..ALLOY
- 63-CO-01 COCHRAN, W.
LATTICE DYNAMICS OF SODIUM
PROC. ROY. SOC., LONDON, SER. A, V.276, P.308 (196
3)
NA ..THEORY/ SOLID/ DISPERSION RELATION
- 63-CO-02 COCHRAN, W./ COWLEY, R.A.
DIELECTRIC CONSTANTS AND LATTICE VIBRATION IN IONIC CRY
STALS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.59 (1963)

- THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY
- 63-CO-03 COCHRAN, W./ COWLEY, R.A./ BROCKHOUSE, B.N./ WOODS, A.D.B.
LATTICE DYNAMICS OF ALKALI HALIDE CRYSTALS.III. THEORETICAL
PHYS. REV., V.131, P.1030 (1963)
K.BR/ NA.I ..THEORY/ PHONON DISPERSION
- 63-CO-04 COCKING, S.J.
STUDIES OF LIQUID SODIUM BY INELASTIC SCATTERING OF SLOW NEUTRONS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. IAEA, V.1, P.227 (1963)
NA ..EXPERIMENT/ LIQUID ..DOUBLE DIFFERENTIAL CROSS SECTION
- 63-CO-05 COCKING, S.J./ GUNER, Z.
COMPARATIVE STUDIES OF SLOW NEUTRON SCATTERING BY SOLID AND LIQUID TIN
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. IAEA, V.1, P.237 (1963)
SN ..EXPERIMENT/ SOLID/ LIQUID
- 63-CO-06 COLE, G.H.A.
SCATTERING OF SMALL-WAVE LENGTH NEUTRONS BY SQUARE-MOUNTED POTENTIAL GAS
PHYS. REV., V.129, P.1005-P.1009 (1963)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
- 63-CO-07 COOTE, G.E./ HAYWOOD, B.C.
SCATTERING OF NEUTRONS BY LIQUID BROMINE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. IAEA, V.1, P.249 (1963)
BR ..SCATTERING LAW/ EXPERIMENT/ LIQUID
- 63-CO-08 COWLEY, R.A.
THE TEMPERATURE DEPENDANCE OF SOME NORMAL MODES IN STRONTIUM TITANATE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. IAEA, V.1, P.229 (1963)
SR.TI.03 ..DISPERSION RELATION/ EXPERIMENT/ LATTICE DYNAMICS ..TEMPERATURE DEPENDENCE
- 63-CR-01 CRIBIER, D./ FARNoux, B./ JACROT, B.
FREQUENCY OF OPTICAL VIBRATIONS IN FLUORITE CA.F2 (IN FREQUENCY RENCH)
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. IAEA, V.2, P.225 (1963)
CA.F2 ..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS
- 63-DE-01 DE-BAR, R.B.
EVALUATION OF THE VAN HOVE CORRELATION FUNCTIONS FOR CERTAIN PHYSICAL SYSTEMS
PHYS. REV., V.130, P.827-P.832 (1963)
THEORY-OF-FLUIDS ..THEORY/ CORRELATION FUNCTION/ CRYSTAL/ LIQUID
- 63-DO-01 DOLLING, G.
LATTICE VIBRATIONS IN CRYSTALS WITH DIAMOND STRUCTURE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. IAEA, V.2, P.37 (1963)
SI ..EXPERIMENT/ DISPERSION RELATION
- 63-DO-02 DOLLING, G.
LATTICE VIBRATIONS IN CRYSTALS WITH THE DIAMOND STRUCTURE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. IAEA, VIENNA, V.2, P.37-P.47 (1963)
SI ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ MODIFIED SHELL MODEL/ ROOM TEMPERATURE
- 63-EG-01 EGELSTAFF, P.A./ HAYWOOD, B.C./ THORSON, I.M.
THE MOTION OF HYDROGEN IN WATER
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. IAEA, V.1, P.343-P.357 (1963)
H2.O ..EXPERIMENT ..150DC, 295DK, 425DK
- 63-EG-02 EGELSTAFF, P.A.
PRACTICAL ANALYSIS OF NEUTRON SCATTERING DATA INTO SELF AND INTERFERENCE TERMS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. IAEA, V.1, P.65 (1963)
SCATTERING-THEORIES ..SCATTERING LAW/ THEORY ..SELF TERM/ INTERFERENCE TERM
- 63-EG-03 EGELSTAFF, P.A.
INTERPRETATION OF COHERENT NEUTRON SCATTERING BY LIQUIDS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS. V.1, P.203-P.212 (1963)
PB/ SN ..EXPERIMENT/ SCATTERING FUNCTION/ LIQUID
- 63-EG-04 EGELSTAFF, P.A./ HARRIS, D.H.C.
HIGH ENERGY MODES IN THE FREQUENCY DISTRIBUTION OF GRAPHITE
PHYS. LETT., V.7, P.220-P.220 (1963)
GRAPHITE ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ ..HIGH FREQUENCY MODE/ 950DC
- 63-FU-01 FUKUSHIMA, K./ IDEGUCHI, Y./ MIYAZAWA, T.
THE NORMAL VIBRATIONS OF POLYGLYCINE I
BULL. CHEM. SOC. JAP., V.36, P.1301-P.1307 (1963)

POLYGLYCINE ..THEORY/ NORMAL VIBRATION

- 63-GI-01 GIASER, W.
INELASTIC SCATTERING OF THERMAL NEUTRONS FROM DOWTHERM
A,
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.307 (1963)
BIPHENYL ..EXPERIMENT/ SCATTERING LAW/ MIXTURE OF BIPHE
NYL AND BIPHENYLOXYD
- 63-GI-02 GISSLER, W.
INVESTIGATION OF NEUTRON SCATTERING CROSS SECTION NEAR
THE BRAGG CUT-OFF WAVELENGTH (IN GERMANY)
Z. KRISTALLOGR., V.118, P.149 (1963)
D2,O ..THEORY/ EXPERIMENT/ SIGMA(E) ..4DK/ 77DK
- 63-GO-01 GOLDMAN, D.T./ FEDERIGHI, F.D.
CALCULATION OF THERMAL NEUTRON FLUX SPECTRA IN A POLYET
HYLENE MODERATED MEDIUM
NUCL. SCI. ENG., V.16, P.165-P.175 (1963)
POLYETHYLENE ..LIQUID/ THEORY/ SIGMA (E,E-PRIME,THETA)/
NEUTRON SPECTRUM
- 63-GO-02 GOLDMAN, D.T./ FEDERIGHI, F.D.
CALCULATION OF THE INELASTIC SCATTERING OF NEUTRONS FRO
M POLYETHYLENE AND WATER
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.389-P.404 (1963)
H2,O/ POLYETHYLENE ..CROSS SECTION EVALUATION
- 63-GR-01 GRIFFING, G.W.
SCATTERING OF SLOW NEUTRONS BY GASEOUS METHANE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.435 (1963)
C,H4 ..SIGMA(E-E-PRIME,THETA)/ SCATTERING FUNCTION/ THE
ORY/ GAS/ CROSS SECTION
- 63-HA-01 HAAS, R./ KLEY, W./ KRABS, K.H./ RUBIN, R.
THE PHONON FREQUENCY DISTRIBUTION OF VANADIUM
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.145 (1963)
V ..SCATTERING LAW/ FREQUENCY DISTRIBUTION
- 63-HA-02 HAHN, H.
PERTURBATION THEORY OF ANHARMONICITY EFFECTS IN SLOW NE
UTRON INELASTIC SCATTERING BY CRYSTALS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.37 (1963)
NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ THEORY
- 63-HA-03 HAUTECLER, S./ STILLER, H.
MOLECULAR MOTIONS IN LIQUID METHANE

INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.423 (1963)
C,H4 ..SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ MOLECULAR DY
NAMICS

63-HA-04 HAYWOOD, B.C./ THORSON, J.M.
FREQUENCY DISTRIBUTION OF NORMAL MODES IN GRAPHITE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.111-P.123 (1963)
GRAPHITE ..EXPERIMENT/ FREQUENCY DISTRIBUTION

63-IY-01 IYENGER, P.K./ VENKATARAMAN, G./ RAO, K.R./ VIJAYA
RAGHAVAN, P.R./ ROY, A.P.
DISPERSION RELATIONS FOR PHONONS IN MAGNESIUM
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.99 (1963)
MG ..EXPERIMENT/ DISPERSION RELATION

63-JA-01 JANIK, J.A.
MOLECULAR DYNAMICS INVESTIGATED BY NEUTRON SCATTERING
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.243
(1963)

C,H4/ N,H4,I/ N,H4,CL/ N,H4,BR/ N,H4,S,O3.F ..SIGMA(E)/
SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ THEORY/ GAS/ LIQUID

63-JA-02 JANIK, J.A./ JANIK, J./ MANIAWSKI, F./ RZANY, H./
ROGALSKA, Z./
SYSTEMATIC STUDY OF TOTAL NEUTRON SCATTERING CROSS SECT
IONS OF HYDROGEN CONTAINING MOLECULES
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.405 (1963)

C,H4/ N,H3/ H2,S/ H2,O ..SIGMA(E)/ EXPERIMENT/ LIQUID

63-JA-03 JANIK, J.A./ RZANY, H./ SCIESINSKI, J.
SCATTERING OF SLOW NEUTRONS BY N,H3 MOLECULES, PART 2.
SCATTERING BY LIQUID N,H3

N,H3 ..EXPERIMENT/ TOTAL CROSS SECTION/ LIQUID

63-KA-01 KADANOFF, L./ MARTIN, P.C.
HYDRODYNAMIC EQUATIONS AND CORRELATION FUNCTIONS
ANN. PHYS., N.Y., V.24, P.419-P.469 (1963)
THEORY-OF-FLUIDS ..LIQUID/ CORRELATION FUNCTION

63-KO-01 KOKKEDEE, J.J.J.
THEORY OF THE INFLUENCE OF PHONON-PHONON AND ELECTRON-P
HONON INTERACTIONS ON THE SCATTERING OF NEUTRONS BY CRY
STALS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.15 (1963)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY ..PHONON-PHONON I

INTERACTION/ ELECTRON-PHONON INTERACTION

- 63-KO-02 KOTTWITS, D.A./ LEONARD-JR, B.R./ SMITH, R.B.
QUASI-ELASTIC SCATTERING BY ROOM TEMPERATURE LIGHT WATER
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS. IAEA, V.1, P.373-P.382 (1963)
H2.O ..EXPERIMENT/ LIQUIDS ..22DC
- 63-KO-03 KOTTWITZ, D.A./ LEONARD-JR, B.R.
THE SCATTERING LAW FOR THE ROOM TEMPERATURE LIGHT WATER
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS. IAEA, V.1, P.359-P.371 (1963)
H2.O ..EXPERIMENT/ FREQUENCY DISTRIBUTION
- 63-LA-01 LARSSON, K.E./ DAHLBORG, U.
A STUDY OF THE DIFFUSIVE ATOMIC MOTIONS IN GLYCEROL AND
OF THE VIBRATORY MOTIONS IN GLYCEROL AND LIGHT AND HEA
VY WATER BY COLD NEUTRON SCATTERING
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS. IAEA, V.1, P.317 (1963)
D2.O/ GLYCELINE/ H2.O ..EXPERIMENT/ LIQUID/ FREQUENCY D
ISTRIBUTION/ TOF ..278, 295, 368, 428 AND 572DK
- 63-LI-01 LINDENMEIER, C.W./ MATSUMOTO, D.D./ SKEEN, D.R.
PROGRAM KERNEL
HW-78288 (1963)
H2.O/ POLYETHYLENE/ COMPUTER-CODES ..SCATTERING THEORY/
LIQUID/ SIGMA(E-E-PRIME,THETA) ..INCOHERENT
- 63-MA-01 MACDOUGALL, J.D.
PIXSE
AEEW-M-318 (1963)
COMPUTER-CODES ..SIGMA(E-E-PRIME)/ SCATTERING LAW/ GAS/
LIQUID/SAOLID/ CROSS SECTION EVALUATION
- 63-MA-02 MALISZEWSKI, E./ SOSNOWSKI, J./ BLINOWSKI, K./ KOZ
UBOWSKI, J./ PADLO, I./
NEUTRON-PHONON INTERACTION STUDIES IN COPPER, ZINC AND
MAGNESIUM SINGLE CRYSTALS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS. IAEA, V.2, P.87 (1963)
ZN/ CU/ MG ..EXPERIMENT
- 63-MC-01 MCREYNOLDS, A.W./ WHITEMORE, W.L.
DYNAMICS OF LIQUID HYDROGEN BY NEUTRON SCATTERING
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS. IAEA, V.1, P.263 (1963)
H ..EXPERIMENT/ LIQUID
- 63-MI-01 MICHAELL, E.W.J./ HARDY, J.R./ SAUNDERSON, D.H.
THE DISTRIBUTION OF HIGHER ENERGY NORMAL MODES IN DIAMO
ND

INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS. IAEA, V.2, P.49 (1963)
DIAMOND ..FREQUENCY SPECTRUM/ LATTICE DYNAMICS

63-MI-02 MIKKE, K./ KROH, A.
LATTICE DYNAMICS OF SOME AMMONIUM SALTS BY INVERTED FIL
TER METHOD

INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS. IAEA, V.2, P.237 (1963)
N.H4.CL/ N.H4.BR/ N.H4.F/ N.H4.N.O3 ..LATTICE DYNAMICS/
EXPERIMENT ..INVERTED FILTER METHOD

63-MI-03 MIYAZAWA, T./ FUKUSHIMA, K./ IDEGUCHI, Y.
FAR INFRARED SPECTRA AND THEIR VIBRATIONAL ASSIGNMENTS
OF ISOTACTIC POLYPROPYLENE
J. POLY. SCI., PART B, V.1, P.385-P.387 (1963)
POLYPROPYLENE ..EXPERIMENT/ FAR-INFRARED SPECTROMETRY

63-MI-04 MIYAZAWA, T./ IDEGUCHI, Y./ FUKUSHIMA, K.
MOLECULAR VIBRATION AND STRUCTURE OF HIGH POLYMERS, 4.
A GENERAL METHOD OF TREATING DEGENERATE NORMAL VIBRATIO
NS OF HELICAL POLYMERS AND INFRARED-ACTIVE VIBRATIONS O
F ISOTACTIC POLYPROPYLENE
J. CHEM. PHYS., V.38, P.2709-P.2720 (1963)
POLYPROPYLENE ..THEORY/ INFRARED SPECTRA/ INFINITE HELI
CAL CHAIN POLYMER/ NORMAL MODE

63-MO-01 MOZER, B./ OTONES, K.
MEASUREMENTS OF THE VIBRATIONAL FREQUENCY SPECTRUM OF N
ICKEL-PALLADIUM ALLOYS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS. IAEA, V.2, P.162 (1963)
NI/ PD/ NI-PD ..EXPERIMENT/ LATTICE DYNAMICS ..IMPURITY
MODE

63-MU-01 MUSGRAVE, M.J.P.
ON THE RELATION BETWEEN GRAY AND WHITE TIN
PROC. ROY. SOC., LONDON, SER. A, V.272, P.503 (196
3)
SN ..THEORY/ SOLID/ FREQUENCY DISTRIBUTION

63-NA-01 NAKAGAWA, Y./ WOODS, A.D.B.
LATTICE DYNAMICS OF NIOBIUM
PHYS. REV. LETT., V.11, P.271 (1963)
NB

63-OS-01 OSALSKII, V.S.
THEORY OF THE QUASI-ELASTIC SCATTERING OF COLD NEUTRONS
IN LIQUIDS
FIZ. TVERD. TELA (SOV. PHYS. SOLID STATE), V.5 (V.
5), P.1082-P.1085 (P.789-P.791) (1963 (1963))
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS

/ QUASI-CRYSTALLINE MODEL

- 63-PA-01 PALEVSKY, H./ OTNES, K./ WAKUTA, Y.
LOW FREQUENCY HYDROGEN VIBRATIONS IN POTASSIUM DIHYDROGEN PHOSPHATE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.2, P.273 (1963)
K.H2.P.04 ..EXPERIMENT/ TOF
- 63-PA-02 PARKER, K.
THE ALDERMASTON NUCLEAR DATA LIBRARY AS AT MAY 1963
AWRE-0-70/63 (1963)
COMPILATIONS/ COMPUTER-CODES
- 63-PE-01 PELAH, L./ HAAS, R./ KLEY, W./ KREBS, K.H./ PERETTI, J. J./
OBSERVATION OF A LOW ENERGY PEAK IN THE PHONON FREQUENCY DISTRIBUTION OF VANADIUM
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.2, P.155 (1963)
V ..FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS
- 63-PL-01 PLUMMER, J.P./ SUMMERFIELD, G.C.
VALIDITY OF FERMI APPROXIMATION IN SLOW NEUTRON SCATTERING
PHYS. REV., V.131, P.1153-P.1154 (1963)
SCATTERING-THEORIES ..THEORY
- 63-RA-01 RAHMAN, A.
INTERMEDIATE SCATTERING FUNCTION IN SLOW NEUTRON SCATTERING
PHYS. REV., V.130, P.1334-P.1336 (1963)
SCATTERING-THEORIES ..SCATTERING THEORY/ SCATTERING FUNCTION
- 63-RA-02 RAPEANU, S.
INELASTIC SCATTERING OF COLD NEUTRONS IN C3H5*(O*D)3 AT VARIOUS TEMPERATURES
REV. ROUM. PHYS., V.13, P.913 (1963)
GLYCELINE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING
- 63-RO-01 ROGALSKA, Z.
SLOW NEUTRON SCATTERING BY MOLECULES OF LIQUID METHANE
PHYSICA, V.29, P.491 (1963)
METHANE ..SIGMA(E)/ EXPERIMENT/ LIQUID ..-156DC/ 0.0057 TO 0.101EV
- 63-RO-02 ROGALSKA, Z.
SLOW NEUTRON SCATTERING BY MOLECULES OF LIQUID METHANE
PHYSICA, V.29, P.491-P.498 (1963)
METHANE ..EXPERIMENT/ TOTAL SCATTERING CROSS SECTION VS NEUTRON ENERGY/ LIQUID STATE

- 63-RZ-01 RZANY, H./ SCIESINSKI, J.
SCATTERING OF SLOW NEUTRONS BY LIQUID H2.S
PHYSICA, V.29, P.488-P.490 (1963)
H2.S ..EXPERIMENT/ TOTAL CROSS SECTION
- 63-SA-01 SAFFORD, G./ BRAJOVIC, V./ BOUTIN, H.
AN INVESTIGATION OF THE ENERGY LEVELS IN ALKALINE EARTH HYDROXIDES BY INELASTIC SCATTERING OF SLOW NEUTRONS
J. PHYS. CHEM. SOLIDS, V.24, P.771-P.777 (1963)
MG.(O.H)2/ CA.(O.H)2 ..EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS
- 63-SA-02 SAUNDERSON, D.H./ COCKING, S.J.
STUDIES OF PROTON VIBRATIONS IN GAMMA-TITANIUM HYDRIDE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.2, P.265-P.272 (1963)
TI-H ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY DISTRIBUTION
- 63-SA-03 SAUNDERSON, D.H./ RAINEY, V.S.
INELASTIC SCATTERING OF NEUTRONS BY METHYL- AND N-AMYL ALCOHOLS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.1, P.413 (1963)
ALCOHOL ..LIQUID AND GAS/ EXPERIMENT
- 63-SI-01 SINCLAIR, R.N.
THE NEUTRON SCATTERING LAW AND THE FREQUENCY DISTRIBUTION OF THE NORMAL MODES OF BERYLLIUM AND BERYLLIUM OXIDE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.2, P.199-P.211 (1963)
BE/ BE.O ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY DISTRIBUTION/ TOF ..293 DK
- 63-SI-02 SINGWI, K.S.
THE MOESSBAUER EFFECT AND DYNAMICS OF ATOMIC MOTIONS IN CONDENSED SYSTEMS
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.1, P.3 (1963)
REVIEW-ARTICLES ..THEORY ..MOESSBAUER EFFECT
- 63-SI-03 SINGWI, K.S./ SJOELANDER, A./ RAHMAN, A.
FREQUENCY SPECTRUM OF LIQUIDS AND COLD NEUTRON SCATTERING
INELASTIC SCATTERING OF NEUTRON IN SOLIDS AND LIQUIDS, IAEA, V.1, P.215-P.225 (1963)
NEUTRON-SCATTERING-IN-FLUIDS/ H2.O/ PB ..THEORY/ LIQUID / FREQUENCY DISTRIBUTION/ SCATTERING FUNCTION
- 63-SO-01 SQUIRES, G.L.
THE FREQUENCIES OF THE NORMAL MODES OF ALUMINUM

INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.55 (1963)
AL ..LATTICE DYNAMICS/FREQUENCY SPECTRUM

63-SQ-02 SQUIRES, G.L.
THE RELATION BETWEEN THE INTERATOMIC FORCES AND THE FRE
QUENCIES OF SYMMETRY PHONONS IN CUBIC CRYSTALS
INELASTIC SCATTERING OF NEUTRON IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.71 (1963)
THEORY-OF-SOLIDS ..INTERATOMIC FORCE CONSTANTS/ DISPERS
ION RELATION/ THEORY/ SOLID ..CUBIC CRYSTAL

63-ST-01 STILLER, H./ HAUTECLER, S.
ENERGY DISTRIBUTION OF NEUTRONS SCATTERED FROM SOLID ME
THANE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.281 (1963)
METHANE ..SOLID/ EXPERIMENT

63-SU-01 SUMMERFIELD, G.C./ ZWEIFEL, P.F.
SLOW NEUTRON SCATTERING, SCATTERING LAW AND GCR, T)
PHYS. REV., V.131, P.1149 (1963)
SCATTERING-THEORIES ..SCATTERING LAW/ THEORY/ CORRELATI
ON FUNCTION/ SCATTERING THEORY

63-TC-01 TCHERNOPEKOV, N.A./ ZEMLYANOV, M.G./ TCHETSERIN,
M.G./ LYASHCHENKO, B.G.
INVESTIGATION OF THE PHONON SPECTRUM OF NICKEL
INELASTIC SCATTERING OF NEUTRON IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.159-P.166 (1963)
NI ..EXPERIMENT/ TOF/ FREQUENCY DISTRIBUTION

63-TH-01 THOMSON, B.V.
NEUTRON SCATTERING BY ANHARMONIC CRYSTAL
PHYS. REV., V.131, P.1420 (1963)
NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ SOLID/ LA
TTICE DYNAMICS/ SCATTERING THEORY

63-TH-02 THORSON, I.M./ HAYWOOD, B.C.
SCATTERING LAW FOR U.O2
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.213 (1963)
U.O2 ..EXPERIMENT/ SOLID/ SCATTERING LAW/ FREQUENCY DIS
TRIBUTION/ TOF ..22 DC

63-VE-01 VENKATARAMAN, G./ USHA, K./ IYENGER, P.K.
STUDY OF AMMONIUM HALIDES BY NEUTRON SPECTROMETRY
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.253 (1963)
N.H4.CL/ N.H4.BR ..EXPERIMENT

63-WA-01 WAUGH, J.L.T./ DOLLING, G.

CRYSTAL DYNAMICS OF GALLIUM ARSENIDE
PHYS. REV., V.132, P.2410 (1963)
GA,AS ..EXPERIMENT/ DISPERSION RELATION

63-WE-01 WEBB, F.J.
THE INELASTIC SCATTERING OF NEUTRONS BY METHANE,AMMONIA
AND HYDROGEN
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.457 (1963)
C.H4/ N.H3/ H2 ..SIGMA(E-E-PRIME,THETA)/ EXPERIMENT/ GA
S ..ROOM TEMPERATURE

63-WH-01 WHITTEMORE, W.L./ DANNER, H.R.
NEUTRON INTERACTIONS IN LIQUID PARA-AND ORTH-HYDROGEN
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.1, P.273 (1963)
H ..EXPERIMENT/ LIQUID/ SIGMA (E-E-PRIME,THETA)

63-WO-01 WOLFRAM, T./ LEHMAN, G.W./ DE-WAMES, R.E.
LATTICE DYNAMICS OF WHITE TIN
PHYS. REV., V.129, P.2483 (1963)
SN ..THEORY/ SOLID/ DISPERSION RELATION

63-WO-02 WOODS, A.D.B./ BROCKHOUSE, B.N./ COWLEY, R.A./ COC
HRAN, W.
LATTICE DYNAMICS OF ALKALI HALIDE CRYSTALS 2, EXPERIMEN
TAL STUDIES OF K,BR AND NA.I
PHYS. REV., V.131, P.1025 (1963)
K,BR/ NA.I ..EXPERIMENT/ DISPERSION RELATION/ LATTICE D
YNAMICS ..90DK

63-WO-03 WOODS, A.D.B.
CRYSTAL DYNAMICS FROM NEUTRON SPECTROMETRY
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.3 (1963)
REVIEW-ARTICLES ..LATTICE DYNAMICS/ SOLID/ EXPERIMENT .
NEUTRON SPECTROMETRY

63-YI-01 YIP, S/ OSBORN, R.K.
SLOW-NEUTRON SCATTERING BY HINDERED ROTATORS
PHYS. REV., V.130, P.1860-P.1864 (1963)
H2.O ..THEORY/ MOLECULAR DYNAMICS/ SIGMA(E-E-PRIME,THET
A)

63-YI-02 YIP, S./ OSBORN, R.K.
SMALL-ENERGY ROTATIONAL TRANSITIONS IN SLOW-NEUTRON SCA
TTERING BY WATER
PHYS. REV., V.131, P.2547-P.2549 (1963)
H2.O ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION
..SMALL ENERGY TRANSFER REGION

63-ZE-01 ZEMLYANOV, M.G./ KAGAN, Y.M./ TCHERNOPEKOV, N.A./

- TCHTSERIN, A.G.
A STUDY OF THE PHONON SPECTRUM AND DISPERSION CURVE FOR VANADIUM
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.2, P.125 (1963)
V. DISPERSION RELATION/ FREQUENCY SPECTRUM
- 63-ZE-02 ZEMLYANOV, M.G./ CHERNOPOLEKOV, N.A.
A STUDY OF COLD NEUTRON INELASTIC SCATTERING ON CERTAIN HYDROGENOUS SUBSTANCES
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQUIDS, IAEA, V.2, P.297 (1963)
BENZENE/ BIPHENYL/ POLYETHYLENE. INELASTIC SCATTERING SPECTRA
- 64-AL-01 ALS-NIELSEN, J./ DIETRICH, O.W.
SLOW NEUTRON CROSS SECTIONS FOR He^3 , B AND AU
PHYS. REV., V.133B, P.925 (1964)
HE/ B/ AU. EXPERIMENT/ CROSS SECTION
- 64-AN-01 ANTONINI, M./ ASCARELLI, P./ CAGLIOTI, G.
COHERENT INELASTIC SCATTERING OF SLOW NEUTRON BY A POLY ATOMIC LIQUID ELEMENT
PHYS. REV., V.136, P.1280 (1964)
BR. EXPERIMENT/ LIQUID
- 64-BA-01 BAYM, G.
DIRECT CALCULATION OF ELECTRONIC PROPERTIES OF METALS FROM NEUTRON SCATTERING DATA
PHYS. REV., V.135A, P.1691 (1964)
THEORY-OF-SOLIDS. SCATTERING LAW
- 64-BJ-01 BIRGENEAU, R.J./ CORDES, J./ DOLLING, G./ WOODS, A.D.B.
NORMAL MODES OF VIBRATIONS IN NICKEL
PHYS. REV., V.136A, P.1359 (1964)
NI. 296 DEGREE KELVIN/ EXPERIMENT/ DISPERSION RELATION / 3-AXIS SPECTROMETER
- 64-BO-01 BOUTIN, H./ SAFFORD, G.J./ DANNER, H.R.
LOW-FREQUENCY MOTIONS OF H_2O MOLECULES IN CRYSTALS
J. CHEM. PHYS., V.40, P.2670-P.2679 (1964)
BA, CL2/ CHABAZITE/ ANALCITE/ CU_2S / APOPHYLLITE/ WATER-BERYL. EXPERIMENT/ TOF-SPECTRUM/ WATER IN CRYSTAL
- 64-BO-02 BOUTIN, H./ PRASK, H.
STUDY OF WATER VAPOR ADSORBED ON GAMMA-ALUMINA AND SILICA BY SLOW NEUTRON INELASTIC SCATTERING
SURFACE SCI., V.2, P.261-P.266 (1964)
 H_2O / WATER-SILICA/ WATER-ALUMINA/ $AlCl_3$. EXPERIMENT/ MOLECULAR DYNAMICS. H_2O VAPOR ADSORBED
- 64-BR-01 BROCKHOUSE, B.N./ WOODS, A.D.B./ DOLLING, G./ THORSON, I.M.
RESEARCH WITH INELASTIC NEUTRON SCATTERING AT THE NRU REACTOR
PROC. 3RD INTERN. CONF. PEACEFUL USES ATOMIC ENERGY, GENEVA, V.7, P.419-P.426 (1964)
REVIEW-ARTICLES. EXPERIMENT/ SOLID/ LIQUID
- 64-BR-02 BROCKHOUSE, B.N./ HAUTECLER, S./ STILLER, H.
INELASTIC SCATTERING OF SLOW NEUTRONS
THE INTERACTION OF RADIATION WITH SOLIDS (ED. BY S. TRUMANE, R. ET AL), NORTH-HOLLAND PUBLISHING CO., P.580-P.642 (1964)
REVIEW-ARTICLES. EXPERIMENT/ LATTICE DYNAMICS. NEUTRON SPECTROSCOPY
- 64-BR-03 BROCKHOUSE, B.N.
PHONONS AND NEUTRON SCATTERING
PHONONS AND PHONON INTERACTIONS (ED. BY A.BAK), W. A. BENJAMIN INC., P.221 (1964)
REVIEW-ARTICLES. EXPERIMENT/ LATTICE DYNAMICS. NEUTRON SPECTROSCOPY
- 64-BR-04 BRUGGER, R.M.
A NEW METHOD OF MEASURING FREQUENCY DISTRIBUTIONS OF CRYSTALS
AERE-E-4562 (1964)
NI. EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
- 64-BR-05 BRUGGER, R.M./ RAINEY, V.S./ MCMURRY, H.C.
SCATTERING OF SLOW NEUTRONS FROM METHANE GAS
PHYS. REV., V.136, P.106 (1964)
C, H4. EXPERIMENT/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION
- 64-CH-01 CHEN, S.H./ BROCKHOUSE, B.N.
LATTICE VIBRATIONS OF TUNGSTEN
SOLID STATE COMMUN., V.2, P.73 (1964)
W. EXPERIMENT/ SOLID/ DISPERSION RELATION
- 64-CO-01 COCHRAN, W./ PAWLEY, G.S.
THE THEORY OF DIFFUSE SCATTERING OF X-RAYS BY A MOLECULAR CRYSTAL
PROC. ROY. SOC., LONDON, SER. A, V.280, P.1-P.22 (1964)
HEXAMETHYLENETETRAMINE. THEORY/ LATTICE DYNAMICS/ DISPERSION/ FREQUENCY DISTRIBUTION. X-RAY SCATTERING
- 64-CO-02 COWLEY, R.A.
LATTICE DYNAMICS AND PHASE TRANSITIONS OF STRONTIUM TITANATE

PHYS. REV., V.134, P.981 (1964)
SR,TI,03 ..DISPERSION RELATION/ EXPERIMENT/ LATTICE DYN
AMICS

64-CZ-01 CZERLUNCZAKIEWICZ, B./ KOWALSKA, A.
DOUBLE DIFFERENTIAL CROSS SECTION FOR SLOW NEUTRONS SCA
TTERING ON GASEOUS AMMONIA MOLECULES
ACTA PHYS. POL., V.25, P.141 (1964)
N,H3 ..GASE/ MOLECULE/ EXPERIMENT/ SIGMA(E, E-PRIME)

64-DA-01 DAHLBORG, U./ GROSSHOEG, G./ LARSSON, K.E./ MOELLE
R. E./ PUROHIT, S.N./
INVESTIGATIONS INTO THE MODERATING PROPERTIES OF WATER
PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON THE
PEACEFUL USES OF ATOMIC ENERGY, UNITED NATIONS, GE
NEVA, V.2, P.336-P.344 (1964)
H2,O/ D2,O

64-DA-02 DANNER, H.R./ SAFFORD, G.J./ BOUNTIN, H./ BERGER,
M.
STUDY OF LOW-FREQUENCY MOTIONS IN POLYETHYLENE AND THE
PARAFFIN HYDROCARBONS BY NEUTRON INELASTIC SCATTERING
J. CHEM. PHYS., V.40, P.1417 (1964)
POLYETHYLENE/ PARAFFINE ..FREQUENCY SPECTRUM/ EXPERIMEN
T/ SOLID/ MOLECULAR DYNAMICS

64-DA-03 DANNER, H.R./ BOUTIN, H./ SAFFORD, G.J.
LOW-FREQUENCY MOLECULAR VIBRATIONS IN SOLID HEXANE BY N
EUTRON INELASTIC SCATTERING
J. CHEM. PHYS., V.41, P.3649-P.3650 (1964)
POLYETHYLENE ..EXPERIMENT/ FREQUENCY DISTRIBUTION ..TOF
/ 125, 178 AND 293DK

64-DE-01 DE-WAMES, R.E./ LEHMAN, G.W.
RE-EXAMINATION OF THE LATTICE DYNAMICS OF WHITE TIN USI
NG A MODIFIED AXIALLY SYMMETRIC MODEL
PHYS. REV., V.135A, P.170 (1964)
SN ..THEORY/ SOLID/ LATTICE DYNAMICS

64-DO-01 DOLLING, G./ GILAT, G.
ON THE TEMPERATURE DEPENDENCE OF PHONONS IN BETA-BRASS
SOLID STATE COMMUN., V.2, P.79 (1964)
CU-ZN ..EXPERIMENT/ DISPERSION RELATION

64-DO-02 DORNER, B./ STILLER, H.
FREQUENCY SPECTRUM IN SOLID METHANE AT 6.5DK
PHYS. STATUS SOLIDI, V.5, P.511-P.514 (1964)
METHANE ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION ..6
.5DK/ BE DETECTOR METHOD

64-EG-01 EGELSTAFF, P.A.
THE THERMAL MOTION OF SIMPLE LIQUIDS

AERE-R-4641 (1964)

NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING LAW/ MEAN SQU
ARE DISPLACEMENT/ DIFFUSION PARAMETER/ LIQUID/ THEORY

64-EG-02 EGELSTAFF, P.A./ HAYWOOD, B.C./ WOOD, F.J./ BASTON
A.H.
MOLECULAR MOTIONS IN LIQUID AND SOLID ORTHO-HYDROGEN
PHYS. LETT., V.12, P.188-P.189 (1964)
H ..EXPERIMENT/ SOLID/ LIQUID ..12, 15, 18 AND 21DK

64-FU-01 FULINSKI, A.
ON THE STATISTICAL MECHANICAL EVALUATION OF THE SLOW NE
UTRON SCATTERING FUNCTION
ACTA PHYS. POL., V.26, P.19 (1964)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY

64-FU-02 FULLWOOD, R.R./ CAERTTNER, E.R./ SLOVACEK, R.E.
THE EFFECTS OF COHERENT SCATTERING ON THE THERMALIZATIO
N OF NEUTRON IN BERYLLIUM
RPI-328-22 (1964)
BE ..NEUTRON SPECTRUM/ EXPERIMENT ..TIME AND BUCKLING D
EPENDENT NEUTRON SPECTRUM

64-GL-01 GLASER, W./ BECURTS, K.H.
INELASTIC NEUTRON SCATTERING BY SOME HYDROGENEOUS MODER
ATORS
NUCL. SCI. ENG., V.20, P.236-P.238 (1964)
BENZENE/ BIPHENYL/ BIPHYLE ..EXPERIMENT/ SOLID/ LIQUID
..2ND MOMENT OF ENERGY TRANSFER

64-HA-01 HAYWOOD, B.C.
A COMPILATION OF THE SCATTERING LAW FOR HEAVY WATER AT
22DC AND 150DC
AERE-R4582 (1964)
D2,O ..LIQUID/ EXPERIMENT/ SCATTERING LAW

64-HA-02 HAYWOOD, B.C./ SINCLAIR, R.N.
A COMPILATION OF THE SCATTERING LAW FOR GRAPHITE, BERYL
LIUM AND BERYLLIUM OXIDE AT 22DC
AERE-R-4732 (1964)
GRAPHITE/ BE/ BE,O ..COMPILATION/ SCATTERING FUNCTION

64-HO-01 HONECK, H.C./ HOUSTON, D.H./ NALIBOFF, Y.D.
MUSE, A COMPUTER CODE FOR MULTIPLE SCATTERING CORRECTIO
NS
GA-5968 (1964)
COMPUTER-CODES ..MULTIPLE SCATTERING/ THEORY

64-JA-01 JANIK, J.A./ JANIK, J.M./ MELLOR, J./ PALEVSKY, H.
STUDY OF MOLECULAR ROTATION IN SOLIDS AND LIQUIDS BY TH
E INELASTIC SCATTERING OF COLD NEUTRONS
J. PHYS. CHEM. SOLIDS, V.25, P.1091-P.1098 (1964)

- C.H4/ C.H3.I/ DIMETHYLACETYLENE/ N.H4.CL.O4/ N.H4.P.F6/
H3.O.CL.O4/ DIMETHOXYAZOXYBENZENE ..SOLID/ LIQUID/ EXP
ERIMENT/ BE FILTER/ TOP
- 64-KE-01 KELLY, B.T.,
THE ELASTIC CONSTANTS OF POLYCRYSTALLINE CARBONS AND GR
APHITES
PHIL. MAG., V.9, P.721-P.737 (1964)
GRAPHITE ..THEORY/ SOLID/ LATTICE DYNAMICS
- 64-KO-01 KOMATSU, K.,
INTERPRETATION OF THE SPECIFIC HEAT OF VARIOUS GRAPHITE
S AT VERY LOW TEMPERATURE
J. PHYS. CHEM. SOLIDS, V.25, P.707-P.712 (1964)
GRAPHITE ..THEORY/ LATTICE DYNAMICS ..SPECIFIC HEAT
- 64-KO-02 KOPPEL, J.U./ YOUNG, J.A.,
NEUTRON SCATTERING BY WATER TAKING INTO ACCOUNT THE ANI
SOTROPY OF THE MOLECULAR VIBRATIONS
NUCL. SCI. ENG., V.19, P.412-P.417 (1964)
H2.O ..THEORY/ MOLECULAR DYNAMICS ..SCATTERING KERNEL/
ANISOTROPIC MODEL
- 64-KR-01 KROO, N./ BORGONOV, G./ SKOELD, K./ LARSSON, K.E.,
INELASTIC SCATTERING OF COLD NEUTRONS BY CONDENSED ARGO
N
PHYS. REV. LETT., V.12, P.721 (1964)
AR ..EXPERIMENT/ LIQUID/ SOLID
- 64-LA-01 LARSSON, K.E./ DAHLBORG, U.,
PROTON MOTIONS IN SOME HYDROGENEOUS LIQUIDS STUDIED BY
COLD NEUTRON SCATTERING
PHYSICA, V.30, P.1561-P.1599 (1964)
H2.O/ D2.O/ PENTANE/ GLYCELINE ..EXPERIMENT/ LIQUID/ FR
EQUENCY DISTRIBUTION
- 64-MA-01 MARADUDIN, A.A./ ANBEGAOKAR, V.,
CALCULATION OF THE SCATTERING FUNCTION S(KAPPA, OMEGA)
FOR THE INELASTIC SCATTERING OF NEUTRONS BY ANHARMONIC
CRYSTALS
PHYS. REV., V.135, P.1071 (1964)
NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ SCATTERIN
G FUNCTION/ LATTICE DYNAMICS/ SCATTERING LAW/ THEORY/ S
OLID ..INELASTIC SCATTERING
- 64-MA-02 MARTIN, D.G.,
AN INVESTIGATION INTO THE NUMBER OF NEIGHBOURING ATOMS
TO BE INCLUDED IN CALCULATIONS OF THE SLOW NEUTRON SCAT
TERING CROSS SECTION OF DEFECTS IN SOLIDS
AERE-R-4527 (1964)
NEUTRON-SCATTERING-IN-SOLIDS ..SOLID/ THEORY
- 64-MA-03 MATESCU, N./ TEUTSH, H./ NAHORNIAK, V./ DIACONESCU,
U. P./ TIMIS, P.,
THE TEMPERATURE DEPENDENCE OF NEUTRON INELASTIC SCATTERI
NG IN HEAVY WATER
PROC. 3RD INTERN. CONF. PEACEFUL USES ATOMIC ENERG
Y, GENEVA, V.2, P.403-P.409 (1964)
D2.O ..LIQUID/ SOLID/ EXPERIMENT/ FREQUENCY DISTRIBUTIO
N / SIGMA (E-E-PRIME,THETA)/ DIFFUSION PARAMETER ..-100
DC/ 24DC/ 73DC
- 64-MC-01 MCMURRY, H.L./ GANNON, L.J.,
A MACHINE PROGRAM FOR CALCULATING SLOW NEUTRON SCATTERI
NG CROSS SECTIONS WITH APPLICATION TO WATER
IDO-16984 (1964)
COMPUTER-CODES/ H2.O ..THEORY/ SCATTERING LAW/ SIGMA(E)
/ SIGMA(E-E-PRIME)/ SIGMA-TRANSPORT(E)/ SIGMA(E-E-PRIME
..THETA)/ MOLECULAR DYNAMICS
- 64-MO-01 MOSTOVOY, V.I./ DIKAREV, V.S./ EREMEEV, I.P./ ISHM
AEV, S.P./ SADIKOV, I.P./
EXPERIMENTAL STUDIES OF NEUTRON THERMALIZATION
PRO. 3RD INTERN. CONF. PEACEFULL USES ATOMIC ENERG
Y, GENEVA, V.2, P.280 (1964)
H2.O/ BIPHENYL ..FREQUENCY SPECTRUM/ EXPERIMENT
- 64-NA-01 NALIBOFF, Y.D./ KOPPEL, J.U.,
HEXSCAT - COHERENT ELASTIC SCATTERING OF NEUTRONS BY HE
XAGONAL LATTICES
GA-6026, P.1-P.20 (1964)
COMPUTER-CODES ..THEORY/ COHERENT/ ..POLYCRYSTAL/ FORTR
AN LIST
- 64-NE-01 NELKIN, M./ GHATAK, A.,
SIMPLE BINARY COLLISION MODEL FOR VAN-HOVE-S G(R,T)
PHYS. REV., V.135A, P.4-P.9 (1964)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING FUNCTION ..DI
LUTE FLUID
- 64-NI-01 NIJBOER, B.R.A./ KOKKEDEE, J.J.J.,
THE SCATTERING OF SLOW NEUTRONS BY CRYSTALS AND LIQUIDS
AERE-TRANS-1004 (1964)
SCATTERING-THEORIES ..THEORY/ LIQUID/ SOLID/ SCATTERING
THEORY
- 64-NI-02 NIJBOER, B.R.A./ KOKKEDEE, J.J.J.,
THE SCATTERING OF SLOW NEUTRONS BY CRYSTALS AND LIQUIDS
AERE-TRANS-1004 (1964)
REVIEW-ARTICLES ..SCATTERING THEORY/ SOLID/ LIQUID ..(T
HIS IS TRANSLATED FROM NED. TIJDSCHR. NATUUR, V.29 P.61
-P.79 AND P.93-P.109, 1963)
- 64-NO-01 NOSSAL, R.,

- TIME-RELAXED PROBABILITY DENSITIES AND CORRELATION FUNCTIONS FOR MODERATELY DENSE FLUIDS
PHYS. REV., V.135A, P.1579-P.1589 (1964)
THEORY-OF-FLUIDS ..THEORY/ LIQUID
- 64-OT-01 OTNES, K./ MELLOR, J./ PALEVSKY, H.
SPECTRA OF SCATTERED COLD NEUTRON FROM GASEOUS, LIQUID AND SOLID METHANE
BULL. AMER. PHYS. SOC., V.9, P.421 (1964)
C.H4 ..EXPERIMENT/ LIQUID
- 64-PA-01 PAGE, D.I.
SCATTERING LAW SCALING-VALUES FOR H₂O AT 5500K
CRRP-1196 (1964)
H₂O ..EXPERIMENT/ MOLECULAR DYNAMICS/ SCATTERING FUNCTION ..5500K/ 1200 PSI
- 64-PE-01 PERETTI, P./ JOUANIN, C.
SCATTERING OF SLOW NEUTRONS BY A CRYSTAL WITH POINT DEFECTS
EUR-1020 (1964)
NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY ..POINT DEFECT
- 64-PE-02 PERETTI, J./ JOUANIN, C.
SCATTERING OF SLOW NEUTRONS BY A CRYSTAL WITH POINT DEFECTS
NUOVO CIMENTO, V.34, P.293-P.302 (1964)
NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING FORMULA/ CRYSTALL/ POINT DEFECT
- 64-PR-01 PRYOR, A.W.
THE ELECTRICAL CONDUCTIVITY OF BERYLLIUM OXIDE
J. NUCL. MATER., V.14, P.258 (1964)
BE.O ..THEORY/ SOLID ..ELECTRICAL CONDUCTIVITY
- 64-PR-02 PRYOR, A.W./ SABINE, T.M.
THERMAL VIBRATIONS IN BE.O
J. NUCL. MATER., V.14, P.275 (1964)
BE.O ..EXPERIMENT ..NEUTRON DIFFRACTION MEASUREMENTS/ DIBBYE PARAMETER
- 64-RA-01 RAHMAN, A.
CORRELATIONS IN MOTION OF ATOMS IN LIQUID ARGON
PHYS. REV., V.136A, P.405 (1964)
AR ..THEORY/ MOLECULAR DYNAMICS ..LIQUID DYNAMICS/ DIGITAL COMPUTER SIMULATION
- 64-RA-02 RANDOLPH, P.D.
SLOW NEUTRON INELASTIC SCATTERING FROM SODIUM
PHYS. REV., V.134A, P.1238 (1964)
NA ..SCATTERING LAW / STRUCTURE FACTOR/ LIQUIDS

- 64-RU-01 RUSH, J.J./ TAYLOR, T.I.
ROTATIONAL MOTIONS IN HEXAMETHYLBENZENE AND AMMONIUM PERCHLORATE BY CROSS SECTION MEASUREMENTS WITH SLOW NEUTRONS
J. PHYS. CHEM. SOLIDS, V.68, P.2534 (1964)
HEXAMETHYLBENZENE/ AMMONIUM PERCHLORATE ..EXPERIMENT/ ROTATIONAL MOTION
- 64-SA-01 SAFFORD, G.J./ DANNER, H.R./ BOUTIN, H./ BERGER, M.
INVESTIGATION OF THE LOW-FREQUENCY MOTIONS IN ISOTACTIC AND ATACTIC POLYPROPYLENE
J. CHEM. PHYS., V.40, P.1426-P.1432 (1964)
POLYPROPYLENE ..EXPERIMENT/ TOF SPECTRA/ FREQUENCY SPECTRA/ LATTICE DYNAMICS
- 64-SC-01 SCHMUNK, R.E.
SLOW NEUTRON INELASTIC SCATTERING FROM BERYLLIUM POWDER
PHYS. REV., V.136A, P.1303 (1964)
BE ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY DISTRIBUTION ..COHERENT SCATTERING LAW/ ROOM TEMP.
- 64-SI-01 SINGWI, K.S.
COHERENT SCATTERING OF SLOW NEUTRONS BY A LIQUID
PHYS. REV. A, V.136, P.969-P.980 (1964)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID DYNAMICS ..COHERENT SCATTERING/ WIDTH FUNCTION/ QUASI-CRYSTALLINE MODEL
- 64-SJ-01 SJOELANDER, A.
LECTURES ON PHONONS AND EXTERNAL RADIATION
PHONONS AND PHONON INTERACTIONS (ED. BY A.BAK), W. A. BENJAMIN INC., P.76-P.101 (1964)
REVIEW-ARTICLES ..SCATTERING THEORY
- 64-SP-01 SPRINGER, T./ HOFMYER, C./ KORNBICHLER, S./ LEMMEL, H.D.
ON THE DETERMINATION OF THE DIFFUSION CONSTANTS OF H₂O, POLYPHENYLS, ZR-H₂O AND D₂O BY NEUTRON SINGLE SCATTERING EXPERIMENTS
PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON THE PEACEFUL USES OF ATOMIC ENERGY, UNITED NATIONS, GENEVA, V.2, P.351 (1964)
H₂O/ D₂O/ PHENYL/ ZR-H ..EXPERIMENT/ LIQUID/ DIFFUSION PARAMETER ..AVE-MU
- 64-ST-01 STEHN, J.R./ GOLDBERG, M.D./ MAGURNO, B.A./ WIENER, CHASMAN, R.
NEUTRON CROSS SECTIONS
BNL-325 (2ND ED, SUPPL. 2), V.1 (1964)
H/ D/ H₂O/ D₂O/ HE/ LI/ BE/ GRAPHITE/ N/ O/ NE/ NA/ M

- G/ AL/ SI/ AR/ K/ COMPILATIONS ..SIGMA(E)/ EXPERIMENT
- 64-SU-01 SUMMERFIELD, G.C.
ON THE FERMI APPROXIMATION IN THERMAL NEUTRON SCATTERING
G
ANN, PHYS., N.Y., V.26, P.72-P.80 (1964)
SCATTERING-THEORIES ..THEORIES/ FERMI-APPROXIMATION
- 64-TE-01 TEUTSCH, H./ MATEESCU, N./ NAHORNIK, V./ DIACONES
CU, A./ TIMIS, P.
COLD NEUTRON SCATTERING BY LIGHT AND HEAVY WATER
REV. ROUM. PHYS., V.9, P.737 (1964)
H2/O/ D2/O ..LIQUID/ EXPERIMENT/ NEUTRON SCATTERING
- 64-VA-01 VAN-DINGENEN, W./ NEVEDE-MEVERGNIES, M.
TOTAL CROSS SECTION FOR SCATTERING OF COLD NEUTRONS BY
PROTONS IN SOME COOLED HYDROGENOUS COMPOUNDS
PHYSICA, V.30, P.237-P.243 (1964)
ACETYLENE/ AMMONIA/ METHANE ..TOTAL CROSS SECTION/ EXPE
RIMENT/ SOLID ..LONG WAVE LENGTH/ 300DK-4DK
- 64-VE-01 VENKATARAMAN, G./ DENIZ, K.U./ IYENGAR, P.K./ VIJA
YARAGHAVAN, P.R./ ROY, A.P.
ANHARMONICITY OF THE TORSIONAL OSCILLATIONS OF THE AMMO
NIUM ION IN N.H4.CL
SOLID STATE COMMUN., V.2, P.17-P.19 (1964)
N.H4.CL ..EXPERIMENT ..300, 228 AND 135DK
- 64-VI-01 VINTAIKIN, E.Z./ GORBACHEV, U.V./ GRUZIN, P.L.
INVESTIGATION OF THE THERMAL VIBRATIONS OF THE ATOMS IN
COPPER BY NEUTRON SPECTROMETRY
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.7 (V.
7), P.367-P.371 (P.296-P.299) (1964 (1965))
CU ..DISPERSION RELATION/ SOLID/ EXPERIMENT
- 64-WH-01 WHITEMORE, W.L.
INELASTIC NEUTRON SCATTERING IN LIQUID METHANE AND LIQU
ID PARAHYDROGEN
NUCL. SCI. ENG., V.18, P.182 (1964)
C.H4/ H ..EXPERIMENT/ LIQUID/ MOLECULAR DYNAMICS ..NEUT
RON SPECTRA/ TOTAL CROSS SECTION
- 64-WI-01 WIKNER, N.F./ JOANOU, G.D./ PARKS, D.E.
NEUTRON THERMALIZATION IN GRAPHITE
NUCL. SCI. ENG., V.19, P.108-P.129 (1964)
GRAPHITE ..EXPERIMENT/ LATTICE VIBRATION/ FREQUENCY DIS
TRIBUTION/ SCATTERING FUNCTION/ NEUTRON SPECTRUM
- 64-WI-02 WILSON, J.V.
LATTICE VIBRATION FREQUENCY SPECTRUM OF GRAPHITE
ORNL-P-585 (1964)
GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBU

TION

- 64-WO-01 WOODS, A.D.B./ CHEN, S.H.
LATTICE DYNAMICS OF MOLYBDENUM
SOLID STATE COMMUN., V.2, P.233 (1964)
MO ..EXPERIMENT/ SOLID/ DISPERSION RELATION
- 64-WO-02 WOODS, A.D.B.
LATTICE DYNAMICS OF TANTALUM
PHYS. REV., V.136A, P.781 (1964)
TA ..EXPERIMENT/ SOLID/ DISPERSION RELATION
- 64-YA-01 YARNELL, J.L./ WARREN, J.L./ WENZEL, R.G.
LATTICE VIBRATIONS IN DIAMOND
PHYS. REV. LETT., V.13, P.13 (1964)
DIAMOND ..EXPERIMENT/ DISPERSION RELATION
- 64-YA-02 YARNELL, J.L./ WARREN, J.L./ WENZEL, R.G./ KOENIG,
S.H.
PHONON DISPERSION CURVES IN BISMUTH
IBM J. RES. DEVELOP., V.8, P.234 (1964)
BI ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RE
LATION
- 64-YI-01 YIP, S./ NELKIN, M.
APPLICATION OF KINETIC MODEL TO TIME-DEPENDENT DENSITY
CORRELATIONS IN FLUIDS
PHYS. REV., V.135A, P.1241-P.1247 (1964)
NEUTRON-SCATTERING-IN-FLUIDS ..CORRELATION FUNCTION/ LI
QUID
- 64-YO-01 YOUNG, J.A./ KOPPEL, J.U.
SLOW NEUTRON SCATTERING BY MOLECULAR HYDROGEN AND DEUTE
RIUM
PHYS. REV., V.135A, P.603-P.611 (1964)
H2/ D2 ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING CROSS S
ECTION ..20.4DK
- 64-YO-02 YOUNG, J.A./ KOPPEL, J.U.
LATTICE VIBRATIONAL SPECTRA OF BERYLLIUM, MAGNESIUM AND
ZINC
PHYS. REV., V.134A, P.1476-P.1479 (1964)
BE/ MG/ ZN ..THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DY
NAMICS ..ROOT SAMPLING METHOD
- 64-YO-03 YOUNG, J.C./ HUFFMAN, D.
EXPERIMENTAL AND THEORETICAL NEUTRON SPECTRA
GA-5319 (1964)
H2/O ..EXPERIMENT/ LIQUID/ NEUTRON SPECTRUM/ THEORY
- 64-YO-04 YOUNG, J.A./ KOPPEL, J.U.
SLOW NEUTRON SCATTERING BY MOLECULAR HYDROGEN AND DEUTE

- RIUM
PHYS. REV., V.135A, P.603-P.611 (1964)
H2/ D2 ..THEORY/ MOLECULAR DYNAMICS/ LIQUID ..SCATTERIN
G CROSS SECTION
- 64-ZW-01 ZWANZIG, R.
INCOHERENT INELASTIC NEUTRON SCATTERING AND SELF-DIFFUS
ION
PHYS. REV. A, V.133, P.50-P.51 (1964)
NEUTRON-SCATTERING-IN-FLUIDS ..INCOHERENT APPROXIMATION
/ SCATTERING THEORY/ SCATTERING LAW ..GENERALIZED SELF-
DIFFUSION COEFFICIENT/ FLUCTUATION DISSIPATION THEOREM
- 65-AK-01 AKCASU, A.Z./ OSBORN, P.K.
A STUDY OF INELASTIC NEUTRON SCATTERING BY ANHARMONIC C
RYSTALS WITH THE DAMPING THEORY
INELASTIC SCATTERING OF NEUTRON, IAEA, V.1, P.261
(1965)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ ANHARMONICITY
- 65-AK-02 AKCASU, A.Z./ OSBORN, R.K.
DAMPING THEORY AND ITS APPLICATION TO NEUTRON SCATTERIN
G BY ANHARMONIC CRYSTALS
NUOVO CIM., V.38, P.175-P.196 (1965)
THEORY-OF-SOLIDS/ SCATTERING-THEORIES ..DAMPING THEORY/
SCATTERING CROSS SECTION/ ANHARMONIC CRYSTAL
- 65-AR-01 ARMSTRONG, S.B.
THE ENERGY-DEPENDENT TOTAL NEUTRON CROSS SECTION OF POL
YETHYLENE
NUCL. SCI. ENG., V.23, P.192 (1965)
POLYETHYLENE ..EXPERIMENT/ SOLID
- 65-BA-01 BAJOREK, A./ MACHEKHINA, T.A./ PARLINSKI, K.
INVESTIGATION OF THE DYNAMICS OF N.H4+ AND H2.O MOLECUL
AR GROUPS IN CRYSTALS
INELASTIC SCATTERING OF SLOW NEUTRONS, IAEA, V.2,
P.355-P.382 (1965)
N.H4,CL/ N.H4,BR/ N.H4,1/ N.H4,F/ N.H4,N.O3/ N.H4,C.N.S
/ (N.H4)2.S.O4/ (N.H4)2.S2.O8/ (N.H4)2.CR2.O7 ..EXPERIM
ENT/ NEUTRON SPECTRUM/ SOLID
- 65-BA-02 BALLY, D./ TODIREANU, S./ TARINA, V.
INELASTIC SCATTERING OF NEUTRONS IN ETHYLENE
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.421
-P.429 (1965)
ETHYLENE ..EXPERIMENT/ SCATTERING LAW ..GAS TARGET/ TRI
PLE-AXIS SPECTROMETER
- 65-BA-03 BATA, L./ KOSZO, E./ KROO, N./ PAL, L.
INELASTIC SCATTERING OF COLD NEUTRONS IN ETHER NEAR THE
CRITICAL POINT
- PHYS. LETT., V.19, P.15 (1965)
ETHYL ETHER ..INELASTIC SCATTERING SPECTRA
- 65-BE-01 BEYSTER, J.R./ KOPPEL, J.U.
INTEGRAL NEUTRON THERMALIZATION
GA-6096 (1965)
D2.O/ H2.O/ POLYETHYLENE/ BE ..THEORY/ EXPERIMENT/ LIQU
ID/ SOLID/ CROSS SECTION EVALUATION
- 65-BE-02 BEYSTER, J.R./ YOUNG, J.C./ NEILL, J.M./ MOWRY, W.
DIFFERENTIAL NEUTRON SCATTERING FROM HYDROGENEOUS MODER
ATORS
PULSED NEUTRON RESEARCH, IAEA, V.1, P.407-P.421 (1
965)
H2.O/ D2.O/ ZR-H ..EXPERIMENT/ DIFFUSION PARAMETER ..AV
E-MU
- 65-BL-01 BLECH, I.A./ AVERBACH, B.L.
MULTIPLE SCATTERING OF NEUTRONS IN VANADIUM AND COPPER
PHYS. REV., V.137A, P.1113 (1965)
V/ CU ..THEORY/ MULTIPLE SCATTERING
- 65-BO-01 BORGONOV, G./ CAGLIOTI, G./ ANTONINI, M.
RECENT RESULTS ON THE CRYSTAL PHYSICS OF WHITE TIN
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.117
(1965)
SN ..EXPERIMENT/ CRYSTAL SPECTROMETER/ DISPERSION RELAT
ION ..ROOM TEMPERATURE/ BODY CENTERED TETRAGONAL
- 65-BO-02 BORST, L.B.
THE DISPERSION RELATION IN LIQUID HELIUM
BNL-940 (C-45), P.173 (1965)
HE ..THEORY
- 65-BO-03 BOUTIN, H./ PRASK, H./ TREVINO, S.F./ DANNER, H.
STUDY OF THE LOW-FREQUENCY MOLECULAR MOTIONS IN POLYETH
YLENE AND THE N-PARAFFINS BY SLOW NEUTRON INELASTIC SCA
TTERING
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.407
(1965)
POLYETHYLENE/ PARAFFINE ..FREQUENCY SPECTRUM/ EXPERIMEN
T/ SOLID
- 65-BO-04 BOUTIN, H./ SAFFORD, G.J.
STUDIES OF THE SOLID AND LIQUID PHASES OF H.F, H.CL AND
H.BR BY SLOW NEUTRON INELASTIC SCATTERING
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.393
-P.406 (1965)
H.F/ H.CL/ H.BR ..EXPERIMENT/ LATTICE VIBRATION/ TOF SP
ECTRUM

- 65-B0-05 BOUTIN, H./ PRASK, H./ SAFFORD, G.J.
LOW-FREQUENCY MOTION OF H₂O MOLECULES IN BERYL FROM NE
UTRON INELASTIC SCATTERING
J. CHEM. PHYS. V.42, P.1469 (1965)
H₂O ., TOF
- 65-B0-06 BOUTIN, H./ PRASK, H./ SAFFORD, G.J.
LOW-FREQUENCY MOTIONS OF H₂O MOLECULES IN BERYL FROM N
EUTRON INELASTIC SCATTERING
J. CHEM. PHYS. V.42, P.1469-P.1470 (1965)
WATER-BERYL ., EXPERIMENT/ TOF SPECTRA/ ADSORBED WATER
- 65-BR-01 BREDOV, M.M./ KOTOV, B.A./ OKUNEVA, N.M./ SHAKH-BU
DAGOV, A.L.
INVESTIGATION OF THE PHONON SPECTRUM OF ALUMINUM
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.7 (V.
7), P.1138-P.1145 (P.1413-P.1422) (1965) (1965)
AL ., PHONON SPECTRUM/ EXPERIMENT
- 65-BR-02 BRODSKY, M.H./ BURSTEIN, E.
APPLICATION OF THE SHELL MODEL TO THE LATTICE VIBRATION
OF LI-H
LATTICE DYNAMICS, PERGAMON PRESS, P.175 (1965)
LI, H ., THEORY/ SOLID/ LATTICE DYNAMICS
- 65-BR-03 BROVMAN, E.G./ KAGAN, Y.
THE VIBRATION SPECTRUM OF THE WHITE TIN LATTICE
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.131
(1965)
SN ., SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
- 65-BR-04 BRUGGER, R.M./ STRONG, K.A./ PUGMIRE, R.J./ GRANT,
D.M.
OBSERVATION OF THE LEAST-ENERGETIC E(SUB U) VIBRATION O
F CYCLOHEXANE
J. CHEM. PHYS. V.50, P.1030 (1965)
CYCLOHEXANE ., EXPERIMENT
- 65-CA-01 CASPERS, H.H./ MURPHY, R.A./ BUCHANAN, R.A.
LATTICE VIBRATIONS OF LA, CL₃
LATTICE DYNAMICS (ED. BY WALLIS, R.F.) PERGAMON PRE
SS, P.109 (1965)
LA, CL₃ ., LATTICE DYNAMICS
- 65-CH-01 CHAMPIER, G./ TOUSSAINT, G.
DYNAMICS OF HEXAGONAL CLOSE PACKED LATTICE, SPECTRA OF
VIBRATIONAL FREQUENCIES (IN FRENCH)
LATTICE DYNAMICS (ED. BY WALLIS, R.F.) PERGAMON PR
ESS, P.119 (1965)
THEORY-OF-SOLIDS ., DISPERSION RELATION/ THEORY/ SOLID/
LATTICE DYNAMICS
- 65-CH-02 CHEN, S.H./ EDER, O.J./ EGELSTAFF, P.A./ HAYWOOD,
B.C.G./ WEBB, F.J.
CO-OPERATIVE MODES OF MOTION IN SIMPLE LIQUIDS
PHYS. REV. LETT. V.19, P.269-P.271 (1965)
NEON/ ARGON/ DEUTERIUM/ CARBON TETRAFLUORIDE ., EXPERIME
NT/ LIQUID/ SIGMATHETA, E)
- 65-CH-03 CHERNOPLEKOV, N.A./ ZEMLYANOV, M.G.
INVESTIGATION OF THE QUASILocal LEVEL IN THE VIBRATION
SPECTRUM OF A LATTICE WITH HEAVY IMPURITY ATOMS
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.49 (V.22
) P.449-P.451 (P.315-P.316) (1965) (1966)
PB-MG ., EXPERIMENT/ IN-BAND MODE/ FREQUENCY SPECTRUM
- 65-CH-04 CHERNOPLEKOV, N.A./ ZEMLYANOV, M.G.
INVESTIGATION OF THE QUASILocal LEVEL IN THE VIBRATION
SPECTRUM OF A LATTICE WITH HEAVY IMPURITY ATOMS
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.49 (V.22
) P.449-P.451 (P.315-P.316) (1965) (1966)
MG-PB ., EXPERIMENT/ LOCAL MODE/ PHONON SPECTRA
- 65-CO-01 COCHRAN, W.
INTERPRETATION OF PHONON DISPERSION CURVES
LATTICE DYNAMICS (ED. BY WALLIS, R.F.) PERGAMON PRE
SS, P.75 (1965)
THEORY-OF-SOLIDS ., DISPERSION RELATION/ THEORY/ SOLID
- 65-CO-02 COCHRAN, W.
THEORETICAL ASPECTS OF PHONON DISPERSION CURVES FOR MET
ALS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.3 (1965)
NEUTRON-SCATTERING-IN-SOLIDS ., DISPERSION RELATION/ THE
ORY/ SOLID/ LATTICE DYNAMICS ., METAL
- 65-CO-03 COCKING, S.J./ EGELSTAFF, P.A.
FREQUENCY-WAVE NUMBER RELATIONSHIP FOR COOPERATIVE MODE
S OF MOTION IN LIQUID LEAD AND TIN
PHYS. LETT. V.16, P.130 (1965)
PB/ SN ., EXPERIMENT/ LIQUID/ DISPERSION RELATION
- 65-CO-04 COWLEY, E.R./ COWLEY, R.A.
ANHARMONIC INTERACTIONS IN ALKALI HALIDES. I
PROC. ROY. SOC., LONDON, SER. A, V.287, P.1409 (1965)
THEORY-OF-SOLIDS ., ANHARMONICITY/ THEORY ., ALKALI HALID
E
- 65-CO-05 COWLEY, R.A.
ANHARMONIC EFFECTS AND THE SCATTERING OF NEUTRON FROM A
CRYSTAL
INELASTIC SCATTERING OF NEUTRON, IAEA, V.1, P.297

- (1965)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ LATTICE D
YNAMICS/ SCATTERING THEORY
- 65-CZ-01 CZACHOR, A.
LATTICE DYNAMICS OF THE HEXAGONAL CLOSE-PACKED STRUCTUR
E
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.181
(1965)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ DISPERSION RELATIO
N/ THEORY/ SOLID ..HEXAGONAL CLOSED PACKED CRYSTAL
- 65-DA-01 DASANNACHARYA, B.A./ RAO, K.R.
NEUTRON SCATTERING FROM LIQUID ARGON
PHYS. REV., V.137A, P.417 (1965)
AR ..EXPERIMENT/ LIQUID/ SCATTERING LAW
- 65-DA-02 DASANNACHARYA, B.A./ VENKATARAMAN, G./ USHA-DENIZ,
K.
COLD NEUTRON SCATTERING BY METHANE
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.157
(1965)
C.H4 ..SIGMA(E,E-PRIME,THETA)/ EXPERIMENT/ LIQUID ..E=
4.87 MILLI-V/ 97.5DK
- 65-DE-01 DE-GENNES, P.G.
QUASI-ELASTIC SCATTERING OF NEUTRONS BY DILUTE POLYMER
SOLUTIONS, 1, FREE-DRAINING LIMIT
PHYSICS, V.3, P.37-P.45 (1965)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ QUASI-ELASTIC/ D
ILUTE POLYMER SOLUTIONS
- 65-DE-02 DE-GRAAF, L.A.
INELASTIC NEUTRON SCATTERING BY SOLID AND LIQUID CYCLOH
EXANE
BNL-940(C-45), P.138 (1965)
CYCLOHEXANE ..INELASTIC SCATTERING SPECTRA/ LIQUID AND
SOLID
- 65-DE-03 DE-WAMES, R.E./ WOLFRAM, T./ LEHMAN, G.W.
LATTICE DYNAMICS, HEAT CAPACITIES, AND DEBYE-WALLER FOR
BE AND ZN USING A MODIFIED AXIALLY SYMMETRIC MODEL
PHYS. REV., V.138A, P.717 (1965)
BE/ ZN ..THEORY/ LATTICE DYNAMICS/ DISPERSION BELATION
- 65-DI-01 DICK, B.G.
SHELL AND EXCHANGE CHARGE MODELS OF INTERATOMIC INTERAC
TIONS IN SOLIDS
LATTICE DYNAMICS (ED, BY WALLIS, R.F.) PERGAMON PR
ESS, P.159 (1965)
THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/
LATTICE DYNAMICS
- 65-DO-01 DOLLING, G./ COWLEY, R.A./ WOODS, A.D.B.
THE CRYSTAL DYNAMICS OF URANIUM DIOXIDE
CAN, J. PHYS., V.43, P.1397-P.1413 (1965)
U.O2 ..EXPERIMENT/ THEORY/ DISPERSION RELATION ..296DK/
7-PARAMETER RIGID ION MODEL/ TRIPLE AXIS SPECTROMETER
- 65-DO-02 DOLLING, G./ GILAT, G.
THERMAL VIBRATIONS OF BETA-BRASS AND THE ORDER-DISORDER
TRANSITION
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.343
(1965)
CU-ZN ..EXPERIMENT/ DISPERSION RELATION ..296DK/ PHASE
TRANSITION
- 65-DO-03 DOLLING, G./ WAUGH, J.L.T.
NORMAL VIBRATIONS IN GALLIUM ARSENIDE
LATTICE DYNAMICS, PERGAMON PRESS, P.19 (1965)
GA,AS ..EXPERIMENT/ DISPERSION RELATION
- 65-DO-04 DOLLING, G.
INELASTIC NEUTRON SCATTERING FROM DOPED GERMANIUM AND S
ILICON
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.249
(1965)
GE/ SI ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSIO
N RELATION
- 65-DO-05 DONALDSON, R.E./ PASSELL, L./ BARTOLINI, W./ GROVE
S, D.
DETERMINATION OF THE COHERENT NEUTRON SCATTERING AMPLIT
UDES OF BORON, NITROGEN, AND OXYGEN BY MIRROR REFLECTIO
N
PHYS. REV., V.138B, P.1116 (1965)
B/ N/ O ..MIRROR REFLECTION/ SCATTERING AMPLITUDE
- 65-DO-06 DORNER, B./ STILLER, H.
LATTICE DYNAMICS OF SOLID METHANE
INELASTIC SCATTERING OF NEUTRONS IN SOLIDS AND LIQ
UIDS, IAEA, V.2, P.291 (1965)
C.H4 ..SIGMA(E,E-PRIME,THETA)/ EXPERIMENT/ SOLID/ MOLEC
ULAR DYNAMICS
- 65-DO-07 DORNER, B./ PLESSER, T./ STILLER, H.
HIGH FREQUENCY WAVES IN LIQUID LEAD
PHYSICA, V.31, P.1537-P.1539 (1965)
PB ..EXPERIMENT
- 65-EG-01 EGELSTAFF, P.A.
THERMAL NEUTRON SCATTERING
ACADEMIC PRESS, LONDON AND NEW YORK (1965)
REVIEW-ARTICLES ..THEORY/ EXPERIMENT ..BOOK

- 65-EG-02 EGELSTAFF, P.A.
THE THERMAL MOTION OF SIMPLE LIQUIDS
BRIT. J. APPL. PHYS., V.16, P.1219 (1965)
REVIEW-ARTICLES ..LIQUID
- 65-EG-03 EGELSTAFF, P.A./ SCHOFIELD, P.
STRUCTURE AND THERMAL MOTION OF SIMPLE LIQUIDS, II
CONTEMP. PHYS., V.6, P.453 (1965)
REVIEW-ARTICLES ..LIQUID/ THEORY/ FREQUENCY SPECTRUM/ CORRELATION FUNCTION/ SCATTERING LAW
- 65-EG-04 EGELSTAFF, P.A./ SCHOFIELD, P.
STRUCTURE AND THERMAL MOTION OF SIMPLE LIQUIDS - 2
CONTEMP. PHYS., V.6, P.453-P.464 (1965)
REVIEW-ARTICLES ..REVIEW/ PHYSICAL PROPERTY/ TIME-DEPENDENT DISTRIBUTION/ NEUTRON EXPERIMENT
- 65-EL-01 ELLIOTT, R.J./ MARADUDIN, A.A.
THEORY OF NEUTRON SCATTERING BY LATTICE VIBRATIONS IN IMPERFECT CRYSTALS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.231 (1965)
- NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ DISPERSION RELATION/ SOLID/ LATTICE DYNAMICS ..IMPERFECT CRYSTAL/ NEUTRON SCATTERING
- 65-FU-01 FULINSKI, A.
STATISTICAL-MECHANICAL THEORY OF INCOHERENT VAN-HOVE-SCATTERING FUNCTION FOR THERMODYNAMIC SYSTEMS
ACTA PHYS. POL., V.27, P.245-P.258 (1965)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY ..INCOHERENT SCATTERING FUNCTION
- 65-GA-01 GANNON, L.G./ MCMURRY, H.L.
A MACHINE PROGRAM FOR CALCULATING SLOW NEUTRON SCATTERING CROSS SECTION WITH EXACT AVERAGING OVER MOLECULAR ORIENTATION
IDO-17087 (1965)
C.H4/ C2.H6/ COMPUTER-CODES ..THEORY/ MOLECULAR DYNAMICS / SCATTERING FUNCTION
- 65-GI-01 GIBBS, A.G./ FERZIGER, J.H.
MODELS FOR THE MOTION OF MOLECULE IN A LIQUID AND THEIR APPLICATION TO SLOW-NEUTRON SCATTERING
PHYS. REV., V.138A, P.701 (1965)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ MOLECULAR DYNAMICS ..KINETIC MODEL/ CORRELATION FUNCTION
- 65-GI-02 GILAT, G./ DOLLING, G.
NORMAL VIBRATIONS OF BETA-BRASS
PHYS. REV., V.138A, P.1053 (1965)
- CU-ZN ..EXPERIMENT/ DISPERSION RELATION/ LATTICE VIBRATION ..296DK/ ALLOYS
- 65-GI-03 GILAT, G.
PHONON DENSITY STATES IN LEAD
SOLID STATE COMMUN., V.3, P.101 (1965)
PB ..PHONON FREQUENCY DISTRIBUTION
- 65-GL-01 GLAESER, W./ CARVALLO, F./ EHRET, G.
PHONON FREQUENCY DISTRIBUTION OF VANADIUM
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.99 (1965)
V ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION/ TOF/ ROTATING CRYSTAL SPECTROMETER ..ROOM TEMP.
- 65-GL-02 GLAESER, W.
DETERMINATION OF THE SCATTERING LAWS OF SOME ORGANIC SUBSTANCES WITH SLOW NEUTRONS
NUKLEONIK, V.7, P.64 (1965)
BENZENE/ BIPHENYL/ BIPHYLE ..EXPERIMENT/ MOLECULAR DYNAMICS/ SCATTERING LAW/ SIGMA (E,E-PRIME,THETA)/ FREQUENCY SPECTRUM
- 65-GL-03 GLAESER, W./ EHRET, G./ MERKEL, A.
RECENT MEASUREMENTS OF THE SCATTERING LAWS OF SOME HETEROGENEOUS MODERATORS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.167 (1965)
C6.H6/ H2.O/ ZR-H ..SCATTERING LAW/ FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID ..20DC FOR C6.H6/ 241DC FOR H2.O/ 210DC FOR ZR-H
- 65-GL-04 GLASSGOLD, A.E.
LOW TEMPERATURE PROPERTIES OF LIQUID HE (ISO, A=3)
BNL-940 (C-45), P.69 (1965)
HE ..THEORY
- 65-GO-01 GOLIKOV, V.V./ ZHOKORSKJA, I./ SHAPIRO, F.L./ SHKATULA, A./ JANIK, E.
SLOW NEUTRON SCATTERING IN WATER AND SOME ORGANIC SUBSTANCES
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.201 (1965)
C2.H6.O2/ H2.O/ C2.H4.O2/ C6.H6 ..EXPERIMENT/ LIQUID/ SOLID
- 65-GR-01 GRIFFING, G.W.
ON THE USE OF THE LANGEVIN EQUATION OF BROWNIAN MOTION FOR THE ANALYSES OF COLD AND SLOW NEUTRON SCATTERING BY LIQUID METHANE
J. CHEM. PHYS., V.43, P.3328-P.3336 (1965)
C.H4 ..THEORY/ LIQUID ..LANGEVIN EQUATION/ COMPARED WITH

H EXPERIMENT

- 65-GR-02 GRIFFING, G.W.
APPLICATION OF THE LANGEVIN EQUATION TO THE SCATTERING
OF NEUTRONS FROM LIQUID METHANE
BNL-940(C-45), P.149 (1965)
METHANE ..THEORY/ LIQUID METHANE
- 65-GR-03 GRIFFING, G.W.
SCATTERING OF SLOW NEUTRONS BY DEUTERATED METHANE
PHYS. REV. A, V.136, P.1053 (1965)
METHANE ..GAS DYNAMICS/ C.D4
- 65-GR-04 GRINDLAY, J./ HOWARD, R.
ON THE LATTICE DYNAMICS AND SPECIFIC HEAT OF THE RARE-G
AS SOLIDS
LATTICE DYNAMICS, PERGAMON PRESS, P.129 (1965)
AR ..THEORY/ SOLID/ LATTICE DYNAMICS
- 65-HA-01 HAHN, H.
LATTICE VIBRATIONS IN MOLECULAR CRYSTALS AND NEUTRON SC
ATTERING
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.279
-P.289 (1965)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MOLECULAR CRYSTA
L DYNAMICS/ SCATTERING FUNCTION
- 65-HA-02 HARDY, J.R./ KARO, A.M.
LATTICE DYNAMICS OF RUBIDIUM IODIDE IN RELATION TO THE
NA,CL-CS,CL PHASE TRANSITION
LATTICE DYNAMICS, PERGAMON PRESS, P.195 (1965)
RB.I ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNA
MICS
- 65-HA-03 HARKER, Y.D./ BRUGGER, R.M.
SLOW-NEUTRON INELASTIC SCATTERING FROM LOW-TEMPERATURE
GASEOUS METHANE, LIQUID METHANE AND SOLID METHANE
J. CHEM. PHYS., V.42, P.275-P.284 (1965)
METHANE ..SOLID/ LIQUID/ GAS/ SCATTERING LAW/ EXPERIMEN
T/ TOF/ MOLECULAR DYNAMICS ..125DK/ 99DK/ 83DK
- 65-HA-04 HARLING, O.K./ LEONARD-JR, B.R.
A MULTIPHONON NEUTRON SCATTERING STUDY OF HYDROGEN BOUN
DING IN ZIRCONIUM HYDRIDE
BNL-940(C-45), P.96-P.104 (1965)
ZR-H ..EXPERIMENT/ LATTICE DYNAMICS ..INCOHERENT/ TOF/
295DK
- 65-HA-05 HARRISON, W.A.
THEORY OF PHONON DISPERSION IN METAL
LATTICE DYNAMICS (ED, BY WALLIS, R.F) PERGAMON PRE
SS, P.85 (1965)
- THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/
LATTICE DYNAMICS
- 65-HA-06 HAUTECLER, S./ VAN-DINGEN, W.
LATTICE DYNAMICS OF NICKEL AND KREBS-S MODEL
BROOKHAVEN SYMPOSIUM, BNL-970(C-45), P.83 (1965)
NI ..PHONON DISPERSION
- 65-HO-01 HOFMEYER, C.H.
DETERMINATION OF THE DIFFUSION CONSTANTS DCE,T) AND DVC
T) OF THERMAL NEUTRONS IN H2,O, PHENYLENE, ZR-H1.99 AND
D2,O BY MEASUREMENT OF SCATTERING ANGULAR DISTRIBUTION
3, BENZENE, DIPHENYL,
- 0- M- P- TERPHEYL
NUKLEONIK, V.7, P.286 (1965)
BENZENE/ BIPHENYL/ TERPHEYL ..EXPERIMENT ..21DC-150DC
- 65-HO-02 HOLAS, A.
NOTE ON DISPERSION CURVE CALCULATIONS IN ZINC
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.205
(1965)
ZN ..LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION
- 65-HO-03 HONECK, H.C./ NALIBOFF, Y.D.
FLANGE
GA-6824 (1965)
COMPUTER-CODES
- 65-HO-04 HORSLEY, A.
NEUTRON CROSS SECTIONS OF THE PROTON IN THE ENERGY RANG
E 0.0001EV-20MEV
AWRE 0-23/65 (1965)
H ..CROSS SECTION EVALUATION ..SIGMA TOTAL
- 65-HU-01 HULIN, M.
LATTICE DYNAMICS OF TELLURIUM
LATTICE DYNAMICS, PERGAMON PRESS, P.135 (1965)
TE ..THEORY/ SOLID/ LATTICE DYNAMICS
- 65-II-01 IJIMA, S./ TOKIZAWA, M.
UNCLE, AN IBM-7090 PROGRAM FOR CALCULATING THE SCATTERI
NG KERNELS FOR ANISOTROPIC CRYSTAL (IN JAPANESE)
JAERI-1087 (1965)
COMPUTER-CODES
- 65-IM-01 IMRY, Y./ PELAH, I./ WIENER, E.
PROTON DYNAMICS IN HYDROGEN-BONDED FERROELECTRICS
J. CHEM. PHYS., V.43, P.2332-P.2340 (1965)
K.H2.P.04/ K2.H.P.04/ K3.P.04 ..EXPERIMENT/ LATTICE DYN
AMICS ..TOF
- 65-IY-01 IYENGER, P.K./ VENKATARAMAN, G./ VIJAYARAGHAVAN, P

- R./ ROY, A.P.
LATTICE DYNAMICS OF MAGNESIUM
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.15
3 (1965)
MG ..LATTICE DYNAMICS/ SOLID/ DISPERSION RELATION
- 65-1V-02 IYENGER, P.K./ VENKATARAMAN, G./ VIJAYARAGHAVAN,
P.R./ ROY, A.P.
DISPERSION RELATIONS FOR PHONONS IN MAGNESIUM
LATTICE DYNAMICS (ED. BY WALLIS, R.E.), PERGAMON P
RESS, P.223 (1965)
MG ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMI
CS
- 65-JA-01 JANIK, J.A.
MOLECULAR DYNAMICS INVESTIGATED BY NEUTRON SCATTERING
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.243
-P.278 (1965)
H2.O ..SOLID/ LIQUID/ FREQUENCY DISTRIBUTION/ SIGMA(E,E
-PRIME,THETA)
- 65-JO-01 JOSHI, S.K./ SHARMA, K.C.
THE NATURE OF THE PHONON SPECTRUM AND THE ANALYSIS OF L
ATTICE THERMAL CONDUCTIVITY
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.285
(1965)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS
- 65-KA-01 KAGAN, J./ ZHERNOV, A.P.
EFFECT OF ANHARMONICITY ON THE PHONON SPECTRUM NEAR ITS
DISCONTINUITY
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.391
(1965)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS
- 65-KI-01 KITAGAWA, T./ MIYAZAWA, T.
FREQUENCY DISTRIBUTION OF CRYSTAL VIBRATIONS AND SPECIF
IC HEAT OF POLYETHYLENE
REP. PROG. POLYMER PHYS., V.8, P.53-P.56 (1965)
POLYETHYLENE ..THEORY/ FREQUENCY DISTRIBUTION/ LATTICE
DYNAMICS/ MOLECULAR DYNAMICS ..SPECIFIC HEAT
- 65-KL-01 KLEY, W./ PERETTI, J./ RUBIN, R./ VERDAN, G.
HYDROGEN MOTION IN PRIMARY SOLUTIONS OF HYDROGEN IN SOM
E TRANSITION ELEMENTS
BNL-940(C-45), P.105 (1965)
V-H/ NB-H/ PD-H ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIBU
TION ..500C FOR V-H/ 33DC FOR NB-H, PD-H
- 65-KO-01 KOPPEL, J.U./ YOUNG, J.A.
THE ROLE OF INTERFERENCE SCATTERING IN NEUTRON THERMAL I
ZATION BY HEAVY WATER

- NUKLEONIK, V.7, P.408-P.415 (1965)
D2.O ..LIQUID/ THEORY/ SIGMA (E)/ SIGMA (THETA,E)/ SCAT
TERING LAW/ NEUTRON SPECTRUM
- 65-KO-02 KORNBIHLER, S.
DETERMINATION OF THE DIFFUSION CONSTANTS D(E,T) AND AVE
-D(V,T) OF THERMAL NEUTRONS IN H2.O, PHENYLENE, ZR-H1.92
AND D2.O BY MEASUREMENT OF THE ANGULAR DISTRIBUTION OF
SCATTERED NEUTRONS, PART 2, ZIRCONIUM HYDRIDE AND HEAV
Y WATER (IN GERMANY)
NUKLEONIK, V.7, P.281 (1965)
D2.O/ ZR-H ..EXPERIMENT/ LIQUID/ DIFFUSION PARAMETER
- 65-KR-01 KREBS, K.
DISPERSION CURVES AND LATTICE FREQUENCY DISTRIBUTION OF
METALS
PHYS. REV., V.138A, P.143-P.147 (1965)
LI/ NA/ K ..THEORY/ SOLID/ DISPERSION RELATION
- 65-KR-02 KROO, N./ BORGONOVI, G./ SKOELD, K./ LARSSON, K.R.
INELASTIC SCATTERING OF COLD NEUTRONS BY CONDENSED ARGO
N
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.101
(1965)
AR ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
- 65-LA-01 LARSSON, K.E./ DAHLBORG, U./ JOVIC, D.
COLLECTIVE ATOMIC MOTIONS IN LIQUID ALUMINIUM STUDIED B
Y COLD NEUTRON SCATTERING
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.117
(1965)
AL ..EXPERIMENT/ LIQUID/ DISPERSION RELATION/ FREQUENCY
DISTRIBUTION
- 65-LA-02 LARSSON, K.E.
LIQUID DYNAMICS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.3 (C
1965)
REVIEW-ARTICLES ..LIQUID/ MOLECULAR DYNAMICS
- 65-LA-03 LAX, M.
COMMENTS ON THE SHELL MODEL FOR LATTICE VIBRATIONS
LATTICE DYNAMICS (ED. BY WALLIS, R.F.) PERGAMON PR
ESS, P.179 (1965)
THEORY-OF-SOLIDS ..THEORY
- 65-LE-01 LEHMAN, G.W./ WOLFRAM, T./ DE-WAMES, R.E.
STUDIES IN LATTICE DYNAMICS OF METALS USING THE A-S MOD
EL
LATTICE DYNAMICS, PERGAMON PRESS, P.101 (1965)
THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/
LATTICE DYNAMICS

- 65-LE-02 LEMMEL, H.
DETERMINATION OF THE DIFFUSION CONSTANTS $D(E,T)$ AND AVERAGE
-DVCT) OF THERMAL NEUTRONS IN H₂O, PHENYLENE, ZR-H₂O.92
AND D₂O BY MEASUREMENT OF THE ANGULAR DISTRIBUTION OF
SCATTERED NEUTRONS. PART 1. H₂O (IN GERMANY)
NUKLEONIK, V.7, P.266-P.280 (1965)
H₂O ..EXPERIMENT/ LIQUID/ DISPERSION PARAMETER/ SIGMA(
THETA,E)
- 65-LO-01 LOMER, W.M.
NEUTRON SPECTROSCOPY OF SOLIDS - PART 1
CONTEMP. PHYS., V.7, P.278-P.293 (1965)
REVIEW-ARTICLES ..REVIEW/ NEUTRON SCATTERING/ LATTICE D
YNAMICS
- 65-LO-02 LONG-PRICE, D.
PHONON IN WHITE TIN
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.109
(1965)
SN ..EXPERIMENT/ TOF/ DISPERSION RELATION ..ROOM TEMPER
ATURE/ BODY CENTERED TETRAGONAL
- 65-MA-01 MAIOROV, L.V.
ASYMPTOTIC FORM OF THE SCATTERING LAW FOR SLOW NEUTRONS
AT. ENERG., USSR (SOV. AT. ENERGY), V.19 (V.19), P
.67-P.69 (P.940-P.943) (1965 (1965))
SCATTERING-THEORIES ..SCATTERING FUNCTION
- 65-MA-02 MALISZEWSKI, E./ ROSULAWSKI, J.H./ SLEDZIEWSKA, D.
LATTICE DYNAMICS OF ZINC
LATTICE DYNAMICS, EDITED BY WALLIS, R.F., PERGAMON
PRESS, P.33 (1965)
ZN ..EXPERIMENT/ SOLID/ DISPERSION RELATION
- 65-MA-03 MARADUDIN, A.A.
A SIMPLE EXPRESSION FOR THE QUARTIC ANHARMONIC CONTRIBU
TION TO THE HELMHOLTZ FREE ENERGY OF A SPECIAL MODEL OF
AN F.C.C. CRYSTAL
LA-3379-MS (1965)
THEORY-OF-SOLIDS ..ANHARMONICITY/ THEORY ..HELMHOLTZ FR
EE ENERGY
- 65-MA-04 MATSUOKA, K./ ARAI, K.
MANUAL OF EGELSTAFF-SCHOFIELD MODEL CODE (E.S. CODE)
JAERI-1094 (1965)
COMPUTER-CODES
- 65-MJ-01 MIKKE, K./ DOBRZYNSKI, L.
STUDIES OF AMMONIUM ION MOTIONS IN SOLID SOLUTIONS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.383
(1965)
- N.H4.I/ K.I ..FREQUENCY SPECTRA/ SOLID SOLUTION
- 65-MO-01 MOELLER, H.B./ MACKINTOSH, A.R.
INELASTIC SCATTERING OF NEUTRONS IN CHROMIUM
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.95
(1965)
CR ..EXPERIMENT/ SOLID/ DISPERSION RELATION ..TRIPLE AX
IS SPECTROMETER
- 65-MO-02 MOELLER, H.B./ MACKINTOSH, A.R.
OBSERVATION OF RESONANT LATTICE MODES BY INELASTIC NEUT
RON SCATTERING
PHYS. REV. LETT., V.15, P.623 (1965)
CR-W ..DISPERSION RELATION/ EXPERIMENT/ LATTICE DYNAMIC
S ..DISORDERED ALLOY
- 65-MO-03 MOZER, B./ OTNES, K./ PALEVSKY, H.
MEASURED VIBRATIONAL FREQUENCY DISTRIBUTION OF NI, V, T
I AND TI67-ZR33
LATTICE DYNAMICS, EDITED BY WALLIS, R.F., PERGAMON
PRESS, P.63 (1965)
NI/ V/ TI/ TI-ZR ..EXPERIMENT/ SOLID/ FREQUENCY DISTRIB
UTION
- 65-MU-01 MUSGRAVE, M.J.P.
LATTICE DYNAMICAL MODEL FOR GRAY AND WHITE TIN AND THEI
R RELEVANCE TO TRANSITIONS AT HIGH PRESSURE
LATTICE DYNAMICS, PERGAMON PRESS, P.189 (1965)
SN ..THEORY/ SOLID/ LATTICE DYNAMICS
- 65-MY-01 MYERS, W./ DONOVAN, J.L./ KING, J.S.
POLYETHYLENE FREQUENCY SPECTRUM FROM WARM-NEUTRON SCATTE
RING
J. CHEM. PHYS., V.42, P.4299 (1965)
POLYETHYLENE ..SIGMA(E, E-PRIME, THETA)/ FREQUENCY SPECTR
UM/ EXPERIMENT/ SOLID
- 65-MY-02 MYERS, W./ SUMMERFIELD, G.C./ KING, J.S.
NEUTRON SCATTERING IN STRETCH-ORIENTED POLYETHYLENE
BROOKHAVEN SYMPOSIUM, BNL-940 (C-45), P.126 (1965)
POLYETHYLENE ..FREQUENCY SPECTRA
- 65-NA-01 NAKAGAWA, Y./ WOODS, A.D.B.
LATTICE DYNAMICS OF NIOBIUM
LATTICE DYNAMICS, EDITED BY WALLIS, R.F., PERGAMON
PRESS, P.39 (1965)
NB ..EXPERIMENT/ SOLID/ DISPERSION RELATION
- 65-NA-02 NALIBOFF, Y.D.
LHK - AN IBM 7044 PROGRAM TO CALCULATE CROSS SECTIONS A
ND KERNELS FOR LIQUID PARA- AND ORTHO-HYDROGEN
GA-5652 (1965)

COMPUTER-CODES/ HYDROGEN ..THEORY/ LIQUID

- 65-NE-01 NELKIN, M./ VAN-LEEUEWEN, J.M.J./ YIP, S.
A KINETIC DESCRIPTION OF THE VAN-HOVE CORRELATION FUNCTIONS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.35-P.58 (1965)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..KINETIC THEORY
- 65-NU-01 NUSIMOVICI, M.A./ BIRMAN, J.L.
LATTICE DYNAMICS OF WURTZITE, CD.S
PHYS. REV., V.156, P.925 (1965)
CD.S ..LATTICE DYNAMICS
- 65-OT-01 OTTEWITTE, E.H.
THE EFFECT OF TEMPERATURE, MICROSTRUCTURE OF SINTERED BERYLLIUM OXIDE ON THE SCATTERING CROSS SECTIONS FOR A SNAP REACTOR
NAA-SR-MEMO-11604 (1965)
BE.O ..SIGMA(E)/ EXPERIMENTS/ SOLID ..290DK/ 800DK/ 1300 DK/ 1500DK
- 65-PA-01 PAL, S./ SHARMA, P.K.
DISPERSION OF LATTICE WAVES IN TUNGSTEN
PHYS. LETT., V.19, P.105 (1965)
W ..THEORY/ PHONON DISPERSION
- 65-PA-02 PALEVSKY, H.
A STUDY OF THE DIFFUSIVE MOTIONS OF LIQUIDS BY MEANS OF COLD-NEUTRON SCATTERING EXPERIMENTS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.265 (1965)
PB/ H2.O/ SN ..EXPERIMENT/ LIQUID
- 65-PA-03 PALEVSKY, H.
SLOW NEUTRON STUDIES OF MOLECULAR MOTIONS IN CONDENSED MATTER
BNL-9297 (1965)
REVIEW-ARTICLES ..EXPERIMENT/ MOLECULAR DYNAMICS
- 65-PA-04 PATHAK, K.N.
THEORY OF ANHARMONIC CRYSTALS
PHYS. REV., V.139, P.1569 (1965)
THEORY-OF-SOLIDS ..ANHARMONICITY/ DISPERSION RELATION/ THEORY ..GREEN FUNCTION
- 65-PE-01 PECKHAM, G.
PHONON DISPERSION RELATIONS IN MAGNESIUM OXIDE
LATTICE DYNAMICS (ED. BY B.F.WALLIS), P.49 (1965)
MG.O ..LATTICE DYNAMICS
- 65-PE-02 PELAH, I./ KREBS, K./ IMRY, Y.

INELASTIC NEUTRON SPECTRA AND THE VIBRATIONAL MODES OF THE HYDROGEN LAYER IN ALKALI AND ALKALINE-EARTH HYDROXIDES

J. CHEM. PHYS., V.43, P.1864-P.1869 (1965)
CA.(O.H)2/ MG.(O.H)2/ LI.O.H ..EXPERIMENT/ LATTICE DYNAMICS ..TOF

65-PE-03 PELAH, I./ WIENER, E./ IMRY, J.
INDICATION OF PROTON TUNNELLING IN K.H2.P.O4 BY COMPARING NEUTRON INELASTIC SCATTERING AND INFRARED MEASUREMENTS

INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.325-P.331 (1965)
K.H2.P.O4/ K2.H.P.O4/ K3.P.O4 ..EXPERIMENT/ LATTICE DYNAMICS ..TOF

65-PO-01 POPE, N.K./ NATION, R.
THE VAN HOVE SCATTERING FUNCTION FOR WATER
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.141-P.146 (1965)
H2.O ..SCATTERING LAW/ CORRELATION FUNCTION

65-PO-02 POPE, N.K.
THE FORCE CONSTANTS OF GERMANIUM
LATTICE DYNAMICS, PERGAMON PRESS, P.147 (1965)
GE ..LATTICE DYNAMICS/ SOLID/ THEORY

65-PR-01 PRAKASH, S./ JOSHI, S.K.
FORCE CONSTANTS OF SODIUM
PHYS. REV., V.140A, P.1754 (1965)
NA ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION

65-RA-01 RAHMAN, A.
NORMIALIZATION OF DIFFRACTION DATA FROM LIQUIDS
J. CHEM. PHYS., V.42, P.3540 (1965)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID

65-RA-02 RANDOLPH, P.D.
SLOW NEUTRON SCATTERING STUDIES OF LIQUID AND SOLID ARGON
IDO-17089 (1965)
AR ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY DISTRIBUTION ..LIQUID AND SOLID

65-RO-01 ROGALSKA, Z.
ROTATIONAL DYNAMICS OF SOLID METHANE MOLECULES BY SLOW NEUTRON CROSS-SECTION MEASUREMENTS
ACTA PHYS. POL., V.27, P.581-P.586 (1965)
METHANE ..EXPERIMENT/ SOLID/ LIQUID/ TOTAL CROSS SECTION N ..105DK/ 80DK/ 1.5MEV-4.5MEV

65-RO-02 ROSENBAUM, M./ ZWEIFEL, P.F.

QUASICLASSICAL THEORY OF NEUTRON SCATTERING
PHYS. REV., V.137B, P.271-P.284 (1965)
SCATTERING-THEORIES ..SCATTERING THEORY

65-RO-03 ROSENSTOCK, H.B.,
APPLICATION OF A SUM RULE TO THE STUDY OF INTERATOMIC FORCES

LATTICE DYNAMICS, P.205 (1965)
THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/
LATTICE DYNAMICS

65-RO-04 ROWE, J.M./ BROCKHOUSE, B.N./ SVENSSON, E.C.
LATTICE DYNAMICS OF WHITE TIN

PHYS. REV. LETT., V.14, P.554 (1965)
SN ..EXPERIMENT/ DISPERSION RELATION ..BODY CENTERED TETRAGONAL

65-RU-01 RUBIN, R./ PERETTI, J./ VERDAN, G./ KLEY, W.,
INELASTIC SCATTERING OF COLD NEUTRONS BY LOCALIZED MODES IN VANADIUM HYDRIDE SYSTEM
PHYS. LETT., V.14, P.100-P.102 (1965)
V/ V-H ..EXPERIMENT/ SOLID/ ..ROOM TEMP. FOR V/ 150 DC
FOR V-H/ LOCALIZED MODE IN V DUE TO H

65-RU-02 RUSH, J.J./ TAYLOR, T.I.,
STUDY OF LOW-FREQUENCY MOTIONS IN SEVERAL FERROELECTRIC SALTS BY THE INELASTIC SCATTERING OF COLD NEUTRONS
INELASTIC SCATTERING OF NEUTRONS, V.2, P.333-P.345 (1965)
K4,FE.(C.N)6/ (N.H4)2.S.O4/ N.H4.H.S.O4/ (N.H4)2.BE.F4
..EXPERIMENT/ MOLECULAR LATTICE DYNAMICS/ NEUTRON SPECTROSCOPY ..TOF/ 296, 177 AND 125DK

65-SA-01 SAFFORD, G.J./ LOSACCO, F.,
STUDY OF LOW-FREQUENCY MOTIONS IN NYLON-6
J. CHEM. PHYS., V.43, P.3404-P.3405 (1965)
NYLON ..EXPERIMENT/ TOF SPECTRA/ FREQUENCY DISTRIBUTION / LATTICE DYNAMICS

65-SC-01 SCHMUNK, R.E./ BRUGGER, R.M./ RANDOLPH, P.D.,
INTERFERENCE EFFECTS IN SLOW NEUTRON INELASTIC SCATTERING FROM POLYCRYSTALLINE SOLIDS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.379 (1965)

AL/ BE ..EXPERIMENT/ SCATTERING FUNCTION/ TOF/ FREQUENCY DISTRIBUTION ..POLYCRYSTAL/ COHERENT SCATTERER

65-SC-02 SCHMUNK, R.E./ GAUIN, W.R.,
DISPERSION RELATIONS OF WHITE TIN
PHYS. REV. LETT., V.14, P.44 (1965)
SN ..EXPERIMENT/ DISPERSION RELATION ..BODY CENTERED TETRAGONAL CRYSTAL

65-SE-01 SEARS, V.F.,
THE ITINERANT OSCILLATOR MODEL OF LIQUIDS
PROC. PHYS. SOC., LONDON, V.86, P.953-P.964 (1965)
NEUTRON-SCATTERING-IN-FLUIDS/ AR ..LIQUID/ CORRELATION FUNCTION

65-SE-02 SEARS, V.F.,
THEORY OF COLD NEUTRON SCATTERING BY HYDROGEN IN LIQUID ARGON

PROC. PHYS. SOC., LONDON, V.86, P.965 (1965)
H ..SCATTERING LAW

65-SH-01 SHAM, L.T.,
A CALCULATION OF THE PHONON FREQUENCIES IN SODIUM
PROC. ROY. SOC., LONDON, SER. A, V.283, P.33 (1965)

NA ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION

65-SH-02 SHIMADA, S.,
NELKER, A CODE OF SCATTERING KERNEL CALCULATION FOR BOUND HYDROGEN (IN JAPANESE)
JAERI-1085 (1965)
COMPUTER-CODES

65-SI-01 SIGMAR, D.J.,
THE SELF-CORRELATION FUNCTION OF REAL GASES
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.59-P.84 (1965)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ GAS ..SELF-CORRELATION FUNCTION

65-SI-02 SINGH, R.P./ MANI, K.K./ KELKAR, V.M.,
PHONON DISPERSION RELATIONS IN ALKALI METALS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.77 (1965)

THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..ALKALI METAL

65-SI-03 SINGWI, K.S./ FELDMANN, G.,
COHERENT SCATTERING OF SLOW NEUTRONS BY LIQUID SODIUM
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.85-P.99 (1965)

NA ..THEORY/ SCATTERING FUNCTION/ LIQUID ..PHONON IN LIQUID

65-SI-04 SINGWI, K.S.,
COHERENT SCATTERING OF SLOW NEUTRONS BY LIQUID ARGON
PHYSICA, V.31, P.1257-P.1285 (1965)
ARGON ..THEORY/ LIQUID/ SCATTERING LAW ..COHERENT SCATTERING/ ONE-PHONON APPROXIMATION

- 65-SJ-05 SINGWI, K.S./ ANDERSON, L.
PHONON ANOMALY AND COHERENT SCATTERING OF SLOW NEUTRONS IN
LIQUID METALS
PHYS. REV. LETT., V.15, P.693 (1965)
NEUTRON-SCATTERING-IN-FLUIDS ..KOHN EFFECT
- 65-SJ-06 SINHA, S.K./ SQUIRES, G.L.
THE FREQUENCIES OF THE NORMAL MODES OF COPPER
LATTICE DYNAMICS. (ED. BY WALLIS, R.F.), PERGAMON
PRESS, P.53 (1965)
CU ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/
TOF
- 65-SJ-01 SJOELANDER, A./ JOHNSON, R.
INTERPRETATION OF SLOW NEUTRON SCATTERING DATA IN METAL
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.61
(1965)
NEUTRON-SCATTERING-IN-SOLIDS ..DISPERSION RELATION/ THE
ORY/ SOLID/ LATTICE DYNAMICS ..METAL/ NEUTRON SCATTERIN
G
- 65-SL-01 SLATER, L.S.
THE TEMPERATURE VARIATION OF THE SCATTERING PROPERTIES
OF CRYSTALS
ADV. PHYS., V.14, P.1 (1965)
V/ SI/ CU/ NEUTRON-SCATTERING-IN-SOLIDS ..HARMONIC APPR
OXIMATION/ DEBYE APPROXIMATION
- 65-SQ-01 SQUIRES, G.L.
MEASUREMENTS OF THE FREQUENCIES OF THE NORMAL MODES OF
MAGNESIUM
BROOKHAVEN SYMPOSIUM, BNL-970 (C-45), P.78 (1965)
MG ..PHONON DISPERSION/ EXPERIMENT
- 65-SR-01 SRINIVASAN, R./ RAO, R.R.
STRAIN DEPENDENCE OF THE FREQUENCIES AND THERMAL EXPANS
ION OF THE HEXAGONAL CLOSE-PACKED LATTICE
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.325
(1965)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS
- 65-SR-02 SRIVASTAVA, P.L.
A COMPARISON BETWEEN THE ELECTRON-PHONON INTERACTIONS O
F TOYA AND BAILYN
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.49
(1965)
THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/
LATTICE DYNAMICS ..ELECTRON-PHONON INTERACTION
- 65-ST-01 STEDMAN, R./ NILSSON, G.
OBSERVATIONS ON THE FERM! SURFACE OF ALUMINUM BY NEUTRO
- N SPECTROMETRY
PHYS. REV. LETT., V.15, P.634 (1965)
AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
- 65-ST-02 STEDMAN, A.T./ NILSSON, G.
PHONON IN ALUMINIUM AT 80DK
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.211
(1965)
AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
..CRYSTAL SPECTROMETER/ 80DK
- 65-ST-03 STEELE, W.A./ PECORA, R.
SCATTERING FROM FLUIDS OF NONSPHERICAL MOLECULES. I. X-
RAY AND NEUTRONS, II. LIGHT
J. CHEM. PHYS., V.42, P.1863-P.1879 (1965)
SCATTERING-THEORIES ..THEORY/ STATISTICAL MECHANICS/ DI
FFERENTIAL CROSS SECTION/ CORRELATION FUNCTION ..ELASTI
C AND INELASTIC SCATTERING
- 65-ST-04 STILLER, H.
PROTON MOTIONS IN ACID AQUEOUS SOLUTIONS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.179
-P.189 (1965)
H,F-H2,O/ N,H4,F-H2,O ..EXPERIMENT/ SOLUTION/ BE-FILTER
DETECTOR SPECTRUM
- 65-ST-05 STRAKER, E.A.
INELASTIC NEUTRON SCATTERING FROM PRESSURIZED ETHANE
J. CHEM. PHYS., V.43, P.4134 (1965)
C2,H6 ..SCATTERING LAW
- 65-ST-06 STRAKER, E.A./ KING, J.S./ CARPENTER, J.M./ VINCEN
T, D.H.
INELASTIC SCATTERING OF THERMAL NEUTRONS FROM PRESSURIZ
ED ETHANE
BNL-940(C-45), P.142 (1965)
ETHANE ..EXPERIMENT/ PRESSURIZED ETHANE
- 65-ST-07 STRONG, K.A./ HARKER, Y.D./ BRUGGER, R.M.
SCATTERING OF SLOW NEUTRONS FROM AMMONIA AND HYDROGEN S
ULFIDE
J. CHEM. PHYS., V.42, P.1568-P.1572 (1965)
AMMONIA/ HYDROGEN SULFIDE ..EXPERIMENT/ GAS/ CROSS SECT
ION EVALUATION ..MTR-PHASE-CHOPPER
- 65-SU-01 SUMMERFIELD, G.C.
DETERMINATION OF THE PHONON SPECTRUM OF POLYETHYLENE BY
NEUTRON SCATTERING
J. CHEM. PHYS., V.43, P.1079-P.1080 (1965)
POLYETHYLENE ..THEORY ..SCATTERING CROSS SECTION FOR PO
LYETHYLENE

- 65-SU-02 SUNAKAWA, S. / FUKUI, Y.
THE PSEUDOPOTENTIAL FOR THE HARD-CORE INTERACTION
PROGR. THEORET. PHYS., KYOTO, V.34, P.693 (1965)
THEORY-OF-SOLIDS ..PSEUDOPOTENTIAL
- 65-SV-01 SVENSSON, E.C. / BROCKHOUSE, B.N. / ROWE, J.M.
IN-BAND, MODES OF VIBRATIONS OF A DILUTE DISORDERED AL
LOYS CU(AU)
SOLID STATE COMMUN., V.3, P.245 (1965)
CU-AU ..EXPERIMENT/ DISPERSION RELATION ..3-AXIS-SPECTR
OMETER/ DISORDERED ALLOYS
- 65-TA-01 TASUMI, M. / SHIMANOUCHI, T.
CRYSTAL VIBRATIONS AND INTERMOLECULAR FORCES OF POLYMET
HYLENE CRYSTALS
J. CHEM. PHYS., V.43, P.1245-P.1258 (1965)
POLYETHYLENE ..THEORY/ MOLECULAR DYNAMICS/ DISPERSION R
ELATION
- 65-TO-01 TOYA, T.
LATTICE DYNAMICS OF LEAD
LATTICE DYNAMICS, PERGAMON PRESS, P.91 (1965)
PB ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATI
ON
- 65-TO-02 TOYA, T.
ELECTRON-PHONON INTERACTIONS AND LATTICE DYNAMICS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.25
(1965)
NEUTRON-SCATTERING-IN-SOLIDS ..DISPERSION RELATION/ THE
ORY/ SOLID/ LATTICE DYNAMICS ..ELECTRON-PHONON INTERACT
ION
- 65-TU-01 TURCHIN, V.F.
CALCULATION OF DIFFERENTIAL SCATTERING CROSS SECTION OF
SLOW NEUTRON BY TIME INTEGRATION (IN RUSSIAN)
AT. ENERG., USSR (SOV. AT. ENERGY), V.19, P.428-P.
432 (1965)
H2.O ..LIQUID/ SOLID/ SCATTERING LAW/ FREQUENCY DISTRIB
UTION
NG LAW/ FREQUENCY DISTRIBUTION
- 65-TU-02 TURCHIN, V.F.
SLOW NEUTRONS
ISRAEL PROGRAM FOR SCIENTIFIC TRANSLATIONS (1965)
REVIEW-ARTICLES ..BOOK
- 65-TU-03 TURCHIN, V.F. / TARASOV, V.A.
ASYMPTOTIC FORMULAE FOR SLOW NEUTRON SCATTERING BY BOUN
D ATOMS
AT. ENERG., USSR (SOV. AT. ENERGY), V.18 (V.18), P
.118-P.121 (P.146-P.150) (1965 (1965))
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY ..(ENG

- LISH TRANSLATION FOR THIS PAPER IS ALSO PRESENTED IN J.
NUCL. ENERGY, V.20, P.313-P.317, 1966)
- 65-VA-01 VAN-LEEUEWEN, J.M.J. / YIP, S.
DERIVATION OF KINETIC EQUATIONS FOR SLOW-NEUTRON SCATTE
RING
PHYS. REV. A, V.139, P.1138-P.1151 (1965)
SCATTERING-THEORIES ..THEORY ..KINETIC EQUATIONS/ DENSE
GAS
- 65-VE-01 VENKATARAMAN, G. / DENIZ, K.U. / IVENGAR, P.K. / VIJA
YARAGHAVAN, P.R. / ROY, A.P.
STUDY OF ELASTIC INCOHERENT SCATTERING BY AMMONIUM SALT
S
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.347
-P.353 (1965)
V/ N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN
.BR6 ..EXPERIMENT/ ELASTIC SCATTERING/ ANGULAR DISTRIBU
TION
- 65-VE-02 VERTEBNYI, V.P. / DZYUB, I.P. / MAISTRENKO, A.N. / PA
SECHNIK, M.V.
COHERENT EFFECTS DURING THE INTERACTION OF SLOW NEUTRON
S WITH LIQUIDS
AT. ENERG., USSR (SOV. AT. ENERGY), V.18 (V.18), P
.452-P.455 (P.585-P.589) (1965 (1965))
N2/ O2 ..EXPERIMENT/ TOTAL CROSS SECTION/ LIQUID/ SOLID
S
- 65-WA-01 WALLER, I.
THEORETICAL INVESTIGATIONS OF THE INFLUENCE OF ANHARMON
ICITY AND IMPURITIES ON NEUTRON SCATTERING BY CRYSTALS
AND ON THE MOESSBAUER EFFECT
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.225
(1965)
NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY/ THEORY/ S
OLID ..IMPURITY/ NEUTRON/ CRYSTAL/ MOESSBAUER EFFECT
- 65-WA-02 WARREN, J.L. / WENZEL, R.G. / YARNELL, J.L.
DISPERSION CURVES FOR PHONONS IN DIAMOND
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.361
(1965)
DIAMOND ..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNA
MICS
- 65-WA-03 WARREN, J.L.
CHARGED BOND CORRECTION TO THE DISPERSION CURVES OF DIA
MOND
BNL-940(C-45), P.88 (1965)
DIAMOND ..THEORY/ PHONON DISPERSION
- 65-WE-01 WEINSTOCK, J.

- NONANALYTICITY OF TRANSPORT COEFFICIENTS AND THE COMPLETE DENSITY EXPANSION OF MOMENTUM CORRELATION FUNCTIONS
PHYS. REV., V.140A, P.460-P.465 (1965)
THEORY-OF-FLUIDS ..AUTOCORRELATION FUNCTION
- 65-WH-01 WHITEMORE, W.L.
DIFFERENTIAL NEUTRON THERMALIZATION
GA-6583 (1965)
POLYETHYLENE/ GRAPHITE/ METHANE/ ZH-H/ Y-H/ LA-H ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ SCATTERING FUNCTION ..300K/ 900K
- 65-WH-02 WHITEMORE, W.L.
INELASTIC SCATTERING OF NEUTRONS BY REACTOR TYPE GRAPHITE
BNL 940(C-45), P.94 (1965)
GRAPHITE ..EXPERIMENT
- 65-WH-03 WHITEMORE, W.L.
THE NATURE OF HYDROGEN MOTION IN ZR-H DETERMINED FROM AN EXPERIMENTAL NEUTRON STUDY OF LARGE, BOUND ENERGY LEVELS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.305-P.315 (1965)
ZR-H ..EXPERIMENT ..HIGH-ENERGY INCIDENT NEUTRONS
- 65-WO-01 WOODS, A.D.B.
LATTICE DYNAMICS OF TRANSITION METALS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.87 (1965)
NB/ TA/ MO/ W ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
- 65-WO-02 WOODS, A.D.B./ POWELL, B.M.
PHONONS IN DISORDERED NIOBIUM-MOLYBDENUM ALLOYS
PHYS. REV. LETT., V.15, P.778 (1965)
NB-MO ..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS ..DISORDERED ALLOYS
- 65-WO-03 WOODS, A.D.B.
LIQUID HELIUM DISPERSION CURVE AT LARGE MOMENTUM
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.191 (1965)
HE ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
- 65-WO-04 WOODS, A.D.B./ DOLLING, G./ COWLEY, R.A.
THE CRYSTAL DYNAMICS OF URANIUM DIOXIDE
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.1, P.373 (1965)
UO2 ..CRYSTAL DYNAMICS/ DISPERSION RELATION/ EXPERIMENT

- 65-YA-01 YARNELL, J.L./ WARREN, J.L./ KOENIG, S.H.
EXPERIMENTAL DISPERSION CURVES FOR PHONONS IN ALUMINUM LATTICE DYNAMICS, (ED, BY WALLIS, R.F.), PERGAMON PRESS, P.57 (1965)
AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
- 65-YI-01 YIP, S./ RANGANATHAN, S.
DYNAMIC STRUCTURE FACTOR OF DILUTE GASES IN THE FOKKER-PLANCK APPROXIMATION
PHYS. FLUIDS, V.8, P.1956-P.1963 (1965)
NEUTRON-SCATTERING-IN-FLUIDS ..DILUTE GAS/ SCATTERING FUNCTION
- 65-YO-01 YOUNG, J.A./ KOPPEL, J.U.
CALCULATION OF THERMAL SCATTERING KERNELS
GA-6281 (1965)
BE/ C/ H2/O/ D2/O/ C,H2/ H2/ D2 ..THEORY/ SCATTERING FUNCTION/ CROSS SECTION EVALUATION
- 65-YO-02 YOUNG, J.A./ KOPPEL, J.U.
PHONON SPECTRUM OF GRAPHITE
J. CHEM. PHYS., V.42, P.357-P.364 (1965)
GRAPHITE ..THEORY/ FREQUENCY SPECTRUM/ BORN-VON KARMAN MODEL
- 65-YO-03 YOUNG, J.A./ WIKNER, N.F./ PARKS, D.E.
NEUTRON THERMALIZATION IN GRAPHITE 2
NUKLEONIK, V.7, P.295-P.300 (1965)
GRAPHITE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION/ NEUTRON SPECTRUM ..SCATTERING KERNEL/ 300K
- 65-YO-04 YOUNG, J.A./ KOPPEL, J.U.
COHERENT INELASTIC SCATTERING FROM POLYCRYSTALLINE BERYLLIUM
PHYS. LETT., V.16, P.235 (1965)
BE ..POLYCRYSTAL/ SCATTERING LAW
- 65-ZE-01 ZEMLYANOV, M.G./ BROVMAN, E.G./ CHERNOPOLEKOV, N.A./ SHITIKOV, I.L.
STUDY OF DYNAMICS OF LITHIUM HYDRIDE AND DEUTERIDE BY INELASTIC SCATTERING OF COLD NEUTRONS
LA-TR-65-35 (1965)
LI,H ..THEORY/ BORN VON KARMAN MODEL/ SIGMA(E,E-PRIME,T HETA)
- 65-ZE-02 ZEMLYANOV, M.G./ CHERNDLEKOV, U.A./ SHITIKOV, J.L.
COLD NEUTRON SCATTERING BY POLYPHENYLS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.221 (1965)
C6,H6 ..SIGMA(E,E-PRIME,THETA)/ EXPERIMENT/ LIQUID ..290K

- 65-ZE-03 ZEMLYANOV, M.G./ BROVMAN, E.G./ CHERNOPILEKOV, N.A.,
/ SHITIKOV, Y.L.
STUDY OF THE DYNAMICS OF LITHIUM HYDRIDE AND DEUTERIDE
IN THE INELASTIC SCATTERING OF COLD NEUTRONS
INELASTIC SCATTERING OF NEUTRONS, IAEA, V.2, P.431
(1965)
LI, H. ., EXPERIMENT/ CALCULATION/ FREQUENCY DISTRIBUTION
- 65-ZY-01 JAPANESE NUCLEAR DATA COMMITTEE
SURVEY AND PROBLEMS IN THE STUDY OF THERMAL NEUTRON SCAT-
TERING (IN JAPANESE)
JAERI-REPORT-1086 (1965)
REVIEW-ARTICLES ., CROSS SECTION EVALUATION
- 65-ZY-02 JAPANESE NUCLEAR DATA COMMITTEE
THEORETICAL CALCULATION FOR THERMAL NEUTRON SCATTERING
KERNEL
JAERI-1095 (1965)
REVIEW-ARTICLES ., EVALUATION/ SCATTERING LAW
- 66-AD-01 ADKINS, C.R./ PERSIANI, P.J./ HWANG, R.N./ KAGANOV
E, J.J.
THE CHEMICAL BINDING EFFECTS ON THE RESONANCE LINE SHAPE
S OF URANIUM-238 IN A U.O2 LATTICE
CONF-660303, P.134 (1966)
U.O2 ., THEORY/ LATTICE DYNAMIC/ FREQUENCY DISTRIBUTION
. , RESONANCE LINE SHAPES
- 66-AH-01 AHLERS, G.
HEAT CAPACITY OF BERYLLIUM BELOW 30DK
PHYS. REV., V.145, P.419 (1966)
BE ., EXPERIMENT/ DEBYE TEMPERATURE ., HEAT CAPACITY/ FRO
M 1.4 DK TO 30 DK
- 66-AN-01 ANIMALU, A.O.E./ BONSIGNORI, F./ BORTOLANI, V.
THE PHONON SPECTRA OF ALKALI METALS AND ALUMINIUM
NUOVO CIM., B, V.44, P.159-P.171 (1966)
NA/ K/ AL/ LI/ RB/ CS ., THEORY/ PHONON DISPERSION/ MODE
L POTENTIAL
- 66-AN-02 ANTONINI, B./ PAOLETTI, A./ GAMBETTA, V.
TOTAL NEUTRON CROSS SECTION OF SOME POLYPHENYLS IN SOLI
D AND LIQUID PHASE
PHYSICA, V.32, P.119-P.126 (1966)
BENZENE/ BIPHENYL ., EXPERIMENT/ SOLID/ LIQUID/ SIGMA(E)
- 66-AN-03 ANTUNEZ, H./ BEYSTER, J.R./ BROUWER, W./ CARRIVEAU
G./ KOPPEL, J.U./
INTEGRAL NEUTRON THERMALIZATION
GA-7091 (1966)
BE.O/ H2.O/ D2.O/ ZR-H ., EXPERIMENT/ THEORY/ SCATTERING
- FUNCTION/ CROSS SECTION EVALUATION
- 66-AR-01 ARDENTE, V./ NARDELLI, G.F./ REATTO, L.
SLOW-NEUTRON SCATTERING BY LIQUIDS. A HINDERED-TRANSLAT
OR MODEL
PHYS. REV., V.148, P.124-P.148 (1966)
NEUTRON-SCATTERING-IN-FLUIDS ., THEORY/ CORRELATION FUNC
TION/ SCATTERING FUNCTION ., HINDERED-TRANSLATOR MODEL
- 66-AR-02 ARDENTE, A./ NARDELLI, G.F./ REATTO, L.
INCOHERENT SCATTERING OF SLOW NEUTRONS BY LIQUID. A MIN
DERED-TRANSLATOR MODEL
REACTOR PHYSICS IN THE RESONANCE AND THERMAL REGIO
NS, MIT PRESS, V.1, P.73 (1966)
NEUTRON-SCATTERING-IN-FLUIDS ., MOLECULAR DYNAMICS/ LIQU
ID/ THEORY/ FREQUENCY DISTRIBUTION
- 66-BA-01 BAJOREK, A./ JANIK, J.A./ JANIK, J.M./ PARLINSKI,
K./ SUKNIK-HRYNKIEWICZ, M.
MOLECULAR DYNAMICS STUDY BY THE NEUTRON INELASTIC SCATT
ERING METHOD. 2, METHYL IODIDE
JIUR-E3-3057 (1966)
METHYL IODIDE ., MOLECULAR DYNAMICS/ EXPERIMENT
- 66-BA-02 BATA, L./ KROO, N.
INELASTIC NEUTRON SCATTERING BY DENSITY FLUCTUATIONS IN
C.O2 NEAR THE CRITICAL POINT
PHYS. LETT., V.24A, P.57 (1966)
C.O2 ., EXPERIMENT ., NEUTRON SCATTERING/ DENSITY FLUCTUA
TION/ CRITICAL POINT
- 66-BE-01 BENTLE, G.G.
ELASTIC CONSTANTS OF SINGLE-CRYSTAL BE.O AT ROOM TEMPER
ATURE
J. AMER. CERAM. SOC., V.2, P.201 (1966)
BE.O ., EXPERIMENT/ LATTICE DYNAMICS
- 66-BE-02 BERNE, B.J./ BOON, N.P./ RICE, S.A.
ON THE CALCULATION OF AUTOCORRELATION FUNCTIONS OF DYNA
MICAL VARIABLES
J. CHEM. PHYS., V.45, P.1086-P.1096 (1966)
MISCELLANEOUS ., AUTOCORRELATION FUNCTION
- 66-BE-03 BESHAI, S.F.
TOTAL CROSS SECTIONS OF U, U.O2 AND TH.O2 FOR THERMAL A
ND SUBTHERMAL NEUTRONS
AE-222 (1966)
U/ U.O2/ TH.O2 ., EXPERIMENT/ TOTAL CROSS SECTION/ TOF
- 66-BE-04 BEVINGTON, P.R./ PETITT, G.A.
MANIAC, A COMPUTER CODE FOR CORRECTING NEUTRON SCATTERI
NG ANGULAR DISTRIBUTIONS

- NUCL. INSTRUM. METHODS, V.44, P.341 (1966)
COMPUTER-CODES .,CODE/ NEUTRON SCATTERING/ ANGULAR DISTRIBUTION
- 66-BE-05 BEYSTER, J.R./ CARRIVEAN, G.
DIFFERENTIAL NEUTRON SCATTERING CROSS SECTION MEASUREMENTS
WASH-1068 (EANDC(U)85U), P.62 (1966)
H₂O .,LIQUID/ THEORY/ EXPERIMENT/ SIGMA (THETA,E) .,MULTIPLE SCATTERING CORRECTION
- 66-BE-06 BEYSTER, J.R./ NEILL, J.M./ YOUNG, J.C.
RECENT DEVELOPMENTS IN INTEGRAL NEUTRON THERMALIZATION REACTOR PHYSICS IN THE RESONANCE AND THERMAL REGIONS, MIT PRESS, V.1, P.151 (1966)
H₂O/ D₂O/ ZR-H/ GRAPHITE/ BE.O .,NEUTRON SPECTRUM/ COMPILEATION/ LIQUID/ GAS
- 66-BL-01 BLANK, A.Y./ KANER, E.A.
THE PHONON SPECTRUM OF METALS IN MAGNETIC FIELD
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.50 (V.23), P.1013-P.1023 (P.673-P.680) (1966) (1966)
THEORY-OF-SOLIDS .,THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS/ SOLID .,METAL
- 66-BO-01 BOFFI, V.C./ MARSICO, B./ MOLINARI, V.G./ SCOZZAFAVA, R.
NEUTRON DIFFUSION PARAMETERS IN BENZENE
NUCL. SCI. ENG., V.20, P.236 (1966)
BENZENE .,SIGMA-TRANSPORT(E)/ SIGMA(E-E-PRIME,THETA)/ THEORY/ GAS/ LIQUID/ DIFFUSION PARAMETER/ CROSS SECTION EVALUATION .,MU-BAR
- 66-BO-02 BOUTIN, H./ TREVINO, S./ PRASK, H.
LOW-FREQUENCY MOLECULAR MOTIONS IN AMMONIUM AZIDE
J. CHEM. PHYS., V.45, P.401-P.402 (1966)
N₄H₃ .,EXPERIMENT/ TOF SPECTRA/ MOLECULAR DYNAMICS
- 66-BO-03 BOUTIN, H./ WHITEMORE, W.L.
INVESTIGATION OF THE ALPHA-HELIX-RANDOM-COIL TRANSITION IN POLYGLUTAMIC ACID BY SLOW NEUTRON SCATTERING
J. CHEM. PHYS., V.44, P.3127-P.3128 (1966)
POLYGLUTAMIC ACID .,EXPERIMENT/ FREQUENCY SPECTRUM/ MOLECULAR DYNAMICS
- 66-BR-01 BREDOV, M.M./ KOTOV, B.A./ OKUNEVA, N.M./ OSKOTSKI, V.S./ SHAKH-BUDAGOV, A.L.
POSSIBILITY OF MEASURING THE THERMAL VIBRATION SPECTRUM (GOMEGA). USING COHERENT INELASTIC NEUTRON SCATTERING FROM A POLYCRYSTALLINE SAMPLE
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.9 (V.9), P.287-P.293 (P.214-P.218) (1966) (1967)

NEUTRON-SCATTERING-IN-SOLIDS .,FREQUENCY SPECTRUM/ SCATTERING THEORY

- 66-BR-02 BROECKER, B.
TOTAL NEUTRON CROSS SECTION MEASUREMENT IN HYDROGENEOUS COMPOUNDS
EANDC(E) 66 U (1966)
N₄H₄CL/ N₄H₄BR/ N₄H₄I/ ZR-H/ TI-H .,SIGMA(E)/ EXPERIMENT/ CRYSTAL SPECTROMETER
- 66-BR-03 BROVMAN, E.G./ KAGAN, Y.
PHONON SPECTRUM OF WHITE TIN
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.8 (V.8), P.1402-P.1416 (P.1120-P.1129) (1966) (1966)
SN .,THEORY/ PHONON DISPERSION AND STATE DENSITIES/ HEAT CAPACITY/ DEBYE TEMPERATURE/ WHITE TIN
- 66-BR-04 BRUGGER, R.M./ STRONG, K.A./ CARPENTOR, J.M.
BE.O DISPERSION RELATIONS
WASH-1068(EANDC(U)85U) (1966)
BE.O .,EXPERIMENT/ DISPERSION RELATION/ ROTATING CRYSTAL SPECTROMETER .,ROOM TEMPERATURE
- 66-BR-05 BRUGGER, R.M.
INTERPRETATION OF SCATTERING-LAW DATA
REACTOR PHYSICS IN THE RESONANCE AND THERMAL REGION, MIT PRESS, V.1, P.91 (1966)
METHANE/ ETHANE/ AL/ NA/ PB/ AR .,COMPILEATION/ SCATTERING FUNCTION
- 66-BU-01 BUHRER, W./ SCHNEIDER, T./ GLASER, W.
PHONON DISPERSION IN COPPER
SOLID STATE COMMUN., V.4, P.443 (1966)
CU .,EXPERIMENT/ PHONON DISPERSION
- 66-CA-01 CANELORE, N.R./ CAST, R.C.
A METHOD OF INCLUDING EPITHERMAL NEUTRON SCATTERING BY BOUND PROTONS IN COMBINED SLOWING-DOWN/ THERMAL CALCULATION BY MONTE CARLO
WAPD-TM-617 (1966)
MISCELLANEOUS .,SCATTERING THEORY
- 66-CO-01 COCHRAN, W./ COWLEY, R.A./ DOLLING, G./ ELCOMBE, M.
THE CRYSTAL DYNAMICS OF LEAD TELLURIDE
PROC. ROY. SOC., LONDON, SER. A, V.293, P.433-P.451 (1966)
Pb,Te .,EXPERIMENT/ MODEL CALCULATION/ PHONON DISPERSION/ FREQUENCY SPECTRA/ SPECIFIC HEAT/ THERMAL EXPANSION/ LIFE TIME
- 66-CO-02 COWLEY, R.A./ WOODS, A.D.B./ DOLLING, G.

- CRYSTAL DYNAMICS OF POTASSIUM, 1. PSEUDOPOTENTIAL ANALYSIS OF PHONON DISPERSION CURVES AT 90K
PHYS. REV., V.150, P.487 (1966)
K. LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION, 90K
- 66-CO-03 COWLEY, E.R./ COWLEY, R.A.
ANHARMONIC INTERACTION IN ALKALI HALIDES, II,
PROC. ROY. SOC., LONDON, SER. A, V.292, P.209 (1966)
- K.BR/ NA, I/ THEORY-OF-SOLIDS ..THEORY/ ANHARMONICITY/ PHONON DISPERSION
- 66-CZ-01 CZACHOR, A.
LATTICE VIBRATIONS IN METALS OF A NON-BRAVAIS STRUCTURE
JNR-709-II (1966)
- THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY/ SOLID/ DISPERSION RELATION ..METAL
- 66-DE-01 DE-WETTE, F.W./ COTTERILL, R.M.J./ DOYAMA, M.
LATTICE DYNAMICS OF COPPER WITH A MORSE POTENTIAL
PHYS. LETT., V.23, P.309 (1966)
- CU ..THEORY/ PHONON DISPERSION
- 66-DE-02 DELTOUR, J.
A NEW METHOD OF OBTAINING THE FREQUENCY SPECTRUM MOMENTS OF DISORDERED LATTICES BY A MONTE CARLO PROCESS
PHYSICA, V.32, P.762 (1966)
- THEORY-OF-SOLIDS ..BORN-VON KARMAN MODEL/ FREQUENCY SPECTRUM/ THEORY ..MOMENT METHOD/ MONTE CARLO METHOD
- 66-DE-03 DESAI, R.C.
ATOMIC MOTIONS IN MONATOMIC FLUIDS
NYO-3326-13 (1966)
- AR ..THEORY/ LIQUID/ INTERMEDIATE SCATTERING FUNCTION
- 66-DE-04 DESAI, R.C./ NELKIN, M.
ATOMIC MOTIONS IN A RIGID SPHERE GAS AS A PROBLEM IN NEUTRON TRANSPORT
NUCL. SCI. ENG., V.24, P.142-P.152 (1966)
- NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ GAS/ CORRELATION FUNCTION ..NEUTRON DIFFUSION
- 66-DE-05 DESAI, R.C./ NELKIN, M.
COLLECTIVE MOTION IN LIQUID ARGON
PHYS. REV. LETT., V.16, P.839-P.841 (1966)
- AR ..THEORY/ LIQUID ..COLLECTIVE MOTION IN LIQUID
- 66-DE-06 DESAI, R.C.
NON-GAUSSIAN CORRECTIONS TO VAN HOFES GS(R,T) FOR A MONATOMIC GAS
J. CHEM. PHYS., V.44, P.77-P.86 (1966)
- CRYSTAL DYNAMICS OF POTASSIUM, 1. PSEUDOPOTENTIAL ANALYSIS OF PHONON DISPERSION CURVES AT 90K
PHYS. REV., V.150, P.487 (1966)
K. LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION, 90K

THEORY-OF-FLUIDS ..GAS/ CORRELATION FUNCTION/ THEORY ..NON-GAUSSIAN CORRECTION/ MONATOMIC GAS

66-DI-01 DIEDERICH, M.E./ TRIVISONNO, J.
TEMPERATURE DEPENDENCE OF THE ELASTIC CONSTANTS OF SODIUM
J. PHYS. CHEM. SOLIDS, V.27, P.637 (1966)
NA ..EXPERIMENT ..SINGLE CRYSTAL/ 78 DK TO 195 DK/ ULTRASONIC PULSE ECHO TECHNIQUE

66-DI-02 DIMITRIJEVIC, Z./ KRASNICKI, S./ RZANY, H./ TODOROVIĆ, J./ WANIC, A.
NEUTRON INVESTIGATION OF TEMPERATURE EFFECTS IN THE MAGNETIC SPECTRUM OF MAGNETITE
PHYS. STATUS SOLIDI, V.15, P.119-P.122 (1966)
MAGNETITE/ MAGNETIC-SCATTERING ..EXPERIMENT/ DIFFUSE SCATTERING

66-DO-01 DOLLING, G./ COWLEY, R.A./ SCHITTENHELM, C.
NORMAL VIBRATIONS OF POTASSIUM IODIDE
PHYS. REV., V.147, P.577 (1966)
K.1 ..EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS

66-DO-02 DOLLING, G./ COWLEY, R.A.
THE THERMODYNAMIC AND OPTICAL PROPERTIES OF GERMANIUM, SILICON, DIAMOND AND GALLIUM ARSENIDE
PROC. PHYS. SOC., LONDON, V.88, P.463 (1966)
GE/ SI/ DIAMOND/ GA, AS ..COHERENT INELASTIC SCATTERING STUDIES/ PHONON DISPERSION

66-DO-03 DORNER, B.
MEASUREMENTS OF DISPERSION CURVES IN POLYCRYSTAL AND LIQUID AT TAU=0 (IN GERMANY)
JUL-412-NP (1966)

NEUTRON-SCATTERING-IN-FLUIDS ..EXPERIMENT/ LATTICE DYNAMICS/ MOLECULAR DYNAMICS/ DISPERSION RELATION

66-DO-04 DORNER, B./ STILLER, H.M.
INTERNAL DYNAMICS IN LOW TEMPERATURE PHASE OF MOLECULAR CRYSTAL C₂H₄
JUL-476-NP (1966)
C₂H₄ ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ SOLID ..6.5 DK/ 2.7DK/ INVERSE-FILTER-METHOD

66-DO-05 DORNER, B./ STILLER, H.M.
THE INTERNAL DYNAMICS IN LOW-TEMPERATURE PHASE OF MOLECULAR CRYSTAL C₂H₄
PHYS. STATUS SOLIDI, V.18, P.793-P.806 (1966)
C₂H₄ ..EXPERIMENT/ 6.5, 2.7, 18DK/ INVERTED FILTER METHOD

- 66-DO-06 DOWNES, J.S./ WHITE, J.W./ EGELSTAFF, P.A./ RAINEY, V.
LOCALIZED VIBRATIONS OF TRAPPED MOLECULES
PHYS. REV. LETT., V.17, P.533-P.536 (1966)
METHANE-QUINOL/ METHYL CYANIDE-QUINOL/ METHANOL-QUINOL/
WATER-QUINOL/ AMMONIA-ZEOLITE ..EXPERIMENT/ TOF SPECTRUM/
UM/ TRAPPED MOLECULES
- 66-ED-01 EDER, O.J./ CHEN, S.H./ EGELSTAFF, P.A.
MOLECULAR MOTION OF HYDROGEN IN LIQUID ARGON AND NEON
PROC. PHYS. SOC., LONDON, V.89, P.833 (1966)
AR/ NE ..EXPERIMENT/ H IN LIQUID AR AND NE
- 66-EF-01 EFROS, A.L.
THEORY OF THERMAL DIFFUSION OF BROWNIAN PARTICLES
ZH. EKSP. TEOR. FIZ. (SOV. PHYS. JETP), V.50 (V.23),
P.809-P.817 (P.536-P.541) (1966) (1966)
THEORY-OF-FLUIDS ..THEORY/ LIQUID ..SELF-DIFFUSION
- 66-EG-01 EGELSTAFF, P.A./ DUFFILL, C./ RAINEY, V./ ENDERBY, J.E./ NORTH, D.M.
THE STRUCTURE FACTOR FOR LIQUID METALS AT LOW ANGLES
PHYS. LETT., V.21, P.286-P.288 (1966)
PB/ SN/ BI/ ZN/ AL ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR
OR
- 66-EG-02 EGELSTAFF, P.A.
MICROSCOPIC TRANSPORT PHENOMENA IN LIQUIDS
REP. PROG. PHYS., V.29, P.333-P.371 (1966)
REVIEW-ARTICLES ..LIQUID/ CORRELATION FUNCTION/ TRANSPORT PHENOMENA
- 66-GI-01 GILAT, G./ RAUBENHEIMER, L.J.
ACCURATE NUMERICAL METHOD FOR CALCULATING FREQUENCY DISTRIBUTIONS IN SOLIDS
PHYS. REV., V.144, P.390 (1966)
THEORY-OF-SOLIDS ..FREQUENCY DISTRIBUTION/ SOLID/ THEORY ..EXTRAPOLATION METHOD
- 66-GI-02 GILAT, G./ NICKLOW, R.M.
NORMAL VIBRATIONS IN ALUMINUM AND DERIVED THERMODYNAMIC PROPERTIES
PHYS. REV., V.143, P.487 (1966)
AL ..PHONON DISPERSION/ PHONON SPECTRA
- 66-GI-03 GINZBURG, S.L./ MALEEV, S.V.
SLOW NEUTRON SCATTERING IN A SUPERCONDUCTOR
FIZ. TVERD. TELA (SOV. PHYS. SOLID STATE), V.8 (V.8), P.1852-P.1855 (P.2320-P.2325) (1966) (1967)
NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY ..NEUTRON SCATTERING BY CONDUCTION ELECTRON/ SUPERCONDUCTOR
- 66-GL-01 GLAUBERMAN, A.E./ RUVINSKII, M.A.
EFFECT OF EXCITONS ON THE SCATTERING OF NEUTRONS BY CRYSTALS
PHYS. STATUS SOLIDI, V.13, P.233-P.238 (1966)
NEUTRON-SCATTERING-IN-SOLIDS/ MAGNETIC-SCATTERING ..THEORY/ SCATTERING BY EXCITONS
- 66-GO-01 GOLDBERG, M.D./ MUGHABGHAB, S.F./ PUROHIT, S.N./ MARGUINO, B.A./ MAY, S.M.
NEUTRON CROSS SECTIONS VOLUME 2B, Z=41 TO 60
BNL-325 (2ND ED. SUPPL. 2) (1966)
COMPILATIONS ..SIGMA(E)
- 66-GR-01 GRAFFSTEIN, A./ RZESSOT, T./ WARD, E.
THE NEUTRON DIFFUSION PARAMETERS OF EPOXYRESIN
INR-731-IXA-R (1966)
RESIN ..EXPERIMENT ..NEUTRON DIFFUSION PARAMETER
- 66-GU-01 GUPTA, N.P./ DAYAL, B.
THEORETICAL PHONON SPECTRA AND HEAT CAPACITIES OF SOLIDIFIED ARGON AND KRYPTON
PHYS. STATUS SOLIDI, V.15, P.465-P.472 (1966)
AR/ KR ..THEORY/ PHONON SPECTRA/ SPECIFIC HEAT
- 66-GU-02 GUPTA, R.P./ DAYAL, B.
LATTICE DYNAMICS OF ZINC
PHYS. STATUS SOLIDI, V.13, P.519-P.527 (1966)
ZN ..THEORY/ PHONON DISPERSION/ SIXTH-NEIGHBOUR MODEL
- 66-GU-03 GUPTA, R.P./ KISHORE, B.
VIBRATIONAL SPECTRUM AND SPECIFIC HEAT OF POTASSIUM ON SHARMA AND J/SHI'S ELECTRON GHS MODEL
PHYS. STATUS SOLIDI, V.13, P.261-P.264 (1966)
K ..THEORY/ PHONON SPECTRUM/ SPECIFIC HEAT
- 66-GU-04 GUPTA, R.P./ DAYAL, B.
LATTICE DYNAMICS OF ZINC
PHYS. STATUS SOLIDI, V.13, P.519 (1966)
ZN ..THEORY/ PHONON DISPERSION/ A TENSOR FORCE MODEL INCLUDING UP TO SIXTH-NEIGHBOUR INTERACTION
- 66-HA-01 HARKER, Y.D.
SOLID METHANE
WASH-1060 (EANDC (US) 850), P.171 (1966)
METHANE ..SIGMA(E-E-PRIME, THETA)/ EXPERIMENT/ SOLID ..5 DK, 9DK, 18DK, 22DK/ E=34.7MV, THETA=48.1D, E=8 TO 45MV
- 66-HA-02 HARLING, O.K.
SLOW-NEUTRON WIDTH OF 200MEV VIBRATION LEVEL IN LIQUID H₂O
PHYS. LETT., V.22, P.15-P.16 (1966)

H2.O .. EXPERIMENT/ SIGMA (E,E-PRIME,THETA)/ LIQUID

- 66-HA-03 HARLING, O.K.
SLOW NEUTRON SCATTERING FROM H2.O
WASH-1068 (EANDC(US) 85U), P.152 (1966)
H2.O .. LIQUID/ EXPERIMENT/ SCATTERING LAW .. ROOM TEMP.
- 66-II-01 IJIMA, S.
ONE-PHONON COHERENT SCATTERING OF SLOW NEUTRONS FROM POLYCRYSTALLINE ALUMINUM
J. NUCL. SCI. TECHNOL., TOKYO, V.3, P.161-P.164 (1966)
AL .. CALCULATION/ PHONON SPECTRUM/ SCATTERING FUNCTION/ COHERENT
- 66-IS-01 ISHMAEV, S.N./ MOSTOVOI, V.I./ NOZIK, N.V./ SADIKO V. I.P./ CHENYSHOV, A.A./
A STUDY OF THE TRANSIENT NEUTRON SPECTRA IN ZIRCONIUM HYDRIDE
AEC-TR-6805 (1966)
ZR-H .. THEORY/ SOLID/ NEUTRON SPECTRUM
- 66-IV-01 IVANOV, G.K.
ELASTIC AND QUASI-ELASTIC SCATTERING OF NEUTRONS BY MOLECULES
ZH, EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.50 (V.23), P.726-P.737 (P.481-P.488) (1966 (1966))
NEUTRON-SCATTERING-IN-FLUIDS .. THEORY/ MOLECULAR DYNAMICS .. QUASI-ELASTIC SCATTERING
- 66-IV-02 IVANOV, G.K.
THE ROLE OF DIFFUSION PROCESSES IN THE SCATTERING OF SLOW NEUTRONS IN LIQUIDS
ZH, EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.51 (V.24), P.1120-P.1126 (P.749-P.753) (1966 (1967))
NEUTRON-SCATTERING-IN-FLUIDS .. GENERAL-THEORIES
- 66-KI-01 KIROUAC, G.J./ MOORE, W.E./ SEEMAN, K.W.
INELASTIC SCATTERING CROSS SECTIONS FOR POLYETHYLENE AND WATER IN THE GAS TRANSITION REGION
NUCL. SCI. ENG., V.25, P.300 (1966)
H2.O/ POLYETHYLENE .. EXPERIMENT/ DOUBLE DIFFERENTIAL CROSS SECTION
- 66-KI-02 KIROUAC, G.J./ MOORE, W.E./ SEEMAN, K.W.
DOUBLE DIFFERENTIAL SCATTERING CROSS SECTIONS AND SCATTERING LAW FOR H2.O AT 300DK
KAPL-M-6536 (1966)
H2.O .. SCATTERING LAW/ SIGMA (E,E-PRIME,THETA)/ EXPERIMENT .. 300DK
- 66-KI-03 KIROUAC, G.J./ MOORE, W.E./ SEEMANN, M.L.

POLYETHYLENE DOUBLE DIFFERENTIAL INELASTIC SCATTERING CROSS SECTIONS FOR EPITHERMAL NEUTRONS
CONF-660303, P.122 (1966)
POLYETHYLENE .. EXPERIMENT/ SCATTERING FUNCTION .. 29DC

66-KI-04 KITAGAWA, T./ MIYAZAWA, T.
INTERCHAIN POTENTIAL, FREQUENCY DISTRIBUTION AND SPECIFIC HEAT OF POLYOXYMETHYLENE CRYSTAL
REP. PROGR. POLYMER PHYS., V.9, P.175-P.176 (1966)
POLYOXYMETHYLENE .. THEORY/ FREQUENCY DISTRIBUTION/ SOLID .. SPECIFIC HEAT

66-KO-01 KOPPEL, J.U.
NEUTRON SCATTERING BY HYDROGENOUS MODERATORS
GA-7055 (1966)
POLYETHYLENE/ ZR-H/ H2.O .. SCATTERING FUNCTION/ SCATTERING CROSS SECTION/ NEUTRON SPECTRUM

66-KO-02 KOPPEL, J.U./ YOUNG, J.A.
SLOW NEUTRON SPECTRA IN MOLECULAR HYDROGEN AT LOW TEMPERATURE
NUKLEONIK, V.8, P.40-P.45 (1966)
H2 .. THEORY/ MOLECULAR DYNAMICS/ DIFFERENTIAL CROSS SECTION .. 20.5DK

66-KO-03 KOPPEL, J.U./ TRIPLETT, J.R./ NALIBOFF, Y.D.
GASKET, A UNIFIED CODE FOR THERMAL NEUTRON SCATTERING
GA-7417 (1966)
COMPUTER-CODES .. SCATTERING FUNCTION/ LATTICE DYNAMICS/ MOLECULAR DYNAMICS/ SCATTERING THEORY

66-KO-04 KOPPEL, J.U.
NEUTRON SCATTERING BY HYDROGENOUS MODERATORS
REACTOR PHYSICS IN THE RESONANCE AND THERMAL REGION
NS. MIT PRESS, V.1, P.3 (1966)
H2.O/ POLYETHYLENE/ ZR-H/ H .. CROSS SECTION EVALUATION/ SCATTERING FUNCTION/ THEORY/ LIQUID/ SOLID/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS

66-KO-05 KOSALY, G./ SOLT, G.
SLOW NEUTRON SCATTERING BY SOLID C.H4 AND N.H4.I
PHYSICA, V.32, P.1571 (1966)
C.H4/ N.H4.I .. THEORY/ DIFFERENTIAL CROSS SECTION .. 86DK FOR C.H4/ ROOM TEMP. FOR N.H4.I

66-KO-06 KOSALY, G./ SOLT, G.
ON THE MASS TENSOR APPROXIMATION OF SLOW NEUTRON SCATTERING
PHYSICA, V.32, P.16-P.26 (1966)
SCATTERING-THEORIES .. THEORY .. MODIFICATION OF KRIEGER-NELKIN THEORY

- 66-KR-01 KRIVOGLAZ, M.A./ TIKHONOVA, E.A.,
THE EFFECT OF GEOMETRICAL DISTORTIONS OF THE CRYSTAL LATTICE ON X-RAY AND THERMAL NEUTRON SCATTERING BY MULTICONSTITUENT UNORDERED SOLID SOLUTION
BNL-TR-104 (1966)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY
- 66-KU-01 KUCHER, T.I./ NECHIPORUK, V.V.,
LATTICE VIBRATION FREQUENCIES OF DIAMOND
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.8 (V.8), P.317-P.320 (P.261-P.263) (1966 (1966))
DIAMOND ..THEORY/ PHONON DISPERSION
- 66-KU-02 KURI, P./ SAUER, P.,
NOTE ON CALCULATING ENERGY VALUES OF ROTATIONALLY HINDERED LINEAR MOLECULES
Z. PHYS., V.194, P.478-P.481 (1966)
NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS ..LINEAR MOLECULES
- 66-LA-01 LARON, K./ BERGSTEDT, L.,
PROTON MOTIONS IN COMPLEX HYDROGENEOUS LIQUID 1.A CROSS SECTION FOR QUASI-ELASTIC SCATTERING OF SLOW NEUTRONS
PHYS. REV., V.151, P.117 (1966)
ALCOHOL/ PENTANE ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ NEUTRON SPECTRA/ DIFFERENTIAL CROSS SECTION
- 66-LA-02 LARSSON, K.E./ AMARAL, L.B./ IVANCHEV, N./ RIPEANU, S./ BERGSTEDT, L.,
PROTON MOTIONS IN COMPLEX HYDROGENEOUS LIQUIDS.2. RESULTS GAINED FROM SOME NEUTRON-SCATTERING EXPERIMENTS
PHYS. REV., V.151, P.126 (1966)
ALCOHOL/ PENTANE ..EXPERIMENT/ LIQUID/ MOLECULAR DYNAMICS/ DIFFERENTIAL CROSS SECTION ..153DK-333DK
- 66-LE-01 LECHNER, R./ QUITTNER, G.,
PRESSURE-INDUCED PHONON FREQUENCY SHIFTS IN LEAD MEASURED BY INELASTIC NEUTRON SCATTERING
PHYS. REV. LETT., V.17, P.1259 (1966)
PB ..PHONON DISPERSION/ PRESSURE EFFECT
- 66-LO-01 LOMER, W.M.,
NEUTRON SPECTROSCOPY OF SOLIDS - PART 2
CONTEMP. PHYS., V.7, P.401-P.418 (1966)
REVIEW-ARTICLES ..REVIEW/ MAGNETIC SCATTERING/ SPIN WAVES/ CRITICAL SCATTERING/ DEFECT SCATTERING
- 66-MA-01 MAHAN, G.D.,
PHONON-BROADENED OPTICAL SPECTRA; URBACH-S. RULE
PHYS. REV., V.143, P.602 (1966)
THEORY-OF-SOLIDS ..THEORY ..ELECTRON-PHONON INTERACTION
- 66-MA-02 MAHESH, P.S./ DAYAL, B.,
LATTICE DYNAMICS AND SPECIFIC HEATS OF SOME TRANSITION METALS ON KREBS-S MODEL
PHYS. REV., V.143, P.443 (1966)
FE/ MO/ W ..THEORY/ PHONON DISPERSION AND FREQUENCY DISTRIBUTION
- 66-MC-01 MCMURRY, H.L./ RUSSELL, G.J./ BRUGGER, R.M.,
SLOW-NEUTRON SCATTERING BY WATER
NUCL. SCI. ENG., V.25, P.248-P.260 (1966)
H2O ..EXPERIMENT
- 66-MC-02 MCMURRY, H.L.,
MODEL FOR CALCULATING THE SLOW NEUTRON SCATTERING BY LIQUID D2O
IN-1020 (1966)
D2O ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ FREQUENCY SPECTRUM/ SIGMA(E)/ SIGMA-TRANSPORT(E)/ SIGMA(E-E-PRIME, THETA)/ SCATTERING LAW ..295DK/ 423DK
- 66-MC-03 MCMURRY, H.L.,
SLOW NEUTRON SCATTERING KERNELS FOR H2O AT 423DK AND 550DK
IN-1019 (1966)
H2O ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION/ SIGMA(E)/ SCATTERING LAW ..423DK/ 550DK
- 66-ME-01 MEERS, J.T.,
EFFECTS OF NEUTRON DAMAGE ON THE MECHANICAL PROPERTIES OF PYROLYTIC AND SINGLE-CRYSTAL GRAPHITE
TID-22733 (1966)
GRAPHITE ..EXPERIMENT/ LATTICE DYNAMICS
- 66-MI-01 MINTS, M.Y.,
ENERGY SPECTRUM OF A DISORDERED LINEAR CHAIN
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.50 (V.23), P.1156-P.1166 (P.768-P.774) (1966 (1966))
THEORY-OF-SOLIDS ..SOLID/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS ..DISORDERED LINEAR CHAIN
- 66-MO-01 MOZER, B./ OTNES, K./ THAPER, C.,
EXPERIMENTAL STUDY OF THE LATTICE DYNAMICS OF DISORDERED VANADIUM ALLOYS
PHYS. REV., V.152, P.535-P.539 (1966)
V-BE/ V-NI/ V-PT ..EXPERIMENT/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ ALLOY
- 66-MY-01 MYERS, W./ SUMMERFIELD, G.C./ KING, J.S.,
NEUTRON SCATTERING IN STRETCH-ORIENTED POLYETHYLENE
J. CHEM. PHYS., V.44, P.184-P.187 (1966)
POLYETHYLENE ..MOLECULAR DYNAMICS/ EXPERIMENT/ SIGMA(E)

)/ FREQUENCY SPECTRUM

- 66-NA-01 NAKAHARA, Y./ TAKAHASHI, H.
ON THE ITINERANT OSCILLATOR MODEL OF LIQUIDS
PROC. PHYS. SOC., LONDON, V.89, P.747 (1966)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS
- 66-NA-02 NAKAHARA, Y./ TAKAHASHI, H.
ON THE ITINERANT OSCILLATOR MODEL OF LIQUIDS
JAERI-MEMO-2311 (1966)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY ..LIQUID DYNAMICS
- 66-NE-01 NELKIN, M. / YIP, S.
BRILLOUIN SCATTERING BY GASES AS A TEST OF THE BOLTZMAN
N EQUATION
PHYS. FLUIDS, V.9, P.380 (1966)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING-LAW
- 66-NI-01 NIJBOER, B.R.A./ RAHMAN, A.
TIME EXPANSION OF CORRELATION FUNCTIONS AND THE THEORY
OF SLOW NEUTRON SCATTERING
PHYSICA, V.32, P.415-P.432 (1966)
SCATTERING-THEORIES ..SCATTERING FUNCTION/ CORRELATION
FUNCTION/ THEORY
- 66-NO-01 NOSSAL, R.
VALIDITY OF THE CONVOLUTION APPROXIMATION FOR THE VAN H
OVE G(R,T) FUNCTION
PHYS. REV., V.143, P.74 (1966)
SCATTERING-THEORIES ..CORRELATION FUNCTION/ SCATTERING
FUNCTION
- 66-NU-01 NUSIMOVICI, M.A./ BIRMAN, J.L.
SUM RULE FOR LATTICE VIBRATION OF WURTZITE STRUCTURES
J. PHYS. CHEM. SOLIDS, V.27, P.701 (1966)
THEORY-OF-SOLIDS ..DISPERSION RELATION/ BORN-VON KARMAN
MODEL/ THEORY ..SUM RULE/ WURTZITE STRUCTURE
- 66-OE-01 OEHME, H./ RICHTER, H.
MEASUREMENTS OF COHERENT SCATTERING OF NEUTRONS BY MOLT
EN SODIUM, CESIUM AND BISMUTH AT VARIOUS TEMPERATURES
NATURWISSENSCHAFTEN, V.53, P.16 (1966)
CS/ BI/ NA ..STRUCTURE FACTOR
- 66-PA-01 PALEVSKI, H.
SLOW NEUTRON STUDIES OF MOLECULAR MOTIONS IN CONDENSED
MATTER
J. CHIM. PHYS., V.63, P.157-P.167 (1966)
REVIEW-ARTICLES ..FILTER-CHOPPER METHOD/ DISPERSION REL
ATION/ FREQUENCY DISTRIBUTION FUNCTION/ QUASI-ELASTIC P

EAK/ TIME OF FLIGHT TECHNIQUES

- 66-PA-02 PASKIN, A./ RAHMANN, A.
EFFECT OF A LONG-RANGE OSCILLATORY POTENTIAL ON THE RAD
IAL DISTRIBUTION FUNCTION AND THE CONSTANT OF SELF-DIFF
USION IN LIQUID NA
PHYS. REV. LETT., V.21, P.300-P.303 (1966)
NA ..THEORY/ LIQUID ..MOLECULAR POTENTIAL/ RADIAL DENSIT
Y FUNCTION
- 66-PA-03 PASKIN, A.
THE DYNAMIC STRUCTURE OF LIQUIDS
BNL-50080(T-475) (1966)
REVIEW-ARTICLES/ AR/ NA/ CE/ RB ..LIQUID/ THEORY/ STRUC
TURE FACTOR/ VELOCITY AUTOCORRELATION FUNCTION..LIQUID
METAL
- 66-PA-04 PAWLEY, G.S./ COCHRAN, W./ COWLEY, R.A./ DOLLING,
G.
DIATOMIC FERROELECTRICS
PHYS. REV. LETT., V.17, P.753-P.755 (1966)
SN,TE ..EXPERIMENT/ PHONON DISPERSION/ TEMPERATURE DEPE
NDENCE
- 66-PA-05 PAYTON, D.N.
DYNAMICS OF DISORDERED HARMONIC LATTICES
LA-3510 (1966)
THEORY-OF-SOLIDS ..HARMONIC APPROXIMATION/ THEORY
- 66-PA-06 PAYTON, D.N./ VISSCHER, W.M.
DYNAMICS OF DISORDERED HARMONIC LATTICES IN ONE, TWO AN
D THREE DIMENSIONS
LA-3471 (1966)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ FREQUENCY DISTRIBU
TION/ THEORY ..DISORDERED HARMONIC LATTICE
- 66-PE-01 PELAH, I./ IMRY, J.
A SIMPLE INTERPRETATION OF THE QUASIELASTIC SCATTERING
OF SLOW NEUTRONS IN WATER
PHYS. LETT., V.21, P.248 (1966)
H2,O ..THEORY
- 66-PR-01 PRASK, H.J./ BOUTIN, H.
LOW-FREQUENCY MOTIONS OF H2,O MOLECULES IN CRYSTAL, 3
J. CHEM. PHYS., V.45, P.3284 (1966)
H2,O ..EXPERIMENT/ MOLECULAR DYNAMICS/ DIFFERENTIAL CRO
SS SECTION ..H2,O MOLECULES IN CRYSTAL
- 66-PJ-01 PUROHIT, S.N.
ANALYSIS OF THE QUASI-ELASTIC SCATTERING OF NEUTRONS IN
HYDROGENEOUS LIQUIDS
AE-259 (1966)

NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING LAW/ THEORY/
LIQUID/ INCOHERENT APPROXIMATION ..QUASI-ELASTIC SCATTE
RING

66-RA-01 RAHMAN, A.
LIQUID STRUCTURE AND SELF-DIFFUSION
J. CHEM. PHYS., V.45, P.2583 (1966)
NEUTRON-SCATTERING-IN-FLUIDS/ AR ..LIQUID/ FREQUENCY DI
STRIBUTION ..COMPUTER EXPERIMENT/ 85.5DK

66-RA-02 RAHMAN, A.
THE VELOCITY AUTOCORRELATION FUNCTION IN LIQUIDS FROM A
NEW POINT OF VIEW
REACTOR PHYSICS IN THE RESONANCE AND THERMAL REGIO
NS, MIT PRESS, V.1, P.123 (1966)
AR ..FREQUENCY DISTRIBUTION/ THEORY/ LIQUID/ MOLECULE D
YNAMICS ..COMPUTER EXPERIMENT

66-RA-03 RANDOLPH, P.D.
LIQUID LEAD
WASH-1068 (EANDC-US-85U), P.175 (1966)
LEAD ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..352DC

66-RA-04 RANDOLPH, P.D./ SINGWI, K.S.
SLOW NEUTRON SCATTERING AND COLLECTIVE MOTIONS IN LIQUI
D LEAD
PHYS. REV., V.152, P.99 (1966)
PB ..SCATTERING LAW/ LIQUID/ CRYSTAL SPECTROMETER/ EXPE
RIMENT ..COLLECTIVE MOTION

66-RA-05 RASHBA, E.I.
THEORY OF VIBRONIC SPECTRA OF MOLECULAR CRYSTALS
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.50 (V.23
) , P.1064-P.1080 (P.708-P.718) (1966 (1966))
THEORY-OF-SOLIDS ..THEORY/ MOLECULAR DYNAMICS

66-RO-01 ROSENSTOCK, H.B./ BLANKEN, G.
INTERATOMIC FORCES IN VARIOUS SOLIDS
PHYS. REV., V.145, P.546 (1966)
NA/ NB/ MO/ TA/ W/ CU-ZN/ SN ..THEORY/ DISPERSION RELAT
ION ..FORCE CONSTANTS FOR BORN-VON KARMAN MODEL

66-RU-01 RUSH, J.J./ TAYLOR, T.I.
NEUTRON-SCATTERING STUDY OF HINDERED ROTATIONAL MOTIONS
AND PHASE TRANSITIONS IN HEXAMETHYLBENZENE
J. CHEM. PHYS., V.44, P.2749 (1966)
HEXAMETHYLBENZENE ..EXPERIMENT/ SOLID/ FREQUENCY DISTRI
BUTION ..LOW-FREQUENCY MOTION/ NEAR 110DK/ NEAR 383DK

66-RU-02 RUSH, J.J./ FERRARO, J.R.
NEUTRON AND INFRARED SPECTRA OF H,CR.O2 AND D,CR.O2
J. CHEM. PHYS., V.44, P.2496-P.2498 (1966)

H,CR.O2 ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ MOLECULAR
CRYSTAL DYNAMICS ..TOF/ H,CR.O2 AND D,CR.O2

66-RU-03 RUSH, J.J./ FLOTOW, H.E./ CONNOR, D.W./ THAPER, C.
L.
VIBRATION SPECTRA OF YTTRIUM AND UKANIUM HYDRIDES BY TH
E INELASTIC SCATTERING OF COLD NEUTRON
J. CHEM. PHYS., V.45, P.3817-P.3825 (1966)
Y-H/ U-H ..EXPERIMENT/ HYDROGEN VIBRATION/ OPTICAL BAND
SPECA

66-RU-04 RUSH, J.J./ LEUNG, P.S./ TAYLOR, T.I.
MOTIONS OF WATER MOLECULES IN POTASSIUM FERROCYANIDE TR
IHYDRATE, WATER, AND ICE: A NEUTRON SCATTERING STUDY
J. CHEM. PHYS., V.45, P.1312 (1966)
H2.O ..INELASTIC SCATTERING SPECTRA

66-RU-05 RUSH, J.J./ LEUNG, P.S./ TAYLOR, T.I.
MOTIONS OF WATER MOLECULES IN POTASSIUM FERROCYANIDE TR
IHYDRATE, WATER, AND ICE. A NEUTRON SCATTERING STUDY
J. CHEM. PHYS., V.45, P.1312-P.1317 (1966)
WATER-POTASSIUM FERROCYANIDE TRIHYDRATE ..EXPERIMENT/ M
OLECULAR MOTION/ FERROELECTRIC TRANSITION

66-SA-01 SAFFORD, G.J./ HAUMANN, A.W./ SIMON, F.T.
NEUTRON-SCATTERING STUDY OF THE INTERMOLECULAR AND CRY
STALLINE MODES OF POLYETHYLENE
J. CHEM. PHYS., V.45, P.3787 (1966)
POLYETHYLENE ..FREQUENCY SPECTRUM/ NEUTRON SPECTRUM/ EX
PERIMENT/ LIQUID ..NEUTRON SCATTERING

66-SA-02 SAFFORD, G.J./ LOSACCO, F.J.
STUDY OF THE LOW-FREQUENCY OH(-) MOTIONS OF LI.O.H BY N
EUTRON INELASTIC SCATTERING
J. CHEM. PHYS., V.44, P.345-P.348 (1966)
LI.O.H ..EXPERIMENT/ TOF SPECTRUM/ MOLECULAR DYNAMICS

66-SA-03 SAHM, V.C./ VENKATARAMAN, G./ RUY, A.P.
PHONON DISPERSION RELATIONS IN BERYLLIUM USING THE PSUE
DO POTENTIAL APPROACH
PHYS. LETT., V.23, P.633-P.634 (1966)
BE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION

66-SA-04 SAUER, P.
ON HINDERED ROTATION OF LINEAR MOLECULES
Z. PHYS., V.194, P.360-P.372 (1966)
THEORY-OF-SOLIDS ..MOLECULAR DYNAMICS/ SOLID

66-SA-05 SAUNDERSON, D.H.
PRESSURE DEPENDENCE OF THE TA-(100) ZONE-BOUNDARY PHONO
N FREQUENCY IN RUBIDIUM IODIDE
PHYS. REV. LETT., V.17, P.530-P.533 (1966)

- RB.1 ..EXPERIMENT/ PHONON FREQUENCY/ PRESSURE EFFECT
- 66-SC-01 SCHLEMPER, E.O./ HAMILTON, W.C.
TOF/ 293DK/ 175DK/ 123DK
J. CHEM. PHYS., V.44, P.2499-P.2505 (1966)
(N,H)2.SI.F6 ..EXPERIMENT/ NEUTRON SPECTROSCOPY
- 66-SC-02 SCHMIDT, U./ SAAD, M.
USE OF TOTALLY REFLECTED COLD NEUTRONS FOR MEASUREMENT
OF THE TEMPERATURE DEPENDENCE OF THE (N,P) CROSS SECTION
N FOR CHEMICALLY BOUND PROTONS
EANDC(E) 66 U (1966)
BENZENE/ BIPHENYL/ TERPHENYL/ CYCLOHEXANE ..EXPERIMENT
- 66-SC-03 SCHMUNK, R.E.
BE DISPERSION RELATIONS
WASH-1068/ EANDC(US) 85U, P.164 (1966)
BE ..THEORY/ SOLID/ DISPERSION RELATION ..TEST OF SUM RULE
- 66-SC-04 SCHMUNK, R.E.
EXTENSION OF DISPERSION-RELATION MEASUREMENTS OF BERYLLIUM
PHYS. REV., V.149, P.450-P.456 (1966)
BE ..EXPERIMENT/ DISPERSION RELATION ..(0001), (0110),
(1120) DIRECTION/ DATA GIVEN IN GRAPHICAL FORM
- 66-SE-01 SEARS, V.F.
THEORY OF COLD NEUTRON SCATTERING BY HOMONUCLEAR DIATOMIC LIQUIDS
CAN. J. PHYS., V.44, P.1279 (1966)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ MOLECULAR ROTATIONS/ LIQUID/ THEORY ..HOMONUCLEAR DIATOMIC LIQUID/ FREE ROTATION
- 66-SE-02 SEARS, V.F.
THEORY OF COLD NEUTRON SCATTERING BY HOMONUCLEAR DIATOMIC LIQUIDS, 2 HINDERED ROTATION
CAN. J. PHYS., V.44, P.1299 (1966)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ MOLECULAR ROTATION/ LIQUID/ THEORY ..HOMONUCLEAR DIATOMIC LIQUID/ HINDERED ROTATION
- 66-SE-03 SEARS, V.F.
THE LAW OF CORRESPONDING STATES AND COLD NEUTRON SCATTERING BY LIQUID
CAN. J. PHYS., V.44, P.867 (1966)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING THEORY/ LIQUID/ THEORY ..LAW OF CORRESPONDING STATES
- 66-SH-01 SHUKLA, M.M./ DAYAL, B.
LATTICE VIBRATIONS OF ALUMINIUM ON THE BASIS OF KREBS'S

- MODEL
PHYS. STATUS SOLIDI, V.16, P.513-P.516 (1966)
AL ..THEORY/ PHONON DISPERSION/ KREBS MODEL
- 66-SI-01 SIMPSON, O.D./ MOORE, M.S./ BERRETH, J.R.
TABULATION OF THE TOTAL NEUTRON CROSS SECTION OF U-232
IN-1015 (1966)
U ..EXPERIMENT/ SIGMA(E) ..0.01EV-10000EV
- 66-SI-02 SINHA, S.K.
LATTICE DYNAMICS OF COPPER
PHYS. REV., V.143, P.143 (1966)
CU ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ TOF ..ROOM TEMPERATURE
- 66-SI-03 SINHA, S.K./ VENKATARAMAN, G.
EFFECT OF NUCLEAR SPIN CORRELATIONS ON THE SCATTERING OF NEUTRONS BY MOLECULES
PHYS. REV., V.149, P.1 (1966)
NEUTRON-SCATTERING-IN-FLUIDS/ METHANE ..MOLECULAR DYNAMICS ..DIFFERENTIAL CROSS SECTION/ NUCLEAR SPIN CORRELATION/ SPHERICAL-TOP MOLECULES
- 66-SK-01 SKOELD, K./ NELIN, G.
NEUTRON STUDY OF THE DIFFUSION OF HYDROGEN IN PALLADIUM
SOLID STATE COMMUN., V.4, P.303-P.306 (1966)
PD-H ..EXPERIMENT/ DIFFUSION BROADENING
- 66-SL-01 SLATER, J.C.
GREEN'S-FUNCTION METHOD IN THE ENERGY-BAND PROBLEM
PHYS. REV., V.145, P.599 (1966)
THEORY-OF-SOLIDS ..THEORY ..ELECTRON BAND/ GREEN FUNCTION
- 66-SO-01 SOLOVEV, S.P./ KUKHTO, O.L./ CHERNOPOLEKOV, N.A./ ZETLYANOV, M.G.
SCATTERING OF COLD NEUTRONS BY POLYCRYSTALLINE BARIUM, STRONTIUM, AND LEAD TITANATES
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.8 (V.8), P.2699-P.2708 (P.2156-P.2162) (1966 (1967))
SR.TI.O3/ BA.TI.O3/ PB.TI.O3 ..EXPERIMENT/ LATTICE VIBRATION ..POLYCRYSTAL/ ROOM TEMP/ 470DC AND 520DC FOR PB, TI.O3
- 66-SP-01 SPARK, S.D.
XLIBIT, ANL CROSS-SECTION LIBRARY CODE
ANL-7112 (TID-4500) (1966)
COMPUTER-CODES ..CDC-3600 PROGRAM
- 66-SQ-01 SQUIRES, G.L.
MEASUREMENTS OF THE FREQUENCIES OF THE NORMAL MODES IN MAGNESIUM

PROC. PHYS. SOC., LONDON, V.88, P.919 (1966)
MG ., PHONON DISPERSION

66-ST-01 STEDMAN, R./ NILSSON, G.
DISPERSION RELATIONS FOR PHONONS IN ALUMINUM AT 80 AND
300DK
PHYS. REV., V.143, P.492 (1966)
AL ., EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
.3-AXIS SPECTROMETER/ 80DK/ 300DK

66-SU-01 SUICH, J.E.
THE SENSITIVITY OF D2O MODERATE REACTOR PARAMETERS TO THE
RMAL NEUTRON SCATTERING LAW
CONF-660303, P.151 (1966)
D2.O ., NEUTRON SPECTRUM

66-SU-02 SUNAKAWA, S./ FUKUI, Y./ NISHIGORI, T.
MULTIPLE SCATTERING OF NEUTRONS AND CORRELATION FUNCTIO
NS
PROGR. THEORET. PHYS., KYOTO, V.35, P.228-P.240 (1
966)
SCATTERING-THEORIES ., DIFFERENTIAL CROSS SECTION/ MULTI
PLE SCATTERING

66-SZ-01 SZKATULA, A./ FULINSKI, A.
DYNAMICAL AND THERMODYNAMICAL STRUCTURE OF WATER FROM T
HE SCATTERING OF COLD NEUTRONS
INP-501-PS (1966)
H2.O ., LIQUID/ MOLECULAR DYNAMICS

66-TE-01 TEUTSCH, H./ MATESCU, N./ NAHORNIAK, V./ DIACONES
CU, A.
COLD NEUTRON SCATTERING BY LIQUID NITROGEN
PHYS. LETT., V.22, P.538 (1966)
N2 ., EXPERIMENT/ LIQUID DYNAMICS

66-TR-01 TREVINO, S.F.
NEUTRON SCATTERING FROM ORIENTED POLYETHYLENE
J. CHEM. PHYS., V.45, P.757-P.759 (1966)
POLYETHYLENE ., EXPERIMENT/ NEUTRON SPECTROSCOPY ., TOF/
ORIENTED SAMPLE

66-TR-02 TREVINO, S./ BOUTIN, H.
LOW-ENERGY VIBRATIONAL MODES OF POLYOXYMETHYLENE BY NEU
TRON SCATTERING
J. CHEM. PHYS., V.45, P.2700-P.2702 (1966)
POLYOXYMETHYLENE ., EXPERIMENT/ FREQUENCY SPECTRA/ LATI
CE DYNAMICS

66-VE-01 VENKATARAMAN, G./ DASANNACHARYA, B.A./ RAD, K.R.
COLD NEUTRON SCATTERING FROM LIQUID C.D4
PHYS. LETT., V.23, P.226-P.227 (1966)

METHANE ., LIQUID/ EXPERIMENT/ MOLECULAR DYNAMICS/ TOF
COHERENT

66-VE-02 VENKATARAMAN, G.
RECENT ADVANCES IN THE STUDY OF ATOMIC MOTIONS IN LIQUI
DS

PROCEEDINGS OF THE NUCLEAR PHYSICS AND SOLID STATE
PHYSICS SYMPOSIUM, DAE, BOMBAY, P.109-P.126 (1966)
REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-FLUIDS ., LIQUID
DYNAMICS

66-VE-03 VENKATARAMAN, G./ RAD, K.R./ DASANNACHARYA, B.A./
DAYANIDHI, P.K.
NEUTRON SCATTERING FROM GASEOUS METHANE AND AMMONIA
PROC. PHYS. SOC., LONDON, V.89, P.379-P.383 (1966)
AMMONIA/ METHANE ., THEORY/ CALCULATION/ CROSS SECTION/
GAS PHASE

66-VE-04 VENKATARAMAN, G./ DENIZ, K.U./ IYENGAR, P.K./ ROY,
A.P./ VIJAYARAGHAVAN, P.R.
STUDY OF THE ROTATIONAL BEHAVIOUR OF THE AMMONIUM ION I
N SEVERAL SALTS BY NEUTRON SPECTROMETRY
J. PHYS. CHEM. SOLIDS, V.27, P.1103-P.1123 (1966)
N.H4.CL/ N.H4.BR/ N.H4.I/ (N.H4)2.SN.CL6/ (N.H4)2.SN.BR
6 ., EXPERIMENT/ ROTATIONAL MODE/ N.H4 ION

66-WE-01 WEST, R.E./ BRUGGER, R.M./ GRIFFING, G.W.
COHERENT SCATTERING FROM C.D4 GAS
WASH-1068 (EANDC (US) 85U), P.171 (1966)
METHANE ., SCATTERING LAW/ EXPERIMENT/ THEORY/ GAS ., 306
DK/ C.D4

66-WE-02 WEST, R.E./ BRUGGER, R.M./ GRIFFING, G.W.
INTRAMOLECULAR COHERENT SCATTERING OF NEUTRONS BY C.D4
GAS
PHYS. REV., V.148, P.163-P.169 (1966)
C.H4 ., EXPERIMENT/ SCATTERING FUNCTION/ GAS/ MOLECULAR
DYNAMICS ., 306DK/ TOF

66-WH-01 WHITEMORE, W.L.
SCATTERING OF NEUTRONS BY POLYETHYLENE, (GA-6456, 1966
)
NUCL. SCI. ENG., V.24, P.394 (1966)
POLYETHYLENE ., EXPERIMENT

66-WH-02 WHITEMORE, W.L.
DIFFERENTIAL NEUTRON THERMALIZATION
GA-7287 (1966)
D2.O/ GRAPHITE ., EXPERIMENT/ SCATTERING FUNCTION ., 24DC

- 66-WI-01 WILLIAMS, M.M.R.
THE SLOWING DOWN AND THERMALIZATION OF NEUTRONS
NORTH-HOLLAND, AMSTERDAM (1966)
REVIEW-ARTICLES ..BOOK
- 66-WO-01 WORDEN, J.R./ PURCELL, W.L./ LIKALA, R.C.
SENSITIVITY OF THERMAL REACTOR PARAMETERS TO SCATTERING
MODEL
CONF-660303, P.146 (1966)
H2.O/ D2.O/ GRAPHITE ..NEUTRON SPECTRUM/ SIGMA(E-E-PRIM
E)
- 66-YO-01 YOUNG, J.A.
ATOMIC MOTION IN MODERATORS
REACTOR PHYSICS IN THE RESONANCE AND THERMAL REGIO
NS. MIT PRESS, V.1, P.3 (1966)
BE/ C/ BE.O ..SCATTERING FUNCTION/ THEORY/ LATTICE DYNA
MICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
- 66-YO-02 YOUNG, J.A./ KOPPEL, J.U.
PHONON SPECTRUM OF BERYLLIUM OXIDE
GA-6862 (1966)
BE.O ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE/ FREQ
UENCY SPECTRUM ..(THIS IS A PREPRINT OF A PAPER SUBMITT
ED FOR PUBLICATION IN NUCL. SCI. ENG.)
- 66-ZE-01 ZEMLYANOV, M.G./ SOMENKOV, V.A./ CHERNOPOLEKOV, N.A.
AN INVESTIGATION OF INELASTIC NEUTRON SCATTERING BY A
CRYSTAL DOPED WITH LIGHT IMPURITY ATOMS
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.52 (V.25
) , P.663-P.669 (P.436-P.438) (1966 (1977))
NI-BE ..EXPERIMENT/ LOCAL MODE/ PHONON SPECTRA
- 66-ZW-01 ZWANZIG, R.
APPROXIMATE EIGENFUNCTIONS OF THE LIOUVILLE OPERATOR IN
CLASSICAL MANY-BODY SYSTEMS
PHYS. REV., V.144, P.170 (1966)
THEORY-OF-FLUIDS ..STATISTICAL MECHANICS/ GAS/ LIQUID/
SOLID/ THEORY ..LIOUVILLE OPERATOR
- 66-ZY-01 JAPANESE NUCLEAR DATA COMMITTEE
HOW TO USE THE UNCLE CODE, SUPPLEMENT TO JAERI-1087
JAERI-MEMO-2334 (1966)
COMPUTER-CODES
- 66-ZY-02 JAPAN ATOMIC ENERGY RESEARCH INSTITUTE
INELASTIC SCATTERING OF NEUTRONS
JAERI-1113 (1966)
REVIEW-ARTICLES ..DYNAMICS OF SOLIDS AND LIQUIDS
- 67-AG-01 AGGARWAL, K.G.
LATTICE DYNAMICS OF DIAMOND
PROC. PHYS. SOC., LONDON, V.91, P.381-P.389 (1967)
DIAMOND ..THEORY/ PHONON DISPERSION/ TWO-NEIGHBOUR BORN
-VON KARMAN MODEL
- 67-AG-02 AGRAWAL, A.K./ YIP, S.
CORRELATION OF INFRARED AND INELASTIC NEUTRON SCATTERIN
G SPECTRA
J. CHEM. PHYS., V.46, P.1999-P.2000 (1967)
C.H4 ..THEORY/ LIQUID/ CROSS SECTION EVALUATION
- 67-AL-01 ALDRED, B.K./ EDEN, R.C./ WHITE, J.W.
NEUTRON SCATTERING SPECTROSCOPY OF LIQUIDS
DISCUSS. FARADAY SOC., V.43, P.169 (1967)
ACETIC ACID/ ALCOHOL ..MOLECULAR DYNAMICS/ LIQUID/ EXPE
RIMENT
- 67-AL-02 ALDRED, B.K./ EDEN, R.C./ WHITE, J.W.
NEUTRON SCATTERING SPECTROSCOPY OF LIQUIDS
DISCUSS. FARADAY SOC., V.43, P.169-P.191 (1967)
ACETIC ACID/ METHANOL ..EXPERIMENT/ TOF SPECTRUM/ QUASI
-ELASTIC PEAK WIDTH
- 67-AL-03 ALDRED, B.K./ EDEN, R.C./ WHITE, J.W.
NEUTRON SCATTERING SPECTROSCOPY OF LIQUIDS
DISCUSS. FARADAY SOC., V.43, P.169-P.183 (1967)
ACETIC ACID/ METHANOL ..EXPERIMENT/ SUBSTITUTION OF DEU
TERIUM AND FLUORINE
- 67-AL-04 ALS-NIELSEN, J./ DIETRICH, O.W.
LONG RANGE ORDER AND CRITICAL SCATTERING OF NEUTRONS BE
LOW THE TRANSITION TEMPERATURE IN BETA-BRASS
PHYS. REV., V.153, P.717 (1967)
CU-ZN ..CRITICAL SCATTERING/ ALLOY
- 67-AX-01 AXMANN, A./ GISSLER, W.
SLOW NEUTRON SCATTERING BY POLYCRYSTALLINE SELENIUM AND
TELLURIUM (IN GERMANY, JUL-479-NP)
PHYS. STATUS SOLIDI, V.19, P.721-P.727 (1967)
SE/ TE ..EXPERIMENT/ TOF/ POLYCRYSTAL
- 67-BA-01 BAJOREK, A./ NATKANIEC, I./ PARLIMSKY, K./ SUDNIK-
HRYUKIEVICZ, M./ JANIK, J.A./
MOLECULAR DYNAMICS IN GASEOUS AND SOLID METHANE STUDIED
BY THE INELASTIC NEUTRON SCATTERING METHOD
PHYSICA, V.41, P.397 (1967)
METHANE ..EXPERIMENT/ GAS/ SOLID/ CRYSTAL SPECTROMETER
- 67-BA-02 BALLY, D./ TODIREANU, S./ TREPADUS, V./ TARINA, V.
THE NEUTRON DOUBLE DIFFERENTIAL CROSS SECTIONS OF METHA
NE AND ETHYLENE
PHYSICA, V.33, P.523-P.527 (1967)

METHANE/ ETHYLENE ..GAS/ EXPERIMENT

- 67-BA-03 BARKER-JR, A.S./ VERLESER, H.W.
LONG WAVE OPTICAL PHONON VIBRATIONS IN MIXED CRYSTALS
SOLID STATE COMMUN., V.5, P.695-P.699 (1967)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY
- 67-BA-04 BATA, L./ KROO, N.
INELASTIC NEUTRON SCATTERING BY DENSITY FLUCTUATIONS IN
C.O2 NEAR THE CRITICAL POINT
PHYS. LETT., V.24A, P.57 (1967)
C.O2 ..CRITICAL SCATTERING
- 67-BE-01 BERGSMAN, J./ VAN-DIJK, C./ TOCCHETTI, D.
NORMAL VIBRATIONS IN ALPHA-IRON
PHYS. LETT., V.24A, P.270 (1967)
FE ..DISPERSION RELATION/ EXPERIMENT/ SOLID/ LATTICE DY
NAMICS/ CRYSTAL SPECTROMETER/ BORN-VON KARMAN MODEL ..M
ETAL
- 67-BE-02 BERNE, B./ FRISCH, H.I.
HIGH-FREQUENCY LINEAR RESPONSE OF CLASSICAL FLUIDS TO B
ROWNIAN OSCILLATORS
PHYS. REV., V.47, P.2477-P.2480 (1967)
THEORY-OF-FLUIDS ..LIQUID/ THEORY ..HIGH-FREQUENCY RESP
ONCE
- 67-BE-03 BEYSTER, J.R./ BORGONOV, G.M./ CARRIVEAU, G.W.
ANGULAR SCATTERING BY C.H2
GA-3030 (1967)
C.H2/ C6.H6/ ZR-H ..EXPERIMENT
- 67-BE-04 BEYSTER, J.R./ NEIL, J.M.
STATUS OF THERMAL NEUTRON SPECTRA
GA-7092 (CONF-670707-7) (1967)
REVIEW-ARTICLES
- 67-BI-01 BISCHOFF, F./ BRYANT, W.A./ ESCH, L.J./ LAJEUNESSE
C./ MOORE, W.E./
EPITHEMAL NEUTRON INELASTIC SCATTERING
WASH-107, P.103 (1967)
POLYETHYLENE/ H2.O/ ZR-H/ NB-H/ U.O2 ..EXPERIMENT
- 67-BI-02 BITTER, M./ GISSLER, W./ SPRINGER, T.
LATTICE DYNAMICS OF SOLID HELIUM AT 2.9K AND 125ATM BY
NEUTRON SCATTERING
PHYS. STATUS SOLIDI, V.23K, P.155-P.158 (1967)
HE ..EXPERIMENT/ PHONON DISPERSION
- 67-BI-03 BITTER, M./ GISSLER, W./ SPRINGER, T.
LATTICE DYNAMICS OF SOLID HELIUM AT 2.9 K AND 125 ATM B
Y NEUTRON SCATTERING

PHYS. STATUS SOLIDI, V.23K, P.155 (1967)
HE ..PHONON DISPERSION

- 67-BJ-01 BJORKMAN, G./ GRIMVALL, G.
POLARIZATION VECTORS FOR LATTICE VIBRATIONS IN SODIUM
PHYS. STATUS SOLIDI, V.19, P.863-P.865 (1967)
NA ..THEORY/ PHONON POLARIZATION/ KREBS MODEL
- 67-BJ-02 BJORKMAN, G./ LUNDQVIST, B.I./ SJOELANDER, A.
DAMPING OF PHONONS IN ALUMINUM
PHYS. REV., V.159, P.551 (1967)
AL ..THEORY/ LATTICE DYNAMICS
- 67-BL-01 BLANCHARD, R./ VARSHNI, Y.D.
LATTICE DYNAMICS OF DIAMOND
PHYS. REV., V.159, P.599 (1967)
DIAMOND ..LATTICE DYNAMICS/ THEORY/ DISPERSION RELATION
..SHELL MODEL CALCULATION/ DEBYE TEMP.
- 67-BL-02 BLINC, R./ DIMIC, V./ PETKOVSEK, J./ PIRKMAJER, E.
STUDY OF PROTON DYNAMICS IN PARAELECTRIC K.H2.P.O4 BY Q
UASI-ELASTIC COLD NEUTRON SCATTERING
PHYS. LETT., V.26A, P.8-P.9 (1967)
K.H2.P.O4 ..MOLECULAR DYNAMICS/ SOLID/ EXPERIMENT
- 67-BO-01 BOON, J./ RICE, S.A.
MEMORY EFFECTS AND THE AUTOCORRELATION FUNCTION OF A DY
NAMICAL VARIABLE
J. CHEM. PHYS., V.47, P.2480-P.2490 (1967)
AR/ THEORY-OF-FLUIDS ..THEORY/ LIQUID ..MOMENTUM AUTO-C
ORRELATION FUNCTION
- 67-BO-02 BORGONOV, G./ LOGIUDICE, G./ TOCCHETTI, D.
AN ANALYSIS OF LATTICE VIBRATIONS OF ORDERED FE3.AL
J. PHYS. CHEM. SOLIDS, V.28, P.467 (1967)
FE-AL ..PHONON DISPERSION/ FE3.AL
- 67-BO-03 BOYSTER, J.R./ MCMURRY, H.L.
ADJUSTER, A FORCE CONSTANT ADJUSTER PROGRAM TO OBTAIN L
EAST SQUARES FIT TO OBSERVED FREQUENCIES OF MOLECULES A
ND CRYSTALS
IN-1148 (1967)
COMPUTER-CODES ..THEORY/ MOLECULAR DYNAMICS/ LATTICE DY
NAMICS ..FORTRAN PROGRAM FOR THE IBM 7040
- 67-BR-01 BROCKHOUSE, B.N./ ABOU-HELA, H.E./ HALLMAN, E.D.
LATTICE VIBRATION IN IRON AT 296OK
SOLID STATE COMMUN., V.5, P.211 (1967)
FE ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION
- 67-BR-02 BROVMAN, E.G./ KAGAN, Y.
ON THE PHONON SPECTRUM OF METALS

- ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.52 (V.25)
J. P.557-P.574 (P.365-P.376) (1967)
SN/ SN.02 ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION
/ THEORY/ LATTICE DYNAMICS/ BORN-VON KARMAN MODEL/ CENT
RAL-FORCE MODELS ..METAL
- 67-BR-03 BROWN, J.S./ HORTON, G.K.
MODEL POTENTIALS AND THE DISPERSION LAW IN SOLID KRYPTON
PHYS. REV. LETT., V.18, P.647 (1967)
KR ..LATTICE DYNAMICS/ THEORY/ DISPERSION RELATION/ FRE
QUENCY DISTRIBUTION ..730K
- 67-BR-04 BROWN, P.J./ ZIEBECK, K.R.A.
MAGNETIZATION DISTRIBUTION IN A PARTIALLY DISORDERED AU
4-V ALLOY
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.616-P.622 (1967)
AU-V ..POLARIZED NEUTRON DIFFRACTION
- 67-BR-05 BRUGGER, R.M./ STRONG, K.A.
LATTICE VIBRATIONS OF BE.O
J. PHYS. CHEM. SOLIDS, V.28, P.249 (1967)
BE.O ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATIO
N ..ROOM TEMPERATURE
- 67-BU-01 BUCKLAND, R.J./ SAUNDERSON, D.H.
LONGITUDINAL OPTIC MODES IN MAGNESIUM OXIDE
AERE-R-5467 (1967)
MG.O ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATIO
N ..TRIPLE AXIS SPECTROMETER
- 67-BU-02 BUYERS, W.J.L.
LATTICE DYNAMICS OF SODIUM FLUORIDE
PHYS. REV., V.153, P.923-P.930 (1967)
NA.F ..EXPERIMENT/ PHONON DISPERSION/ MODEL CALCULATION
- 67-CA-01 CAGLIOTI, G./ CORCHIA, M./ RIZZI, G.
NEUTRON DIFFRACTION ANALYSIS OF LIQUID ZINC, 1
NUOVO CIM., B, V.49, P.222-P.226 (1967)
ZINC ..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION
- 67-CA-02 CARBOTTE, J.P./ DYNES, R.C.
CALCULATIONS OF THE SUPERCONDUCTING TRANSITION TEMPERA
TURE IN ALUMINIUM
PHYS. LETT., A, V.25, P.685 (1967)
AL ..THEORY/ SUPERCONDUCTING TRANSITION/ PHONON SPECTRA
- 67-CA-03 CARPENTER, J.M.
ORIENTATION-AVERAGED AMPLITUDE OF THE ONE-QUANTUM TERM
IN THE NEUTRON SCATTERING LAW FOR MOLECULAR GASES

- J. CHEM. PHYS., V.46, P.465 (1967)
C2.F6/ BR2 ..SCATTERING LAW/ CORRELATION FUNCTION/ THEO
RY/ GAS/ MOLECULAR DYNAMICS ..TORSIONAL OSCILLATION
- 67-CA-04 CARRIVEAU, G.W.
SINGLE DIFFERENTIAL CROSS SECTION OF ZIRCONIUM HYDRIDE
GA-8345 (1967)
ZR-H ..ANGULAR DISTRIBUTION/ TEMPERATURE EFFECT
- 67-CH-01 CHEN, S.H.
GROUP-THEORETICAL ANALYSIS OF LATTICE VIBRATIONS IN MET
ALLIC BETA-TIN
PHYS. REV., V.163, P.532 (1967)
SN ..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY PROPERT
IES
- 67-CH-02 CHERNOPOLEKOV, N.A./ PANOVA, G.K./ ZEMLYANOV, M.G./
SAMOILOV, B.N./ KUTAITSEV, V.I.
INVESTIGATION OF THE QUASI-LOCAL LEVEL IN THE VIBRATION
AL SPECTRUM OF THE TI LATTICE WITH HEAVY IMPURITY ATOMS
PHYS. STATUS SOLIDI, V.20, P.767-P.770 (1967)
TI-U ..EXPERIMENT/ LOCAL MODE/ TIO.95-UO.05
- 67-CL-01 CLENDENIN, W.W.
CALCULATION OF THERMAL NEUTRON SCATTERING CROSS SECTION
S FOR CRYSTALLINE MATERIALS, THE FOR PROGRAM
LA-3823 (1967)
COMPUTER-CODES ..CROSS SECTION EVALUATION/ SOLID/ SCATT
ERING FUNCTION ..FORTRAN LIST
- 67-CO-01 COCKING, S.J.
HIGH FREQUENCY WAVES IN LIQUIDS METALS
ADVAN. PHYS., V.16, P.189 (1967)
AL/ PB/ BI/ RB/ SN ..SOLID/ LIQUID/ DISPERSION RELATION
/ EXPERIMENT
- 67-CO-02 COLLINS, A.T./ LIGHTOWLERS, E.C./ DEAN, P.J.
LATTICE VIBRATION SPECTRA OF ALUMINUM NITRIDE
PHYS. REV., V.158, P.833 (1967)
AL.N ..OPTICAL EXPERIMENT
- 67-CO-03 COWLEY, E.R./ OKAZAKI, A.
THE LATTICE DYNAMICS OF THALLOUS BROMIDE
PROC. ROY. SOC., LONDON, SER. A, V.300, P.45 (1967)
TL.BR ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION
RELATION
- 67-CU-01 CURTIS, R.L./ GRIMSEY, R.A.
INCITE - A FORTRAN-IV PROGRAM TO GENERATE THERMAL NEUTR
ON SPECTRA AND MULTIGROUP CONSTANTS USING ARBITRARY SCA
TTERING KERNELS

IN-1062 (1967)
COMPUTER-CODES ..NEUTRON SPECTRUM

- 67-CU-02 CUSACK, N.E.
THE PHYSICS OF LIQUID METALS
CONTEMP. PHYS., V.8, P.583-P.606 (1967)
REVIEW-ARTICLES ..LIQUID METAL/ PHYSICAL PROPERTIES
- 67-DA-01 DANIELS, W.B./ SHIRANE, G./ FRAZER, B.C./ UMEBAYASHI, H./ LEAKE, J.A.
PHONON-DISPERSION MEASUREMENTS ON A KRYPTON SINGLE CRYSTAL
PHYS. REV., V.18, P.548-P.550 (1967)
KR ..EXPERIMENT/ PHONON DISPERSION/ 79DK
- 67-DA-02 DASANNACHARYA, B.A./ VENKATARAMAN, G.
DYNAMICS OF LIQUID C.H4 FROM COLD-NEUTRON SCATTERING
PHYS. REV., V.156, P.43 (1967)
C.H4 ..CROSS SECTION EVALUATION/ LIQUID/ EXPERIMENT/ DIFFUSION PARAMETER/ FREQUENCY DISTRIBUTION ..ROTATING CRYSTAL SPECTROMETER/ 98DK
- 67-DE-01 DEPLANTE, J.L.
PAIR INTERACTIONS AND PHONON SPECTRUM IN METAL (IN FRENCH)
J. PHYS., PARIS, V.28, P.465 (1967)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY/ DISPERSION RELATION ..CUBIC METAL/ KOHN EFFECT
- 67-DE-02 DESAI, R.C./ YIP, S.
SUM RULE CRITERION IN COHERENT SLOW NEUTRON SCATTERING IN LIQUIDS
PHYS. LETT., V.25A, P.211-P.212 (1967)
NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID/ THEORY ..SUM RULE
- 67-DE-03 DEWETTE, F.W./ NOSANOW, L.H./ WERTHAMER, N.R.
CALCULATION OF PHONON FREQUENCIES AND THERMODYNAMIC PROPERTIES OF CRYSTALLINE BCC HELIUM
PHYS. REV., V.162, P.824-P.834 (1967)
HE ..THEORY/ LATTICE VIBRATION/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
- 67-DI-01 DIMITRIJEVIC, Z./ KRASNICKI, S./ TODOROVIC, J./ WAGNIC, A.
NEUTRON INVESTIGATION OF MAGNONS IN MAGNETITE
PHYS. STATUS SOLIDI, V.22K, P.55-P.57 (1967)
MAGNETITE/ MAGNETIC-SCATTERING ..EXPERIMENT/ MAGNON DISPERSION
- 67-DO-01 DOLLING, G.
DYNAMICS OF MOLECULAR CRYSTALS

- CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.263-P.280 (1967)
REVIEW-ARTICLES ..MOLECULAR DYNAMICS/ ANTHRACENE/ BENZENE/ CARBON DIOXIDE/ HEXAMETHYLENETETRAAMINE/ HYDROGEN/ IODINE/ NAPHTHALENE/ NITROGEN/ PARADICHLOROBENZENE/ PYRAZINE/ SULPHUR/ THIUREA/ UREA
- 67-DO-02 DORNER, B./ PLESSER, T./ STILLER, H.
BRILLOUIN SCATTERING OF NEUTRONS FROM LIQUIDS
DISCUSS. FARADAY SOC., V.43, P.160 (1967)
PB ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..LIQUID DYNAMICS/ METAL
- 67-DO-03 DORNER, B./ PLESSER, T./ STILLER, H.
BRILLOUIN SCATTERING OF NEUTRONS FROM LIQUIDS
DISCUSS. FARADAY SOC., V.43, P.160-P.168 (1967)
PB ..EXPERIMENT/ 3-AXIS SPECTROMETER/ LIQUID/ DISPERSION CURVE
- 67-DO-04 DORNER, B./ PLESSER, T./ STILLER, H.
BRILLOUIN SCATTERING OF NEUTRONS FROM LIQUIDS
DISCUSS. FARADAY SOC., V.43, P.160-P.168 (1967)
PB ..EXPERIMENT/ POLYCRYSTAL/ LIQUID/ DISPERSION CURVES
- 67-EG-01 EGELSTAFF, P.A./ HAYWOOD, B.C./ WEBB, F.J.
MOLECULAR MOTIONS IN LIQUID AND SOLID HYDROGEN AND DEUTERIUM
PROC. PHYS. SOC., LONDON, V.90, P.681 (1967)
H2 ..MOLECULAR DYNAMICS/ SOLID/ LIQUID/ EXPERIMENT
- 67-EG-02 EGELSTAFF, P.A.
RADIATION SCATTERING DATA ON LIQUID METALS
ADVAN. PHYS., V.16, P.147 (1967)
REVIEW-ARTICLES ..LIQUID
- 67-EG-03 EGELSTAFF, P.A./ WIGNALL, G.D.
CRITICAL INELASTIC SCATTERING OF SLOW NEUTRONS FROM A BINARY LIQUID METAL MIXTURE (BI-ZN)
AERE-R-5627 (1967)
BI-ZN ..EXPERIMENT/ LIQUID ..QUASI-ELASTIC SCATTERING/ CONCENTRATION FLUCTUATION
- 67-EG-04 EGELSTAFF, P.A.
RADIATION SCATTERING STUDIES OF THE STRUCTURE AND TRANSPORT PROPERTIES OF LIQUIDS
DISCUSS. FARADAY SOC., V.43, P.149-P.159 (1967)
REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING FUNCTION/ TRANSPORT PROPERTIES
- 67-EG-05 EGELSTAFF, P.A.
RADIATION SCATTERING STUDIES OF THE STRUCTURE AND TRANSPORT PROPERTIES OF LIQUIDS

- PORT PROPERTIES OF LIQUIDS
DISCUSS. FARADAY SOC., V.43, P.149-P.159 (1967)
REVIEW-ARTICLES .. LIQUID/ STRUCTURE/ TRANSPORT PROPERTIES/ NEUTRON SCATTERING
- 67-EG-06 EGELSTAFF, P.A.,
RADIATION SCATTERING STUDIES OF THE STRUCTURE AND TRANSPORT PROPERTIES OF LIQUIDS
DISCUSS. FARADAY SOC., V.43, P.149-P.159 (1967)
REVIEW-ARTICLES .. THEORETICAL BACKGROUND
- 67-EG-07 EGELSTAFF, P.A./ MAYWOOD, B.C./ WEBB, F.J.,
MOLECULAR MOTIONS IN LIQUID AND SOLID HYDROGEN AND DEUTERIUM
H2 .. EXPERIMENT/ MOLECULAR MOTION/ LIQUID AND SOLID
PROC. PHYS. SOC., LONDON, V.90, P.681 (1967)
- 67-EL-01 ELCOMBE, M.M.,
SOME ASPECTS OF THE LATTICE DYNAMICS OF QUARTZ
PROC. PHYS. SOC., LONDON, V.91, P.947-P.958 (1967)
QUARTZ .. EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
ION
- 67-EL-02 ELCOMBE, M.M.,
THE CRYSTAL DYNAMICS OF LEAD SULPHIDE
PROC. ROY. SOC., LONDON, SER. A, V.300, P.210-P.217 (1967)
P.B.S. .. EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ MODEL FITTING/ FREQUENCY SPECTRUM
- 67-EL-03 ELLIOTT, R.J./ TAYLOR, D.W.,
VIBRATIONS OF RANDOM DILUTE ALLOYS
PROC. ROY. SOC., LONDON, SER. A, V.296, P.161-P.188 (1967)
NEUTRON-SCATTERING-IN-SOLIDS .. THEORY/ LATTICE DYNAMICS .. IMPURITY EFFECT
- 67-EL-04 ELLIOTT, R.J./ HARTMAN, W.H.,
THEORY OF NEUTRON SCATTERING FROM LIQUID AND SOLID HYDROGEN
H2 .. MOLECULAR DYNAMICS/ THEORY/ SIGMA(THETA, E)
PROC. PHYS. SOC., LONDON, V.90, P.671-P.680 (1967)
- 67-EL-05 ELLIOTT, R.J./ THORPE, M.F.,
GROUP THEORETICAL SELECTION RULES IN INELASTIC NEUTRON SCATTERING
PROC. PHYS. SOC., LONDON, V.91, P.903-P.916 (1967)
NEUTRON-SCATTERING-IN-SOLIDS .. THEORY .. PHONON/ MAGNON/ GROUP THEORY
- 67-EN-01 ENGLMAN, R./ RUPPIN, R.,
OPTICAL LATTICE VIBRATIONS IN FINITE IONIC CRYSTALS I.
- IN THE ABSENCE OF RETARDATION
IA-1117 (1967)
NEUTRON-SCATTERING-IN-SOLIDS .. LATTICE DYNAMICS
- 67-FE-01 FERZIGER, J.H./ FEINSTEIN, D.L.,
COLLECTIVE EFFECTS AND THE HYDRODYNAMIC APPROXIMATION IN NEUTRON SCATTERING FROM FLUID
PHYS. REV., V.158, P.1 (1967)
NEUTRON-SCATTERING-IN-FLUIDS/ NA .. SCATTERING THEORY/ GAS/ LIQUID/
- 67-FE-02 FERZIGER, J.H./ FEINSTEIN, D.L.,
COLLECTIVE EFFECTS AND HYDRODYNAMIC APPROXIMATION IN NEUTRON SCATTERING FROM FLUIDS
PHYS. REV., V.158, P.97 (1967)
NA/ NEUTRON-SCATTERING-IN-FLUIDS .. THEORY/ LIQUID DYNAMICS
- 67-GE-01 GEE, A.R./ ROBINSON, G.W.,
RAMAN SPECTRUM OF CRYSTALLINE BENZENE
J. CHEM. PHYS., V.46, P.4847-P.4853 (1967)
BENZENE .. MOLECULAR DYNAMICS .. RAMAN SPECTRUM
- 67-GE-02 GEICK, R./ SCHROEDER, U./ STUKE, J.,
LATTICE VIBRATIONAL PROPERTIES OF TRIGONAL SELENIUM
PHYS. STATUS SOLIDI, V.24, P.99-P.108 (1967)
SE .. INFRARED EXPERIMENT/ CALCULATION/ PHONON DISPERSION
- 67-GI-01 GIBBS, A.G./ LINDENMEIER, C.W.,
ANALYTICAL EVALUATION OF THE LARGE TIME CONTRIBUTION TO NEUTRON SCATTERING CROSS SECTION
BNWL-SA-1085 (CONF-670707-4) (1967)
SCATTERING-THEORIES .. THEORY/ CROSS SECTION EVALUATION
- 67-GI-02 GILAT, G.,
EXISTENCE OF AN INFINITY IN THE FREQUENCY DISTRIBUTION G(NU) OF MONOATOMIC BODY-CENTERED CUBIC CRYSTALS
PHYS. REV., V.157, P.540 (1967)
CR/ FE/ W/ THEORY-OF-SOLIDS .. THEORY/ PHONON SPECTRA/ BCC METALS
- 67-GL-01 GLAESER, W.,
A REVIEW OF SCATTERING LAW STUDIES FOR MODERATORS
KFK 602 (1967)
REVIEW-ARTICLES/ H2/O/ ZR-H/ GRAPHITE/ D2/O/ BE/ BE.O .. INCOHERENT APPROXIMATION/ MULTIPLE SCATTERING/ SCATTERING LAW/ FREQUENCY SPECTRUM/ EXPERIMENT/ THEORY/ LIQUID/ SOLID/ SIGMA(E)/ SIGMA(E, THETA)/ NEUTRON SPECTRUM
- 67-GO-01 GOLAND, A.N./ OTNES, K.,
QUASI-ELASTIC SCATTERING OF SLOW NEUTRONS BY WATER AND

- AQUEOUS SOLUTION OF SODIUM CHLORIDE
PHYS. REV., V.153, P.184 (1967)
H2,O ..EXPERIMENT/ LIQUID ..QUASI-ELASTIC SCATTERING
- 67-GU-01 GUPTA, R.P./ SHARMA, P.K.
DEBYE-WALLER FACTORS OF COPPER AND GOLD
J. CHEM. PHYS., V.46, P.1359-P.1361 (1967)
CU/ AU ..LATTICE DYNAMICS/ THEORY
- 67-HA-01 HARKER, T.D./ BRUGGER, R.M.
INVESTIGATION OF THE LOW-TEMPERATURE PHASE TRANSITION I
N SOLID METHANE BY SLOW NEUTRON INELASTIC SCATTERING
J. CHEM. PHYS., V.46, P.2201-P.2208 (1967)
METHANE ..EXPERIMENT/ SOLID/ TOF/ MOLECULAR DYNAMICS/ S
CATTERING FUNCTION ..5DK/ 9.1DK/ 18DK/ 22.1DK/ PHASE TR
ANSITION
- 67-HA-02 HAUTECLER, S./ VAN-DINGENEN, W.
LATTICE DYNAMICS OF NICKEL
PHYSICA, V.34, P.257-P.271 (1967)
NI ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
..ROOM TEMP
- 67-HA-03 HAYWOOD, B.C.
THE SPECTRAL DENSITY OF HYDROGEN IN WATER
J. NUCL. ENERGY, V.21, P.249-P.262 (1967)
H2,O ..CROSS SECTION EVALUATION/ LIQUID/ THEORY/ FREQUE
NCY DISTRIBUTION/ SCATTERING FUNCTION/ SIGMA(E) ..ROOM
TEMPERATURE
- 67-HE-01 HENNINGER, E.H./ BUSCHERT, R.C./ HEATON, L.
ATOMIC RADIAL DISTRIBUTION IN AMORPHOUS SELENIUM BY X-R
AY AND NEUTRON DIFFRACTION
J. CHEM. PHYS., V.46, P.586 (1967)
SE ..SIGMA(THETA,E)/ CORRELATION FUNCTION/ EXPERIMENT/
LIQUID/ SOLID/ CROSS SECTION EVALUATION ..NEUTRON DIFFR
ACTION/ RADIAL DISTRIBUTION/ AMORPHOUS SOLID
- 67-HO-01 HO, P.S./ RUOFF, A.L.
A QUASI-HARMONIC CALCULATION OF LATTICE DYNAMICS FOR NA
PHYS. STATUS SOLIDI, V.23, P.489-P.499 (1967)
NA ..THEORY/ PHONON DISPERSION/ QUASI-HARMONIC MODEL
- 67-HO-02 HO, P.S./ RUOFF, A.L.
A QUASI-HARMONIC CALCULATION OF LATTICE DYNAMICS FOR NA
PHYS. STATUS SOLIDI, V.23, P.489-P.499 (1967)
NA ..THEORY/ PHONON DISPERSION/ QUASI-HARMONIC CALCULAT
ION
- 67-HO-03 HOEGBERG, T./ BOHLIN, L.
ANHARMONIC EFFECTS ON PHONONS IN SOLID KRYPTON
SOLID STATE COMMUN., V.5, P.951 (1967)

- KR ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
- 67-HU-01 HUTCHINSON, P./ SCHOFIELD, P.
SCAT AND SLAB, TWO COMPUTER CODES FOR THE COMPUTATION T
HERMAL NEUTRON SCATTERING CROSS-SECTIONS
AERE-R-5536 (1967)
COMPUTER-CODES ..SCATTERING FUNCTION ..INCOHERENT GAUSS
IAN APPROXIMATION
- 67-IB-01 IBARRA-JR, H./ SHER, R.
THERMAL NEUTRON SPECTRUM MEASUREMENTS BY FOIL ACTIVATIO
N
NUCL. SCI. ENG., V.29, P.7 (1967)
H2,O ..EXPERIMENT/ NEUTRON SPECTRUM ..20DC
- 67-IS-01 ISHIKAWA, K.
ON THE QUASI-HARMONIC THEORY OF PHONON
PHYS. STATUS SOLIDI, V.21, P.137-P.144 (1967)
THEORY-OF-SOLIDS ..ANHARMONIC CRYSTAL/ PHONON SHIFT AND
DAMPING/ QUASI-HARMONIC APPROXIMATION
- 67-IV-01 IVERONOVA, U.I./ PARANGTOPO, X./ ZVYAGINA, A.P.
X-RAY DETERMINATION OF DISPERSION CURVES OF THE IONIC C
RYSTALS K,CL AND K,I
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.9 (V.
9), P.1609-P.1612 (P.1265-P.1268) (1967 (1967))
K,CL/ K,I ..LATTICE DYNAMICS/ DISPERSION RELATION ..X-R
AY EXPERIMENT
- 67-JA-01 JAEN, J.K./ KHAN, A.A.
WKB APPROXIMATION OF QUANTUM RADIAL DISTRIBUTION FUNCTI
ON APPLIED TO FLUID NEON
J. CHEM. PHYS., V.49, P.260 (1967)
NE ..THEORY/ LIQUID/ STATISTICAL MECHANICS
- 67-JA-02 JARVIS, R.G.
CALCULATIONS OF THE THERMAL SCATTERING LAW FOR SOLIDS A
ND LIQUIDS
AECL-2705 (1967)
COMPUTER-CODES
- 67-KA-01 KADOTANI, H./ IJIMA, S.
ON THE COHERENT SCATTERING OF SLOW NEUTRONS FROM HEAVY
WATER
J. NUCL. SCI. TECHNOL., TOKYO, V.4, P.625-P.627 (1
967)
D2,O ..THEORY/ PHONON SPECTRUM/ SCATTERING FUNCTION/ 29
5.423DK
- 67-KA-02 KARIMOV, I./ BROVMAN, E.G./ ZEMLYANOV, M.G./ SOMEN
KOV, V.A./ CHERNOPOLEKOV, N.A.
BROADENING OF THE OPTICAL BRANCHES OF THE PHONON SPECTR

UM IN METAL HYDRIDES (IN RUSSIAN)

FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.9 (V. 9), P.1991-P.1995 (P.1566-P.1568) (1967 (1968))

TH-H/ U-H/ CE-H ..LATTICE DYNAMICS/ THEORY

- 67-KA-03 KARIMOV, I./ ZEMLYANOV, M.G./ KOST, M.E./ SOMENKOV, V.A./ CHERNOPOLEKOV, N.A.
A LATTICE DYNAMICAL INVESTIGATION OF THE HYDRIDES CE-H₂, CE-H₃, TH-H₂, AND U-H₂ USING INELASTIC SCATTERING OF COLD NEUTRONS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.9 (V. 9), P.1740-P.1743 (P.1366-P.1368) (1967 (1967))
CE-H/ TH-H/ U-H ..EXPERIMENT/ PHONON SPECTRA

- 67-KA-04 KAY, M.I./ RITTER, H.L.
THE COHERENT NEUTRON SCATTERING AMPLITUDES FOR SEVEN ISOTOPIES OF TIN
ACTA CRYSTALLOGR., V.23, P.868 (1967)
SN ..SCATTERING AMPLITUDE/ EXPERIMENT

- 67-KI-01 KIROUAC, G.J.
A COMPARISON OF SCATTERING LAW DATA AND CALCULATION FOR WATER
KAPL-P-3179 (1967)
H₂O ..LIQUID/ SCATTERING FUNCTION

- 67-KI-02 KITAGAWA, T./ MIYAZAWA, T.
INELASTIC-SCATTERING CROSS SECTION OF NEUTRON BY CRYSTALLINE VIBRATIONS OF POLYETHYLENE
J. CHEM. PHYS., V.47, P.337-P.338 (1967)
POLYETHYLENE ..THEORY/ FREQUENCY DISTRIBUTION/ SIGMA (E-E-PRIME, THETA)

- 67-KI-03 KITAGAWA, T./ MIYAZAWA, T.
INELASTIC SCATTERING CROSS SECTION OF NEUTRON BY CRYSTALLINE VIBRATIONS OF POLYETHYLENE
REPORTS ON PROGRESS IN POLYMER PHYSICS IN JAPAN, V.10, P.185-P.186 (1967)
POLYETHYLENE ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..DIFFERENTIAL CROSS SECTION

- 67-KI-04 KITCHENS, T.A./ MINKIEWICZ, V.J./ LIPSCHULTZ, F.P., / SHIRANE, G./ NATHANS, R.
THE PHONON DISPERSION RELATION FOR MCP HE-4 WITH A MOLAR VOLUME OF 21.1CM³
BNL-12596 (1967)
HE ..SOLID/ EXPERIMENT/ DISPERSION RELATION/ LATTICE DYNAMICS ..THREE CRYSTAL SPECTROMETER/ EO=13.5MEV

- 67-KI-05 KITTELBERGER, J.S./ HORNIG, D.F.
VIBRATIONAL SPECTRUM OF CRYSTALLINE H₂F AND D₂F
J. CHEM. PHYS., V.46, P.3099 (1967)

H.F ..EXPERIMENT/ LATTICE DYNAMICS ..INFRARED EXPERIMENT

- 67-KO-01 KOEHLER, T.R.
NEW APPROACH TO LATTICE DYNAMICS APPLIED TO SOLID 3-HE AT ODK
PHYS. REV. LETT., V.18, P.634 (1967)
HE ..THEORY/ LATTICE DYNAMICS

- 67-KO-02 KOPPEL, J.U./ MARADUDIN, A.A.
PHONON DISPERSION RELATIONS FOR BERYLLIUM METAL
PHYS. LETT., V.24A, P.244 (1967)
BE ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS ..METAL

- 67-KO-03 KOPPEL, J.U./ TRIPLETT, J.R./ NALIBOFF, Y.D.
GASKET, A UNIFIED CODE FOR THERMAL NEUTRON SCATTERING
GA-7417 (REV.) (1967)
COMPUTER-CODES ..SCATTERING FUNCTION ..DIFFERENTIAL CROSS SECTION

- 67-KO-04 KOPPEL, J.U./ YOUNG, J.A.
NEUTRON SCATTERING IN BERYLLIUM
GA-8031 (1967)
BE ..THEORY/ SOLID

- 67-KO-05 KOTOV, B.A./ OKUNEVA, N.M./ REGEL, A.R./ SHAKH-BUDAGOV, A.L.
COMPARISON OF SPECTRA OF COLD NEUTRONS SCATTERED BY AMORPHOUS AND CRYSTALLINE SELENIUM
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.9 (V. 9), P.1227-P.1230 (P.955-P.957) (1967 (1967))
SE ..EXPERIMENT/ FREQUENCY SPECTRA/ AMORPHOUS AND CRYSTALLINE

- 67-KR-01 KREBS, K./ HOELZL, K.
INELASTIC NEUTRON SCATTERING AND LATTICE DYNAMICS OF METALS IN QUASI-ION APPROXIMATION
EUR-3621E-PART-1 (1967)
NEUTRON-SCATTERING-IN-SOLIDS ..LATTICE DYNAMICS/ THEORY / DISPERSION RELATION ..METAL

- 67-KU-01 KURKIJARVI, J.
ABOUT A NEXT TERM TO THE CONVOLUTION APPROXIMATION FOR THE TIME DEPENDENT PAIR CORRELATION FUNCTION
PHYSICA, V.35, P.143-P.147 (1967)
SCATTERING-THEORIES ..CORRELATION FUNCTION/ THEORY

- 67-LA-01 LAKATOS, K.
EFFECTS OF IMPURITIES ON LATTICE VIBRATIONS. A MODEL CALCULATION INCLUDING MASS AND FORCE CONSTANT CHANGES, NEUTRON SCATTERING

- NYO-2391-45 (1967)
NEUTRON-SCATTERING-IN-SOLIDS/ AL ..LATTICE DYNAMICS/ TH
EORY/ FREQUENCY DISTRIBUTION
- 67-LE-01 LEBOWITZ, J.L./ PERCUS, J.K.
KINETIC EQUATIONS AND DENSITY EXPANSIONS, EXACTLY SOLVA
BLE ONE-DIMENSIONAL SYSTEM
PHYS. REV., V.155, P.122-P.138 (1967)
THEORY-OF-FLUIDS ..LIQUID DYNAMICS
- 67-LE-02 LEVI, A.C.
ON THE MOTIONS OF ATOM IN A LIQUID AS A STOCHASTIC PROC
ESS
PHYSICA, V.36, P.324-P.344 (1967)
AR ..MOLECULAR DYNAMICS/ LIQUID/ FREQUENCY DISTRIBUTION
/ THEORY
- 67-LI-01 LIPSCHULTZ, F.P./ MINKIEWICZ, V.J./ KITCHENS, T.A.
/ SHIRANE, G./ NATHANS, R.
PHONON DISPERSION MEASUREMENTS ON A HCP 4HE SINGLE CRYST
AL AT 27 ATM
PHYS. REV. LETT., V.19, P.1307 (1967)
HE ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RE
LATION
- 67-LI-02 LITTON, G.M.
PROGRAM BRAGG, A FORTRAN-IV PROGRAM FOR CALCULATION BRA
GG CURVES AND FLUX DISTRIBUTIONS
UCRL-17391 (1967)
COMPUTER-CODES
- 67-LO-01 LORD-JR, A.E.
COUPLING OF MAGNONS AND PHONONS AT HIGH FREQUENCIES
PHYS. STATUS SOLIDI, V.23, P.521-P.526 (1967)
THEORY-OF-SOLIDS ..MAGNON-PHONON COUPLING
- 67-LU-01 LURIE, N.A.
INFLUENCE OF ROTATIONAL LEVELS ON SLOW-NEUTRON SCATTERI
NG BY LINEAR GASES
J. CHEM. PHYS., V.46, P.352 (1967)
NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS/ GAS/
THEORY/ CROSS SECTION EVALUATION
- 67-MA-01 MARSTON, R.L./ DICK, B.G.
LATTICE DYNAMICS OF THE EXCHANGE CHARGE MODEL OF ALKALI
HALIDES
SOLID STATE COMMUN., V.5, P.731-P.734 (1967)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY
- 67-MA-02 MARTIN, D.G.
A STUDY OF VERY SMALL DEFECT CLUSTERS IN IRRADIATED MAG
NESIUM OXIDE, USING LONG-WAVELENGTH NEUTRON SCATTERING

- MEASUREMENTS
AERE-R-5521 (1967)
MG.O ..SOLID/ EXPERIMENT ..DEFECT SCATTERING/ SCATTERIN
G THEORY
- 67-MA-03 MARTIN, D.G.
THE MATHEMATICAL FORMULATION OF THE SCATTERING OF LONG
WAVELENGTH NEUTRONS BY DEFECTS IN SOLID
AERE-R-5479 (1967)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID ..DEFECT S
CATTERING
- 67-MC-01 MCMURRY, H.L.
PREPARATION OF H2O AND D2O SLOW NEUTRON SCATTERING KE
RNELS FOR ENDF USING MR TYPE MODELS
IN-1065 (1967)
H2,O/ D2,O ..SIGMA(E,E-PRIME)/ COMPILATION
- 67-MC-02 MCMURRY, H.L./ SOLBRIG-JR, A.W./ BOYTER, J.K./ NOB
LE, C.
THE USE OF VALENCE FORCE POTENTIALS IN CALCULATING CRYST
AL VIBRATIONS
J. PHYS. CHEM. SOLIDS, V.28, P.2359 (1967)
DIAMOND ..LATTICE DYNAMICS/ DISPERSION RELATION/ THEORY
- 67-ME-01 MEYERS, V.W.
INELASTIC SCATTERING OF COLD NEUTRONS IN POLYCRYSTALLIN
E GRAY TIN
J. PHYS. CHEM. SOLIDS, V.28, P.2207-P.2210 (1967)
SN ..EXPERIMENT/ PHONON SPECTRUM
- 67-MI-01 MIKOLAJ, P.G./ PINGS, C.J.
STRUCTURE OF LIQUIDS, 4, DIRECT CORRELATIONS FUNCTIONS
OF LIQUID ARGON
J. CHEM. PHYS., V.46, P.1412-P.1420 (1967)
AR ..LIQUID/ EXPERIMENT
- 67-MI-02 MIKOLAJ, P.G./ PINGS, C.J.
STRUCTURE OF LIQUIDS, 3, AN X-RAY DIFFRACTION STUDY OF
FLUID ARGON
J. CHEM. PHYS., V.46, P.1401-P.1411 (1967)
AR ..EXPERIMENT/ LIQUID ..RADIAL DISTRIBUTION/ -130DC--
110DC/ X-RAY
- 67-MI-03 MINKIEWICZ, V.J./ SHIRANE, G./ NATHANS, R.
PHONON DISPERSION RELATION FOR IRON
PHYS. REV., V.162, P.528-P.531 (1967)
FE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/
FREQUENCY DISTRIBUTION ..ROOM TEMPERATURE/ ALPHA PHASE
IRON

- 67-MO-01 MOORE, W.E./ KIROUAC, G.J./ EASCH, L.J./ SEEMANN, K.W./ YEATER, M.L.
EPITHERMAL NEUTRON INELASTIC SCATTERING BY POLYETHYLENE
RPI-328-108 (1967)
POLYETHYLENE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS ..300DK
- 67-MO-02 MORLEY, G.L.
LATTICE DYNAMICS OF SOLID HELIUM
IS-T-206 (1967)
HE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..HCP PHASE/ ODK/ DEBYE TEMPERATURE
- 67-MY-01 MYERS, V.W.
INELASTIC SCATTERING OF COLD NEUTRONS IN POLYCRYSTALLINE GRAY TIN
J. PHYS. CHEM., SOLIDS, V.28, P.2207 (1967)
SN ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..COLD NEUTRON FACILITY/ ODK/ GRAY TIN
- 67-NA-01 NAKAHARA, Y./ KATO, O.
FREDAN-BI, A FORTRAN-IV PROGRAM FOR COMPUTATION OF THE FREQUENCY DISTRIBUTIONS OF BERYLLIUM AND ICE BY ROOT SAMPLING METHOD
JAERI-1146 (1967)
BE/ H2.O/ COMPUTER-CODES ..SOLID/ THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
- 67-NA-02 NATKANIEC, I./ PARLINSKI, K./ BAJOREK, A./ SUDNIK-HRYNKIEWICZ, M.
LOCAL MODES IN LI-MG AND BE-CU ALLOYS
PHYS. LETT., V.24A, P.517-P.519 (1967)
MG-LI/ CU-BE ..EXPERIMENT/ LOCAL VIBRATION/ NEUTRON SPECTROSCOPY
- 67-NE-01 NEILL, J.M./ ANTUNEZ, H./ SPEREVAK, D.
NEUTRON THERMALIZATION IN DIPHENYL
GA-8050 (1967)
BIPHENYL ..EXPERIMENT
- 67-NE-02 NEILL, J.M.
TOTAL CROSS SECTIONS OF REACTOR MODERATOR
WASH-1079 (1967)
BENZENE ..SIGMA (E)/ EXPERIMENT
- 67-NE-03 NELKIN, M./ RANGANATHAN, S.
COLLISIONLESS SOUND IN CLASSICAL FLUIDS
PHYS. REV., V.164, P.222-P.227 (1967)
LEAD ..SCATTERING LAW/ QUASI-ELASTIC PEAK/ THEORY ..VLA SOV EQUATION
- 67-NG-01 NG, S.C./ BROCKHOUSE, B.N.
LATTICE DYNAMICS OF THE ALLOY SYSTEMS BI-PB-TL
SOLID STATE COMMUN., V.5, P.79 (1967)
BI-PB-TL ..EXPERIMENT/ PHONON/ ALLOYS
- 67-NG-02 NG, S.C./ BROCKHOUSE, B.N.
LATTICE DYNAMICS OF THE ALLOY SYSTEMS BI-PB-TL
SOLID STATE COMMUN., V.5, P.79 (1967)
BI-PB-TL/ ..PHONON DISPERSION/ ALLOY SYSTEM
- 67-NI-01 NICKLOW, R.M./ GILAT, G./ SMITH, H.G./ RAUBENHEIMER, L.J./ WILKINSON, M.K.
PHONON FREQUENCIES IN COPPER AT 49 AND 298DK
PHYS. REV., V.164, P.922 (1967)
CU ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION/ FREQUENCY SPECTRUM ..3-AXIS SPECTROMETER/ 49DK/ 298DK
- 67-NO-01 NOBLE, C./ SOLBRIG-JR, A.W./ MCMURRY, H.L., MACS M., A PROGRAM FOR COMPUTING THE CRYSTAL DYNAMICAL MATRIX, PHONON DISPERSION RELATIONS, AND STRUCTURE FACTORS FOR NEUTRON INELASTIC SCATTERING
IN-1125 (1967)
COMPUTER-CODES ..LATTICE DYNAMICS ..COHERENT SINGLE-PHONON SCATTERING OF NEUTRONS
- 67-O'-01 O'CONNOR, D.A.
THE DYNAMICAL THEORY OF THE INTERACTION OF X-RAYS AND NEUTRONS WITH PHONONS
PROC. PHYS. SOC., LONDON, V.91, P.917-P.927 (1967)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ DYNAMICAL THEORY
- 67-OK-01 OKA, T.
VIBRATION-ROTATION INTERACTION IN SYMMETRIC-TOP MOLECULES AND THE SPLITTING BETWEEN A1, A2 LEVELS
J. CHEM. PHYS., V.47, P.5410 (1967)
N.H3 ..MOLECULE DYNAMICS/ THEORY/ FREQUENCY DISTRIBUTION
- 67-OV-01 OVERTON-JR, W.C./ SCHUCH, A.F.
SUPPLEMENT TO TABLES FOR THE RAPID EVALUATION OF THE DEBYE TEMPERATURE OF CUBIC CRYSTALS FROM ELASTIC CONSTANTS
LA-3615-MS (1967)
THEORY-OF-SOLIDS ..THEORY
- 67-PA-01 PAGE, D.I.
SCATTERING LAW S(,) - VALUES FOR GRAPHITE AT 1300DK AND 1800DK
AERE-R-5574 (1967)
GRAPHITE ..SCATTERING FUNCTION/ EXPERIMENT ..HIGH TEMPERATURE

- 67-PA-02 PAGE, D.I.
THE PHONON FREQUENCY DISTRIBUTION OF VANADIUM
PROC. PHYS. SOC., LONDON, V.91, P.76-P.85 (1967)
V ..EXPERIMENT/ SCATTERING LAW/ FREQUENCY SPECTRUM
- 67-PA-03 PALEVSKY, H.
LOOKING AT MATTER WITH PARTICLES
BNL-50059 (T-462) (1967)
REVIEW-ARTICLES ..EXPLANATION ON NEUTRON INELASTIC SCAT
TERING
- 67-PA-04 PAN, S.S./ YEATER, M.L./ MOORE, W.E.
RECENT LOW ENERGY INELASTIC SCATTERING RESULTS FOR META
L HYDRIDES AND URANIUM CARBIDE
RPI-328-101 (1967)
ZR-H/ NB-H/ TI-H/ U.C ..EXPERIMENT/ LATTICE DYNAMICS/ F
REQUENCY DISTRIBUTION
- 67-PA-05 PATHAK, K.N./ DEO, B.
EFFECT OF LATTICE ANHARMONICITY ON THE DEBYE-WALLER FAC
TOR
PHYSICA, V.35, P.167 (1967)
THEORY-OF-SOLIDS ..SOLID/ LATTICE DYNAMICS ..ANHARMONIC
EFFECT
- 67-PA-06 PAWLEY, G.S.
A MODEL FOR THE LATTICE DYNAMICS OF NAPHTHALENE AND ANT
HRACENE
PHYS. STATUS SOLIDI, V.20, P.347-P.360 (1967)
NAPHTHALENE/ ANTHRACENE ..THEORY/ PHONON DISPERSION/ FR
EQUENCY SPECTRA/ DEBYE TEMP./ DEBYE-WALLER FACTOR
- 67-PA-07 PAWLEY, G.S.
A MODEL FOR THE LATTICE DYNAMICS OF NAPHTHALENE AND ANT
HRACENE
PHYS. STATUS SOLIDI, V.20, P.347-P.360 (1967)
NAPHTHALENE/ ANTHRACENE ..THEORY/ PHONON DISPERSION/ PH
ONON SPECTRUM/ 6-EXP FORCE
- 67-PE-01 PECKHAM, G.
THE PHONON DISPERSION RELATION FOR MAGNESIUM OXIDE
PROC. PHYS. SOC., LONDON, V.90, P.657 (1967)
MG.O ..LATTICE DYNAMICS/ EXPERIMENT/ THEORY/ DISPERSION
RELATION/ FREQUENCY DISTRIBUTION ..ROOM TEMPERATURE
- 67-PE-02 PECKHAM, G.
THE PHONON DISPERSION RELATION FOR DIAMOND
SOLID STATE COMMUN., V.3, P.311 (1967)
DIAMOND ..PHONON DISPERSION RELATION
- 67-PL-01 PLUMMER, J.P.
MULTIPLE SCATTERING OF THERMAL NEUTRONS
IN-1045 (1967)
SCATTERING-THEORIES ..SCATTERING THEORY
- 67-PL-02 PLUMMER, J.R./ SUMMERFIELD, G.C./ ZWEIFEL, P.F.
QUANTUM STATISTICS AND SLOW NEUTRON SCATTERING BY GASES
J. CHEM. PHYS., V.47, P.4923 (1967)
HE ..THEORY/ DISTRIBUTION FUNCTION/ GAS ..DIFFERENTIAL
SCATTERING CROSS SECTION/ 5-6DK
- 67-PR-01 PRICE, D.L.
LATTICE DYNAMICS OF WHITE TIN
PROC. ROY. SOC., LONDON, SER. A, V.300, P.25-P.44
(1967)
SN ..SOLID/ EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RE
LATION ..CONDUCTION ELECTRON
- 67-RA-01 RAHMAN, A.
COLLECTIVE COORDINATES IN CLASSICAL SYSTEMS
PHYS. REV. LETT., V.19, P.420-P.421 (1967)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
- 67-RA-02 RAMASESHEN, S./ VISWANATHAN, K.S.
ANOMALOUS NEUTRON SCATTERING BY CRYSTALS AND THE AMPLI
TUDES OF LATTICE WAVES
ACTA CRYSTALLOGR., SECT. A, V.26, P.364 (1967)
SCATTERING-THEORIES ..ANOMALOUS SCATTERING/ POLARIZATI
ON VECTOR/ ONE-PHONON SCATTERING
- 67-RA-03 RANDOLPH, P.D.
SEARCH FOR THE KOHN EFFECT IN LIQUID LEAD
IN-1094 (1967)
PB ..EXPERIMENT/ LIQUID/ DISPERSION RELATION
- 67-RA-04 RANDOLPH, P.D./ MYERS, W.R.
TRANSVERSE COLLECTIVE ATOMIC VIBRATIONS IN LIQUID LEAD
IN-1115, P.1-P.10 (1967)
PB ..EXPERIMENT/ LIQUID/ DISPERSION RELATION ..350DC/ C
OLLECTIVE VIBRATIONAL MODE
- 67-RA-05 RANDOLPH, P.D.
SLOW NEUTRON INELASTIC SCATTERING FROM LIQUID SODIUM
PHYS. REV., V.134, P.1238 (1967)
NA ..EXPERIMENT/ LIQUID
- 67-RA-06 RAO, K.R./ DASANNACHARYA, B.A./ VENKATARAMAN, G.
NEUTRON SCATTERING STUDIES IN LIQUID GALLIUM
PROCEEDINGS OF THE NUCLEAR PHYSICS AND SOLID STATE
PHYSICS SYMPOSIUM, SOLID STATE PHYSICS, DAE, BOMB
AY, P.217-P.220 (1967)
GA ..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION

- 67-RA-07 RAPEANU, S./ ILESCU, N.
QUASI ELASTIC SCATTERING OF SLOW NEUTRON IN PENTANOL
PHYS. LETT., V.26A, P.72 (1967)
PENTANOL ..EXPERIMENT/ MOLECULAR DYNAMICS ..ROOM TEMP./
3-AXIS SPECTROMETER
- 67-RA-08 RAO, K.R./ VENKATARAMAN, G./ DASANNACHARYA, B.A.
COLD NEUTRON SCATTERING BY LIQUID METHANE
CAN. J. PHYS., V.45, P.3185-P.3187 (1967)
C.H4 ..THEORY/ LIQUID ..COMPARED WITH EXPERIMENT
- 67-RI-01 RIEDER, K.H./ HOERL, E.M.
SEARCH FOR SURFACE MODES OF LATTICE VIBRATIONS IN MAGNE
SIUM OXIDE
SGAE-M-12/1967 (1967)
MG,O ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS ..SURFACE VI
BRATION
- 67-RO-01 ROWE, J.M.
CRYSTAL DYNAMICS OF METALLIC BETA-SN AT 110DK
PHYS. REV., V.163, P.547-P.551 (1967)
SN ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
..110DK
- 67-RO-02 ROY, A.P./ THAPER, C.L./ IYENGER, P.K.
LATTICE VIBRATION OF VANADIUM BY INELASTIC SCATTERING O
F SLOW NEUTRONS
PHYSICA, V.34, P.384 (1967)
V ..LATTICE DYNAMICS/ EXPERIMENT
- 67-RO-03 ROY, A.P./ VENKATARAMAN, G.
LATTICE DYNAMICS OF MAGNESIUM USING A PSEUDOPOTENTIAL A
PPROACH
PHYS. REV., V.156, P.769-P.776 (1967)
MG ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL
- 67-RU-01 RUSH, J.J.
NEUTRON-SCATTERING STUDY OF HINDERED ROTATIONS IN METHY
LBENZENE
J. CHEM. PHYS., V.47, P.3936 (1967)
BENZENE ..MOLECULAR DYNAMICS/ LIQUID/ SOLID/ EXPERIMENT
/ NEUTRON SPECTRUM/ FREQUENCY SPECTRUM ..BE-FILTER METH
OD/ 296DK-7DK
- 67-RU-02 RUSH, J.J.
COLD-NEUTRON STUDY OF HINDERED ROTATIONS IN SOLID AND L
IQUID METHYLCHLOROFORM, NEOPENTANE, AND ETHANE
J. CHEM. PHYS., V.46, P.2285 (1967)
METHYLCHLOROFORM/ PENTANE/ ETHANE ..COLD-NEUTRON/ FREQU
ENCY SPECTRUM
- 67-RU-03 RUSH, J.J.

- NEUTRON-SCATTERING STUDY OF LOW FREQUENCY MODES IN UREA
AND FERRO-ELECTRIC THIOUREA
J. CHEM. PHYS., V.47, P.4278 (1967)
UREA ..INELASTIC SCATTERING SPECTRA
- 67-SA-01 SAFFORD, G.J./ NAUMANN, A.W.
LOW FREQUENCY MOTIONS IN POLYMERS AS MEASURED BY NEUTRO
N INELASTIC SCATTERING
ADVAN. POLYMER SCI., V.5, P.1-P.27 (1967)
REVIEW-ARTICLES ..EXPERIMENTAL REVIEW/ POLYMER/ TOF SPE
CTRUM/ FREQUENCY SPECTRUM
- 67-SA-02 SAMOSVAT, G.S./ SAYASON, Y.S./ CHUBURKOV, V.T.
SCATTERING OF THE EV-NEUTRONS BY WATER MOLECULES (IN RU
SSIAN)
JINR P3-3413 (1967)
H2,O ..EXPERIMENT
- 67-SC-01 SCHAUFEL, R.F./ SHIMANOUCHI, T.
LONGITUDINAL ACOUSTICAL VIBRATIONS OF FINITE POLYMETHYL
ENE CHAINS
J. CHEM. PHYS., V.47, P.3605 (1967)
POLYETHYLENE ..LATTICE DYNAMICS/ MOLECULAR DYNAMICS/ THE
ORY/ ..OPTICAL EXPERIMENT
- 67-SC-02 SCHROFT, N.W./ MARCH, N.H.
STRUCTURE FACTOR AND DIRECT CORRELATION FUNCTION FOR A
CLASSICAL HARD SPHERE FLUID
PROC. ROY. SOC., LONDON, SER. A, V.297, P.336-P.35
0 (1967)
THEORY-OF-FLUIDS/ AR ..THEORY
- 67-SC-03 SCHNEIDER, T./ STOLL, E./ SZABO, N.
COLLECTIVE EXCITATION IN LIQUID METALS
HELV. PHYS. ACTA, V.40, P.817-P.819 (1967)
THEORY-OF-FLUIDS ..COLLECTIVE EXCITATION/ LIQUID METAL/
DISPERSION CURVE
- 67-SE-01 SEARS, V.F.
COLD NEUTRON SCATTERING BY MOLECULAR LIQUIDS, 3 METHANE
CAN. J. PHYS., V.45, P.237-P.254 (1967)
METHANE ..THEORY/ LIQUID ..COMPARED WITH EXPERIMENT
- 67-SH-01 SHIRANE, G./ NATHANS, R./ MINKIEWICZ, V.J.
TEMPERATURE DEPENDENCE OF THE SOFT FERROELECTRIC MODE I
N K.TA.03
PHYS. REV., V.157, P.396-P.399 (1967)
K.TA.03 ..EXPERIMENT/ PHASE TRANSITION/ SOFT MODE/ LATT
ICE DYNAMICS
- 67-SH-02 SHIRANE, G./ FRAZER, B.C./ MINKIEWICZ, V.J./ LEAKE
..J.A./ LINZ, A.

- SOFT OPTIC MODES IN BARIUM TITANATE
 PHYS. REV. LETT., V.19, P.234 (1967)
 BA.TI.03 ..EXPERIMENT/ LATTICE DYNAMICS
- 67-SH-03 SHUKLA, M.M./ DAYAL, B.
 THE LATTICE VIBRATIONS OF NICKEL IN KREBS'S MODEL
 PHYS. STATUS SOLIDI, V.19, P.729-P.733 (1967)
 NI ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ KRE
 BS MODEL
- 67-SI-01 SINGH, S.P.
 LATTICE DYNAMICS OF NICKEL
 CAN. J. PHYS., V.45, P.1655 (1967)
 NI ..LATTICE DYNAMICS/ THEORY/ FREQUENCY DISTRIBUTION,
 DEBYE TEMPERATURE/ ODK-300DK
- 67-SI-02 SINGH, K.S./ TOSI, M.P.
 ON THE VELOCITY AUTOCORRELATION IN CLASSICAL FLUID
 PHYS. REV., V.157, P.153-P.155 (1967)
 THEORY-OF-FLUIDS/ ARGON ..THEORY/ LIQUID ..VELOCITY AUT
 O-CORRELATION
- 67-SK-01 SKOELD, K./ KARLEN, L./ SCIESINSKI, J.
 A SPECIMEN CONTAINER FOR INELASTIC NEUTRON SCATTERING S
 TUDIES OF LIQUIDS AT HIGH PRESSURES
 NUCL. INSTRUM. METHODS, V.56, P.305 (1967)
 PENTANE/ H₂O ..MOLECULAR DYNAMICS/ SOLID/ EXPERIMENT/
 FREQUENCY SPECTRUM
- 67-SK-02 SKOELD, K./ LARSSON, K.E.
 ATOMIC MOTION IN LIQUID ARGON
 PHYS. REV., V.161, P.102 (1967)
 AR ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION/ DISPERSIO
 N RELATION ..94DK
- 67-SK-03 SKOELD, K./ NELIN, G.
 DIFFUSION OF HYDROGEN IN THE ALPHA-PHASE OF PD-H STUDIE
 O BY SMALL ENERGY TRANSFER NEUTRON SCATTERING
 J. PHYS. CHEM. SOLIDS, V.28, P.2369 (1967)
 PD-H ..HYDROGEN DIFFUSION
- 67-SK-04 SKOELD, K.
 SMALL ENERGY TRANSFER SCATTERING OF COLD NEUTRONS FROM
 LIQUID ARGON
 PHYS. REV., V.19, P.1023-P.1025 (1967)
 AR ..LIQUID/ THEORY/ SCATTERING FUNCTION ..QUASIELASTIC
 SCATTERING
- 67-SL-01 SLAGGIE, E.L.
 MULTIPLE SCATTERING IN SLOW NEUTRON DOUBLE DIFFERENTIAL
 MEASUREMENTS
 NUCL. SCI. ENG., V.30, P.199 (1967)
- SCATTERING-THEORIES ..THEORY
- 67-SI-02 SLAGGIE, E.L.
 MULTIPLE SCATTERING IN NEUTRON DOUBLE DIFFERENTIAL CROS
 S SECTION MEASUREMENTS
 GA-8052 (1967)
 SCATTERING-THEORIES ..THEORY ..MULTIPLE SCATTERING CORR
 ECTION
- 67-SM-01 SMITH, D.B.
 LATTICE DYNAMICS OF BISMUTH
 LA-3773 (1967)
 BI ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION
 ..CONST.-O METHOD/ 75DK
- 67-SM-02 SMITH, R.B.
 SOME MEASUREMENTS OF THE NEUTRON SCATTERING LAW FOR LIG
 HT WATER AT 95DC
 BNWL-345 (1967)
 H₂O ..EXPERIMENT/ SCATTERING FUNCTION ..95DC/ TRIPLE A
 XIS SPECTROMETER
- 67-SO-01 SOLI, G.
 SLOW NEUTRON SCATTERING BY SOLID METHANE
 PHYSICA, V.37, P.253 (1967)
 METHANE ..MOLECULAR DYNAMICS/ SCATTERING FUNCTION/ SOLI
 D
- 67-ST-01 STARTSEV, V.I./ BRAUD, I.S.
 DETERMINATION OF THE DISPERSION OF ELASTIC VIBRATIONS I
 N THE POTASSIUM CHLORIDE CRYSTAL LATTICE USING X-RAY DI
 FFUSE SCATTERING
 DOKL. AKAD. NAUK SSSR (SOV. PHYS.-DOKLADY), V.172
 (V.12), P.1053-P.1056 (P.138-P.140) (1967 (1967))
 K.CL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATIO
 N ..X-RAY EXPERIMENT
- 67-ST-02 STECKI, J.
 FREQUENCY-DEPENDENT DIRECT CORRELATION FUNCTION
 DISCUSS. FARADAY SOC., V.43, P.212 (1967)
 NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ SCATTERI
 NG FUNCTION ..(GR.T)
- 67-ST-03 STEDMAN, R./ ALMÖVIST, L./ NILSSON, G.
 PHONON-FREQUENCY DISTRIBUTIONS AND HEAT CAPACITIES OF A
 LUMINUM AND LEAD
 PHYS. REV., V.162, P.549-P.557 (1967)
 AL/ PB ..LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ..800
 DK FOR AL/ 500DK FOR PB
- 67-ST-04 STEDMAN, R./ ALMÖVIST, L./ NILSSON, G./ RAUNIO, G.
 DISPERSION RELATIONS FOR PHONON IN LEAD AT 80 AND 300DK

- PHYS. REV., V.162, P.545-P.548 (1967)
PB ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION
..80DK/ 300DK
- 67-ST-05 STOCKMEYER, R./ STILLER, H.H.
LATTICE DYNAMICS OF SOLID ADAMANTANE
PHYS. STATUS SOLIDI, V.19, P.781 (1967)
ADAMANTANE ..EXPERIMENT/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS/ SOLID/ FREQUENCY DISTRIBUTION ..133DK/ 198DK/ 293DK
- 67-ST-06 STRONG, K.A./ BRUGGER, R.M.
MEASUREMENTS OF THE FREQUENCY OF TORSIONAL VIBRATION IN THE ETHANE MOLECULE
J. CHEM. PHYS., V.42, P.421-P.429 (1967)
ETHANE ..MOLECULAR DYNAMICS/ GAS/ EXPERIMENT/ FREQUENCY DISTRIBUTION ..ROOM TEMPERATURE
- 67-SU-01 SUMMERFIELD, G.C./ ZWEIFEL, P.F.
APPLICATION OF THE QUASICLASSICAL METHOD TO INCOHERENT NEUTRON SCATTERING BY MOLECULES
PHYS. REV., V.159, P.1 (1967)
SCATTERING-THEORIES ..SCATTERING THEORY/ GAS
- 67-SV-01 SVENSSON, E.C./ BROCKHOUSE, B.N.
IN-BAND MODES OF VIBRATION OF A COPPER-3AT-PERCENT GOLD ALLOY
PHYS. REV. LETT., V.18, P.858 (1967)
CU-AU ..LATTICE DYNAMICS/ EXPERIMENT ..CONSTANT-0 METHODS/ ROOM TEMP.
- 67-SV-02 SVENSSON, E.C./ BROCKHOUSE, B.N./ ROWE, J.M.
CRYSTAL DYNAMICS OF COPPER
PHYS. REV., V.155, P.619-P.632 (1967)
CU ..EXPERIMENT/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ FORCE ANALYSIS
- 67-SZ-01 SZKATULA, A./ FULINSKI, A.
DYNAMICAL AND THERMODYNAMICAL STRUCTURE OF WATER FROM THE SCATTERING OF COLD NEUTRONS
PHYSICA, V.36, P.35 (1967)
H2O ..THEORY/ LIQUID/ FREQUENCY DISTRIBUTION
- 67-TA-01 TASUMI, M./ KRIMM, S.
CRYSTAL VIBRATION OF POLYETHYLENE
J. CHEM. PHYS., V.46, P.755 (1967)
POLYETHYLENE ..MOLECULAR DYNAMICS/ THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
- 67-TA-02 TASUMI, M./ ZERBI, G.
FREQUENCY DISTRIBUTIONS OF RANDOM POLYMERS
J. POLY. SCI., PART B, V.5, P.985-P.988 (1967)
- THEORY-OF-SOLIDS ..FREQUENCY DISTRIBUTION/ RANDOM POLYMER
- 67-TA-03 TAYLOR, D.W.
VIBRATIONAL PROPERTIES OF IMPERFECT CRYSTALS WITH LARGE DEFECT CONCENTRATIONS
PHYS. REV., V.156, P.1017 (1967)
THEORY-OF-SOLIDS ..CRYSTAL VIBRATION/ IMPERFECT CRYSTALS WITH DEFECTS
- 67-TH-01 THAPER, C.L./ ROY, A.P./ VENKATARAMAN, G./ IYENGAR, P.K.
NEUTRON INELASTIC SCATTERING STUDIES IN K₂H₂P₂O₄
PROCEEDINGS OF THE NUCLEAR PHYSICS AND SOLID STATE PHYSICS SYMPOSIUM, SOLID STATE PHYSICS, DAE, BOMBAY, P.233-P.238 (1967)
K₂H₂P₂O₄ ..EXPERIMENT/ FREQUENCY SPECTRA
- 67-TR-01 TREVINO, S./ BOUTIN, H.
STUDIES OF LOW-FREQUENCY MOLECULAR MOTIONS IN POLYMERS BY NEUTRON INELASTIC SCATTERING
J. MACROMOL. SCI., PART A, V.1, P.723-P.746 (1967)
POLYETHYLENE/ POLYETHYLENEOXIDE/ POLYACRYLONITRILE/ POLYXYMETHYLENE ..REVIEW/ TOF SPECTRA/ FREQUENCY SPECTRA
- 67-TU-01 TUCKER, J.E./ REESE, W.
HEAT CAPACITY OF POLYETHYLENE FROM 2.5DK TO 30DK
J. CHEM. PHYS., V.46, P.1388-P.1399 (1967)
POLYETHYLENE ..EXPERIMENT
- 67-VA-01 VAN-DINGENEN, W./ HAUTECLER, S.
DISPERSION RELATIONS FOR PHONONS AND MAGNONS IN ALPHA-Fe
PHYSICA, V.37, P.603 (1967)
Fe ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..ROOM TEMPERATURE/ TOF METHOD
- 67-VE-01 VENKATARAMAN, G./ DASANNACHARYA, B.A./ RAO, K.R.
DYNAMICS OF LIQUID C₂D₄ FROM COLD-NEUTRON SCATTERING
PHYS. REV., V.161, P.133-P.142 (1967)
METHANE ..LIQUID/ EXPERIMENT/ THEORY ..COHERENT EFFECT
- 67-VE-02 VERBLE, J.L.
LATTICE DYNAMICS OF LITHIUM HYDRIDE
LA-3750 (1967)
LiH ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION ..CONST-0/ ROOM TEMP./ LI-D CRYSTAL
- 67-VE-03 VERDAN, G.
STUDIES OF THE DYNAMICAL BEHAVIOUR OF ADSORBED MOLECULES BY SLOW NEUTRON SPECTROSCOPY
PHYS. LETT., V.25A, P.435 (1967)

METHANE/ ACETYLENE/ ETHYLENE ..EXPERIMENT/ ADSORBED MOLECULES

- 67-VE-04 VERDAN, G.
STUDIES OF THE DYNAMICAL BEHAVIOUR OF ADSORBED MOLECULES BY SLOW NEUTRON SPECTROSCOPY
PHYS. LETT., A, V.25, P.435 (1967)
H2-CHARCOAL/ C,H4-CHARCOAL/ C2,H4-CHARCOAL/ C2,H2-CHARCOAL ..EXPERIMENT/ FREQUENCY SPECTRA/ ADSORBED MOLECULES
- 67-VE-05 VERMA, M.P./ DAYAL, B.
LATTICE DYNAMICS OF MG.O
PHYS. STATUS SOLIDI, V.19, P.751-P.756 (1967)
MG.O ..THEORY/ PHONON DISPERSION/ COMBINED DENSITY-OF-STATES
- 67-VI-01 VISSER, J.D./ VAN-DER-WALT, R.
VLOED, A FORTRAN IV DATA REDUCTION AND FLUX CALCULATION PROGRAM WRITTEN FOR USE ON THE IBM-360 DIGITAL COMPUTER
R
PEL-148 (1967)
COMPUTER-CODES
- 67-WA-01 WAGNER, M.
DISPERSION DYNAMICS OF CRYSTAL LATTICES
Z. PHYS., V.206, P.131-P.149 (1967)
THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS
- 67-WA-02 WARREN, J.L./ YARNELL, J.L./ DOLLING, G./ COWLEY, R.A.
LATTICE DYNAMICS OF DIAMOND
PHYS. REV., V.158, P.805 (1967)
DIAMOND ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATION
TION
- 67-WE-01 WEBB, F.J.
THE INELASTIC SCATTERING OF COLD NEUTRONS BY METHANE AND AMMONIA
PROC. PHYS. SOC., LONDON, V.92, P.912 (1967)
METHANE/ AMMONIA ..GAS/ EXPERIMENT/ NEUTRON SPECTRUM ..20DK
- 67-WH-01 WHITTEMORE, W.L.
DIFFERENTIAL NEUTRON THERMALIZATION
GA-7439, (TID-4500) (1967)
D2,O/ H/ GRAPHITE ..CROSS SECTION EVALUATION/ LIQUID/ SOLID/ EXPERIMENT/ SCATTERING FUNCTION ..ELECTRON LINAC CHOPPER/ TOF
- 67-WJ-01 WIGNALL, G.D.
MULTIPLE ELASTIC SCATTERING OF THERMAL NEUTRONS BY POLY

CRYSTALLINE LEAD

- AERE-M-1911 (1967)
SCATTERING-THEORIES ..CROSS SECTION EVALUATION/ EXPERIMENT
- 67-YU-01 YUEN, P.S./ VARHNI, Y.P.
ANGULAR FORCES IN THE LATTICE DYNAMICS OF FACE-CENTERED CUBIC METALS
PHYS. REV., V.164, P.895 (1967)
CU ..LATTICE DYNAMICS/ THEORY/ DISPERSION RELATION/ FREQUENCY SPECTRUM ..FCC CUBIC METAL
- 68-AG-01 AGRAWAL, A.K./ YIP, S.
ROTATIONAL CORRELATION FUNCTIONS IN NEUTRON SCATTERING BY MOLECULAR GASES
PHYS. REV., V.171, P.263-P.271 (1968)
C,H4/ H,CL/ N,H3 ..GAS/ THEORY/ CORRELATION FUNCTION ..INCOHERENT/ INTERMEDIATE SCATTERING FUNCTION
- 68-AG-02 AGRAWAL, A.K./ DESAI, R.C./ YIP, S.
ANALYSIS OF NEUTRON SCATTERING EXPERIMENTS ON LIQUIDS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.545-P.559 (1968)
NEUTRON-SCATTERING-IN-FLUIDS/ AR/ NA/ PB/ METHANE ..THEORY ..MODEL CALCULATION
- 68-AG-03 AGRAWAL, A.K./ YIP, S./ GORDON, R.G.
NEUTRON SCATTERING BY LIQUID H,CL
CHEM. PHYS. LETT., V.2, P.584-P.586 (1968)
H,CL ..THEORY/ ROTATIONAL TIME CORRELATION FUNCTION
- 68-AL-01 ALMØVIST, L./ RAUNIO, G./ STEDMAN, R.
PHONON DISPERSION RELATIONS IN NA,CL AT 80DK
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.295-P.299 (1968)
NA,CL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..80DK
- 68-AL-02 ALS-NIELSEN, J.
LOCALIZED AND BAND PHONONS IN TA88-NB12 STUDIED BY COHERENT INELASTIC NEUTRON SCATTERING
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.35-P.41 (1968)
TA-NB ..EXPERIMENT/ LATTICE DYNAMICS ..CRYSTAL SPECTRUM ..LOCALIZED PHONON
- 68-AN-01 ANDRIESSE, C.D.
ON THE CONVOLUTION APPROXIMATION IN THE THEORY OF COHERENT NEUTRON SCATTERING FROM LIQUIDS
PHYS. LETT., V.27A, P.93 (1968)
AR ..THEORY/ LIQUID/ SCATTERING THEORY ..84DK

- 68-AN-02 ANDRUS, W.S./ MUETHER, H.R./ PALEVSKY, H.,
TEMPERATURE DEPENDENCE OF QUASI-ELASTIC SCATTERING OF C
OLD NEUTRONS FROM LIQUID ARGON
BNL-12372 (1968)
AR ..LIQUID/ EXPERIMENT
- 68-AN-03 ANDRUS, W.S./ MUETHER, H.R./ PALEVSKY, H.,
INELASTIC SCATTERING OF COLD NEUTRONS FROM LIQUID ARGON
AT ELEVATED TEMPERATURES
PHYS. LETT., V.26A, P.152 (1968)
AR ..SCATTERING LAW/ EXPERIMENT/ LIQUID ..BE FILTER MET
HOD/ 870K/ 97DK/ 111DK/ 124DK/ 22ATM
- 68-AN-04 ANDRUS, W.S./ MUETHER, H.R./ PALEVSKY, H.,
TEMPERATURE DEPENDENCE OF QUASI-ELASTIC SCATTERING OF C
OLD NEUTRONS FROM LIQUID ARGON
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.457-P.4
62 (1968)
AR ..EXPERIMENT/ TOF/ QUASI-ELASTIC
- 68-AN-05 ANDRUS, W.S./ MUETHER, H.R./ PALEVSKY, H.,
INELASTIC SCATTERING OF COLD NEUTRONS FROM LIQUID ARGON
AT ELEVATED TEMPERATURES
PHYS. LETT., A, V.26, P.152-P.153 (1968)
AR ..LIQUID/ EXPERIMENT ..QUASI-ELASTIC PEAK/ TEMPERATU
RE DEPENDENCE/ 87.97,111.124 DEG.KELVIN/ WIDTH VS. MOMEN
TUM TRANSFER
- 68-AR-01 ARDENTE, V./ NARDELLI, G.F./ REATTO, L.,
SCATTERING OF SLOW NEUTRONS AND MOLECULAR DYNAMICS IN L
IQUID STATE (IN ITALIAN)
EUR-4037-1 (1968)
AR/ NA ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ FREQUENCY
DISTRIBUTION/ SCATTERING FUNCTION
- 68-AR-02 ARDENTE, V./ CUNIBERTI, R./ KIND, A./ ROSSI, G.,
MOLECULAR MODEL FOR POLYPHENYLS AND ITS USE IN CALCULAT
ING REACTOR PARAMETERS
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,
V.1, P.467 (1968)
BIPHENYL/ BENZENE ..CROSS SECTION EVALUATION/ MOLECULAR
DYNAMICS/ GAS/ THEORY
- 68-AR-03 ARDENTE, V./ GALLS, G.,
HINDERED-ROTATIONS EFFECT ON NEUTRON THERMALIZATION IN
LIGHT WATER
NUKLEONIK, V.11, P.251 (1968)
H2.O ..SIGMA (E)/ NEUTRON SPECTRUM/ THEORY ..MODIFIED N
ELKIN MODEL
- 68-BA-01 BAJOREK, A./ NATKANIEC, I./ PARLINSKI, K./ HRYNKIE
WICZ, M.S./ JANIK, J.A.,//
- MOLECULAR DYNAMICS IN GASEOUS AND SOLID METHANE STUDIED
BY THE INELASTIC NEUTRON SCATTERING METHOD
INP-608/PS (1968)
C.H4 ..EXPERIMENT/ GAS/ SOLID/ MOLECULAR DYNAMICS ..TOF
METHOD/ IBR PULSED REACTOR, DUBNA/ 120DK/ 80DK
- 68-BA-02 BAJOREK, A./ JANIK, J.A./ JANIK, J.M./ NATKANIEC,
I./ PARLINSKI, K.,//
INVESTIGATION OF THE DYNAMICS OF WATER MOLECULES IN CRY
STALLO-HYDRATES BY NEUTRON INELASTIC SCATTERING
NEUTRON INELASTIC SCATTERING, IAEA, V.2, P.143-P.1
58 (1968)
H2.O ..EXPERIMENT/ MOLECULAR DYNAMICS ..WATER IN CRYSTA
L
- 68-BA-03 BANK, M.I./ KRIMM, S.,
LATTICE-FREQUENCY STUDIES OF CRYSTALLINE AND FOLD STRUC
TURE IN POLYETHYLENE
J. CHEM. PHYS., V.39, P.4951 (1968)
POLYETHYLENE/ PARAFFINE ..FREQUENCY DISTRIBUTION/ SOLID
/ EXPERIMENT ..INFRARED ABSORPTION SPECTRUM/ 30DC/ -168
DC
- 68-BA-04 BATA, L./ KROO, N.,
INVESTIGATION OF THE DYNAMICAL PROPERTIES OF LIQUID-GAS
SYSTEMS BY COHERENT COLD NEUTRON SCATTERING NEAR THE C
RITICAL POINT
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.615-P.6
22 (1968)
C.O2/ C.S2 ..EXPERIMENT ..CRITICAL SCATTERING
- 68-BE-01 BENEDEK, G./ NARDELLI, G.F.,
LATTICE DYNAMICS OF IMPERFECT ALKALI HALIDES
J. CHEM. PHYS., V.48, P.5242 (1968)
NA,CL/ K,CL ..DISPERSION RELATION/ THEORY/ LATTICE DYNA
MICS
- 68-BE-02 BEYSTER, J.R.,
NEUTRON SCATTERING FROM LIGHT WATER
NUCL. SCI. ENG., V.31, P.254 (1968)
H2.O ..LIQUID/ EXPERIMENT
- 68-BE-03 BEYSTER, J.R./ BORGONOVI, G.M./ BROUWER, W./ CARRI
VEAU, G.W./ GOZANI, T.,//
INTEGRAL NEUTRON THERMALIZATION
GA-8449 (1968)
BIPHENYL/ ZR-H/ U.O2 ..LATTICE DYNAMICS/ SCATTERING FUN
CTION
- 68-BE-04 BEYSTER, J.R./ BORGONOVI, G.M./ CARRIVEAU, G.W.,
ANGULAR SCATTERING BY C.H2, ZR-H1.85 AND C6.H6
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,

- V.1, P.493 (1968)
C.H2/ ZR-H/ C6.H6 ..EXPERIMENT/ MOLECULAR DYNAMICS
- 68-BI-01 BISCHOFF, F./ MOORE, W.E./ YEATER, M.L.
MONTE CARLO MULTIPLE SCATTERING CODE DEVELOPMENT
WASH-1124, P.163 (1968)
COMPUTER-CODES ..THEORY/ SLAB SAMPLE/ TUBLER SAMPLE
- 68-BO-01 BORGONOV, G.
LATTICE DYNAMICS AND NEUTRON SCATTERING OF BE.O
GA-8758 (1968)
BE.O ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..RIGID ION MODEL/ SHELL MODEL
- 68-BO-02 BORGONOV, G./ CARRIVEAU, G.W.
TOTAL CROSS SECTIONS OF U.C2
GA-8782 (1968)
U.C ..SOLID/ SIGMA (E) ..ROOM TEMPERATURE
- 68-BO-03 BORGONOV, G.M./ CARRIVEAU, G.W.
NEUTRON SCATTERING FROM MG.O
PHYS. REV., V.174, P.953-P.958 (1968)
MG.O ..EXPERIMENT/ ANGULAR DISTRIBUTION/ SHELL MODEL CALCULATION
- 68-BO-04 BOUTIN, H./ VIP, S.
MOLECULAR SPECTROSCOPY WITH NEUTRONS
THE MIT PRESS, CAMBRIDGE, MASSACHUSETTS, AND LONDON, ENGLAND (1968)
NEUTRON-SCATTERING-IN-SOLIDS/ NEUTRON-SCATTERING-IN-FLUIDS ..BOOK/ MOLECULAR DYNAMICS/ NEUTRON SCATTERING
- 68-BO-05 BOUTIN, H./ PRASK, H.
APPLICATION OF SLOW NEUTRON SCATTERING TO STUDIES IN COLLOID AND SURFACE CHEMISTRY
ADVANCE, COLLOID INTERFACE SCI., V.2, P.1-P.38 (1968)
REVIEW-ARTICLES ..WATER ADSORBED/ WATER IN BIOLOGICAL SYSTEMS
- 68-BO-06 BOWMAN, J.C./ KRUMHANS, J.A.
THE LOW-TEMPERATURE SPECIFIC HEAT OF GRAPHITE
J. PHYS. CHEM. SOLIDS, V.6, P.367-P.379 (1968)
GRAPHITE ..THEORY/ LATTICE DYNAMICS
- 68-BO-07 BOYTER, J.K./ SOLBRIG-JR, A.W.
MACS J, A PROGRAM FOR COMPUTING CRYSTAL PHONON DISPERSION RELATIONS, STRUCTURE FACTORS FOR NEUTRON INELASTIC SCATTERING AND JACOBIAN MATRICES
IN-1147 (1968)
COMPUTER-CODES ..LATTICE DYNAMICS/ DISPERSION RELATION
- ..STRUCTURE FACTOR FOR COHERENT SINGLE PHONON SCATTERING OF NEUTRONS/ FORTRAN IV PROGRAM
- 68-BR-01 BROVMAN, E.G./ KAGAN, Y./ KHOLAS, A.
THEORY OF VIBRATIONAL SPECTRUM IN HEXAGONAL METALS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.165-P.179 (1968)
BE/ MG/ ZN ..THEORY/ LATTICE DYNAMICS
- 68-BR-02 BROWN, R.C./ MARCH, N.H.
ATOMIC TRANSPORT AND ISOTOPIC MASS EFFECTS IN CLASSICAL LIQUIDS
J. PHYS. CHEM. LIQUIDS, V.1, P.141-P.158 (1968)
THEORY-OF-FLUIDS ..CORRELATION FUNCTION/ FREQUENCY SPECTRA/ MASS EFFECT/ ALLOYS
- 68-BR-03 BRUGGER, R.M.
SLOW NEUTRON SCATTERING FROM WATER
NUCL. SCI. ENG., V.33, P.187 (1968)
H2.O ..SCATTERING FUNCTION/ EXPERIMENT/ LIQUID ..TOF/ 16DC
- 68-BR-04 BRUGGER, R.M./ PLUMMER, J.P.
SLOW NEUTRON SCATTERING FROM WATER
IN-1141 (1968)
H2.O ..EXPERIMENT/ SCATTERING FUNCTION
- 68-BR-05 BRUN, T.O./ SINHA, S.K./ SWENSON, C.A./ TILFORD, C.R.
LATTICE DYNAMICS OF HCP HE4 BY INELASTIC NEUTRON SCATTERING
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.339-P.342 (1968)
HE ..EXPERIMENT/ DISPERSION RELATION ..4.2DK
- 68-BU-01 BUHRER, W./ SCHNEIDER, T./ STOLL, E.
PHONON DISPERSION IN COPPER
HELV. PHYS. ACTA, V.41, P.399 (1968)
CU ..PHONON DISPERSION
- 68-BU-02 BULAVIN, L.A./ VORONEL, A.V./ OSTANEVICH, Y.M./ SIMKINA, A.P./ STRELKOV, A.V.
SELF-DIFFUSION COEFFICIENT OF ETHANE NEAR THE LIQUID-GAS TRANSITION POINT
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.525-P.533 (1968)
ETHANE ..EXPERIMENT/ QUASI-ELASTIC/ LIQUID/ GAS
- 68-BU-03 BURGMAN, J.O./ SCIESINSKI, J./ SKOELD, K.
PROTON DYNAMICS IN WATER AND ICE STUDIED BY INELASTIC SCATTERING OF SLOW NEUTRONS
PHYS. REV., V.170, P.808 (1968)

H₂O ..SOLID/ LIQUID/ EXPERIMENT/ FREQUENCY DISTRIBUTION
N ..COLD NEUTRON TOF/ 273.4DK/ 268.7DK

68-BU-04 BUYERS, W.J.L./ COWLEY, R.A.
NORMAL MODES OF VIBRATION OF MIXED K.BR/RB.BR CRYSTALS
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.43-P.46
(1968)
K.BR/ RB.BR ..EXPERIMENT/ LATTICE DYNAMICS ..MIXED CRYSTALS

68-BU-05 BUYERS, W.J.L./ COWLEY, R.A./ PAUL, G.L./ COCHRAN, W.
NEUTRON SCATTERING NEAR THE FERROELECTRIC TRANSITION IN
K₂D₂P₂O₄
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.267-P.274
(1968)
K₂H₂P₂O₄ ..EXPERIMENT/ QUASI-ELASTIC SCATTERING ..340C
-49.6DC

68-BU-06 BUYERS, W.J.L./ SMITH, T.
DEBYE-WALLER FACTORS OF ALKALI HALIDES
J. PHYS. CHEM. SOLIDS, V.29, P.1051-P.1057 (1968)
K₂CL/ K.BR/ NA₂I/ NA₂CL/ NA₂BR/ NA₂F ..THEORY/ DEBYE-WALLER FACTOR ..TEMPERATURE DEPENDENCE/ 0-900DK

68-BU-07 BUZANO, C./ RASETTI, M.
SCATTERING OF SLOW NEUTRON FROM MOLECULES OF THE POINT GROUP C-3V
NUOVO CIM., B, V.57, P.1-P.18 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SCATTERING BY MOLECULE

68-BU-08 BUZANO, C./ DEMICHELIS, F./ RASETTI, M.
ROTATION-VIBRATION INTERACTION IN SCATTERING OF SLOW-NEUTRONS BY SPHERICAL-TOP MOLECULES
PHYS. REV., V.167, P.97 (1968)
NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY/ GAS/ FREQUENCY DISTRIBUTION/ ..DIFFERENTIAL CROSS SECTION

68-CA-01 CAGLIOTTI, G./ RIZZI, G./ CUBIOTTI, G.
PHONON-PHONON INTERACTIONS IN ZINC
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.373-P.377 (1968)
ZN ..EXPERIMENT/ LATTICE DYNAMICS/ ANHARMONIC CONTRIBUTION

68-CA-02 CARPENTER, J.M./ SCHAEFER, R.A.
AMPLITUDE OF THE TOW QUANTUM IN THE SCATTERING LAW FOR MOLECULAR GASES
NEUTRON THERMALIZATION AND REACTOR SPECTRA. IAEA, V.1, P.293 (1968)
BR/ C₂F₆ ..SCATTERING THEORY

68-CA-03 CARPENTER, J.M./ LURIE, N.A.
COHERENT INELASTIC NEUTRON SCATTERING BY MOLECULAR GASES. MEASUREMENTS ON C₂F₆ AND ROTATION-VIBRATION COUPLING CALCULATIONS FOR C₂D₄
NEUTRON INELASTIC SCATTERING. IAEA, V.2, P.205-P.222 (1968)
C₂F₆/ C₂H₄ ..EXPERIMENT/ GAS/ SCATTERING FUNCTION

68-CA-04 CARVALHO, F.
INELASTIC SCATTERING OF THERMAL NEUTRONS IN GRAPHITE
NUCL. SCI. ENG., V.34, P.224 (1968)
GRAPHITE ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT ..TOF/ 533DK

68-CH-01 CHEN, S.H./ DVORAK, V.
GROUP-THEORETICAL ANALYSIS OF LATTICE VIBRATIONS IN MOLECULAR CRYSTALS
J. CHEM. PHYS., V.48, P.4060 (1968)
HEXAMETHYLENETETRAMINE/ ADAMANTANE/ N₂H₄CL ..THEORY/ MOLECULAR DYNAMICS/ LATTICE DYNAMICS/ DISPERSION RELATION

68-CH-02 CHEVEAU, L.
MODEL FOR LATTICE DYNAMICS IN METALS
PHYS. REV., V.169, P.496 (1968)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..METAL

68-CO-01 COCHRAN, W.
FOURIER TRANSFORMS AND CORRELATION FUNCTIONS
THEORY OF CONDENSED MATTER. IAEA, P.307-P.324 (1968)
NEUTRON-SCATTERING-IN-SOLIDS ..LECTURE NOTE/ CORRELATION FUNCTION

68-CO-02 COCHRAN, W.
A CORRELATION FUNCTION FOR PHONON EIGENVECTORS
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.275-P.280 (1968)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ CORRELATION FUNCTION

68-CO-03 COCKING, S.J./ EGELSTAFF, P.A.
CO-OPERATIVE MODES OF MOTION IN LIQUID LEAD
J. PHYS., C, LONDON, V.1, P.507 (1968)
PB ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..15DC ABOVE AND BELOW MELTING POINT/ 350DC

68-CO-04 COCKING, S.J.
STUDIES OF THE LIQUID STATE USING THE INELASTIC SCATTERING OF SLOW NEUTRONS

- AERE-R-5867 (1968)
NA/ PB ..EXPERIMENT/ LIQUID/ ..LIQUID DYNAMICS
- 68-CO-05 COCKING, S.J.,
A QUASI-PHONON TREATMENT OF COHERENT NEUTRON SCATTERING
BY LIQUID LEAD
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.463-P.4
72 (1968)
PB ..THEORY/ LIQUID DYNAMICS
- 68-CO-06 COCKING, S.J./ EGELSTAFF, P.A.
THE TEMPERATURE DEPENDENCE OF CO-OPERATIVE MODES OF MOT
ION IN LIQUID PB
J. PHYS., C, LONDON, V.1, P.519 (1968)
PB ..LIQUID DYNAMICS/ TEMPERATURE DEPENDENCE
- 68-CO-07 COHEN, M.H./ MARTIN, R.M./ PICK, R.M.
MICROSCOPIC THEORY OF FORCE CONSTANTS IN SOLIDS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.119-P.1
39 (1968)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS ..FORCE CONSTANTS
- 68-CO-08 COPLEY, J.R.D./ BROCKHOUSE, B.N./ CHEN, S.H.
LATTICE DYNAMICS OF RUBIDIUM
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.209-P.2
14 (1968)
RB ..EXPERIMENT/ DISPERSION RELATION ..120K
- 68-CO-09 COWLEY, R.A./ WOODS, A.D.B.
NEUTRON SCATTERING FROM LIQUID HELIUM AT HIGH ENERGIES
PHYS. REV. LETT., V.21, P.787 (1968)
HE ..LIQUID/ EXPERIMENT/ SCATTERING FUNCTION ..1.1DK/ 4
..2DK
- 68-CO-10 COWLEY, R.A.
NEUTRONS, FREE ELECTRONS AND HIGH MAGNETIC FIELDS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.141-P.1
48 (1968)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ LATTICE DYNAMICS
..MAGNETIC FIELD
- 68-CO-11 COWLEY, R.A./ BUYERS, W.J.L./ SVENSSON, E.C./ PAUL
..G.L.
NEUTRON SCATTERING AND ELASTIC CONSTANTS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.281-P.2
88 (1968)
K.BR/ SR.TI.03 ..THEORY/ EXPERIMENT/ LATTICE DYNAMICS/
ELASTIC CONSTANT ..NEUTRON MEASUREMENT/ ULTRASONIC MEAS
UREMENT
- 68-CO-12 COWLEY, R.A.
A CALCULATION OF THE NEUTRON SCATTERING BY LIQUIDS AS M
- EASURED WITH THE COLD NEUTRON TIME-OF-FLIGHT TECHNIQUE
AECL-3189, P.0-P.11 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ..TIME-OF-FLIGHT/ COLLECTI
VE MODE
- 68-CO-13 COWLEY, R.A./ SVENSSON, E.C./ BUYERS, W.J.L.
NEUTRON SCATTERING AND ELASTIC CONSTANTS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.281 (19
68)
K.BR/ SR.TI.03/ K.H2.P.04 ..ELASTIC CONSTANT/ SOUND VEL
OCITY/ ANHARMONICITY
- 68-CZ-01 CZACHOR, A.
ON THE LATTICE DYNAMICS OF HEXAGONAL STRUCTURE METALS
PHYS. STATUS SOLIDI, V.29, P.423-P.434 (1968)
MG/ ZN/ BE ..THEORY/ PHONON DISPERSION
- 68-DA-01 DAHLBORG, U./ FRIBERG, B./ LARSSON, K.E./ PIRKMAJE
R, E.
NEW RESULTS ON 'QUASI-ELASTIC' SCATTERING FROM SOME HYD
ROGENOUS LIQUIDS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.581-P.5
97 (1968)
PENTANE/ PENTANOL ..EXPERIMENT ..QUASI-ELASTIC/ TEMPERA
TURE EFFECT
- 68-DA-02 DAMLE, P.S./ SJOELANDER, A./ SINGWI, K.S.
ITINERANT-OSCILLATOR MODEL OF LIQUIDS
PHYS. REV., V.165, P.277-P.282 (1968)
THEORY-OF-FLUIDS ..LIQUID/ FREQUENCY SPECTRUM/ THEORY
..ITINERANT-OSCILLATOR-MODEL
- 68-DA-03 DASANNACHARYA, B.A.
MOLECULAR MOTIONS IN LIQUIDS
PROCEEDINGS OF THE NUCLEAR PHYSICS AND SOLID STATE
PHYSICS SYMPOSIUM, SOLID STATE PHYSICS, DAE, BOMB
AY, P.144-P.160 (1968)
REVIEW-ARTICLES ..MOLECULAR LIQUID/ MOLECULAR MOTION/ N
EUTRON SCATTERING
- 68-DA-04 DASANNACHARYA, B.A./ NAVARRO, G.O./ IBARRA, H./ CH
ATRAPHORN, S./ LEE, G.B.
NEUTRON DIFFRACTION BY LIQUID ZINC
PHYS. REV., V.173, P.241-P.248 (1968)
ZN ..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION
- 68-DA-05 DAUBERT, J./ JEX, H./ ROSSBERG, D.
THERMAL NEUTRON SCATTERING BY ICE SINGLE CRYSTAL (IN GE
RMAN)
IKF-22 (1968)
H2.O ..SOLID/ EXPERIMENT/ SIGMA (E)

- 68-DE-01 DE-WETTE, F.W./ RAHMAN, A.
INELASTIC SCATTERING OF NEUTRONS BY POLYCRYSTALS
PHYS. REV., V.176, P.784 (1968)
NEUTRON-SCATTERING-IN-SOLIDS .,FREQUENCY DISTRIBUTION/
THEORY/ SOLID .,ONE-PHONON/ COHERENT/ POLYCRYSTAL/ INEL
ASTIC SCATTERING CROSS SECTION/ MONATOMIC/ FCC CRYSTAL
- 68-DE-02 DE-WIT, G.A./ BROCKHOUSE, B.N.
THE LATTICE DYNAMICS OF FERROMAGNETIC AND PARAMAGNETIC
NICKEL
J. APPL. PHYS., V.39, P.451 (1968)
NI .,EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
.400DC/ 300DC/ ROOM TEMP.
- 68-DE-03 DELTOUR, J.
THE COMPUTATION OF LATTICE FREQUENCY DISTRIBUTION FUNCTI
ONS BY MEANS OF CONTINUED FRACTIONS
PHYSICA, V.39, P.413 (1968)
THEORY-OF-SOLIDS .,FREQUENCY DISTRIBUTION/ THEORY/ SOLI
D .,CONTINUED FRACTION/ LINEAR CHAIN
- 68-DE-04 DESAI, R.C./ YIP, S.
DYNAMICAL CORRELATIONS IN SIMPLE LIQUIDS AND COLD-NEUTR
ON SCATTERING BY ARGON
PHYS. REV., V.166, P.129 (1968)
AR .,LIQUID/ SCATTERING FUNCTION .94,4DK
- 68-DO-01 DOLLING, G./ SMITH, H.G./ NICKLOW, R.M./ VIJAYARAG
HAVAN, P.R./ WILKINSON, M.K.
LATTICE DYNAMICS OF LITHIUM FLUORIDE
PHYS. REV., V.168, P.970-P.979 (1968)
LI,F .,EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATIO
N/ FREQUENCY DISTRIBUTION .,3-AXIS CRYSTAL SPECTROMETER
/ 298DK/ HEAT CAPACITY/ DEBYE-WALLER FACTOR
- 68-DU-01 DURIG, J.R./ WALKER, M./ BAGLIN, F.G.
LATTICE VIBRATIONS OF MOLECULAR CRYSTALS 2, CYANAMIDE A
ND CYANAMIDE-D2
J. CHEM. PHYS., V.48, P.4675 (1968)
CYANAMIDE .,FREQUENCY DISTRIBUTION/ EXPERIMENT/ MOLECUL
AR DYNAMICS/ LATTICE DYNAMICS
- 68-EC-01 ECKSTEIN, S./ VARGA, B.B.
DISPERSION OF PHONONS IN 4HE
PHYS. REV. LETT., V.21, P.1311 (1968)
HE .,THEORY/ LIQUID/ STATISTICAL MECHANICS
- 68-ED-01 EDER, O.J./ EGELSTAFF, P.A.
THE MOLECULAR DYNAMICS OF METHANE IN ARGON
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.223-P.2
35 (1968)
METHANE .,EXPERIMENT/ SOLID/ LIQUID/ THEORY/ MOLECULAR
- DYNAMICS .,METHANE IN ARGON
- 68-EG-01 EGGER, H./ GSANGER, M./ LUSCHER, E./ DORNER, B.
PHONON DISPERSION MEASUREMENTS ON AN ARGON SINGLE CRYST
AL AT 4.2 DEG. K.
PHYS. LETT., A, V.28, P.433 (1968)
AR .,EXPERIMENT/ PHONON DISPERSION/ SINGLE CRYSTAL
- 68-EI-01 EISENTHAL, K.B./ DOWLEY, M.W./ PETICOLAS, W.L.
TWO-PHONON SPECTRUM OF A LIQUID
PHYS. REV. LETT., V.20, P.93-P.95 (1968)
CHLORONAPHTHALENE .,EXPERIMENT/ LIQUID .,TWO-PHONON SPE
CTRUM
- 68-EL-01 EL-ELA, M.A./ SALAMA, M./ ABDEL-KAWY, A./ ADIB, M.
/ HAMOUDA, I.
MEASUREMENT OF THE TOTAL NEUTRON CROSS-SECTION OF ZINC
AND ANTIMONY IN THE ENERGY RANGE 0.002-0.4 EV USING A T
IME-OF-FLIGHT SPECTROMETER
J. NUCL. ENERGY, V.22, P.389 (1968)
SB .,TOTAL CROSS SECTION
- 68-EN-01 ENDERBY, J.E./ NORTH, D.M.
PERCUS-YEVICK STRUCTURE FACTORS FOR LIQUID ALLOYS
J. PHYS. CHEM. LIQUIDS, V.1, P.1-P.11 (1968)
THEORY-OF-FLUIDS/ NA-K .,STRUCTURE FACTOR/ ALLOY LIQUID
/ PERCUS-YEVICK
- 68-ER-01 EREMEEV, I.P./ MOSTOVOI, V.I./ SADIKOV, I.P./ CHEY
SCHOV, A.A.
STUDY OF INELASTIC NEUTRON SCATTERING IN GRAPHITE AT VA
RIOUS TEMPERATURES (IN RUSSIAN)
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,
V.1, P.343 (1968)
GRAPHITE .,SCATTERING FUNCTION/ EXPERIMENT .,15DC/ 490D
C/ 1000DC
- 68-ES-01 ESCH, L.J./ MOORE, W.E./ YEATER, M.L.
HIGH TEMPERATURE WATER SCATTERING LAW MEASUREMENT
H2,O .,LIQUID/ EXPERIMENT/ FREQUENCY DISTRIBUTION/ SCAT
TERING FUNCTION
- 68-FA-01 FAURE, P./ KAHANE, A.
INTERPRETATION OF OPTICAL SPECTRA OF LOW FREQUENCY OF I
CE BY MEANS OF A DYNAMIC MODEL OF CRYSTALLINE LATTICE (I
N FRENCH)
J. PHYS., PARIS, V.28, P.944 (1968)
H2,O .,FREQUENCY DISTRIBUTION/ DISPERSION RELATION/ LAT
TICE DYNAMICS/ THEORY/ SOLID
- 68-FE-01 FELDKAMP, L.A./ VENKATARAMAN, G./ KING, J.S.

DISPERSION RELATION FOR SKELETAL VIBRATIONS IN DEUTERATED POLYETHYLENE
NEUTRON INELASTIC SCATTERING, IAEA, V.2, P.159-P.165 (1968)
POLYETHYLENE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ CONST.-@

68-FL-01 FLEURY, P.A./ SCOTT, J.F./ WORLOCK, J.M.,
SOFT PHONON MODES AND THE 1100K PHASE TRANSITION IN SR,
TI, O3
PHYS. REV. LETT., V.21, P.16 (1968)
SR, TI, O3 ..RAMAN SPECTROSCOPY

68-FO-01 FORSTER, D./ MARTIN, P.C.,
MOMENTS OF THE MOMENTUM DENSITY CORRELATION FUNCTIONS IN
N SIMPLE LIQUIDS
PHYS. REV., V.170, P.155-P.159 (1968)
THEORY-OF-FLUIDS ..LIQUID/ THEORY/ CORRELATION FUNCTION
..FOURTH-FREQUENCY-MOMENT/ SUM RULES

68-FO-02 FORSTER, D./ MARTIN, P.C. / YIP, S.,
MOMENT METHOD APPROXIMATION FOR THE VISCOSITY OF SIMPLE
LIQUIDS APPLICATION TO ARGON
PHYS. REV., V.170, P.160-P.163 (1968)
THEORY-OF-FLUIDS ..LIQUID/ CORRELATION FUNCTION ..ARGON
/ VISCOSITY/ MOMENT METHOD

68-FO-03 FOURNIER, R.P./ SAVOIE, R./ BESSETTE, F./ CABANA,
A.,
VIBRATIONAL SPECTRA OF LIQUID AND CRYSTALLINE C.F4
J. CHEM. PHYS., V.49, P.1159 (1968)
C.F4 ..FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID/ SOLID
D ..70DK/ 125DK/ INFRA-RED/ RAMAN SPECTRA

68-FR-01 FRANCHETTI, S./ MAZZA, A.,
ON THE INTERPRETATION OF SOME EXPERIMENTAL RESULTS ON RADIATION SCATTERING AND ATOMIC MOTIONS FOR SOME NOBLE GASES IN THE LIQUID STATE
NUOVO CIM., B, V.55, P.348-P.361 (1968)
AR/ NE/ HE ..THEORY/ MONATOMIC LIQUID/ RADIAL DENSITY AND SCATTERING FUNCTION

68-FR-02 FRANCHETTI, S.,
ON A MODEL FOR MONATOMIC LIQUIDS
NUOVO CIM., B, V.55, P.335-P.347 (1968)
THEORY-OF-FLUIDS/ NEUTRON-SCATTERING-IN-FLUIDS ..MONATOMIC LIQUIDS/ RADIAL DENSITY/ SCATTERING FUNCTION

68-FU-01 FULINSKI, A./ ZGIERSKI, M.,
SCATTERING SLOW NEUTRONS BY GASEOUS METHANE AND INTERMOLECULAR INTERACTIONS
PHYS. LETT., V.27A, P.9 (1968)

METHANE ..EXPERIMENT/ GAS

68-GE-01 GERBAUX, X./ HADNI, A.,
LATTICE VIBRATIONS OF PYRAZINE CRYSTAL
J. CHEM. PHYS., V.49, P.955 (1968)
PYRAZINE ..FREQUENCY DISTRIBUTION/ EXPERIMENT/ SOLID

68-GI-01 GIBBS, A.G./ LINDEMETER, C.W.,
ANALYTICAL EVALUATION OF THE LARGE TIME CONTRIBUTION TO NEUTRON SCATTERING CROSS SECTIONS
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA, V.1, P.271 (1968)
H2, O ..SCATTERING THEORY/ LIQUID

68-GI-02 GISSLER, W./ AXMANN, A./ SPRINGER, T.,
INELASTIC NEUTRON SCATTERING ON SOLID AND LIQUID TELLURIUM AND SELENIUM
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.245-P.252 (1968)
SE/ TE ..EXPERIMENT/ SOLID/ LIQUID/ TOF/ 3-AXIS-SPECTROMETER ..340DC FOR SE/ 450DC FOR TE

68-GL-01 GLAESER, W.,
A REVIEW OF SCATTERING LAW STUDIES FOR MODERATORS
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA, V.1, P.235 (1968)
H2, O/ ZR-H/ GRAPHITE/ D2, O/ BE/ BE, O ..COMPIATION/ SCATTERING FUNCTION/ CROSS SECTION EVALUATION

68-GL-02 GLAESER, W.,
STUDIES OF INELASTIC SCATTERING OF SLOW NEUTRON BY MODERATORS
NUKLEONIK, V.11, P.282 (1968)
H2, O/ D2, O/ ZR-H/ GRAPHITE/ BE/ BE, O ..SCATTERING FUNCTION/ DIFFUSION PARAMETER/ COMPIATION

68-GL-03 GLASS, L./ RICE, S.A.,
UNIFIED APPROXIMATION FOR THE VELOCITY AUTOCORRELATION FUNCTION AND THE STRUCTURE FUNCTION OF A SIMPLE LIQUID
PHYS. REV., V.176, P.239-P.249 (1968)
NEUTRON-SCATTERING-IN-FLUIDS/ AR ..THEORY/ LIQUID/ CORRELATION FUNCTION ..COHERENT-SCATTERING CROSS SECTION

68-GL-04 GLASS, L./ RICE, S.A.,
NEW APPROXIMATION FOR THE CALCULATION OF NEUTRON SCATTERING FROM A SIMPLE LIQUID
PHYS. REV., V.165, P.186-P.194 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ CORRELATION FUNCTION/ DIFFERENTIAL SCATTERING CROSS SECTION

68-GL-05 GLASS, L./ RICE, S.A.,
UNIFIED APPROXIMATION FOR THE VELOCITY AUTOCORRELATION

FUNCTION AND THE STRUCTURE FUNCTION OF A SIMPLE LIQUIDS
 PHYS. REV., V.176, P.239-P.249 (1968)
 THEORY-OF-FLUIDS ..LIQUID/ CORRELATION FUNCTION/ THEORY
 / NEUTRON SCATTERING ..ONE-PARTICLE AND TWO-PARTICLE MO
 TIONS IN MONATOMIC LIQUID

68-GR-01 GRANT, D.M./ STRONG, K.A./ BRUGGER, R.M.
 DIRECT OBSERVATION OF METHYL LIBRATIONS IN NEOPENTANE
 PHYS. REV. LETT., V.20, P.983 (1968)
 PENTANE ..EXPERIMENT/ LIBRATIONAL MOTION

68-GR-02 GRIMVALL, S./ GRIMVALL, G.
 X-RAY DEBYE TEMPERATURE FOR AL, NB AND PB
 ACTA CRYSTALLOGR., SECT. A, V.24, P.612 (1968)
 AL/ NB/ PB ..FREQUENCY DISTRIBUTION/ THEORY/ LATTICE DY
 NAMICS ..DEBYE TEMP.

68-GR-03 GROSS, E.P./ WISNIEWSKY, D.
 SPACE-TIME CORRELATION FUNCTIONS FOR THE ENSKOG DENSE G
 AS THEORY
 PHYS. FLUIDS, V.11, P.1387-P.1394 (1968)
 THEORY-OF-FLUIDS ..KINETIC EQUATION/ HARD SPHERE GAS

68-GU-01 GUPTA, V.D./ TREVINS, S./ BOUTINE, H.
 VIBRATION SPECTRA OF POLYGLYCINE
 J. CHEM. PHYS., V.48, P.3008 (1968)
 POLYGLYCINE ..FREQUENCY DISTRIBUTION/ THEORY/ LATTICE D
 YNAMICS

68-HA-01 HARLING, O.K.
 SLOW-NEUTRON INELASTIC SCATTERING AND DYNAMICS OF HEAVY
 WATER
 NUCL. SCI. ENG., V.33, P.41-P.50 (1968)
 D2.O ..SCATTERING FUNCTION/ LIQUID/ FREQUENCY DISTRIBU
 TION/ EXPERIMENT ..ROOM TEMP.

68-HA-02 HARLING, O.K.
 THE DYNAMICS OF LIQUID H2.O AND D2.O AND SOLID H2.O FRO
 M THE INELASTIC SCATTERING OF EPITHERMAL NEUTRONS
 NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.507-P.5
 19 (1968)
 H2.O/ D2.O ..EXPERIMENT/ MOLECULAR DYNAMICS/ FREQUENCY
 DISTRIBUTION ..EPITHERMAL NEUTRONS

68-HA-03 HARLING, O.K.
 THE DYNAMICS OF LIQUID H2.O AND D2.O AND SOLID H2.O FRO
 M THE INELASTIC SCATTERING OF EPITHERMAL NEUTRONS
 BNWL-SA-1535 (1968)
 H2.O/ D2.O ..EXPERIMENT/ TOF/ DIFFERENTIAL CROSS SECTIO
 N/ SPECTRAL DENSITY ..299DK/ 268DK

68-HA-04 HARTMANN, W.H.

THEORY OF THE VIBRATIONS OF DILUTE ALLOYS WITH SHORT-RAN
 GE ORDER
 PHYS. REV., V.172, P.677 (1968)
 THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS/ DISPERSION
 RELATION ..ALLOY/ IMPURITY EFFECT/ DOUBLE-TIME GREEN F
 UNCTION

68-HA-05 HAUTECLER, S./ NEVE-DE-MEVERGNIES, M.
 APPLICATION OF THE KREBS MODEL TO THE STUDY OF THE LATT
 ICE DYNAMICS OF HEXAGONAL CLOSE-PACKED METALS
 NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.91-P.99
 (1968)
 THEORY-OF-SOLIDS ..LATTICE DYNAMICS ..METAL/ HEXAGONAL
 STRUCTURE

68-HA-06 HAYWOOD, B.C./ PAGE, P.I.
 THE SCATTERING LAW FOR HEAVY WATER AT 540DK AND LIGHT W
 ATER AT 500DK
 NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,
 V.1, P.361 (1968)
 H2.O/ D2.O ..EXPERIMENT/ SCATTERING FUNCTION/ FREQUENCY
 DISTRIBUTION

68-HE-01 HENRY, B.R./ SIEBRAND, W.
 ANHARMONICITY IN POLYATOMIC MOLECULES. THE CH-STRETCHIN
 G OVERTONE SPECTRUM OF BENZENE
 J. CHEM. PHYS., V.49, P.5369 (1968)
 BENZENE ..FREQUENCY SPECTRUM/ THEORY/ LIQUID/ MOLECULE
 DYNAMICS

68-HE-02 HERDADE, S.B.
 SLOW-NEUTRON SCATTERING AND ROTATIONAL FREEDOM OF METHY
 L GROUPS IN SEVERAL ORGANIC COMPOUNDS
 NEUTRON INELASTIC SCATTERING, IAEA, V.2, P.197-P.2
 04 (1968)
 METHYLENE ..EXPERIMENT/ SIGMA(E) ..METHYL GROUPS IN ORG
 ANIC COMPOUNDS

68-HO-01 HO, P.S.
 LATTICE-DYNAMIC CALCULATION FOR ALKALI METALS
 PHYS. REV., V.169, P.523 (1968)
 THEORY-OF-SOLIDS/ NA/ K ..DISPERSION RELATION/ THEORY/
 LATTICE DYNAMICS

68-HO-02 HOLMRYD, S./ NELIN, G.
 DIFFUSIVE MOTIONS IN BENZENE AND TOLUENE STUDIED WITH S
 LOW NEUTRONS
 NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.475-P.4
 82 (1968)
 BENZENE/ TOLUENE ..EXPERIMENT/ TOF ..DIFFUSIVE MOTION/
 QUASI-ELASTIC

- 68-HO-03 HOYLAND, J.R.,
INTERNAL ROTATION IN BUTANE
J. CHEM. PHYS., V.49, P.2563 (1968)
C4.H10 ..THEORY/ MOLECULE DYNAMICS
- 68-II-01 IIZUMI, M./ AYO, S.,
TOTAL CROSS SECTION OF GLASSY CARBON FROM 0.001 TO 0.1E
V
J. NUCL. SCI., TECHNOL., TOKYO, V.5, P.649 (1968)
C ..SIGMA (E)
- 68-IY-01 IYENGAR, P.K.,
INTERATOMIC FORCES IN SOLIDS
THEORY OF CONDENSED MATTER, IAEA, P.665-P.688 (1968)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS ..LECTURE NOTE
- 68-IY-02 IYENGAR, P.K./ VENKATARAMAN, G./ GAMEEL, Y.H./ RAO,
K.R.,
KOHANOMALIES IN ZINC
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.195-P.201 (1968)
ZN ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
..KOHANOMALIES
- 68-JA-01 JACROT, B.,
NEUTRONS AND CRITICAL PHENOMENA
THEORY OF CONDENSED MATTER, IAEA, P.483-P.499 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ..PHASE TRANSITION/ CRITICAL SCATTERING/ LECTURES
- 68-JA-02 JANIK, J.A.,
MOLECULAR DYNAMICS STUDIED BY NEUTRON INELASTIC SCATTERING AND COMPUTING METHOD
INP-600/PS (1968)
C.H4/ H2.O/ N.H3/ LI2.S.O4.H2.O/ H3.O.N.O3/ C.H3.I ..EXPERIMENT/ GAS/ LIQUID/ SOLID/ MOLECULAR DYNAMICS
- 68-JA-03 JANIK, J.A.,
NEUTRONS AND MOLECULES
THEORY OF CONDENSED MATTER, IAEA, P.577-P.601 (1968)
NEUTRON-SCATTERING-IN-SOLIDS/ NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING BY MOLECULES/ LECTURES
- 68-JA-04 JARVIS, R.G.,
CALCULATION AND THE THERMAL SCATTERING LAW FOR SOLIDS AND LIQUIDS
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA, V.1, P.261 (1968)
H2.O ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ THE

ORY

- 68-JO-01 JOHNSTON, A.S.,
TWO PHONON INELASTIC COHERENT THERMAL SCATTERING CROSS SECTION OF BERYLLIUM
WNL-TME-1854 (1968)
BE ..THEORY/ SOLID/ HARMONIC APPROXIMATION/ SCATTERING LAW/ INCOHERENT APPROXIMATION/ FREQUENCY DISTRIBUTION/ DEBYE-WALLER FACTOR ..COHERENT CROSS SECTION
- 68-KA-01 KAGAN, Y./ BROVMAN, E.G.,
THE ROLE OF ELECTRONS IN PHONON SPECTRUM FORMATION IN METALS (IN RUSSIAN)
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.3-P.34 (1968)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS ..METAL/ ELECTRON CONTRIBUTION
- 68-KA-02 KAHN, R./ TROTTIN, J.P./ CRIBIER, D./ BENOIT, C.,
STUDY OF THE DYNAMICS OF THE LATTICE OF A MG.F2 MONOCRYSTAL BY INELASTIC NEUTRON SCATTERING (IN FRENCH)
NEUTRON INELASTIC SCATTERING, IAEA, V.2, P.289-P.293 (1968)
MG.F2 ..EXPERIMENT/ 3-AXIS SPECTROMETER/ LATTICE DYNAMICS/ DISPERSION RELATION
- 68-KA-03 KARIMOV, I./ BROVMAN, E.G./ ZEMLYANOV, M.G./ SOMENKOV, V.A./ CHERNOPOLEKOV, N.A.,
BROADENING OF THE OPTICAL BRANCHES OF THE PHONON SPECTRUM IN METAL HYDRIDES
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.9 (V.9), P.1991-P.1995 (P.1566-P.1568) (1968 (1968))
CE-H/ TH-H/ U-H ..LATTICE DYNAMICS/ EXPERIMENT/ FREQUENCY DISTRIBUTION ..TOF/ 20DC
- 68-KA-04 KARO, A.M./ HARDY, J.K.,
LATTICE DYNAMICS AND SPECIFIC HEAT DATA OF CS.CL, CS.BR AND CS.I
J. CHEM. PHYS., V.48, P.3173 (1968)
CS.CL/ CS.BR/ CS.I ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..RIGID-ION MODEL/ POLARIZATION DIPOLE MODEL/ DEFORMATION DIPOLE MODEL
- 68-KE-01 KERR, W.C.,
CORRELATED MOTIONS IN SIMPLE CLASSICAL LIQUIDS
PHYS. REV., V.174, P.316-P.325 (1968)
THEORY-OF-FLUIDS ..LIQUID/ CORRELATION FUNCTION/ THEORY
- 68-KI-01 KIROUAC, G.J./ MOORE, W.E./ ESCH, L.J./ SEEMAN, K.W./ YEATER, M.L.,
EPITHERMAL NEUTRON INELASTIC SCATTERING AND SCATTERING

- LAW FOR H₂O
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,
V.1, P.389 (1968)
H₂O ..SCATTERING FUNCTION/ EXPERIMENT ..300DK
- 68-KI-02 KITAGAWA, T./ MIYAZAWA, T.
INTERCHAIN POTENTIAL, FREQUENCY SPECTRUM, SPECIFIC HEAT
AND ROOT MEAN SQUARED DISPLACEMENTS IN POLYETHYLENE CR
YSTAL
REPORTS ON PROGRESS IN POLYMER PHYSICS IN JAPAN, V
.11, P.219-P.222 (1968)
POLYETHYLENE ..THEORY/ LATTICE DYNAMICS/ DISPERSION REL
ATION/ FREQUENCY DISTRIBUTION ..SPECIFIC HEAT
- 68-KI-03 KITAGAWA, T./ MIYAZAWA, T.
CROSS-SECTION FOR MULTI-PHONON SCATTERING OF NEUTRONS B
Y CRYSTALLINE POLYETHYLENE
J. POLY. SCI., PART B, V.6, P.83-P.86 (1968)
POLYETHYLENE ..THEORY/ FREQUENCY DISTRIBUTION ..ONE, TW
O, THREE-PHONON SCATTERING/ 100DK
- 68-KO-01 KOHLER, T.R.
NEW THEORY OF LATTICE DYNAMICS AT 0K
PHYS. REV., V.165, P.942 (1968)
NEUTRON-SCATTERING-IN-SOLIDS ..LATTICE DYNAMICS/ THEORY
- 68-KO-02 KOPPEL, J.U./ YOUNG, J.A.
NEUTRON SCATTERING IN BERYLLIUM
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,
V.1, P.333 (1968)
BE ..LATTICE DYNAMICS/ SOLID/ THEORY/ DISPERSION RELATI
ON
- 68-KO-03 KOTHARI, L.S./ SINGAL, C.M.
LATTICE DYNAMICS OF MICROCRYSTALLITE
PHYS. REV., V.168, P.952 (1968)
THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS
- 68-KO-04 KOTHARI, L.S./ GOYAL, I.C.
NEUTRON SCATTERING FROM AN N-DIMENSIONAL LATTICE (N=1,
2,3)
PHYS. REV., V.168, P.752 (1968)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ SOLID/ LATTICE D
YNAMICS/ FREQUENCY DISTRIBUTION
- 68-KO-05 KOTOV, B.A./ OKUNEVA, N.M./ PLACHENOVA, E.L.
EXPERIMENTAL DETERMINATION OF THE THERMAL VIBRATION SPE
CTRUM OF WHITE TIN
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.10 (V
.10), P.513-P.517 (P.402-P.405) (1968 (1968))
SN ..EXPERIMENT/ PHONON SPECTRA/ SPECIFIC HEAT
- 68-LA-01 LAJEUNESSE, C./ MOORE, W.E./ PUROHIT, S.N./ YEATER
M.L.
URANIUM CARBIDE SCATTERING LAW
WASH-1124, P.612 (1968)
U.C ..THEORY/ EXPERIMENT/ CROSS SECTION/ FREQUENCY DIST
RIBUTION
- 68-LA-02 LARSSON, K.E.
LIQUID DYNAMICS FROM NEUTRON SCATTERING
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.397-P.4
29 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID DYNAMICS/ REVIEW
- 68-LA-03 LARSSON, K.E.
ROTATIONAL AND TRANSLATIONAL DIFFUSION IN COMPLEX LIQUI
DS
PHYS. REV., V.167, P.171-P.182 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID/ DIFFUSION PARAME
TER ..ROTATIONAL DIFFUSION/ TRANSLATIONAL DIFFUSION
- 68-LE-01 LEBOWITZ, J.L./ PERCUS, J.K./ SYKES, J.
TIME EVOLUTION OF THE TOTAL DISTRIBUTION FUNCTION OF A O
NE-DIMENSIONAL SYSTEM OF HARD RODS
PHYS. REV., V.171, P.224-P.235 (1968)
THEORY-OF-FLUIDS ..THEORY ..TIME DEPENDENT DISTRIBUTION
FUNCTION/ ONE-DIMENSIONAL SYSTEM
- 68-LE-02 LEIBFRIED, G.
LATTICE DYNAMICS
THEORY OF CONDENSED MATTER, IAEA, P.175-P.227 (196
8)
THEORY-OF-SOLIDS ..LECTURE NOTE
- 68-LE-03 LEUNG, P.S./ TAYLOR, T.I./ HAVENS-JR, W.W.
STUDIES OF PHASE TRANSITIONS IN AMMONIUM SALTS AND BARR
IERS TO ROTATION OF AMMONIUM IONS BY NEUTRON-SCATTERING
CROSS SECTIONS AS A FUNCTION OF TEMPERATURE
J. CHEM. PHYS., V.48, P.4912-P.4918 (1968)
N.H₄F/ N.H₄Cl/ N.H₄Br/ N.H₄I/ (N.H₄)₂S.O₄/ (N.H₄)₂
CR₂O₇/ N.H₄Cl.O₄ ..EXPERIMENT/ TOTAL CROSS SECTION/
MOLECULAR DYNAMICS ..TEMPERATURE DEPENDENCE
- 68-LO-01 LOH, E.
OPTICAL PHONONS IN BE₂O CRYSTALS
PHYS. REV., V.166, P.673 (1968)
BE₂O ..LATTICE DYNAMICS/ EXPERIMENT ..ROOM TEMP./ INFRA
RED REFLECTION/ RAMAN SPECTRAL SHIFTS/ SINGLE CRYSTAL
- 68-LO-02 LONGSTER, G.F./ WHITE, J.W.
VIBRATIONAL ASSIGNMENTS IN POLYMER NEUTRON-SCATTERING S
PECTRA BY ATOMIC SUBSTITUTION

- J. CHEM. PHYS., V.48, P.5271 (1968)
POLYACETALDEHYDE/ POLYTRIFLUOROACETALDEHYDE ..EXPERIMENT/ TOF/ NEUTRON SPECTRUM ..ROOM TEMPERATURE/ COLD NEUTRON SOURCE
- 68-LY-01 LYNCH-JR, J.E./ SUMMERFIELD, G.C./ FELDKAMP, L.A./ KING, J.S.
NEUTRON SCATTERING IN NORMAL AND DEUTERATED POLYETHYLENE
J. CHEM. PHYS., V.48, P.912 (1968)
POLYETHYLENE ..SOLID/ EXPERIMENT/ THEORY/ FREQUENCY DISTRIBUTION/ LATTICE DYNAMICS..ROOM TEMP.
- 68-LY-02 LYNCH-JR, J.E./ SUMMERFIELD, G.C.
FREQUENCY DISTRIBUTIONS OF SYNDIOTACTIC POLYVINYLCHLORIDE
NEUTRON INELASTIC SCATTERING, IAEA, V.2, P.167-P.173 (1968)
POLYVINYL CHLORIDE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
- 68-MA-01 MANNHEIM, P.D.
INFLUENCE OF FORCE-CONSTANT CHANGES ON THE LATTICE DYNAMICS OF CUBIC CRYSTALS WITH POINT DEFECT
PHYS. REV., V.165, P.1011 (1968)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY
- 68-MA-02 MARADUDIN, A.A./ VOSKO, S.H.
SYMMETRY PROPERTIES OF THE NORMAL VIBRATIONS OF CRYSTAL
REV. MOD. PHYS., V.40, P.1 (1968)
DIAMOND ..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY PROPERTIES/ SPACE GROUP/ IRREDUCIBLE REPRESENTATION
- 68-MA-03 MARCH, N.H.
THE LIQUID STATE
THEORY OF CONDENSED MATTER, IAEA, P.93-P.174 (1968)
THEORY-OF-FLUIDS ..LECTURE NOTE/ SCATTERING FUNCTION
- 68-MA-04 MARSDEN, R.S./ MCMURRY, H.L.
CALCULATED SCATTERING LAW AND THERMAL NEUTRON SPECTRA FOR BENZENE
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA, V.1, P.457 (1968)
C6.H6 ..SIGMA (E)/ SIGMA (E-E-PRIME)/ SCATTERING FUNCTION/ NEUTRON SPECTRUM/ THEORY/ GAS/ MOLECULE DYNAMICS
- 68-MA-05 MARTEL, P./ COWLEY, R.A./ STEVENSON, R.W.H.
EXPERIMENTAL STUDIES OF THE MAGNETIC AND PHONON EXCITATIONS IN COBALT FLUORIDE
CAN. J. PHYS., V.46, P.1355-P.1370 (1968)
CO.F2 ..EXPERIMENT/ CONSTANT-0 METHOD/ DISPERSION RELATION ..80DK/ 4.2DK/ RIGID ION MODEL

- 68-MA-06 MARTIN, D.G.
THE CALCULATION OF DIFFERENTIAL NEUTRON SCATTERING CROSS SECTIONS OF POINT DEFECTS IN A RELAXED LATTICE
AERE-R-5682 (1968)
NEUTRON-SCATTERING-IN-SOLIDS ..SCATTERING THEORY ..SCATTERING CROSS SECTION BY INTERSTITIAL ATOM
- 68-MA-07 MARTIN, R.M.
LATTICE VIBRATIONS IN SILICON. MICROSCOPIC DIELECTRIC MODELS
PHYS. REV. LETT., V.21, P.536 (1968)
SI ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
- 68-MA-08 MARTIN, D.G.
A STUDY OF VERY SMALL DEFECT CLUSTERS IN IRRADIATED MAGNESIUM OXIDE. USING LONG-WAVELENGTH NEUTRON SCATTERING MEASUREMENTS
PROC. PHYS. SOC., LONDON, V.1, P.333 (1968)
Mg.O ..EXPERIMENT/ THEORY/ SOLID ..DEFECT SCATTERING
- 68-MA-09 MARTIN, P.C./ YIP, S.
FREQUENCY DEPENDENT FRICTION CONSTANT ANALYSIS OF DIFFUSION IN SIMPLE LIQUIDS
PHYS. REV., V.170, P.151 (1968)
AR ..FREQUENCY DISTRIBUTION/ THEORY/ LIQUID/ STATISTICAL MECHANICS ..FLUCTUATION-DISSIPATION THEOREMS/ DISPERSION RELATIONS/ SUM RULES
- 68-MA-10 MATEESCU, N./ TEUTSCH, H./ DIACONESCU, A./ NAHORNIAK, V.
MOLECULAR DYNAMICS IN LIQUID NITROGEN AND LIQUID BISMUTH INVESTIGATED BY COLD NEUTRON SCATTERING
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.439-P.447 (1968)
N2/ BI ..EXPERIMENT/ TOF/ SCATTERING FUNCTION ..77.4DK FOR N2/ 560DK FOR BI
- 68-ME-01 MELVIN, J.S./ PIRIE, J.D./ SMITH, T.
LATTICE DYNAMICS AND IONIC DEFORMATION IN SOME ALKALIHALIDES
PHYS. REV., V.175, P.1082-P.1090 (1968)
Na.F/ Na.CL/ Na.BR/ Na.I ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE ..SHELL MODEL/ IONIC DEFORMATION
- 68-MI-01 MIKA, K./ DORNER, B./ STILLER, H.H.
BRILLOUIN SCATTERING OF NEUTRONS FROM LIQUID C.O
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.599-P.607 (1968)
C.O ..EXPERIMENT/ CONSTANT-0 ..77.3DK FOR LIQUID/ 63.1DK FOR SOLID

- 68-MI-02 MILLER, A.P./ BROCKHOUSE, B.N.
ANOMALOUS BEHAVIOR OF THE LATTICE VIBRATIONS AND THE EL
ECTRONIC SPECIFIC HEAT OF PALLADIUM
PHYS. REV. LETT., V.20, P.798 (1968)
PD ..EXPERIMENT/ THEORY/ LATTICE DYNAMICS/ DISPERSION R
ELATION ..TRIPLE AXIS SPECTROMETER/ 85DK/ 120DK/ 296DK/
673DK
- 68-MI-03 MILLER, S.A./ CASPERS, H.H./ RAST, H.E.
LATTICE VIBRATIONS OF YTTRIUM VANADATE
PHYS. REV., V.168, P.964-P.969 (1968)
V.V.04 ..EXPERIMENT/ LATTICE DYNAMICS ..INFRARED AND RA
HMAN SPECTROSCOPY
- 68-MI-04 MINKIEWICZ, V.J./ KITCHENS, T.A./ LIPSHULTZ, F.P./
NATHANS, R./ SHIRANE, G.
PHONON SPECTRUM OF HCP 4HE
PHYS. REV., V.174, P.267 (1968)
HE ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RE
LATION ..1.03DK
- 68-MO-01 MOZER, B.
LOCALIZED MODES, RESONANT MODES AND IMPURITY VIBRATIONA
L BANDS IN VANADIUM ALLOYS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.55-P.63
(1968)
V ..EXPERIMENT/ LATTICE DYNAMICS ..ALLOYS/ RESONANT, LO
CALIZED MODES
- 68-MY-01 MYERS, W.R./ RANDOLPH, P.D.
LOW-FREQUENCY VIBRATIONS IN POLYETHYLENE AT 300DK, 77DK
AND 4.2DK
J. CHEM. PHYS., V.49, P.1043 (1968)
POLYETHYLENE ..EXPERIMENT/ LATTICE DYNAMICS ..DIFFERENT
IAL CROSS SECTION/ 300DK/ 77DK/ 4.2DK/
- 68-MY-02 MYERS, W.R.
NEUTRON SCATTERING IN ORIENTED POLYETHYLENE AT 300, 77
AND 4.2DK
IN-1151 (1968)
POLYETHYLENE ..FREQUENCY DISTRIBUTION/ EXPERIMENT/ SOLI
D ..TOF/ SPECIFIC HEAT
- 68-NA-01 NAKAHARA, Y.
PHONON SPECTRUM AND THERMAL NEUTRON SCATTERING IN LIGHT
WATER ICE
J. NUCL. SCI. TECHNOL., TOKYO, V.5, P.635 (1968)
H2.O ..FREQUENCY DISTRIBUTION/ THEORY/ SOLID/ LATTICE D
YNAMICS
- 68-NA-02 NARTEN, A.H.
DIFFRACTION PATTERN AND STRUCTURE OF LIQUID BENZENE
- J. CHEM. PHYS., V.48, P.1630 (1968)
BENZENE ..LIQUID/ EXPERIMENT/ MOLECULAR DYNAMICS ..X-R
Y DIFFRACTION/ 25DC
- 68-NA-03 NATKANIEC, I./ PARLINSKI, K./ JANIK, J.A./ BAJOREK
A./ SUDNIK-HRYNIEWICZ, M.
LOCAL VIBRATIONS OF IMPURITY ATOMS IN COPPER AND LEAD
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.65-P.78
(1968)
CU-BE/ CU-MG/ PB-NA/ PB-MG ..EXPERIMENT/ LATTICE DYNAMI
CS ..ALLOY/ LOCAL VIBRATION
- 68-NE-01 NEIL, J.M./ RUSSEL-JR, J.L./ BROWN, J.R.
TOTAL NEUTRON CROSS SECTION OF WATER
NUCL. SCI. ENG., V.33, P.265 (1968)
H2.O ..EXPERIMENT/ LIQUID/ TOTAL CROSS SECTION ..23DC/
LINAC
- 68-NE-02 NELKIN, M./ ORTOLEVA, P.J.
COLLECTIVE MODES IN LIQUIDS AND NEUTRON SCATTERING
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.535-P.5
44 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID ..KINETIC
THEORY/ COLLECTIVE MODES
- 68-NE-03 NERBLE, J.L./ WARREN, J.L./ YARNELL, J.L.
LATTICE DYNAMICS OF LITHIUM HYDRIDE
PHYS. REV., V.168, P.980-P.989 (1968)
LI.H ..FREQUENCY DISTRIBUTION/ DISPERSION RELATION/ LAT
TICE DYNAMICS/ EXPERIMENT ..ROOM TEMPERATURE/ LI.D
- 68-NG-01 NG, S.C./ BROCKHOUSE, B.N.
ATOMIC VIBRATIONS IN FACE-CENTERED-CUBIC ALLOYS OF BI,
PB AND TL
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.253-P.2
66 (1968)
PB-TL/ BI-TL/ BI-PB/ BI-PB-TL ..EXPERIMENT/ LATTICE DYN
AMICS/ DISPERSION RELATION ..100DK/ KOHN ANOMALIES
- 68-NI-01 NICKLOW, R.M./ VIJAYARAGHAVAN, P.R./ SMITH, H.G./
DOLLING, G./ WILKINSON, M.K.
COHERENT INELASTIC SCATTERING STUDY OF LOCAL AND IN-BAN
D MODES IN CU(1-X)-AL(X) CRYSTALS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.47-P.54
(1968)
CU-AL ..EXPERIMENT/ LATTICE VIBRATION ..LOCAL MODE
- 68-NI-02 NICKLOW, R.M./ VIJAYARAGHAVAN, P.R./ SMITH, H.G./
WILKINSON, M.K.
OBSERVATION OF LOCALIZED VIBRATIONS IN CU 4/100, AL BY
COHERENT INELASTIC NEUTRON SCATTERING
PHYS. REV. LETT., V.20, P.1245 (1968)

CU-AL ..PHONON DISPERSION/ LOCALIZED MODE

- 68-NI-03 NILSSON, G.
OBSERVATIONS OF THE KOHN EFFECT IN COPPER
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.187-P.1
94 (1968)
- CU ..EXPERIMENT/ LATTICE VIBRATION/ DISPERSION RELATION
..KOHN EFFECT
- 68-NO-01 NORTH, D.M./ ENDERBY, J.E./ EGELSTAFF, P.A.
THE STRUCTURE FACTOR FOR LIQUID METALS. II - RESULTS FO
R LIQUID ZN, TL, PB, SN AND BI
J. PHYS., C, LONDON, V.1, P.1075-P.1087 (1968)
- ZN/ TL/ PB/ SN/ BI ..EXPERIMENT/ LIQUID/ STATISTICAL ME
CHANICS ..LIQUID METAL/ 340DC-1100DC
- 68-NO-02 NORTH, D.M./ ENDERBY, J.E./ EGELSTAFF, P.A.
THE STRUCTURE FACTOR FOR LIQUID METALS I, THE APPLICATI
ON OF NEUTRON DIFFRACTION TECHNIQUES
J. PHYS., C, LONDON, V.2, P.784-P.794 (1968)
- NEUTRON-SCATTERING-IN-FLUIDS ..STRUCTURE FACTOR/ LIQUID
..NEUTRON DIFFRACTION/ LIQUID METAL
- 68-NO-03 NORTH, D.M./ ENDERBY, J.E./ EGELSTAFF, P.A.
THE STRUCTURE FACTOR FOR LIQUID METALS I, THE APPLICATIO
N OF NEUTRON DIFFRACTION TECHNIQUES,
J. PHYS., C, LONDON, V.1, P.784 (1968)
- PB/ TI ..STRUCTURE FACTOR
- 68-NO-04 NOSSAL, R.
COLLECTIVE MOTION IN SIMPLE CLASSICAL FLUID
PHYS. REV., V.166, P.81 (1968)
- NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID/ THEORY
- 68-O--01 O'REILLY, D.E.
SELF-DIFFUSION COEFFICIENTS AND ROTATIONAL CORREATION T
IMES IN POLAR LIQUIDS
J. CHEM. PHYS., V.49, P.5416 (1968)
- C.CL4/ C.H3CL3/ C6.H5CL/ H.F/ H2O ..CORRE
LATION FUNCTION/ MOLECULAR ROTATIONS/ LIQUID/ EXPERIMENT/
DIFFUSION PARAMETER ..POLAR LIQUID/ NMR/ RELAXATION TI
ME/ QUASILATTICE MODEL/ CORRELATION TIME/ VISCOSITY
- 68-OH-01 OHRLICH, R./ DREXEL, W.
LATTICE DYNAMICS OF PLATINUM
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.203-P.2
08 (1968)
- PT ..EXPERIMENT/ LATTICE DYNAMICS/ TOF/ DISPERSION RELA
TION/ FREQUENCY DISTRIBUTION
- 68-OS-01 OSTHELLER, G.L./ SCHMUNK, R.E./ BRUGGER, R.M./ KEA
RNEY, R.J.,

PHONON DISPERSION RELATION OF BERYLLIUM OXIDE
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.315-P.3
24 (1968)

BE,O ..EXPERIMENT/ 3-AXIS SPECTROMETER/ LATTICE DYNAMIC
S/ DISPERSION RELATION

68-OS-02 OSTHELLER, G.L./ SCHMUNK, R.E./ KEARNEY, R.J.
PHONON DISPERSION RELATION OF BERYLLIUM OXIDE
IN-1129 (1968)

BE,O ..DISPERSION RELATION/ CRYSTAL SPECTROMETER/ LATTI
CE DYNAMICS/ EXPERIMENT/ SOLID/ HARMONIC APPROXIMATION/
STRUCTURE FACTOR

68-OZ-01 OZELTON, M.W./ SWALIN, R.A.
SELF-DIFFUSION IN LIQUID SODIUM AT CONSTANT VOLUME AND
PRESSURE

PHIL. MAG., V.18, P.441 (1968)

NA ..DIFFUSION COEFFICIENT/ LIQUID

68-PA-01 PAGE, D.I./ HAYWOOD, B.C.
THE HARWELL SCATTERING LAW PROGRAMME. FREQUENCY DISTRIB
UTIONS OF MODERATORS
AERE-R-5778 (1968)

H2,O/ D2,O/ GRAPHITE/ BE/ BE,O ..COMPILATION/ LIQUID/ S
OLID/ FREQUENCY DISTRIBUTION ..AT VARIOUS TEMP.

68-PA-02 PAGE, D.I.
THE PHONON DISTRIBUTION OF GRAPHITE AT HIGH TEMPERATURE
S

NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.325-P.3
34 (1968)

GRAPHITE ..EXPERIMENT/ TOF/ FREQUENCY DISTRIBUTION ..18
00DK

68-PA-03 PAGE, D.I.,
SCATTERING LAW (ALPHA, BETA)-VALUES FOR A MIXTURE OF L
IGHT WATER AND HEAVY WATER

AERE-R-5832 (1968)

H2,O/ D2,O ..EXPERIMENT/ SCATTERING FUNCTION/ COMPILATI
ON ..MIXTURE OF H2,O AND D2,O/ 0-0.13EV/ 1-17A-1

68-PA-04 PAHOR, S.
MULTIPLE SCATTERING AND INVERSE ALBEDO PROBLEM

PHYS. REV., V.175, P.218 (1968)

SCATTERING-THEORIES ..SCATTERING THEORY ..MULTIPLE SCAT
TERING CORRECTION

68-PA-05 PARKS, P.B./ PELLARIN, D.J./ PROCHNOW, N.H./ BAUMA
N, N.P.

THERMAL NEUTRON DIFFUSION IN LIGHT AND HEAVY WATER
DP-1090 (1968)

H2,O/ D2,O ..EXPERIMENT/ DIFFUSION PARAMETER

- 68-PE-01 PERCUS, J.K./ YEVICK, G.J.,
DIRECT CORRELATION FUNCTION IN SPACE AND TIME
PHYS. FLUIDS, V.11, P.2050-P.2052 (1968)
THEORY-OF-FLUIDS ..THEORY/ DIRECT CORRELATION FUNCTION
- 68-PI-01 PISERI, L./ ZERBI, G.,
VIBRATIONAL FREQUENCY SPECTRA OF RANDOMLY FOLDED SIMPLE
ZIG-ZAG CHAINS
CHEM. PHYS. LETT., V.2, P.127-P.131 (1968)
POLYETHYLENE ..THEORY/ PHONON SPECTRA/ ZIG-ZAG CHAIN
- 68-PO-01 POWELL, B.M./ MARTEL, P./ WOODS, A.D.B.,
LATTICE DYNAMICS OF NIOBIUM-MOLYBDENUM ALLOYS
PHYS. REV., V.171, P.727 (1968)
NB-MO ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATI
ON ..ROOM TEMP./ ALLOY/ KOHN EFFECT
- 68-PO-02 POWELL, B.M.,
LATTICE DYNAMICS OF HEXAMETHYLENETETRAAMINE
NEUTRON INELASTIC SCATTERING, IAEA, V.2, P.185-P.1
95 (1968)
HEXAMETHYLENETETRAAMINE ..EXPERIMENT/ CONST.-Q/ DISPERSI
ON CURVES/ FREQUENCY DISTRIBUTION ..296DK
- 68-PO-03 POWLES, J.G.,
NUCLEAR MAGNETIC RESONANCE IN LIQUIDS AND SOLIDS (REVI
EW PAPER)
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.379 (19
68)
REVIEW-ARTICLES ..TO COMPARE NMR WITH THAT OF NEUTRON S
CATTERING
- 68-PR-01 PRASK, H./ BOUTIN, H./ YIP, S.,
FREQUENCY SPECTRUM OF HYDROGENOUS MOLECULAR SOLID BY I
NELASTIC NEUTRON SCATTERING, HEXAGONAL H₂O ICE
J. CHEM. PHYS., V.48, P.3367 (1968)
H₂O ..SOLID/ EXPERIMENT/ THEORY/ FREQUENCY DISTRIBUTIO
N ..COLD NEUTRON TOF/ 150DK
- 68-PU-01 PUROHIT, S.N./ PAN, S.S./ BISCHOFF, F./ BRYVAUT, W
A./ LAJEUNESSE, C.,
INELASTIC NEUTRON SCATTERING IN METAL HYDRIDES, U.C AND
U.O2 AND APPLICATIONS OF THE SCATTERING LAW
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,
V.1, P.407 (1968)
U.C/ U.O2/ ZR-H/ TI-H/ NB-H/ TH-H ..SCATTERING FUNCTION
/ FREQUENCY DISTRIBUTION/ EXPERIMENT
- 68-PU-02 PUROHIT, S.N.,
DISCUSSION OF THE QUASI ELASTIC SCATTERING OF NEUTRONS
IN INCOHERENT LIQUIDS
- J. PHYS. CHEM. LIQUIDS, V.1, P.13-P.32 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID/ QUASI EL
ASTIC/ INCOHERENT
- 68-PY-01 PYNN, R./ SOUJRES, G.L.,
MEASUREMENTS OF FREQUENCIES OF NORMAL MODES OF MAGNESIU
M
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.215-P.2
22 (1968)
MG ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/
TOF
- 68-QU-01 QUITTNER, G./ VUKOVICH, S./ ERNST, G.,
PRESSURE DEPENDENCE OF THE FREQUENCY OF SOME PHONONS IN
SODIUM IODIDE
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.367-P.3
72 (1968)
NA, I ..EXPERIMENT/ LATTICE DYNAMICS ..PRESSURE EFFECTS/
3000 ATM
- 68-RA-01 RAHMAN, A.,
CURRENT FLUCTUATIONS IN CLASSICAL LIQUIDS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.561-P.5
72 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ MOLECULAR DYNAMI
CS/ SCATTERING FUNCTION
- 68-RA-02 RANDOLPH, P.D.,
SCATTERING LAW FOR LIQUID SODIUM AT SMALL MOMENTUM TRAN
SFERS
IN-1199 (1968)
NA ..SCATTERING FUNCTION/ EXPERIMENT/ LIQUID ..375,8DK/
QUASI-ELASTIC/ INELASTIC
- 68-RA-03 RANDOLPH, P.D.,
INELASTIC SCATTERING IN LIQUID SODIUM AT SMALL MOMENTUM
TRANSFER
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.449-P.4
56 (1968)
NA ..EXPERIMENT/ TOF ..102DC/ SMALL MOMENTUM TRANSFER/
DIFFUSIVE AND COLLECTIVE EXCITATION
- 68-RA-04 RANDOLPH, P.D.,
MASS-CURRENT FLUCTUATIONS IN LIQUID LEAD
PHYS. REV. LETT., V.20, P.531-P.533 (1968)
PB ..LIQUID/ CORRELATION FUNCTION/ SCATTERING LAW/ EXPE
RIMENT
- 68-RA-05 RAO, K.R.,
NEUTRON DIFFRACTION FROM LIQUID CARBON TETRACHLORIDE
J. CHEM. PHYS., V.48, P.2395-P.2398 (1968)
C.CL4 ..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION

- 68-RA-06 RAPEANU, S.
QUASI-ELASTIC SCATTERING OF COLD NEUTRONS IN C₃H₅*(O*
D) AT VARIOUS TEMPERATURES
PHYS. LETT., A, V.28A, P.31 (1968)
GLYCELINE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING
- 68-RA-07 RAST, H.E./ CASPERS, H.H./ MILLER, S.A./ BUCHANAN,
R.A.
INFRARED DISPERSION AND LATTICE VIBRATIONS OF LA.F3
PHYS. REV., V.171, P.1051 (1968)
LA.F3 ..EXPERIMENT ..4.2DK/ 77DK/ 373DK/ INFRARED REFLE
CTION/ KRAMERS-KRONIG METHOD
- 68-RI-01 RICHTER, J./ VOSS, K.
NEW MODEL FOR THE CALCULATION OF NEUTRON SCATTERING
PHYS. LETT., V.28A, P.376-P.377 (1968)
AR/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LINEARIZED V
LASOV-BOLTZMAN EQUATION
- 68-RI-02 RICHTER, J./ VOSS, K.
NEW MODEL FOR THE CALCULATION OF NEUTRON SCATTERING
PHYS. LETT., A, V.28, P.376-P.377 (1968)
AR ..THEORY-LIQUID/ QUASI-ELASTIC SCATTERING ..LINEARIZ
ED VLASOV EQUATION
- 68-RI-03 RICHTER, J./ VOSS, K.
DISPERSION RELATION OF THE VLASOV EQUATION (IN GERMANY)
ANN. PHYS., LEIPZIG, V.21, P.303-P.311 (1968)
THEORY-OF-FLUIDS ..THEORY/ COLLECTIVE MOTION/ CLASSICAL
SYSTEM/ DISPERSION/ VLASOV EQUATION
- 68-RI-04 RIEDER, K.H./ HOERL, E.M.
SEARCH FOR SURFACE MODES OF LATTICE VIBRATIONS IN MAGNE
SIUM OXIDE
PHYS. REV. LETT., V.20, P.209-P.211 (1968)
MG.O ..EXPERIMENT/ PHONON SPECTRA/ SURFACE MODE
- 68-RO-01 ROSS, D.K./ SZABO, F.P./ SNALAN, Y.
THE INELASTIC SCATTERING OF NEUTRONS FROM BENZENE AND W
ATER
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,
V.1, P.477 (1968)
BENZENE/ H₂O ..SCATTERING FUNCTION/ FREQUENCY DISTRIBU
TION/ EXPERIMENT/ LIQUID ..20DC FOR BENZENE/ 23DC, 234D
C FOR H₂O
- 68-RU-01 RUSH, J.J./ FLOTOW, H.E.
VIBRATION SPECTRA OF VANADIUM HYDRIDE IN THREE CRYSTAL
PHASES BY INELASTIC NEUTRON SCATTERING
J. CHEM. PHYS., V.48, P.3795 (1968)
V-H ..FREQUENCY DISTRIBUTION/ EXPERIMENT
- 68-SA-01 SAKAMOTO, M./ HAMAGUCHI, Y.
LATTICE DYNAMICS OF CU(1-X)-NI(X)
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.181-P.1
86 (1968)
CU-NI ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATI
ON ..ALLOYS
- 68-SA-02 SAKURAI, J./ BUYERS, W.J.L./ COWLEY, R.A./ DOLLING
G.
CRYSTAL DYNAMICS AND MAGNETIC EXCITATIONS IN COBALTOUS
OXIDE
PHYS. REV., V.167, P.510 (1968)
CO.O ..LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATIO
N ..3-AXIS SPECTROMETER/ 425DK/ 110DK
- 68-SA-03 SAMOSVAT, G.S./ SAYASOV, Y.S./ CHUBURKOV, V.T.
SCATTERING OF SLOW NEUTRONS BY WATER MOLECULES
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.54 (V.27
), P.29-P.36 (P.15-P.18) (1968)
H₂O ..EXPERIMENT/ MOLECULAR DYNAMICS/ TOF ..RESONANT-D
ETECTOR METHOD
- 68-SA-04 SAMPSON, T.E./ CARPENTER, J.M.
THERMAL NEUTRON INELASTIC SCATTERING BY METHYL ALCOHOL
AND METHYL MERCAPTAN
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.491-P.4
99 (1968)
ALCOHOL/ MERCAPTAN ..EXPERIMENT/ MOLECULAR DYNAMICS
- 68-SC-01 SCHENK, C./ WIENER, E./ WECKERMANN, B./ KLEY, W.
DISAPPEARANCE OF A VIBRATIONAL MODE IN THE FERROELECTRI
C PHASE TRANSITION OF K₂H₂P₂O₄
PHYS. REV., V.172, P.576-P.578 (1968)
K₂H₂P₂O₄ ..EXPERIMENT/ TOF/ SINGLE CRYSTAL ..AS A FUNC
TION OF TEMPERATURE/ PHASE TRANSITION
- 68-SC-02 SCHENK, C./ WIENER, E./ WECKERMANN, B./ KLEY, W.
DISAPPEARANCE OF A VIBRATIONAL MODE IN THE FERROELECTRI
C PHASE TRANSITION OF K₂H₂P₂O₄
PHYS. REV., V.172, P.576-P.578 (1968)
K₂H₂P₂O₄ ..EXPERIMENT/ TOF/ SINGLE CRYSTAL ..AS A FUNC
TION OF TEMPERATURE/ PHASE TRANSITION
- 68-SC-03 SCHERMER, R.I./ BLUME, M.
POLARIZATION EFFECTS IN SLOW NEUTRON SCATTERING 3. NUCL
EAR POLARIZATION
PHYS. REV., V.166, P.554 (1968)
SCATTERING-THEORIES ..SOLID/ SCATTERING THEORY
- 68-SC-04 SCHMUCK, P./ QUITTNER, G.
THREE-BODY FORCES IN THE LATTICE DYNAMICS OF LEAD

- SGAE-PH-74/1968 (1968)
LEAD ., DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS
- 68-SC-05 SCHMUCK, P./ QUITTNER, G.
THREE-BODY FORCES IN THE LATTICE DYNAMICS OF LEAD
PHYS. LETT., V.28A, P.226-P.227 (1968)
PB ., THEORY/ LATTICE DYNAMICS/ DISPERSION CURVES ., PSEUDO
POTENTIAL CALCULATION
- 68-SC-06 SCHNEIDER, T./ STOLL, E.
LATTICE DYNAMICS AND ELECTRONIC STRUCTURE OF SODIUM, MAGNESIUM AND ALUMINIUM
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.101-P.118 (1968)
NA/ MG/ AL ., THEORY/ LATTICE DYNAMICS ., ELECTRONIC STRUCTURE/ METAL
- 68-SC-07 SCHOFIELD, P.
THE THEORY OF HIGH-FREQUENCY DENSITY FLUCTUATIONS IN LIQUIDS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.573-P.580 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ., THEORY/ SCATTERING FUNCTION
- 68-SH-01 SHAH, P.N.
DETERMINATION OF THE VELOCITY OF HIGH-FREQUENCY SOUND IN LIQUID HE BY X-RAY SCATTERING
PHYS. REV. LETT., V.20, P.1026-P.1028 (1968)
HE ., LIQUID/ EXPERIMENT ., HE-3/ X-RAY SCATTERING/ HIGH-FREQUENCY-SOUND VELOCITY
- 68-SH-02 SHENK, C.H./ WIENER, E./ WECKERMANN, B./ KLEY, W.
DISAPPEARANCE OF VIBRATIONAL MODE IN FERROELECTRIC PHASE TRANSITION OF K₂H₂P₂O₄
PHYS. REV., V.172, P.576 (1968)
K₂H₂P₂O₄ ., INCOHERENT SCATTERING SPECTRA/ PHASE TRANSITION/ LATTICE VIBRATION
- 68-SH-03 SHIMIZU, H.
DEPENDENCE OF THE TIME-CORRELATION FUNCTIONS OF MOLECULAR RANDOM MOTIONS ON THE INTERMOLECULAR POTENTIAL
J. CHEM. PHYS., V.48, P.2494 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ., THEORY/ FREQUENCY DISTRIBUTION/ CORRELATION FUNCTION/ LIQUID/ MOLECULAR DYNAMICS/ STATISTICAL MECHANICS
- 68-SI-01 SINGWI, K.S./ SJOELANDER, A.
THEORY OF ATOMIC MOTIONS IN SIMPLE CLASSICAL LIQUIDS
PHYS. REV., V.167, P.152 (1968)
AR ., THEORY/ LIQUID/ PAIR DISTRIBUTION FUNCTION ., 85.9D
- K
68-SI-02 SINGWI, K.S./ SKOELD, K./ TOSI, M.P.
ZERO SOUND IN CLASSICAL LIQUIDS
PHYS. REV. LETT., V.21, P.881 (1968)
NEUTRON-SCATTERING-IN-FLUIDS/ AR ., THEORY/ LIQUID/ MOLECULAR DYNAMICS
- 68-SI-03 SINGWI, K.S.
ATOMIC MOTIONS IN LIQUIDS AND NEUTRON SCATTERING
THEORY OF CONDENSED MATTER, IAEA, P.603-P.638 (1968)
NEUTRON-SCATTERING-IN-FLUIDS ., LIQUID DYNAMICS/ LECTURE NOTE
- 68-SI-04 SINHA, S.K.
ELECTRON-PHONON INTERACTION AND PHONON DISPERSION RELATION USING THE AUGMENTED-PLANE-WAVE METHOD
PHYS. REV., V.169, P.477 (1968)
THEORY-OF-SOLIDS ., THEORY/ LATTICE DYNAMICS ., METAL
- 68-SK-01 SKOELD, K.
EFFECTS OF MOLECULAR REORIENTATION IN SOLID METHANE ON THE QUASIELASTIC SCATTERING OF THERMAL NEUTRON
J. CHEM. PHYS., V.49, P.2443 (1968)
METHANE ., SCATTERING FUNCTION/ SOLID/ MOLECULAR DYNAMICS/ THEORY ., 22.1DK/ ORIENTATIONAL JUMP DIFFUSION MODEL
- 68-SL-01 SLAGGIE, E.L.
CENTRAL FORCE LATTICE DYNAMICAL MODEL FOR ZIRCONIUM HYDRIDE
J. PHYS. CHEM. SOLIDS, V.29, P.923 (1968)
ZR-H ., THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION ., ROOT SAMPLING METHOD
- 68-SL-02 SLAGGIE, E.L.
MULTIPLE SCATTERING IN NEUTRON DOUBLE DIFFERENTIAL CROSS SECTION MEASUREMENTS
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA, V.1, P.311 (1968)
H₂O/ ZR-H ., THEORY/ CROSS SECTION EVALUATION
- 68-SL-03 SLAGGIE, E.L.
CENTRAL FORCE LATTICE DYNAMICAL MODEL FOR URANIUM CARBIDE
GA-8675 (1968)
U.C ., THEORY/ SOLID/ LATTICE DYNAMICS/ CENTRAL-FORCE MODELS/ BORN-VON KARMAN MODEL/ FREQUENCY DISTRIBUTION/ INTRATOMIC FORCE CONSTANTS/ INCOHERENT APPROXIMATION ., SPECIFIC HEAT
- 68-SM-01 SMITH, H.G./ DOLLING, G./ NICKLOW, R.M./ VIJAYARAG

- HAVAN, P.R./ WILKINSON, M.K.,
PHONON DISPERSION CURVES IN LITHIUM
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.149-P.1
55 (1968)
- LI, .EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/
FREQUENCY DISTRIBUTION .980K/ LI7/ 3-AXIS SPECTROMETE
R
- 68-SO-01 SOSNOWSKI, J./ BEDNARSKI, S./ CZACHOR, A.,
PHONON DISPERSION RELATIONS IN BISMUTH
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.157-P.1
62 (1968)
- BI, .EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/
CONST-0
- 68-SP-01 SPREVAK, D./ KOPPEL, J.U./ YOUNG, J.A.,
SLOW NEUTRON SCATTERING AND THERMALIZATION BY BENZENE
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,
V.1, P.437 (1968)
- BENZENE, .THEORY/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIB
UTION/ CROSS SECTION EVALUATION
- 68-SP-02 SPREVAK, D./ BORGONOV, G.M./ NEILL, J.M./ CARRIVE
AN, G.W.,
NEUTRON THERMALIZATION IN BENZENE
NUKLEONIK, V.11, P.233 (1968)
- BENZENE, .SCATTERING FUNCTION/ LIQUID/ NEUTRON SPECTRUM
/ SCATTERING THEORY, .ROOM TEMPERATURE
- 68-ST-01 STAMENKOVICH, S.S.,
SCATTERING OF SLOW NEUTRONS BY THE PROTONS IN HYDROGEN
BONDS USING THE DOUBLE-POTENTIAL-WELL MODEL
FIZ, TVERD, TELA (SOV, PHYS.-SOLID STATE), V.10, P
.675 (1968)
- H, .DOUBLE-POTENTIAL-WELL/ HYDROGEN BOND, .SIGMA (THETA
.E)/ THEORY/ MOLECULAR DYNAMICS
- 68-ST-02 STECKI, J./ WOJNAR, R.,
KINETIC EQUATION FOR THE SELF-CORRELATION FUNCTION G(R,
T) IN THE DILUTE BOLTZMANN GAS
CHEM, PHYS, LETT, V.2, P.343-P.345 (1968)
- THEORY-OF-FLUIDS, .GAS/ THEORY/ CORRELATION FUNCTION
- 68-ST-03 STEINMAN, D.K./ SUMMERFIELD, G.C.,
NEUTRON INCOHERENT SCATTERING FROM KDP
J, PHYS, CHEM, SOLIDS, V.30, P.449 (1968)
- K.H2.P.04, .INCOHERENT SCATTERING
- 68-ST-04 STOCKMEYER, R./ STILLER, H.,
PHONONS, TORSIONS, AND ROTATIONAL DIFFUSION IN ADAMANTAN
E
PHYS, STATUS SOLIDI, V.27, P.269-P.280 (1968)

- ADAMANTANE, .EXPERIMENT/ PHONON SPECTRUM/ FITTED BY CAL
CULATIONS
- 68-SU-01 SUGAWARA, A./ YIP, S./ SIROVICH, L.,
KINETIC THEORY ANALYSIS OF LIGHT SCATTERING IN GASES
PHYS, REV., V.168, P.121-P.123 (1968)
- SCATTERING-THEORIES, .GAS/ FREQUENCY SPECTRUM/ THEORY,
.KINETIC-THEORY
- 68-SU-02 SUMMERFIELD, G.C./ LURIE, N.A.,
INELASTIC NEUTRON SCATTERING BY GASEOUS O2
J, CHEM, PHYS., V.49, P.890 (1968)
- O, .SCATTERING FUNCTION/ EXPERIMENT/ THEORY/ GAS, .MAGN
ETIC SCATTERING/ ROOM TEMP.
- 68-SU-03 SUMMERFIELD, G.C./ ZWEIFEL, P.F.,
QUASI-CLASSICAL APPROXIMATION FOR SCATTERING FROM MOLEC
ULES
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA,
V.1, P.283 (1968)
- H,CL/ H,F, .SCATTERING THEORY
- 68-SV-01 SVENSSON, E.C./ BUYERS, W.L.,
EXPERIMENTAL DIFFERENCE BETWEEN FIRST AND ZERO SOUND IN
K,BR
PHYS, REV., V.165, P.1063 (1968)
- K,BR, .LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION RELATIO
N, .3-AXIS-SPECTROMETER/ 950K/ 463DK
- 68-SY-01 SYKES, J.,
CO-OPEATIVE MODES OF MOTION IN A SIMPLE MODEL OF A LIQU
ID
PHYS, LETT., V.28A, P.208 (1968)
- NEUTRON-SCATTERING-IN-FLUIDS, .LIQUID/ SCATTERING LAW/
DISPERSION RELATION/ THEORY
- 68-TA-01 TAGLAUER, E.,
SMALL ANGLE SCATTERING OF SUBTHERMAL NEUTRONS FROM DEFO
RMED POLYCRYSTALLINE COPPER
PHYS, STATUS SOLIDI, V.29, P.259-P.268 (1968)
- CUT/ SCATTERING-BY-DEFECTS, .EXPERIMENT/ SMALL ANGLE SCA
TTERING/ DISLOCATION IN COLD WORKED CRYSTALS
- 68-TA-02 TALHOUK, S.J./ HARRIS, P.M./ WHITE, D./ ERICKSON,
R.A.,
SCATTERING OF THERMAL NEUTRONS BY LIQUID SOLUTIONS OF O
RTHO AND PARADEUTERIUM
J, CHEM, PHYS., V.48, P.1273 (1968)
- D, .EXPERIMENT/ LIQUID/ MOLECULAR DYNAMICS, .200K/ NEUT
RON DIFFRACTION/ RADIAL DISTRIBUTION FUNCTION
- 68-TA-03 TARINA, V.

- STUDY OF THE SOLID-LIQUID TRANSITION IN CYCLOXANE BY C
OLD NEUTRONS
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.501-P.5
06 (1968)
CYCLOHEXANE ..EXPERIMENT/ SIGMA(E)/ DIFFERENTIAL CROSS
SECTION ..SOLID-LIQUID TRANSITION/ -20DC-20DC
- 68-TH-01 THORSON, I.M.
THE SCATTERING LAW FOR VARIOUS REACTOR MATERIALS
NEUTRON THERMALIZATION AND REACTOR SPECTRA. IAEA,
V.1, P.373 (1968)
ZR-H/ U.O2 ..SCATTERING FUNCTION/ EXPERIMENT/ SOLID ..D
IFFERENTIAL SCATTERING CROSS SECTION
- 68-TR-01 TREPADUS, V./ BALLY, D./ PARFENOV, V.A./ LIFOROV,
V.G.
INELASTIC SCATTERING OF THERMAL NEUTRONS BY SOME BENZEN
E DERIVATIVES
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.483-P.4
90 (1968)
BENZENE ..EXPERIMENT/ MOLECULAR DYNAMICS
- 68-TR-02 TREVINO, S./ PRASK, H./ WALL, T./ YIP, S.
LATTICE DYNAMICS OF HYDROGEN-BONDED CRYSTALS
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.345-P.3
62 (1968)
H2.O/ H2.CL ..THEORY/ LATTICE DYNAMICS ..HARMONIC SOLIDS
- 68-TR-03 TREVINO, S.F.
COMMENT ON MOLECULAR DYNAMICS STUDY BY THE NEUTRON INELA
STIC SCATTERING METHOD, 5, S.C.(N.H2)2
PHYSICA, V.40, P.160 (1968)
UREA ..THEORY/ SOLID
- 68-TU-01 TUNKALO, E./ KUOPPAMAKI, R./ PALMGREN, A.
PHONONS IN LIQUID BISMUTH STUDIED BY NEUTRON INELASTIC
SCATTERING
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.431-P.4
37 (1968)
BI ..EXPERIMENT/ LIQUID/ SOLID/ DISPERSION RELATION ..2
80DC FOR LIQUID/ 262DC FOR SOLID
- 68-TU-02 TUNKALO, E./ BAJOREK, A./ NATKANIEC, I./ PARLINSKI
K./ SUDNIK-HRYNKIEWICZ, M.
STUDY OF THE FREQUENCY DISTRIBUTION IN UNSTRETCHED AND
STRETCHED RUBBER BY NEUTRON INELASTIC SCATTERING
NEUTRON INELASTIC SCATTERING. IAEA, V.2, P.237-P.2
41 (1968)
RUBBER ..EXPERIMENT/ TOF/ FREQUENCY DISTRIBUTION
- 68-VA-01 VALENTINE, T.M.

- COHERENT NEUTRON SCATTERING LENGTH OF 170
AERE-R-5770 (1968)
O ..EXPERIMENT ..USING U.O2 SINGLE CRYSTAL
- 68-VA-02 VAN-DIJK, C./ BERGSMA, J.
LATTICE DYNAMICS OF ALFA-Fe AND Fe3-AL
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.233-P.2
40 (1968)
FE/ FE-AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RE
LATION/ FREQUENCY DISTRIBUTION
- 68-VE-01 VERBLE, J.L./ WARREN, J.L./ YARNELL, J.L.
LATTICE DYNAMICS OF LITHIUM HYDRIDE
PHYS. REV., V.168, P.980-P.989 (1968)
LI.H ..EXPERIMENT/ PHONON DISPERSION/ LI-D/ MODEL ANALY
SIS/ FREQUENCY SPECTRUM
- 68-VE-02 VERDAN, G./ RUBIN, R./ KLEY, W.
THE DYNAMICS OF HYDROGEN IMPURITIES IN NIOBIUM AND VANA
DIUM
NEUTRON INELASTIC SCATTERING. IAEA, V.1, P.223-P.2
31 (1968)
V-H/ NB-H ..EXPERIMENT/ LATTICE DYNAMICS ..200DC
- 68-WA-01 WAGNER, M.
INVESTIGATION OF LATTICE DYNAMICS BY MEANS OF VIBRONIC
SPECTRA
Z. PHYS., V.214, P.78 (1968)
THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS
- 68-WA-02 WALMSLEY, S.H.
LATTICE VIBRATIONS AND ELASTIC CONSTANTS OF MOLECULAR C
RYSTALS IN PAIR POTENTIAL APPROXIMATION
J. CHEM. PHYS., V.48, P.1438 (1968)
C.O2 ..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DISTR
IBUTION
- 68-WA-03 WARREN, J.L.
FURTHER CONSIDERATIONS ON SYMMETRY PROPERTIES OF THE NO
RMAL VIBRATIONS OF A CRYSTAL
REV. MOD. PHYS., V.40, P.38 (1968)
CS,CL/ MG ..GROUP THEORY/ LATTICE VIBRATION ..SYMMETRY
PROPERTIES/ SPACE GROUP/ IRREDUCIBLE REPRESENTATION
- 68-WH-01 WHITEMORE, W.L.
NEUTRON SCATTERING BY REACTOR GRADE GRAPHITE
NUCL. SCI. ENG., V.33, P.31-P.40 (1968)
GRAPHITE ..CROSS SECTION EVALUATION/ EXPERIMENT/ FREQUE
NCY DISTRIBUTION/ SCATTERING FUNCTION ..300DK
- 68-WH-02 WHITEMORE, W.L.
INELASTIC THERMAL-NEUTRON SCATTERING BY LIQUID D2.O

- NUCL. SCI. ENG., V.33, P.195-P.208 (1968)
D2.O ..SCATTERING FUNCTION/ FREQUENCY DISTRIBUTION/ EXPERIMENT/ LIQUID ..300DK/ INCIDENT NEUTRON ENERGY 0.157-0.646EV
- 68-WH-03 WHITTEMORE, W.L.,
AN INVESTIGATION OF THE POLYPEPTIDE, POLY-L-GLUTAMIC ACID, USING NEUTRON INELASTIC SCATTERING
NEUTRON INELASTIC SCATTERING, IAEA, V.2, P.175-P.184 (1968)
POLYPEPTIDE/ POLYGLUTAMIC ACID ..EXPERIMENT/ TOF/ FREQUENCY DISTRIBUTION
- 68-WI-01 WIGNALL, G.D./ EGELSTAFF, P.A.,
THE TEMPERATURE DEPENDENCE OF CO-OPERATIVE MODES OF MOTION IN LIQUID LEAD
J. PHYS., C, LONDON, V.1, P.519 (1968)
PB ..EXPERIMENT/ LIQUID/ SCATTERING FUNCTION ..336-726DC
- 68-WJ-02 WIGNALL, G.D./ EGELSTAFF, P.A.,
CRITICAL OPALESCENCE IN BINARY LIQUID METAL MIXTURES, 1, TEMPERATURE DEPENDENCE
J. PHYS., C, LONDON, V.1, P.1088 (1968)
BI-GA/ BI-ZN ..CRITICAL PHENOMENA/ BINARY LIQUID METAL
- 68-WO-01 WOODS, A.D.B./ COWLEY, R.A.,
HIGH ENERGY EXCITATIONS IN LIQUID HELLIUM
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.609-P.614 (1968)
HE ..EXPERIMENT/ LIQUID/ TOF/ CONST.-0 ..1.1DK-4.2DK
- 68-YA-01 YARNELL, J.L./ WARREN, J.L./ WENZEL, R.G./ DEAN, P.J.,
LATTICE DYNAMICS OF GALLIUM PHOSPHIDE
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.301-P.313 (1968)
GA,P ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION
- 68-YA-02 YARNELL, J.L./ WARREN, J.L./ WENZEL, R.G./ DEAN, P.J.,
LATTICE DYNAMICS OF GALLIUM PHOSPHIDE
LA-DC-9228 (1968)
GA,P ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ 3-AXIS SPECTROMETER/ SHELL MODEL FIT
- 68-YO-01 YOUNG, J.A.,
NEUTRON SCATTERING FROM MOLECULAR NITROGEN
NEUTRON THERMALIZATION AND REACTOR SPECTRA, IAEA, V.1, P.303 (1968)
N ..SCATTERING THEORY/ MOLECULAR DYNAMICS
- 68-ZE-01 ZEMLYANOV, M.G./ MIRONOV, S.P./ SYRYKH, G.F.,
INVESTIGATION OF ADMIXED STATES IN VANADIUM ALLOYS
NEUTRON INELASTIC SCATTERING, IAEA, V.1, P.79-P.85 (1968)
V ..EXPERIMENT/ LATTICE DYNAMICS ..ALLOY/ LOCAL MODE
- 68-ZE-02 ZERBI, G./ PISERI, L.,
DISPERSION CURVES AND FREQUENCY DISTRIBUTION OF ISOTACTIC POLYPROPYLENE
J. CHEM. PHYS., V.49, P.3840 (1968)
POLYPROPYLENE ..FREQUENCY DISTRIBUTION/ DIFFERENTIAL CROSS SECTION/ CRYSTAL/ THEORY..F.G.METHOD/ ONE-PHONON APPROXIMATION/ DISPERSION CURVE
- 68-ZY-01 JAPAN ATOMIC ENERGY RESEARCH INSTITUTE
PROCEEDINGS OF THE SECOND CONFERENCE ON INELASTIC NEUTRON SCATTERING IN SOLIDS AND LIQUIDS, TOKAI 1967
JAERI-1157 (1968)
REVIEW-ARTICLES ..DYNAMICS OF SOLIDS AND LIQUIDS
- 69-AG-01 AGRAWAL, A.K./ YIP, S.,
SLOW-NEUTRON SCATTERING BY MOLECULAR LIQUIDS
NUCL. SCI. ENG., V.37, P.368 (1969)
NEUTRON-SCATTERING-IN-FLUIDS ..CROSS SECTION EVALUATION/ LIQUID ..MOLECULAR LIQUID
- 69-AL-01 ALIKHANOV, R.A./ DIMITRIJEVIC, Z./ KOWALSKA, A./ KASNIKI, S./ RZANY, H.,
NEUTRON INVESTIGATION OF THE SPIN SYSTEM DYNAMICS IN ALPHA-CR2.O3
PHYS. STATUS SOLIDI, V.32, P.41-P.48 (1969)
CR2.O3/ MAGNETIC-SCATTERING ..EXPERIMENT/ MAGNON DISPERSION RELATION/ ALPHA.CR2.O3/ 85DK/ FITTED TO FOUR EXCHANGE INTEGRAL
- 69-AL-02 ALS-NIELSEN, J.,
STUDIES IN NEUTRON PHYSICS, 1, THERMAL NEUTRON BEAM STANDARDIZATION BY MEANS OF THE HE3(N,P)T REACTION, 2, THE ORDER-DISORDER TRANSITION BETA-BRASS STUDIED BY NEUTRON DIFFRACTION
RISO-196 (1969)
CU-ZN ..NEUTRON DIFFRACTION/SHORT RANGE ORDER PARAMETER
- 69-AN-01 ANDRIESEN, C.D./ COMPAGNER, A./ HASMAN, A./ VAN-LOEF, J.J./ VAN-ZEVENBERG, F.,
INELASTIC NEUTRON SCATTERING BY AR (ISO. A-36) CLOSE TO CONDENSATION
PHYS. LETT., A, V.28, P.642 (1969)
AR ..EXPERIMENT/ GAS DYNAMICS

- 69-AU-01 AUGST, G.R./ ZHERNOV, A.P.
VIBRATIONAL SPECTRUM OF A LATTICE CONTAINING ISOLATED I
NTERSTITIAL IMPURITY ATOMS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.11 (V
.11), P.784-P.786 (P.634-P.635) (1969 (1969))
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ IMPURITY EFFECT
- 69-AX-01 AXE, J.D./ SHIRANE, G./ MUELLER, K.A.
ZONE-BOUNDARY PHONON INSTABILITY IN CUBIC LA.AL.O3
PHYS. REV., V.183, P.820-P.823 (1969)
LA.AL.O3 ..EXPERIMENT/ PHONON DISPERSION/ PHASE TRANSIT
ION/ PHONON INSTABILITY
- 69-AX-02 AXMANN, A./ BIEM, W./ BORSCH, P./ HOSSFELD, F./ ST
ILLER, H.
LATTICE DYNAMICS OF SOLID HYDROFLUORIC ACID
DISCUSS. FARADAY SOC., V.48, P.69-P.77 (1969)
H.F. ..EXPERIMENT/ CALCULATION/ LATTICE DYNAMICS/ DISPER
SION CURVE/ FREQUENCY SPECTRA
- 69-BA-01 BASHER, J.C./ PULL, I.C.
AN INVESTIGATION OF A MONTE CARLO TREATMENT OF THERMAL
NEUTRON SCATTERING
AEEW-M-730 (1969)
SCATTERING-THEORIES ..SCATTERING LAW ..MONTE CARLO METH
OD
- 69-BE-01 BEHARI, J./ TRIPATHI, B.B.
PHONON DISPERSION IN COPPER
PHYS. LETT., V.29A, P.313-P.314 (1969)
CU ..DISPERSION RELATION/ THEORY ..MODIFIED ANGULAR FOR
CE MODEL/ ELECTRON-ION INTERACTION
- 69-BE-02 BEHARI, J./ TRIPATHI, B.B.
PHONON DISPERSION IN COPPER
PHYS. LETT., V.29A, P.313-P.314 (1969)
CU ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ..MO
DIFIED ANGULAR FORCE MODEL/ ELECTRON-ION INTERACTION
- 69-BL-01 BLAESER, G./ PERETTI, J./ TOTH, G.
INELASTIC SCATTERING OF NEUTRONS BY LOCALIZED VIBRATION
S OF INTERSTITIAL HYDROGEN IN METAL LATTICES. CASE OF A
VANADIUM LATTICE
EUR-4216E, P.0-P.42 (1969)
NEUTRON-SCATTERING-IN-SOLIDS/ V ..THEORY/ HYDROGEN/ INT
ERSTITIAL ..NUMERICALS
- 69-BL-02 BLAIN, J.F.
STRUCTURE OF SIMPLE LIQUID
CEA-R-3876, P.0-P.29 (1969)
MISCELLANEOUS ..STRUCTURE FACTOR/ LIQUID/ THEORY
- 69-BO-01 BOFFEY, T.B.
COMMENT ON TOYA'S METHOD FOR OBTAINING THE PHONON FREQU
ENCIES IN MONOVALENT METALS
K/ RB ..DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYN
AMICS ..ELECTRON-PHONON INTERACTION/ EXCHANGE INTERACTI
ON/ TOYA METHOD
- 69-BO-02 BOFFI, S./ CAGLIOTI, G.
LATTICE DYNAMICS BY NEUTRON SCATTERING PART 2
RT/FI(69)41 (1969)
REVIEW-ARTICLES ..LATTICE DYNAMICS
- 69-BO-03 BOFFI, S./ CAGLIOTI, G.
LATTICE DYNAMICS BY NEUTRON SCATTERING PART 1
RT/FI(69)28 (1969)
REVIEW-ARTICLES ..LATTICE DYNAMICS/ EXPERIMENT/ TOF
- 69-BO-04 BOFFI, S./ CAGLIOTI, G.
LATTICE DYNAMICS BY NEUTRON SCATTERING - PART 2
ENERG. NUCL. (MILAN), V.16, P.425-P.437 (1969)
REVIEW-ARTICLES ..LATTICE DYNAMICS/ IONIC CRYSTAL/ META
L/ FERROELECTRIC MATERIAL
- 69-BO-05 BOFFI, S./ CAGLIOTI, G.
LATTICE DYNAMICS BY NEUTRON SCATTERING - PART 1
ENERG. NUCL. (MILAN), V.16, P.369-P.377 (1969)
REVIEW-ARTICLES ..NEUTRON SPECTROSCOPY/ LATTICE DYNAMIC
S
- 69-BO-06 BORGONOV, G.M.
COHERENT SCATTERING LAW FOR POLYCRYSTALLINE BERYLLIUM
GA-9364 (1969)
BE ..CALCULATION/ COHERENT/ POLYCRYSTAL/ SCATTERING LAW
- 69-BO-07 BOYSTER, J.K./ MCMURRY, H.L./ SULBRIG-JR, A.W./ MA
RTIN, R.M.
MACS C A COMPUTING PROGRAM FOR CRYSTAL VIBRATIONS WHIC
H INCLUDES LONG-RANGE COULOMB INTERACTIONS
IN-1280 (1969)
COMPUTER-CODES ..THEORY/ SOLID/ LATTICE DYNAMICS/ INTER
ATOMIC FORCE-CONSTANTS/ STRUCTURE FACTOR ..VALENCE FORC
E/ COULOMB INTERACTION
- 69-BU-01 BUTLAND, A.T.D.
HEXCOH, A PROGRAMME FOR COMPUTING COHERENT ELASTIC SCAT
TER FROM HEXAGONAL POLYCRYSTALS
AEEW-M954, P.0-P.15 (1969)
COMPUTER-CODES ..POLYCRYSTAL
- 69-BU-02 BUTLAND, A.T.D./ CHUDLEY, C.T.

A REVIEW OF THERMAL NEUTRON DIFFUSION DATA FOR HEAVY WATER AND ITS CONSEQUENCES FOR NEUTRON SCATTERING LAWS

AEW-R-685 (1969)
HEAVY WATER ..TOTAL CROSS SECTION/ DIFFUSION COEFFICIENT

69-BU-03 BUYERS, W.J.L./ COWLEY, R.A.,
CRYSTAL DYNAMICS OF POTASSIUM 2, THE ANHARMONIC EFFECTS
PHYS. REV., V.180, P.755-P.766 (1969)

K., PHONON LIFETIME/ ANHARMONIC EFFECT/ EXPERIMENT/ THEORY
..9DK/ 92DK/ 215DK/ 299DK/ NEUTRAL-PSEUDOPOTENTIAL APPROXIMATION

69-CA-01 CAGLIOTI, G./ CORCHIA, M./ RIZZI, G.,
NEUTRON DIFFRACTION ANALYSIS OF LIQUID ZINC. 2
NUOVO CIMENTO, B, V.60, P.48-P.60 (1969)
ZINC ..EXPERIMENT/ LIQUID/ RADIAL DISTRIBUTION/ PAIR POTENTIAL

69-CA-02 CARBOTTE, J.P./ DYNES, R.C./ TROFIMENKOFF, P.N.,
PHONON RENORMALIZATION OF THE ELECTRONIC EFFECTIVE MASS
CAN. J. PHYS., V.47, P.1107-P.1116 (1969)
THEORY-OF-SOLIDS ..FORCE CONSTANTS ARE TAKEN FROM EXPERIMENTAL DISPERSION CURVES, ELECTRON-PHONON INTERACTION IS TREATED WITH PSEUDOPOTENTIAL THEORY

69-CA-03 CARRIVEAU, G.W./ BORGONOV, G.M./ BEYSTER, J.R.,
SINGLE DIFFERENTIAL CROSS SECTION OF ZIRCONIUM HYDRIDE AT EXTENDED TEMPERATURE
NUKLEONIK, V.12, P.143 (1969)
ZR-H ..SIGMA (THETA.E)/ SOLID ..750DK/ ROOMTEMPERATURE

69-CH-01 CHANG, Y.I./ SUMMERFIELD, G.C.,
OBSERVATION OF OPTICAL MODES IN POLYETHYLENE BY NEUTRON SCATTERING
J. POLY. SCI., PART A-2, V.7, P.405 (1969)
POLYETHYLENE ..SOLID/ THEORY/ FREQUENCY DISTRIBUTION

69-CH-02 CHERNOPOLEKOV, N.A./ ZEMLYANOV, M.G./ SOMENKOV, V.A.,
STUDY OF THE DYNAMICS OF GROUP V TRANSITION-METAL HYDRIDES BY MEANS OF INELASTIC NEUTRON SCATTERING
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.11 (V.11), P.2894-P.2901 (P.2343-2349) (1969 (1970))
V-H/ NB-H ..EXPERIMENT/ PHONON SPECTRA

69-CH-03 CHUNG, C./ YIP, S.,
GENERATED HYDRODYNAMICS AND TIME CORRELATION FUNCTIONS
PHYS. REV., V.182, P.323-P.339 (1969)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ CORRELATION FUNCTION/ LIQUID

69-CO-01 COCHRAN, W.,
DYNAMICAL, SCATTERING AND DIELECTRIC PROPERTIES OF FERRIOELECTRIC CRYSTALS
ADVANCE PHYS., V.18, P.157-P.192 (1969)
NEUTRON-SCATTERING-IN-SOLIDS/ BA.TI.03/ K.H2.P.04/ NA.N.02 ..THEORY/ DIELECTRIC/ CRITICAL SCATTERING/ LATTICE DYNAMICS

69-CO-02 COCKING, S.J.,
ATOMIC MOTION IN LIQUID SODIUM 1, DIFFUSIVE MOTION
J. PHYS., C, LONDON, V.2, P.2047 (1969)
NA ..QUASI-ELASTIC PEAK/ TOF/ SCATTERING LAW/ MEAN SQUARE DISPLACEMENT/ EXPERIMENT/ LIQUID/ DIFFUSION PARAMETER ..PROPORTIONAL COUNTER/ LIQUID METAL

69-CO-03 COLLINS, M.F./ HAYWOOD, B.C.,
ATOMIC VIBRATIONS IN CARBON FIBRES
AERE-R-6000 (1969)
GRAPHITE ..EXPERIMENT/ DISPERSION CURVE ..ALONG C-AXIS

69-CO-04 COLLINS, M.F./ HAYWOOD, B.C.G.,
ATOMIC VIBRATIONS IN CARBON FIBERS
CARBON, V.7, P.663 (1969)
C ..COHERENT INELASTIC SCATTERING/ CARBON FIBERS

69-CO-05 COPLEY, J.R.D./ MACPHERSON, R.W./ TIMUSK, T.,
LATTICE DYNAMICS OF POTASSIUM CHLORIDE
PHYS. REV., V.182, P.965-P.972 (1969)
K.C.L. ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ FREQUENCY SPECTRA/ DEBYE TEMP./ INELASTIC STRUCTURE FACTOR ..SHELL MODEL FITTING

69-CO-06 COWLEY, E.R./ DARBY, J.K./ PAWLEY, G.S.,
THE LATTICE DYNAMICS OF TIN TELLURIDE
J. PHYS., C, LONDON, V.2, P.1916-P.1925 (1969)
SN.TE ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..1000K

69-CO-07 COWLEY, E.R.,
SYMMETRY PROPERTIES OF THE NORMAL MODES OF VIBRATIONS OF CALCITE AND (ALPHA)-CORUNDUM
CAN. J. PHYS., V.47, P.1381 (1969)
CALCITE/ CORUNDUM ..THEORY/ LATTICE DYNAMICS

69-CO-08 COWLEY, R.A./ SVENSSON, E.C./ BUYERS, W.J.L.,
INTERFERENCE BETWEEN ONE-AND MULTIPHONON PROCESSES IN THE SCATTERING OF NEUTRONS AND X-RAYS BY CRYSTALS
PHYS. REV. LETT., V.23, P.525 (1969)
NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONICITY

69-CO-09 COWLEY, R.A./ BUYERS, W.J.L./ DOLLING, G.,

- RELATIONSHIP OF NORMAL MODES OF VIBRATION OF STRONTIUM TITANATE AND ITS ANTIFERROELECTRIC PHASE TRANSITION AT 110 DEG.K.
SOLID STATE COMMUN., V.7, P.181 (1969)
SR,TI,03 .PHASE TRANSITION/ LATTICE VIBRATION
- 69-DE-01 DE-GRAAF, L.A.
STUDY OF MOLECULAR MOTIONS IN CYCLOHEXANE AND CYCLOPENTANE BY COLD-NEUTRON SCATTERING
PHYSICA, V.40, P.497 (1969)
CYCLOHEXANE .LIQUID/ SOLID/ EXPERIMENT/ TIME OF FLIGHT
.HINDERED ROTATION OF RIGID MOLECULE/ ROTATIONAL JUMP / QUASIELASTIC PEAK/ ROTATING CRYSTAL
- 69-DE-02 DESAI, R.C./ YIP, S.
INELASTIC SCATTERING OF THERMAL NEUTRONS BY LIQUID SODIUM AND LEAD
PHYS. REV., V.180, P.299 (1969)
NA/ PB .THEORY/ LIQUID/ SCATTERING FUNCTION .LIQUID METAL
- 69-DI-01 DICKEY, J.M./ PASKIN, A.
COMPUTER SIMULATION OF THE LATTICE DYNAMICS OF SOLIDS
PHYS. REV., V.188, P.1407 (1969)
COMPUTER-CODES .THEORY/ SOLID/ LATTICE DYNAMICS/ MOLECULAR DYNAMICS/ ANHARMONICITY
- 69-DR-01 DREXEL, W./ GLAESER, W./ GOMPF, F.
PHONON DISPERSION IN SILVER
PHYS. LETT., V.28A, P.531-P.532 (1969)
AG .DISPERSION RELATION/ BORN-VON KARMAN MODEL/ EXPERIMENT .ROOM TEMPERATURE/ PSEUDORANDOM NEUTRON TOF
- 69-DU-01 DURIG, J.R./ ANTON, D.J.
LOW-FREQUENCY VIBRATIONS IN AMMONIUM IODIDE AND AMMONIUM BROMIDE
J. CHEM. PHYS., V.51, P.3639 (1969)
N.H4.I .SOLID/ EXPERIMENT .RAMAN SPECTRA/ FAR INFRARED SPECTRA
- 69-ED-01 EDER, O.J.
THE ZERO PLACZEK MOMENT AND THE N-PHONON CROSS-SECTION AERE-TRANS-1137 (1969)
SCATTERING-THEORIES .THEORY/ PHONON EXPANSION/ MULTI-PHONON CONTRIBUTION
- 69-ES-01 ESCH, L.J./ YEATER, M.L./ MOOR, W.E./ SEEMANN, K.W.
THE TEMPERATURE DEPENDENCE OF NEUTRON INELASTIC SCATTERING FROM WATER
RPI-328-210 (1969)
H2.O .EXPERIMENT/ DOUBLE DIFFERENTIAL SCATTERING CROSS

SECTION/ 27.170.270DC/ LINAC TOF

- 69-FE-01 FELDKAMP, L.A./ VENKATARAMAN, G./ KING, J.S.
LATTICE DYNAMICS OF CUBIC ZINC SULFIDE
SOLID STATE COMMUN., V.7, P.1571-P.1573 (1969)
ZN,S .EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES
.CONST.-0/ SIX-PARAMETER VALENCE FORCE MODEL
- 69-FE-02 FELDKAMP, L.A./ KING, J.S.
NEUTRON SCATTERING IN DEUTERATED POLYETHYLENE MOL. DYN. AND STRUCT. OF SOLIDS, P.543 (1969)
POLYETHYLENE .CRYSTAL DYNAMICS/ POLYMER
- 69-FE-03 FERNANDEZ, J.F./ GERSCH, H.A.
INELASTIC NEUTRON SCATTERING FROM LIQUID HELIUM IN ITS GROUND STATE
PHYS. LETT., V.30A, P.261-P.262 (1969)
HE .GROUND STATE/ THEORY .ENERGY WIDTH OSCILLATION
- 69-FI-01 FISCHER, C.O.
MICRODYNAMIC BEHAVIOUR OF HYDROGENOUS LIQUIDS BY CROSS SECTION MEASUREMENTS WITH COLD NEUTRONS
PHYS. LETT., V.30A, P.393-P.394 (1969)
BENZENE/ CYCLOHEXANE/ CYCLOHEXANOL/ PYRIDINE/ H2.O/ HEXANE/ METHANOL/ ETHANOL/ ACETONE/ ACETIC ACID/ GLYCERINE / METHYL IODIDE .EXPERIMENT/ MOLECULAR DYNAMICS/ TOTAL SCATTERING CROSS SECTION
- 69-FU-01 FULINSKI, A./ JANIK, J./ BLOCKI, J.
MOLECULAR INTERACTION EFFECT IN NEUTRON SCATTERING BY GASEOUS METHANE
INP-677/PL (1969)
METHANE .THEORY/ MOLECULAR INTERACTION
- 69-GA-01 GARCIA-COLIN, L.S./ KOO, M.L.
BEHAVIOUR OF THE PAIR CORRELATION FUNCTION IN THE CRITICAL REGION
PHYS. LETT., V.29A, P.688-P.689 (1969)
THEORY-OF-SOLIDS .CRITICAL BEHAVIOUR/ SCALING LAW
- 69-GI-01 GILAT, G.
ON ACCIDENTAL DEGENERACIES OF PHONONS IN MONATOMIC CUBIC CRYSTALS
SOLID STATE COMMUN., V.7, P.567-P.569 (1969)
THEORY-OF-SOLIDS .LATTICE DYNAMICS .ACCIDENTAL DEGENERACIES/ CUBIC CRYSTAL
- 69-GI-02 GILAT, G./ RIZZI, G./ CUBIOTTI, G.
LATTICE DYNAMICS OF HCP METALS COMPUTED FROM AN OPTIMUM -MODEL POTENTIAL
PHYS. REV., V.185, P.971-P.983 (1969)
BE/ MG/ ZN .THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE

..METAL/ MODEL POTENTIAL CALCULATION

69-GI-03 GILLIS, N.S.
SOFT PHONON MODE IN SE,TE
PHYS. REV. LETT., V.22, P.1251 (1969)
SE,TE ..THEORY/ SOLID

69-GO-01 GOVINDARAJAN, J./ HARIDASAN, T.M.
LATTICE VIBRATIONS IN ALKALI AZIDES
PHYS. LETT., V.28A, P.701-P.702 (1969)
K.N3/ RB.N3/ CS.N3 ..THEORY/ LATTICE VIBRATION ..RIGID
ION MODEL/ BODY CENTERED TETRAGONAL

69-GY-01 GYORFFY, B.L./ MARCH, N.H.
INTERMEDIATE SCATTERING FUNCTION AND ATOMIC TRANSPORT I
N LIQUID METALS
J. PHYS. CHEM. LIQUIDS, V.1, P.253-P.263 (1969)
NEUTRON-SCATTERING-IN-FLUIDS/ THEORY-OF-FLUIDS ..INTERM
EDIATE SCATTERING FUNCTION/ LIQUID

69-HA-01 HALLMAN, E.D./ BROCKHOUSE, B.N.
CRYSTAL DYNAMICS OF NICKEL-IRON AND COPPER-ZINC ALLOYS
CAN. J. PHYS., V.47, P.1117-P.1131 (1969)
NI-FE/ CU-ZN ..DISPERSION RELATION/ CONSTANT-0 METHOD/
FREQUENCY DISTRIBUTION ..FCC ALLOY/ 296DK/ 573DK

69-HA-02 HAMILTON, W.C./ EDMONDS, J.W./ TIPPE, A./ RUSH, J.
J.
METHYL GROUP ROTATION AND THE LOW TEMPERATURE TRANSITIO
N IN HEXAMETHYLBENZENE
DISCUSS. FARADAY SOC., V.48, P.192-P.204 (1969)
HEXAMETHYLBENZENE ..EXPERIMENT/ TOF SPECTRUM/ NEUTRON D
IFFRACTION

69-HA-03 HARDY, J.R./ KARO, A.M./ MORRISON, I.W./ SENNETT,
C.T./ RUSSEL, J.P.
LATTICE DYNAMICS AND SECOND-ORDER RAMAN SPECTRUM OF NA,
F
PHYS. REV., V.179, P.837 (1969)
NA,F ..LATTICE DYNAMICS/ THEORY/ EXPERIMENT ..RAMAN SPE
CTRUM/ 300DK

69-HA-04 HARIDASAN, T.M./ GOVINDARAJAN, J.
LATTICE DYNAMICS OF HEXAGONAL ICE
CHEM. PHYS. LETT., V.4, P.11-P.12 (1969)
H2,O ..THEORY/ PHONON SPECTRA/ ICE

69-HA-05 HARLING, O.K.
SLOW NEUTRON INELASTIC SCATTERING STUDY OF LIGHT WATER
AND ICE
J. CHEM. PHYS., V.50, P.5279 (1969)
H2,O ..SCATTERING LAW/ FREQUENCY DISTRIBUTION

69-HA-06 HAYWOOD, B.C.G./ COLLINS, M.F.
LATTICE DYNAMICS OF MN,O
J. PHYS., C, LONDON, V.2, P.46-P.51 (1969)
MN,O ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATIO
N ..CONST.-0/ RIGID-ION AND SHELL MODEL FIT

69-HE-01 HENRY, A.W./ SAFFORD, G.J.
STUDY OF LOW-FREQUENCY MOLECULAR MOTIONS IN POLYDIMETHY
LSILOXANE POLYMERS BY NEUTRON INELASTIC SCATTERING
J. POLY. SCI., PART A-2, V.7, P.433-P.462 (1969)
POLYDIMETHYLSILOXANE ..EXPERIMENT/ MOLECULAR DYNAMICS/
LATTICE DYNAMICS ..25DC/ -123DC

69-HO-01 HODGES, C.H.
THEORY OF PHONON DISPERSION CURVES IN SILICON CARBIDE P
OLYTYPES
PHYS. REV., V.187, P.994 (1969)
SI,C ..THEORY/ SOLID/ LATTICE DYNAMICS

69-HO-02 HOEGBERG, T./ SANDSTROEM, R.
AUHARMONIC EFFECTS ON PHONONS IN ALUMINIUM
PHYS. STATUS SOLIDI, V.33, P.169-P.173 (1969)
AL ..THEORY/ PHONON FREQUENCY SHIFT AND DAMPING

69-HU-01 HUBBARD, J./ BEEBY, J.L.
COLLECTIVE MOTION IN LIQUIDS
J. PHYS., C, LONDON, V.2, P.556 (1969)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID

69-HU-02 HUELLER, A.
SOFT PHONON DISPERSION IN BA,TI,O3
Z. PHYS., V.220, P.145-P.158 (1969)
BA,TI,O3 ..THEORY/ LATTICE DYNAMICS/ PHASE TRANSITION
..SOFT OPTICAL MODE

69-IC-01 ICHIKAWA, K./ SHIMOJI, M.
SELF-DIFFUSION IN LIQUID METALS
PHIL. MAG., V.20, P.341 (1969)
LI/ NA/ K/ HG/ PB ..DIFFUSION PARAMETER/ LIQUID/ THEORY
..LIQUID METAL/ FRICTION CONSTANT

69-IV-01 IVANITSKII, P.G./ KROTENKO, V.T./ GORBACHEV, B.I./
TSIBULNIK, A.N.
STUDY OF INELASTIC SCATTERING OF SLOW NEUTRON BY POLYET
HYLENE AT TEMPERATURES 290 AND 100 K
UKRAINIAN PHYS. J., V.14, P.1325 (1969)
POLYETHYLENE ..FREQUENCY SPECTRA

69-JA-01 JAISWAL, V.K./ SHARMA, P.K.
INELASTIC SCATTERING CROSS SECTION OF NEUTRONS IN FERRO
ELECTRICS

PHYSICA, V.44, P.69-P.80 (1969)

NEUTRON-SCATTERING-IN-SOLIDS .,THEORY/ ONE-PHONON COHERENT CROSS SECTION .,DOUBLE-TIME GREEN FUNCTIONS

69-JA-02 JANIK, J.A./ JAKOB, W./ JANIK, J.M.
LATTICE-MOLECULAR VIBRATIONS IN COMPLEXES CO,(N,H3)6,12
AND NI,(N,H3)6,12

IMP-690/P.L (1969)
CO,(N,H3)6,12/ NI,(N,H3)6,12 .,EXPERIMENT/ MOLECULAR DYNAMICS/ FREQUENCY DISTRIBUTION

69-JA-03 JANIK, J.A./ OTNES, K./ SOLT, G./ KOSALY, G.
LATTICE VIBRATIONS AND MOLECULAR ROTATION IN SOLID METHANE NEAR THE MELTING POINT
DISCUSS, FARADAY SOC., V.48, P.87-P.92 (1969)
METHANE .,EXPERIMENT/ SPECTRUM AGAINST WAVELENGTH/ SOLID

69-JA-04 JANIK, J.A./ OTNES, K./ SOLT, G./ KOSALY, G.
LATTICE VIBRATIONS AND MOLECULAR ROTATION IN SOLID METHANE NEAR THE MELTING POINT
DISCUSS, FARADAY SOC., V.48, P.87-P.92 (1969)
C.H4 .,EXPERIMENT/ TOF SPECTRA

69-JH-01 JHONSON, R./ WESTIN, A.
ON PHONONS IN SIMPLE METALS 2, CALCULATED DISPERSION CURVES IN ALUMINIUM
AE-365 (1969)

AL .,THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE .,METAL / ION-ELECTRON INTERACTION MODEL

69-JO-01 JOHNSTON, A.S.
CALCULATION OF THE TWO PHONON COHERENT NEUTRON SCATTERING CROSS SECTION FOR SINGLE CRYSTAL BERYLLIUM IN THE HARMONIC APPROXIMATION
CONF-680501-6 (1969)

BE .,THEORY/ SOLID/ HARMONIC APPROXIMATION/ BORN-VON KARMAN MODEL/ SCATTERING LAW/ DEBYE-WALLER FACTOR/ FREQUENCY DISTRIBUTION .,COHERENT CROSS SECTION

69-KA-01 KAMAL, R./ MENDIRATTA, R.G.
VIBRATIONAL SPECTRUM AND SPECIFIC HEAT OF THALLOUS CHLORIDE

J. PHYS. SOC. JAP., V.26, P.621-P.623 (1969)
TL,CL .,THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION/ SPECIFIC HEAT

69-KA-02 KAMITAKAHARA, W.A./ BROCKHOUSE, B.N.
CRYSTAL DYNAMICS OF SILVER
PHYS. LETT., V.29A, P.639-P.640 (1969)
AG .,DISPERSION RELATION/ EXPERIMENT/ CONSTANT- θ METHOD .,ROOM TEMPERATURE

69-KA-03 KARO, A.M./ HARDY, J.R.
LATTICE DYNAMICS OF NaF

PHYS. REV., V.181, P.1272-P.1277 (1969)
NA,F .,THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY SPECTRA .,RIGID-ION MODEL/ DEFORMATION-DIPOLE MODEL/ DEBYE TEMP.

69-KI-01 KING-3RD, W.F./ CUTLER, P.H.
PHONON DISPERSION-RELATIONS IN BERYLLIUM CALCULATED FROM A PSEUDOPOTENTIAL APPROACH
SOLID STATE COMMUN., V.7, P.295 (1969)
BE .,DISPERSION RELATION/ SOLID/ THEORY/ LATTICE DYNAMICS .,PSEUDOPOTENTIAL/ PHONON/ METAL

69-KI-02 KIROUAC, G.J./ JERNOW, S.K./ MOORE, W.E./ ESCH, L.J.
IMPROVED THEORETICAL CROSS SECTION FOR POLYETHYLENE
KAPL-P-3860 (1969)
POLYETHYLENE .,THEORY/ MOLECULAR DYNAMICS .,SCATTERING CROSS SECTION EVALUATION

69-KL-01 KLEMENS, P.G./ LIPSCHULTZ, F.P.
NEUTRON LINE-WIDTH OF LONGITUDINAL PHONON IN SOLID HELIUM
PHYS. LETT., V.30A, P.127-P.128 (1969)
HE .,SOLID/ THEORY

69-KO-01 KOSALY, G./ VALKO, J.
REMARKS ON THE CALCULATION OF SLOW-NEUTRON CROSS SECTION AND THERMAL SPECTRA IN WATER
NUKLEONIK, V.12, P.237-P.240 (1969)
H2,O .,THEORY/ CROSS SECTION EVALUATION

69-KR-01 KREBS, K./ HOELZL, K.
INELASTIC NEUTRON SCATTERING AND LATTICE DYNAMICS OF METALS IN QUASI-ION APPROXIMATION
EUR-3621E-PART 2 (1969)
LI/ Na/ K/ Rb/ Cs/ AL/ Pb/ Fe/ Ni/ Pt/ COMPUTER-CODES .,PSEUD-ION APPROXIMATION/ FITTING TO EXPERIMENTAL DISPERSION CURVES/ FREQUENCY SPECTRUM/ SPECIFIC HEAT

69-KR-02 KRIVOGLAZ, M.A.
THEORY OF X-RAY AND THERMAL-NEUTRON SCATTERING BY REAL CRYSTAL (TRANSLATED FROM RUSSIAN)
PLENUM PRESS, NEW YORK (1969)
NEUTRON-SCATTERING-IN-SOLIDS .,BOOK

69-KU-01 KUSCER, J./ SUMMERFIELD, G.C.
SYMMETRIES IN SCATTERING OF SLOW NEUTRONS
PHYS. REV., V.188, P.1445-P.1449 (1969)
SCATTERING-THEORIES .,DETAILED-BALANCE/ THEORY

- 69-LA-01 LAKATOS, K./ KRUMHANS, J.A.,
EFFECT OF FORCE-CONSTANT ON THE COHERENT NEUTRON SCATTERING FROM FACE-CENTERED CUBIC CRYSTALS WITH POINT DEFECTS
PHYS. REV., V.180, P.729-P.738 (1969)
NEUTRON-SCATTERING-IN-SOLIDS .POINT-DEFECTS/ THEORY
- 69-LA-02 LA GARDE, V./ PRASK, M./ TREVINO, S.
VIBRATIONS IN TEFLON
DISCUSS. FARADAY SOC., V.48, P.15-P.18 (1969)
TEFLON .EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE
- 69-LE-01 LEADBETTER, A.J.
INELASTIC COLD NEUTRON SCATTERING FROM DIFFERENT FORMS OF SILICA
J. CHEM. PHYS., V.51, P.779-P.786 (1969)
SILICA/ QUARTZ/ CRISTOBALITE .EXPERIMENT/ COLLECTIVE VIBRATION/ AMORPHOUS SOLID .TOF/ SILICA/ QUARTZ/ CRISTOBALITE
- 69-LE-02 LEAKE, J.A./ MINKIEWICZ, V.J./ SHIRANE, G.
PHONON DISPERSION RELATIONS FOR HOLMIUM
SOLID STATE COMMUN., V.7, P.535 (1969)
HO .DISPERSION RELATION/ TRIPLE AXIS SPECTROMETER/ LATTICE DYNAMICS .295DK/ PARAMAGNETIC HO
- 69-LE-03 LEAKE, J.A./ DANIELS, W.B./ SKALYO-JR, J./ FRAZER, B.C./ SHIRANE, G.
LATTICE DYNAMICS OF NEON AT TWO DENSITIES FROM COHERENT INELASTIC NEUTRON SCATTERING
PHYS. REV., V.181, P.1251-P.1260 (1969)
NE .EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION .4.7DK/ 25DK/ TRIPLE-AXIS-SPECTROMETER
- 69-LE-04 LEATH, P.L./ GOODMAN, B.
FREQUENCY SPECTRA IN DISORDERED ALLOYS, AN INTERPOLATION FORMULA
PHYS. REV., V.181, P.1062-P.1069 (1969)
THEORY-OF-SOLIDS .FREQUENCY SPECTRUM/ THEORY/ GREEN FUNCTION
- 69-LE-05 LEBOWITZ, J.L./ PERCUS, J.K./ SYKES, J.
KINETIC APPROACH TO TIME-DEPENDENT CORRELATION FUNCTION
PHYS. REV., V.188, P.487 (1969)
THEORY-OF-FLUIDS .THEORY/ CORRELATION FUNCTION
- 69-MA-01 MAELAND, A.J.
TERNARY HYDRIDES POSSESSING THE CUBIC PEROVSKITE STRUCTURE. 2. VIBRATION SPECTRA BY THE INELASTIC SCATTERING OF COLD NEUTRONS
J. CHEM. PHYS., V.51, P.2915-P.2919 (1969)
BA-LI-H/ SR-LI-H .EXPERIMENT/ SPECTRAL DENSITY .PEROVSKITE STRUCTURE/ BA-LI-H3/ SR-LI-H3
- 69-MA-02 MARADUDIN, A.A./ OITMAA, J.
LONGITUDINAL AND TRANSVERSE LOCALIZED VIBRATION MODES
SOLID STATE COMMUN., V.7, P.1143 (1969)
THEORY-OF-SOLIDS .THEORY/ SOLID/ LATTICE DYNAMICS .IMPURITY VIBRATION
- 69-MA-03 MARSDEN, R.S.
THE CALCULATED NORMAL FREQUENCIES AND NEUTRON SCATTERING LAW FOR BENZENE
IN-1269 (1969)
BENZENE .THEORY/ MOLECULAR DYNAMICS/ SCATTERING LAW
- 69-MA-04 MATSUURA, H./ MIYAZAWA, T.
FREQUENCY DISTRIBUTION AND NEUTRON SCATTERING OF POLYETHYLENE GLYCOL CHAIN
J. CHEM. PHYS., V.50, P.915 (1969)
POLYETHYLENE .FREQUENCY DISTRIBUTION/ MOLECULAR DYNAMICS/ THEORY/ DISPERSION RELATION
- 69-MC-01 McDONALD, D.L./ ELCOMBE, M.M./ PRYOR, A.W.
PHONON DISPERSION CURVES FOR ZINC
J. PHYS., C, LONDON, V.2, P.1857-P.1866 (1969)
ZINC .EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ CONST.-Q METHOD
- 69-ME-01 MEISTER, H./ SKALYO, J./ FRAZER-JR, B.C./ SHIRANE, G.
LATTICE-DYNAMICAL ASPECTS OF THE ANTIFEROELECTRIC PHASE TRANSITION IN (ND4)2P2O4
PHYS. REV., V.184, P.550 (1969)
N.H4.H2P2O4 .EXPERIMENT/ SOLID .QUASI-ELASTIC NEUTRON SCATTERING / TEMPERATURE DEPENDENT FREQUENCY DISTRIBUTION
- 69-ME-02 METZBOWER, E.A.
DISPERSION RELATIONS FOR HEXAGONAL CLOSED-PACKED CRYSTALL LATTICES
PHYS. REV., V.177, P.1139 (1969)
BE/ MG/ ZN .DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMICS .NONCENTRAL-FORCE/ FIVE FORCE CONSTANTS
- 69-MI-01 MILLINGTON, A.J./ SQUIRES, G.L.
MEASUREMENTS OF THE FREQUENCIES OF THE NORMAL MODES OF ZINC
J. PHYS., C, LONDON, V.2, P.2366 (1969)
ZN .DISPERSION RELATION

- 69-MI-02 MINKIEWICZ, V.J./ SHIRANE, G.
SOFT PHONON MODES IN K,MN,F3
J. PHYS. SOC. JAP., V.26, P.674-P.680 (1969)
K,MN,F3 ..EXPERIMENT/ DISPERSION RELATION/ TEMPERATURE
DEPENDENCE
- 69-MO-01 MONTGOMERY, H.
THE SYMMETRY OF LATTICE VIBRATIONS IN THE ZINCBLLENDE AN
D DIAMOND STRUCTURES
PROC. ROY. SOC., LONDON, SER. A, V.309, P.521 (196
9)
ZN,S/ DIAMOND/ SR,TI,O3 ..GROUP THEORY/ LATTICE VIBRATI
ON ..SYMMETRY PROPERTIES
- 69-MO-02 MOORE, W.E./ KIROUAC, G.J./ ESCH, L.J./ SEEMANN, K
..W./ YEATER, M.L.
EPITHERMAL NEUTRON INELASTIC SCATTERING BY POLYETHYLENE
MOL. DYN. AND STRUCT. OF SOLIDS, P.547 (1969)
POLYETHYLENE ..FREQUENCY SPECTRA
- 69-MO-03 MORLEY, G.L./ KLEWER, K.L.
LATTICE DYNAMICS OF HCP HE3 AND HE4 AT HIGH PRESSURES
PHYS. REV., V.180, P.245 (1969)
HE ..DISPERSION RELATION/ THEORY/ FREQUENCY DISTRIBUTIO
N/ SOLID ..SOUND VELOCITY/ SELF-CONSISTENT METHOD
- 69-MO-04 MOZER, B./ PRICE, D.L./ KEATING, D.T./ MEISTER, H.
INCOHERENT NEUTRON SCATTERING FROM LIQUID AND SOLID CU-
NI
PHYS. LETT., V.30A, P.206-P.207 (1969)
CU-NI ..LIQUID/ SOLID/ EXPERIMENT/ ..NEAR THE MELT
- 69-NE-01 NELKIN, M.
THE ABC GUIDE TO THEORIES ON NEUTRON INELASTIC SCATTERI
NG BY LIQUIDS
AERE-R-6277 (1969)
NEUTRON-SCATTERING-IN-FLUIDS ..LIQUID/ THEORY/ CORRELAT
ION FUNCTION/ STATISTICAL MECHANICS ..RPA/ MEMORY FUNCTI
ON/ SUSCEPTIBILITY
- 69-NE-02 NELKIN, M.
EFFECTIVE-FIELD APPROXIMATION IN CLASSICAL LIQUIDS
PHYS. REV., V.138, P.349-P.350 (1969)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY
- 69-NU-01 NUSIMOVICI, M.A.
NORMAL MODES OF LATTICE VIBRATION ON BERYLLIUM OXIDE
COMP. REND., V.268, P.755 (1969)
BE,O ..THEORY
- 69-OI-01 OITMAA, J./ MARADUDIN, A.A.
LATTICE DYNAMICS OF CRYSTALS WITH EXTENDED POINT DEFECT
- S
SOLID STATE COMMUN., V.7, P.1371-P.1377 (1969)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ IMPERFECT CRYSTAL
..CRYSTAL WITH EXTENDED POINT DEFECTS
- 69-OR-01 ORTOLEVA, P.O./ NELKIN, M.
FLUCTUATIONS OF THE SINGLE-PARTICLE DISTRIBUTION FUNCTI
ON IN CLASSICAL FLUIDS
PHYS. REV., V.181, P.429-P.437 (1969)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LIQUID ..AUTO-CO
RRELATION FUNCTION/ SINGLE PARTICLE DISTRIBUTION
- 69-PA-01 PAGE, D.I./ EGELSTAFF, P.A./ ENDERBY, J.E./ WINGFI
ELD, B.R.
ATOMIC OVERLAP IN THE LIQUID STATE
PHYS. LETT., V.29A, P.296-P.297 (1969)
AR/ RB ..LIQUID/ STRUCTURE FACTOR
- 69-PA-02 PARLINSKI, K.
LATTICE DYNAMICS OF AMMONIUM CHLORIDE
ACTA PHYS. POL., V.35, P.223 (1969)
N,H4,CL ..THEORY
- 69-PA-03 PAWLEY, G.S.
MOLECULAR CRYSTAL PHONON DISPERSION CURVES AND MODEL FI
TTING
DISCUSS. FARADAY SOC., V.48, P.125-P.130 (1969)
C6,H12,N4 ..THEORY/ MODEL FITTING/ LATTICE DYNAMICS
- 69-PA-04 PAWLEY, G.S./ YEATS, E.A.
LOW FREQUENCY PHONONS IN NAPHTHALENE
SOLID STATE COMMUN., V.7, P.385-P.388 (1969)
NAPHTHALENE ..EXPERIMENT/ PHONON DISPERSION/ DEUTERATED
SAMPLE
- 69-PJ-01 PINDOR, A.J./ PYNN, R.
APPLICATION OF MODEL POTENTIALS TO PHONON SPECTRUM OF M
AGNESIUM
J. PHYS., C, LONDON, V.2, P.1037 (1969)
MG ..DISPERSION RELATION/ SOLID/ THEORY/ LATTICE DYNAMI
CS ..PHONON/ POTENTIAL/ METAL
- 69-PL-01 PLAKIDA, N.M./ SIKLOS, T.
THEORY OF ANHARMONIC CRYSTALS, 2. LINEAR CHAIN
PHYS. STATUS SOLIDI, V.33, P.113-P.123 (1969)
THEORY-OF-SOLIDS ..LINEAR CHAIN/ ANHARMONIC LATTICE/ FR
EQUENCY AND DAMPING
- 69-PL-02 PLAKIDA, N.M./ SIKLOS, T.
THEORY OF ANHARMONIC CRYSTALS, 1. GENERAL FORMATION
PHYS. STATUS SOLIDI, V.33, P.103-P.112 (1969)
THEORY-OF-SOLIDS ..ANHARMONIC CRYSTAL/ DOUBLE-TIME GREE

N FUNCTION/ FREQUENCY AND DAMPING

- 69-PR-01 PRAKASH, S./ JOSHI, S.K.
THE DETERMINATION OF THE CRYSTAL POTENTIAL FOR A CALCULATION OF PHONON FREQUENCIES OF NORMAL METALS
PHYS. LETT., V.30A, P.123 (1969)
NA ..DISPERSION RELATION/ SOLID/ THEORY/ LATTICE DYNAMICS ..PHONON/ POTENTIAL/ METAL
- 69-PR-02 PRAKASH, S./ JOSHI, S.K.
PHONON FREQUENCIES OF ALKALI METALS
PHYS. REV., V.187, P.808 (1969)
LI/ NA/ K/ RB/ CS ..DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ THEORY/ SOLID/ LATTICE DYNAMICS ..ALKALI METAL/ OPW METHOD/ DIELECTRIC FUNCTION/ HARTREE-FOCK-SLATER METHOD/ EXCHANGE POTENTIAL
- 69-PR-03 PRASK, H./ BOUTIN, H./ YIP, S.
NEUTRON SCATTERING STUDIES OF MOLECULAR VIBRATIONS IN ICE
E
MOLECULAR DYNAMICS AND STRUCTURE OF SOLIDS, NBC SPECIAL PUBLICATION 301, WASHINGTON D.C., P.335 (1969)
H₂O ..ICE/ MOLECULAR VIBRATION
- 69-PR-04 PREVENDER, T.S.
FIT, A NONLINEAR LEAST-SQUARES FITTING PROGRAM TO OBTAIN INTERATOMIC FORCE CONSTANTS FROM OBSERVED PHONON FREQUENCIES
IS-2185 (1969)
COMPUTER-CODES ..LATTICE DYNAMICS/ FORCE CONSTANTS FITTING ..CS,CL TYPE CRYSTAL/ PROGRAM LIST
- 69-PR-05 PREVENDER, T.S.
TRIO, A COMPUTER PROGRAM FOR THE CALCULATION OF PHONON DISPERSION CURVES, ATOM POLARIZATION VECTORS, AND NORMALIZED STRUCTURE FACTORS
IS-2186 (1969)
COMPUTER-CODES ..LATTICE DYNAMICS/ DISPERSION CURVES/ POLARIZATION VECTOR/ STRUCTURE FACTOR
- 69-PR-06 PRICE, D.L./ ROWE, J.M.
THE CRYSTAL DYNAMICS OF GREY (ALPHA) TIN AT 900K
SOLID STATE COMMUN., V.7, P.1433-P.1438 (1969)
SN ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES/ CONSTANT-0/ FREQUENCY SPECTRUM ..900K/ 2500K
- 69-RA-01 RANNINGER, J.
SECOND SOUND IN SOLIDS
J. PHYS., C, LONDON, V.2, P.929-P.940 (1969)
THEORY-OF-SOLIDS ..CORRELATION FUNCTION/ SECOND SOUND ..CRYSTAL LATTICE

- 69-RA-02 RAUNJO, G./ ALMØVIST, L./ STEDMAN, R.
PHONON DISPERSION RELATIONS IN Na,CL
PHYS. REV., V.178, P.1496 (1969)
NA,CL ..DISPERSION RELATION/ EXPERIMENT/ SOLID ..800K/ 3000K
- 69-RA-03 RAUNJO, G./ ALMØVIST, L.
DISPERSION RELATIONS FOR PHONONS IN K,CL AT 80 AND 3000 K
PHYS. STATUS SOLIDI, V.33, P.209-P.215 (1969)
K,CL ..EXPERIMENT/ PHONON DISPERSION RELATION/ 80, 3000 K/ COMPARED WITH BREATHING SHELL MODEL CALCULATION
- 69-RA-04 RAUNJO, G.
PHONON WIDTHS IN Na,CL, K,CL, AND RB,CL FROM NEUTRON MEASUREMENTS
PHYS. STATUS SOLIDI, V.35, P.299-P.304 (1969)
NA,CL/ K,CL/ RB,CL ..EXPERIMENT/ PHONON WIDTH/ 80, 3000 K
- 69-RE-01 REICHELT, K./ MAIER, G.
CALCULATIONS OF SINGLE DIFFERENTIAL NEUTRON SCATTERING CROSS SECTIONS FOR H₂O, USING GENERALIZED FREQUENCY SPECTRUM AND COMPARISON WITH MEASURED VALUES (IN GERMANY)
JUL-587-FN (1969)
H₂O ..CALCULATION/ SINGLE DIFFERENTIAL CROSS SECTION
- 69-RE-02 RENKER, B.
PHONON DISPERSION IN D₂O
PHYS. LETT., V.30A, P.493 (1969)
H₂O ..PHONON DISPERSION/ D₂O
- 69-RE-03 REYNOLDS, P.A./ WHITE, J.W.
INELASTIC NEUTRON SCATTERING FROM MOLECULAR AND CRYSTAL EXCITATIONS IN AROMATIC MOLECULAR CRYSTALS
DISCUSS. FARADAY SOC., V.48, P.131-P.147 (1969)
BENZENE ..EXPERIMENT/ TOF SPECTRUM/ MOLECULAR DYNAMICS
- 69-RE-04 REYNOLDS, P.A./ WHITE, J.W.
INELASTIC NEUTRON SCATTERING FROM MOLECULAR AND CRYSTAL EXCITATIONS IN AROMATIC MOLECULAR CRYSTALS
DISCUSS. FARADAY SOC., V.48, P.131-P.147 (1969)
CHLOROBENZENE
- 69-RI-01 RICHTER, J./ VOSS, K.
SCATTERING LAW FOR KINETIC MODEL IN GERMANY
ANN. PHYS., LEIPZIG, V.22, P.277-P.288 (1969)
THEORY-OF-FLUIDS/ SCATTERING-THEORIES ..THEORY/ SCATTERING LAW/ VLASOV MODEL
- 69-RI-02 RING, J.W./ EGELSTAFF, P.A.

HYDROGEN MOTION IN LIQUID HYDROGEN FLORIDE

J. CHEM. PHYS., V.51, P.762 (1969)
H.F. SCATTERING FUNCTION

69-RO-01 ROWELL, J.M./ MCILLAN, W.L./ FELDMANN, W.L.
PHONON SPECTRA IN PB AND PB40-TL60 DETERMINED BY TUNNEL
ING AND NEUTRON SCATTERING
PHYS. REV., V.178, P.897-P.899 (1969)
PB/ PB-TL EXPERIMENT/ SPECTRAL DENSITY TUNNELING EX
PERIMENT

69-RU-01 RUIJGROK, T.W./ DE-WETTE, F.W./ ANTONIEWICZ, P.R.
PAIR CORRELATION FUNCTION IN MODEL ANHARMONIC CRYSTALS
PHYSICA, V.41, P.489-P.509 (1969)
NEUTRON-SCATTERING-IN-SOLIDS THEORY/ PAIR CORRELATION

69-SA-01 SAFFORD, G.J./ SCHAFER, P.C./ LEUNG, P.S./ DOEBBL
ER, G.F./ BRADY, G.W./
NEUTRON INELASTIC SCATTERING AND X-RAY STUDIES OF AQUEO
US SOLUTIONS OF DIMETHYLSULPHOXIDE AND DIMETHYLSULPHONE
J. CHEM. PHYS., V.50, P.2140 (1969)
DIMETHYLSULPHOXIDE/ DIMETHYLSULPHONE SIGMA (E-E-PRIME
, THETA)/ EXPERIMENT/ LIQUID

69-SA-02 SAFFORD, G.J./ LEUNG, P.S./ NAUMANN, A.W./ SCHAFER
R. P.C.
INVESTIGATION OF LOW-FREQUENCY MOTIONS OF H2O MOLECULE
S IN IONIC SOLUTIONS BY NEUTRON INELASTIC SCATTERING
J. CHEM. PHYS., V.50, P.4444-P.4467 (1969)
H2O IN IONIC SOLUTION/ EXPERIMENT/ TOF SPECTRUM H2O IN
N-WATER INTERACTION

69-SA-03 SAFFORD, G.J./ LEUNG, P.S./ NAUMANN, A.W./ SCHAFER
R. P.C.
INVESTIGATION OF LOW-FREQUENCY MOTIONS OF H2O MOLECULE
S IN IONIC SOLUTIONS BY NEUTRON INELASTIC SCATTERING
J. CHEM. PHYS., V.50, P.4444-P.4467 (1969)
H2O/ LA, CL3/ CS, I/ CS, CL/ K, I/ K, BR/ K, CL/ NA, CL, EXP
ERIMENT/ TOF SPECTRA/ INTERMOLECULAR FREQUENCY/ H2O IN
SOLUTION

69-SA-04 SAFFORD, G.J./ SCHAFER, P.C./ LEUNG, P.S./ DOEBBL
ER, G.F./ BRADY, G.W./
NEUTRON INELASTIC SCATTERING AND X-RAY STUDIES OF AQUEO
US SOLUTIONS OF DIMETHYLSULPHOXIDE AND DIMETHYLSULPHONE
J. CHEM. PHYS., V.50, P.2140-P.2159 (1969)
DIMETHYLSULPHOXIDE/ DIMETHYLSULPHONE EXPERIMENT/ TOF
SPECTRA/ MOLECULAR DYNAMICS/ SELF-DIFFUSION

69-SA-05 SAHNI, V.C./ VENKATARAMAN, G.
LATTICE DYNAMICS OF BERYLLIUM USING A PSEUDOPOTENTIAL A

PPROACH

PHYS. REV., V.185, P.1002 (1969)
BE DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMI
CS PSEUDOPOTENTIAL/ OPW METHOD/ FERMI SURFACE

69-SA-06 SAMPSON, T.E./ CARPENTER, J.M.
QUASIELASTIC SCATTERING OF THERMAL NEUTRONS BY C,H3,O,H
AND C,H3,S,H
J. CHEM. PHYS., V.51, P.5543 (1969)
METHANOL/ METHYLMERCAPTAN INELASTIC SCATTERING SPECTR
A

69-SC-01 SCHNEIDER, T./ STOLL, E./ SZABO, N.
ZERO SOUND DISPERSION LAW IN CLASSICAL LIQUIDS
SOLID STATE COMMUN., V.7, P.501 (1969)
NEUTRON-SCATTERING-IN-FLUIDS/ AR DISPERSION

69-SC-02 SCHROEDER, G.
A COMPARATIVE INVESTIGATIONS ON THE EFFECTS OF VARIOUS
CRYSTAL MODELS FOR THERMAL NEUTRON SCATTERING IN BERYLL
IUM OXIDE USING COMPUTERPROGRAM COLLI (IN GERMANY)
JUL-610-ARG (1969)

BE, O, DEBYE-WALLER FACTOR/ FREQUENCY DISTRIBUTION/ SCA
TTERING LAW/ SIGMA(E)/ SIGMA(E-E-PRIME)/ THEORY/ SOLID

69-SC-03 SCHUMACHER, H.H.
DISORDERED SCATTERING OF NEUTRONS BY SUBSTITUTIONAL BIS
MUTH IN LEAD
JUL-609-FN (1969)
BI-PB EXPERIMENT

69-SH-01 SHARAN, B./ BAJPAI, R.P.
ELASTIC AND FORCE CONSTANTS OF BODY CENTRED TETRAGONAL
CRYSTALS FOR ONE-TWO-THREE NEIGHBOURS NON-CENTRAL INTER
ACTION

J. PHYS. SOC. JAP., V.26, P.1359-P.1361 (1969)
THEORY-OF-SOLIDS LATTICE DYNAMICS/ FORCE CONSTANT/ EL
ASTIC CONSTANT BODY CENTRED TETRAGONAL

69-SH-02 SHARP, R.I.
THE LATTICE DYNAMICS OF NIOBIUM 1, MEASUREMENTS OF THE
PHONON FREQUENCIES
J. PHYS., C, LONDON, V.2, P.421 (1969)
NB DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ DEBYE
TEMPERATURE 296DK/ TOF/ TRIPLE-AXIS

69-SH-03 SHARP, R.I.
THE LATTICE DYNAMICS OF NIOBIUM 2, KOHN ANOMALIES IN NI
OBIUM

J. PHYS., C, LONDON, V.2, P.432 (1969)
NB KOHN EFFECT/ DISPERSION RELATION, FERMI SURFACE

- 69-SH-04 SHAWYER, R.E./ DEAN, P.
ATOMIC VIBRATIONS IN HEXAGONAL ICE 1
DISCUSS. FARADAY SOC., V.48, P.102-P.107 (1969)
H2.O ..THEORY/ LATTICE DYNAMICS/ FREQUENCY SPECTRA
- 69-SH-05 SHINODA, T./ ENOKIDO, H.
MOLECULAR VIBRATIONS OF LOW TEMPERATURE CRYSTAL OF C.O
J. PHYS. SOC. JAP., V.26, P.1353-P.1359 (1969)
C.O ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
- 69-SH-06 SHIRANE, G./ YAMADA, Y.
LATTICE-DYNAMICAL STUDY OF THE 110DK PHASE TRANSITION I
N SR,TI.03
PHYS. REV., V.177, P.858-P.863 (1969)
SR,TI.03 ..EXPERIMENT/ LATTICE DYNAMICS/ PHASE TRANSITION
ON ..SOFT PHONON MODE
- 69-SI-01 SINGH, R.K./ VERMA, M.D.
DISPERSION RELATIONS IN POTASSIUM IODIDE
INDIAN J. PURE APPL. PHYS., V.7, P.151 (1969)
K.I ..PHONON DISPERSION
- 69-SI-02 SINHA, S.K.
DERIVATION OF THE SHELL MODEL OF LATTICE DYNAMICS AND ITS
RELATION TO THE THEORY OF THE DIELECTRIC CONSTANT
PHYS. REV., V.177, P.1256 (1969)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ SOLID/ THEORY
- 69-SL-01 SLAGGIE, E.L.
MULTIPLE SCATTERING IN DOUBLE DIFFERENTIAL MEASUREMENTS
AS A FUNCTION OF NEUTRON PATH LENGTH
NUCL. SCI. ENG., V.36, P.105 (1969)
SCATTERING-THEORIES ..THEORY/ SCATTERING LAW
- 69-SL-02 SLAGGIE, E.L.
THERMAL EXPANSION AND PHONON FREQUENCY SHIFTS IN NON-PR
IMITIVE LATTICES
GA-9417 (1969)
ZR-H ..THEORY/ ANHARMONICITY/ FREQUENCY DISTRIBUTION ..
300DK/ 800DK
- 69-SM-01 SMITH, H.G./ TRAYLOR, J.G./ REICHARDT, W.
COHERENT INELASTIC NEUTRON SCATTERING IN N.H4.CL
PHYS. REV., V.181, P.1218-P.1220 (1969)
N.H4.CL ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS ..TRIPLE-
AXIS-SPECTROMETER
- 69-SP-01 SPREYAK, D./ KOPPEL, J.U.
NEUTRON SCATTERING BY POLYETHYLENE
NUKLEONIK, V.12, P.87 (1969)
POLYETHYLENE ..THEORY/ DISPERSION RELATION/ FREQUENCY D
ISTRIBUTION/ SIGMA (E) ..SCATTERING LAW/ GASKET CODE
- 69-SP-02 SPREYAK, D./ KOPPEL, J.U.
SLOW-NEUTRON SCATTERING BY DIPHENYL
NUCL. SCI. ENG., V.35, P.80 (1969)
BIPHENYL ..THEORY/ SCATTERING LAW/ SIGMA (E)/ LIQUID
- 69-ST-01 STEINMAN, D.K./ SUMMERFIELD, G.C.
NEUTRON INCOHERENT SCATTERING FROM KDP
J. PHYS. CHEM. SOLIDS, V.30, P.449-P.451 (1969)
K.H2.P.04 ..THEORY/ INCOHERENT SCATTERING ..SINGLE CRYST
AL/ TUNNELING MOTION
- 69-ST-02 STOCKMEYER, R./ HOSSFELD, F./ AXMANN, A.
INCOHERENT SCATTERING OF SLOW NEUTRONS BY GLOBULAR MOLE
CULES IN A CUBIC CRYSTAL, 1, CALCULATION OF NEUTRON TIM
E-OF-FLIGHT SPECTRA, 2, INTERPRETATION OF SCATTERING DA
TA FOR ADAMANTANE
JUL-588-FN (1969)
ADAMANTANE ..THEORY/ MOLECULAR DYNAMICS/ SCATTERING FUN
CTION ..COMPUTER CALCULATION
- 69-TA-01 TAHIR-KHELI, R.A./ WU, D.H.
PHENOMENOLOGICAL THEORY OF VELOCITY AUTOCORRELATION IN
SIMPLE LIQUIDS
SOLID STATE COMMUN., V.7, P.1235 (1969)
AR ..CORRELATION FUNCTION/ LIQUID/ FREQUENCY DISTRIBUTI
ON/ MEAN SQUARE DISPLACEMENT/ THEORY ..MEMORY FUNCTION/
DRUDE-MAXWELL MODEL/ RELAXATION TIME
- 69-TA-02 TAKAHASHI, H.
COHERENT NEUTRON SCATTERING FROM POLYCRYSTALLINE GRAPHI
TE
NUCL. SCI. ENG., V.37, P.198-P.215 (1969)
GRAPHITE ..THEORY/ LATTICE DYNAMICS/ SCATTERING FUNCTIO
N ..COHERENT SCATTERING/ COMPUTER CALCULATION
- 69-TE-01 TEH, H.C./ BROCKHOUSE, B.N./ DEWIT, G.A.
LATTICE VIBRATIONS IN DEUTERATED AMMONIUM CHLORIDE
PHYS. LETT., V.29A, P.694-P.695 (1969)
N.H4.CL ..EXPERIMENT/ CONST.-Q METHOD/ LATTICE DYNAMICS
/ DISPERSION RELATION ..DEUTERATED SAMPLE/ 85DK
- 69-TH-01 THAPER, C.L./ SEQUEIRA, A./ DASANNACHARYA, B.A./ I
YENGAR, P.K.
NEUTRON INELASTIC SCATTERING STUDIES IN CRYSTAL HYDRATE
S
K2.C2.O4*H2.O/ BA.(CL.O3)2*H2.O/ LI2.S.O4*H2.O/ CA.S.O4
*2(H2.O)/ CU.CL2*2(H2.O)/ BE.S.O4*4(H2.O) ..EXPERIMENT/
CRYSTAL HYDRATES/ FREQUENCY SPECTRA
- 69-TO-01 TODIREANU, S.

- POSSIBLE PHASE TRANSITIONS IN A PHYSISORBED STATE DETECTED BY COLD NEUTRON SCATTERING
PHYS. LETT., A, V.30, P.367 (1969)
C.H4-CHARCOAL ..EXPERIMENT/ TOTAL SCATTERING CROSS SECTION
- 69-TO-02 TONG, S.Y./ MARADUDIN, A.A.,
NORMAL MODE OF A SEMI-INFINITE IONIC CRYSTAL
PHYS. REV., V.181, P.1318 (1969)
THEORY-OF-SOLIDS ..THEORY
- 69-VE-01 VETELINO, J.F./ MITRA, S.S.,
LATTICE DYNAMICS OF CUBIC Si.C
PHYS. REV., V.178, P.1349 (1969)
Si.C ..LATTICE DYNAMICS/ SOLID/ THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
- 69-VE-02 VETELINO, J.F./ MITRA, S.S./ BRAFMAN, O./ DAMEN, T.C.,
LATTICE DYNAMICS OF CUBIC ZINC SULFIDE
SOLID STATE COMMUN., V.7, P.1809-P.1812 (1969)
Zn.S ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVES ..RIGID ION MODEL
- 69-VI-01 VIJAYARAGHAVAN, P.R./ IYENGAR, P.K.,
PHONON IN CALCIUM FLUORIDE
PROCEEDINGS OF THE NUCLEAR PHYSICS AND SOLID STATE PHYSICS SYMPOSIUM, DAE, BOMBAY, V.3, P.25-P.28 (1969)
CA.F2 ..EXPERIMENT/ PHONON DISPERSION
- 69-WA-01 WAEBER, W.B.,
LATTICE VIBRATIONS OF GALLIUM METAL 1, GROUP-THEORETICAL ANALYSIS
J. PHYS., C, LONDON, V.2, P.882-P.902 (1969)
GA ..THEORY/ LATTICE DYNAMICS/ ..GROUP-THEORETICAL ANALYSIS
- 69-WA-02 WAEBER, W.B.,
LATTICE VIBRATIONS OF GALLIUM METAL 2, EXPERIMENTAL DETERMINATION OF THE PHONON DISPERSION RELATION
J. PHYS., C, LONDON, V.2, P.903-P.913 (1969)
GA ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ TRIPLE-AXIS SPECTROMETER ..77DK
- 69-WA-03 WALKER, L.B./ EGELSTAFF, P.A.,
LATTICE VIBRATIONS IN MOLYBDENUM
PHYS. REV., V.177, P.1111 (1969)
MO ..DISPERSION RELATION/ LATTICE DYNAMICS/ TOF ..ROOM TEMPERATURE
- 69-WA-04 WALLACE, D.C.,

PSEUDOPOTENTIAL CALCULATION OF PHONON FREQUENCIES AND GRUENEISEN PARAMETERS FOR LITHIUM
PHYS. REV., V.178, P.900 (1969)
LI ..DISPERSION RELATION/ SOLID/ THEORY/ LATTICE DYNAMICS ..PSEUDOPOTENTIAL/ PHONON/ GRUENEISEN PARAMETER/ METAL

69-WA-05 WALLACE, D.C.,
DEPENDENCE OF PHONON FREQUENCIES ON THE PSEUDOPOTENTIAL FORM FACTOR FOR ALUMINUM
PHYS. REV., V.187, P.991 (1969)
AL ..THEORY/ PHONON DISPERSION

69-WU-01 WU, S.Y./ TAYLOR, P.L.,
DYNAMICS OF A DISORDERED DIATOMIC CHAIN
PHYS. REV., V.181, P.1136-P.1148 (1969)
THEORY-OF-SOLIDS ..THEORY/ FREQUENCY SPECTRUM/ CHAIN

69-YA-01 YAMADA, Y./ SHIRANE, G.,
NEUTRON SCATTERING AND NATURE OF THE SOFT OPTICAL PHONON IN SR.Tl.O3
J. PHYS. SOC. JAP., V.26, P.396-P.403 (1969)
SR.Tl.O3 ..EXPERIMENT/ CONST.-0/ DISPERSION RELATION/ TEMPERATURE DEPENDENCE ..4.5DK-300DK/ SOFT PHONON MODE

69-YA-02 YAMADA, Y./ SHIRANE, G.,
STUDY OF CRITICAL FLUCTUATIONS IN Ba.Tl.O3 BY NEUTRON SCATTERING

PHYS. REV., V.177, P.848-P.857 (1969)
Ba.Tl.O3 ..EXPERIMENT/ CRITICAL SCATTERING/ QUASI-ELASTIC SCATTERING ..OVERDAMPED PHONON MODEL/ TUNNELING-MODE MODEL

70-AC-01 ACHAR, B.N.N./ BARSH, G.R.,
SCATTERING-MATRIX METHOD IN LATTICE DYNAMICS
PHYS. REV., V.188, P.1356-P.1360 (1970)
THEORY-OF-SOLIDS ..THEORY ..DEFECT/ LOCALIZED MODE

70-AI-01 AICAWADI, N.K.,
AN ESTIMATE FOR THE LIFETIMES OF THE COLLECTIVE MODES IN SIMPLE CLASSICAL LIQUIDS
PHYSICA, V.49, P.345-P.359 (1970)
THEORY-OF-FLUIDS ..THEORY/ COLLECTIVE MODE/ LIFETIME/ MODE-MODE INTERACTION

70-AK-01 AKCASU, A.Z./ DANIELS, E.,
FLUCTUATION ANALYSIS IN SIMPLE FLUIDS
PHYS. REV. A, V.48, P.962 (1970)
THEORY-OF-FLUIDS ..THEORY/ LIQUID ..GENERALIZED LANGEVIN EQUATION/ CURRENT-CURRENT CORRELATION FUNCTION

70-AL-01 ALEXANDROV, Y.A./ KOESTER, L./ SAMOSVAT, G.S.,

- COHERENT SCATTERING AMPLITUDE OF TUNGSTEN-186 MEASURED BY SMALL ANGLE SCATTERING
JINR-E3-5371 (1970)
W. .EXPERIMENT/ SCATTERING AMPLITUDE/ SMALL ANGLE SCATTERING
- 70-AL-02 ALEXANDROV, Y.A./ BALAGUROV, A.M./ SANOSVAT, G.S./ FYKIN, L.E.
THE DEBYE-WALLER FACTOR FOR TUNGSTEN (IN RUSSIAN)
JINR-P14-5358 (1970)
W. .EXPERIMENT/ DEBYE-WALLER FACTOR
- 70-AL-03 ALIKHANOV, R.A./ DIMITRIJEVIC, Z./ KRASNICKI, S./ RZANY, H./ TODOROVIC, J./
INVESTIGATION OF MAGNON DISPERSION RELATION IN ALPHA-FE₂O₃ -ADDITIONAL DATA
PHYS. STATUS SOLIDI, V.41K, P.103-P.106 (1970)
FE₂O₃/ MAGNETIC-SCATTERING .EXPERIMENT/ MAGNON DISPERSION
- 70-AN-01 ANDRIESES, C.D.
ATOMIC MOTION IN GASEOUS ARGON I. DETERMINATION OF THE INTERMEDIATE SCATTERING FUNCTION OF GASEOUS ARGON USING SUBTHERMAL NEUTRONS
PHYSICA, V.48, P.61-P.78 (1970)
AR .INTERMEDIATE SCATTERING FUNCTION .4A NEUTRONS
- 70-AN-02 ANDRIESES, C.D.
ATOMIC MOTION IN GASEOUS ARGON II. COMPARISON OF MODELS ON THE ATOMIC MOTION IN FLUIDE WITH NEUTRON-SCATTERING DATA
PHYSICA, V.49, P.502 (1970)
ARGON .THEORY .MODEL WHICH IS USEFUL FOR THE INTERPRETATION OF THE GAS DATA
- 70-AR-01 ARKUSZEWSKI, J.
MINIGASKET, A CODE FOR THERMAL NEUTRON SCATTERING LAW IN POLYCRYSTALS
INR-1186-XXI-PR (1970)
COMPUTER-CODES .THEORY/ SOLID/ SCATTERING LAW
- 70-AU-01 AUGST, G.R.
THEORY OF NEUTRON SCATTERING IN DIATOMIC CRYSTALS CONTAINING IMPURITIES
FIZ. TVERD. TELA (SOV. PHYS. SOLID STATE), V.12 (V.12), P.1311-P.1316 (P.1031-P.1035) (1970 (1970))
NEUTRON-SCATTERING-IN-SOLIDS .THEORY/ IMPURITY EFFECT/ CUBIC CRYSTAL/ PHONON
- 70-AX-01 AXE, J.D./ SHIRANE, G.
STUDY OF THE ALPHA-BETA QUARTZ PHASE TRANSFORMATION BY INELASTIC NEUTRON SCATTERING
- PHYS. REV. B, V.1, P.342-P.348 (1970)
QUARTZ .EXPERIMENT/ PHONON/ CRITICAL SCATTERING .PHASE TRANSFORMATION/ ABOVE 573DC/ CONST.-0
- 70-AX-02 AXE, J.D./ HARADA, J./ SHIRANE, G.
ANOMALOUS ACOUSTIC DISPERSION IN CENTROSYMMETRIC CRYSTALS WITH SOFT OPTIC PHONONS
PHYS. REV. B, V.1, P.1227 (1970)
K.TA.03 .PHONON DISPERSION/ CRITICAL PHENOMENA
- 70-BA-01 BANSAL, R.M./ KOTHARI, L.S./ TEWARI, S.P.
A MODEL FOR THE LATTICE VIBRATIONS OF SOLID METHANE
PHYS. LETT., A, V.33, P.209-P.210 (1970)
METHANE .THEORY/ SOLID/ LATTICE VIBRATION/ FREQUENCY DISTRIBUTION
- 70-BA-02 BARKER, J.A./ KLEIN, M.L.
ELASTIC CONSTANTS AND PHONON DISPERSION CURVES FOR SOLID ARGON NEAR ODK
PHYS. REV. B, V.2, P.4176 (1970)
AR .THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ ANHARMONICITY
- 70-BA-03 BATA, L./ JOVIC, D.
THE MOLECULAR DYNAMICS ALONG THE COEXISTENCE CURVE OF A LIQUID-GAS SYSTEMS
PHYS. LETT., A, V.33, P.287-P.288 (1970)
C4.H10.O .EXPERIMENT/ LIQUID-GAS PHASE
- 70-BA-04 BATCHELDER, D.N./ COLLINS, M.F./ HAYWOOD, B.C.G./ SIDEY, G.R.
LATTICE DYNAMICS OF ARGON AT 4 K
J. PHYS., C, LONDON, V.3, P.249-P.255 (1970)
AR .LATTICE DYNAMICS/ EXPERIMENT/ DISPERSION CURVE
- 70-BA-05 BATES, J.B./ LIPPINCOTT, E.R./ MIKAWA, Y./ JAKOBSEN, N. R.J.
DYNAMICS OF LATTICE MODELS OF POLYMER
J. CHEM. PHYS., V.52, P.3731 (1970)
H2.O .MOLECULAR VIBRATIONS
- 70-BE-01 BEG, M.M./ ROSS, D.K.
THE QUASIELASTIC SCATTERING OF COLD NEUTRONS FROM THE BETA-PHASE OF PALLADIUM HYDRIDE
J. PHYS., C, LONDON, V.3, P.2487-P.2500 (1970)
PD-H .EXPERIMENT/ QUASIELASTIC SCATTERING .DIFFUSIVE MOTION
- 70-BE-02 BEHARI, J./ TRIPATHI, B.B.
MODIFIED ANGULAR FORCE MODEL IN THE STUDIES OF LATTICE DYNAMICS OF BCC METALS, AN APPLICATION TO SODIUM
J. PHYS. SOC. JAP., V.28, P.346-P.348 (1970)

- NA .,THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION .,BC
C METAL
- 70-BE-03 BEHARI, J./ TRIPATHI, B.B.
PHONON DISPERSION RELATIONS IN NOBLE METALS
J, PHYS., C. LONDON, V.3, P.659-P.665 (1970)
CU/ AG/ AU .,THEORY/ LATTICE VIBRATION/ DISPERSION RELATION
TION .,NON-CENTRAL FORCE MODEL/ ELECTRON-ION INTERACTION
- 70-BE-04 BERGSMÄ, J.
LATTICE DYNAMICS OF MAGNESIUM STANNIDE AND ZINC BLENDE
RCN-121 (1970)
MG2,SN/ ZN.S .,EXPERIMENT/ TRIPLE AXIS SPECTROMETER/ PHONON
DISPERSION RELATION
- 70-BE-05 BERGSMÄ, J.
LATTICE DYNAMICS OF ZINC BLENDE
PHYS, LETT., A, V.32, P.324-P.325 (1970)
ZN.S .,EXPERIMENT/ DISPERSION CURVES .,RIGID ION MODEL/
SHELL MODEL
- 70-BE-06 BEZDEK, H.F./ SCHMUNK, R.E./ FINEGOLD, L.
LATTICE DYNAMICS OF ZIRCONIUM
PHYS, STATUS SOLIDI, V.42, P.275-P.280 (1970)
ZR .,EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ PHONON
DENSITY
- 70-BI-01 BINDER, K.
TOTAL COHERENT CROSS SECTIONS FOR THE SCATTERING OF NEUTRONS
FROM CRYSTALS
PHYS, STATUS SOLIDI, V.41, P.767 (1970)
AL .,EXPERIMENT/ SCATTERING CROSS SECTION
- 70-BI-02 BIRR, M.
MEASUREMENT OF THE QUASI-ELASTIC LINE-BROADENING IN GLYCEROL
WITH A NEUTRON CRYSTAL SPECTROMETER OF EXTREMELY HIGH
ENERGY RESOLUTION
Z, PHYS., V.238, P.221-P.232 (1970)
GLYCERINE .,EXPERIMENT/ QUASI-ELASTIC SCATTERING/ DIFFUSION
CONSTANT
- 70-BL-01 BLINC, R./ DIMIC, V.
NEUTRON SCATTERING STUDY OF SELF DIFFUSION IN LIQUID CRYSTALS
PHYS, LETT., V.31A, P.531-P.531 (1970)
P-AZOXYANISOLE .,EXPERIMENT/ TOF .,DIFFUSION CONSTANT/ LIQUID
CRYSTAL
- 70-BL-02 BLINC, R./ DIMIC, V.
NEUTRON SCATTERING STUDY OF SELF-DIFFUSION IN LIQUID CRYSTALS

- IJS-R-582 (1970)
P-AZOXYANISOLE .,EXPERIMENT/ DIFFUSION BROADENING/ NEMATIC
AND ISOTROPIC LIQUID
- 70-BO-01 BOBETIC, M.V./ BARKER, J.A.
LATTICE DYNAMICS WITH THREE-BODY FORCES; ARGON
PHYS, REV, B, V.2, P.4169 (1970)
AR .,THEORY/ SOLID/ LATTICE DYNAMICS/ ANHARMONICITY .,THREE-BODY
FORCE/ SPECIFIC HEAT/ DEBYE TEMPERATURE
- 70-BO-02 BOCCHIERI, P./ SCOTTI, A./ BEARZI, B./ LOINGER, A.
ANHARMONIC CHAIN WITH LENNARD-JONES INTERACTION
PHYS, REV, A, V.2, P.2013-P.2019 (1970)
THEORY-OF-SOLIDS .,THEORY .,ONE-DIMENSIONAL LATTICE/ ERGODICITY/
NUMERICAL STUDY/ CLASSICAL
- 70-BO-03 BORGONOV, G.M.
NEUTRON SCATTERING KERNELS CALCULATIONS AT EPITHERMAL ENERGIES
GA-9950 (1970)
COMPUTER-CODES .,SCATTERING LAW/ SIGMA(E,E-PRIME)
- 70-BO-04 BORGONOV, G.M./ SPREKAK, D.
A CALCULATION OF THE COHERENT NEUTRON SCATTERING FROM POLYCRYSTALLINE
BERYLLIUM
NUCL, SCI, ENG., V.42, P.137 (1970)
BE .,THEORY,COHERENT SCATTERING/ POLYCRYSTAL
- 70-BR-01 BRAUNECK, W./ GAHN, U./ SOMMER, F./ WERBER, K./ WILLE, C.
THE RADIAL DISTRIBUTION FUNCTION FOR LIQUID ALUMINIUM FROM A
NEW PSEUDO-POTENTIAL CALCULATION
PHYS, REV, LETT., V.31A, P.237 (1970)
AL .,THEORY/ STRUCTURE FACTOR
- 70-BR-02 BRIER, P.N./ HIGGINS, J.S.
NEUTRON INELASTIC SCATTERING MEASUREMENTS ON 1,1,1-TRIFLUOROETHANE
MOL, PHYS., V.19, P.645-P.657 (1970)
C,H3,C,F3 .,EXPERIMENT/ SCATTERING LAW/ .,TORSIONAL OSCILLATION/
SPHERICAL TOP MOLECULE
- 70-BR-03 BROWN, J.S.
KREBS MODEL CALCULATION OF PHONON DISPERSION IN PALLADIUM
PHYS, STATUS SOLIDI, V.39K, P.75-P.78 (1970)
PD .,THEORY/ PHONON DISPERSION/ KREBS MODEL
- 70-BR-04 BRUIN, C./ HASMAN, A.
ON THE COHERENT INTERMEDIATE SCATTERING FUNCTION OF GASEOUS ARGON AS
DETERMINED BY INELASTIC NEUTRON SCATTERING AND MOLECULAR DYNAMICS CALCULATIONS,

- PHYS. LETT., A, V.33, P.338 (1970)
ARGON, INTERMEDIATE SCATTERING FUNCTION/ STRUCTURE FACTOR/ GAS
- 70-BU-01 BUEHRER, W.
LATTICE DYNAMICS OF COPPER
EIR-174 (1970)
CU, EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ CO NST-Q METHOD, PSEUDO-POTENTIAL ANALYSIS
- 70-BU-02 BUEHRER, W.
LATTICE DYNAMICS OF POTASSIUM FLUORIDE
PHYS. STATUS SOLIDI, V.41, P.789-P.795 (1970)
K.F., EXPERIMENT/ PHONON DISPERSION/ ELEVEN PARAMETER FITTING/ FREQUENCY SPECTRUM
- 70-BU-03 BUTLAND, A.T.D./ CHUDLEY, C.I.
THERMAL NEUTRON DIFFUSION DATA AND THE WIMS SCATTERING MODELS FOR LIGHT WATER
AEEW-R-701 (1970)
H₂O, INTEGRAL DATA/ NEUTRON DIFFUSION COEFFICIENT/ TOTAL SIGMA/ EFFECTIVE WIDTH MODEL/ NELKIN MODEL
- 70-CA-01 CAGLIOTTI, G./ RIZZI, G./ CUBIOTTI, G.
TEMPERATURE DEPENDENCE OF NEUTRON GROUPS FROM PHONON IN ZINC
SOLID STATE COMMUN., V.8, P.367-P.371 (1970)
ZN, EXPERIMENT/ LATTICE VIBRATION, TEMPERATURE DEPENDENCE/ 80-670DK
- 70-CA-02 CAGLIOTTI, G./ RIZZI, G.
TEMPERATURE DEPENDENCE OF NEUTRON GROUPS FROM PHONONS IN ZINC
SOLID STATE COMMUN., V.8, P.367-P.371 (1970)
ZN, EXPERIMENT/ TEMPERATURE DEPENDENCE OF PHONON
- 70-CL-01 CLIFFORD, L.R.
A DIFFUSIVE SLOW NEUTRON SCATTERING LAW
DP-1224 (1970)
H₂O, SCATTERING LAW / LIQUID
- 70-CO-01 COLELLA, R./ BATTERMAN, B.W.
X-RAY DETERMINATION OF PHONON DISPERSION IN VANADIUM
PHYS. REV. B, V.1, P.3913-P.3921 (1970)
V, EXPERIMENT/ X-RAY THERMAL DIFFUSE SCATTERING/ LATTICE DYNAMICS/ DISPERSION CURVES/ FREQUENCY SPECTRUM, NO LOW ENERGY PEAK/ NO HIGH ENERGY TAIL
- 70-CO-02 COLLINS, M.F./ HAYWOOD, B.C./ STIRLLING, G.C.
VIBRATION SPECTRA OF HYDROGEN BONDS BY NEUTRON ENERGY-LOSS SPECTROMETRY
J. CHEM. PHYS., V.52, P.1828-P.1831 (1970)
- K.H.F2/ CS.H.CL2/ NA.H.C.O3/ K.C2.CL3.O2/ K.C2.F3.O2, EXPERIMENT/ MOLECULAR DYNAMICS/ FREQUENCY SPECTRA, BE-DETECTOR METHOD
- 70-CO-03 COLLINS, M.F./ HAYWOOD, B.C.
VIBRATION SPECTRA OF CARBOXYLIC ACIDS BY NEUTRON SPECTROSCOPY
J. CHEM. PHYS., V.52, P.5740-P.5745 (1970)
FORMIC ACID/ ACETIC ACID/ PROPIONIC ACID/ OXALIC ACID/ MALONIC ACID/ SUCCINIC ACID/ MONOCHLOROACETIC ACID/ TRICHLOROACETIC ACID/ TRIFLUOROACETIC ACID/ PENTAFLUOROPICNIC ACID/ MALEIC ACID/ L-TARTARIC ACID, EXPERIMENT/ FREQUENCY SPECTRA/ SOLID/ CARBOXYLIC ACID, BE-DETECTOR METHOD
- 70-CO-04 CONN, R.
APPROXIMATE DISPERSION RELATIONS AND THE TOTAL COHERENT INELASTIC NEUTRON SCATTERING CROSS SECTION FOR GRAPHITE
NUCL. SCI. ENG., V.40, P.17-P.24 (1970)
GRAPHITE, THEORY/ SPECTRAL DENSITY/ SIGMA(E)
- 70-CO-05 CORNGOLD, N./ DUDERSTADT, J.J.
PERTURBATIVE THEORY OF SELF-DIFFUSION IN CLASSICAL MANY-PARTICLE SYSTEM, I, VELOCITY AUTOCORRELATION FUNCTION, PHYS. REV. A, V.2, P.836 (1970)
THEORY-OF-FLUIDS, CORRELATION FUNCTION
- 70-CO-06 COULTHARD, M.A.
PRESSURE DEPENDENCE OF PHONON DISPERSION CURVES IN SIMPLE METALS
J. PHYS., C, LONDON, V.3, P.820-P.834 (1970)
SODIUM/ POTASSIUM/ ALUMINIUM/ LEAD, THEORY/ LATTICE VIBRATION/ DISPERSION RELATION, PRESSURE EFFECT/ PSEUDOPOTENTIAL/ METAL
- 70-CU-01 CUNNINGHAM, R.M./ MUHLESTEIN, L.D./ SHAW, W.M./ TOMPSON, C.W.
INVESTIGATION OF IN-BAND RESONANT MODES IN CR-W ALLOYS BY INELASTIC NEUTRON SCATTERING
PHYS. REV. B, V.2, P.4864-P.4870 (1970)
CR-W, EXPERIMENT/ IN-BAND PHONON/ MASS EFFECT
- 70-CZ-01 CZACHOR, A.
SIMPLE MODEL OF LATTICE DYNAMICS FOR MAGNESIUM, COBALT AND YTTRIUM
INR-1189/11/PS (1970)
MG/ CO/ Y, THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ BORN-VON KARMAN MODEL, AXIAL SYMMETRY MODEL / ELASTIC CONSTANT/ HEXAGONAL CLOSE-PACKED CRYSTAL
- 70-CZ-02 CZACHOR, A./ RAJCA, A.

- SIMPLE MODEL OF LATTICE DYNAMICS FOR MAGNESIUM, COBALT AND YTTRIUM PART 2
INR-1219/ 2/ PS (1970)
MG/ CO/ Y ..CALCULATION/ HEXAGONAL METAL/ FREQUENCY SPECTRA
- 70-DA-01 DAUBERT, J.
PHONON DISPERSION IN CS, BR
PHYS. LETT., A, V.32A, P.437-P.437 (1970)
CS, BR ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION ..TOF/ PSEUDOSTATISTICAL CHOPPER/ 3000K
- 70-DE-01 DE-GRAAF, L.A./ SCIESINSKI, J.
STUDY OF MOLECULAR MOTIONS IN PLASTIC-CRYSTALLINE NEOPENTANE BY COLD-NEUTRON SCATTERING
PHYSICA, V.48, P.79-P.92 (1970)
PENTANE ..EXPERIMENT/ QUASI-ELASTIC PEAK ..ROTATIONAL-DIFFUSION/ REORIENTATIONAL JUMP
- 70-DE-02 DE-MUL, F.F./ BERGMAN, J.D.
QUASI-ELASTIC INCOHERENT COLD NEUTRON SCATTERING IN LIQUID CYCLOHEXANOL
PHYS. LETT., A, V.33, P.87-P.88 (1970)
CYCLOHEXANOL ..EXPERIMENT/ TOF/ LIQUID/ QUASI-ELASTIC PEAK ..JUMP-DIFFUSION/ INCOHERENT NEUTRON SCATTERING
- 70-DE-03 DENHAM, P./ FIELD, G.R./ MORSE, P.L.R./ WILKINSON, G.R.
OPTICAL AND DIELECTRIC PROPERTIES AND LATTICE DYNAMICS OF SOME FLUORITE STRUCTURE IONIC CRYSTAL
PROC. ROY. SOC., LONDON, SER. A, V.317, P.55-P.77 (1970)
CA.F2/ SR.F2/ BA.F2/ CD.F2/ PB.F2 ..THEORY/ LATTICE DYNAMICS/ FREQUENCY SPECTRA/ DISPERSION CURVES
- 70-DI-01 DIACONESCU, A./ NAHORNIAC, V./ MATEESCU, N./ TEUTSCH, H.
COLD NEUTRON SCATTERING BY METHYL ALCOHOL, CYCLOHEXANE AND THEIR MIXTURE NEAR THE CONSENSUS POINT
REV. ROUM. PHYS., V.15, P.783 (1970)
METHANOL/ CYCLOHEXANE ..INELASTIC SCATTERING SPECTRA
- 70-DO-01 DOHLBORG, U./ LARSSON, K.E./ PIKMAJER, E.
ROTATIONAL MOTIONS IN SOLIDS. THE FERROELECTRIC TRANSITION IN (NH4)2S.O4
PHYSICA, V.49, P.1 (1970)
AMMONIUM SULFATE ..EXPERIMENT/ COLD NEUTRON SPECTROMETER/ FERROELECTRICITY/ PHASE TRANSITION/ ROTATIONAL MOTION / ANGULAR CORRELATION FUNCTION
- 70-DO-02 DOI, K./ SAKAMOTO, M./ IIZUMI, M./ MASAKI, N./ MOTOHASHI, H.

- LOW ENERGY VIBRATIONS OF POLYETHYLENES AND THE EFFECTS OF CRYSTALLINITY AS OBSERVED BY NEUTRON INELASTIC SCATTERINGS
JAERI-1197, P.109-P.113 (1970)
POLYETHYLENE ..EXPERIMENT/ FREQUENCY DISTRIBUTION
- 70-DO-03 DOLLING, G./ POWELL, B.M.
INTERMOLECULAR DYNAMICS OF HEXAMETHYLENETETRAMINE
PROC. ROY. SOC., LONDON, SER. A, V.319, P.209-P.235 (1970)
HEXAMETHYLENETETRAMINE ..EXPERIMENT/ PHONON DISPERSION/ DHMT/ MODEL FITTING/ PHONON DENSITY
- 70-DO-04 DOLLING, G./ SAKURAI, J./ COWLEY, R.A.
CRYSTAL DYNAMICS OF SODIUM NITRIDE
J. PHYS. SOC. JAP., V.28, SUPPLEMENT, P.258 (1970)
NA.N.O2 ..PHONON DISPERSION
- 70-EG-01 EGELSTAFF, P.A./ HARRIS, D.H.C.
LOW FREQUENCY MOLECULAR MODES IN LIQUID HYDROCARBONS
DISCUSS. FARADAY SOC., V.49, P.193-P.207 (1970)
PENTANE/ HEPTANE/ DODECANE ..EXPERIMENT/ QUASI-ELASTIC/ DIFFUSION CONSTANT
- 70-EG-02 EGELSTAFF, P.A./ WIGNALL, G.D.
CRITICAL OPALESCENCE IN BINARY LIQUID METAL MIXTURES 2. CONCENTRATION DEPENDENCE
J. PHYS., C, LONDON, V.3, P.1673 (1970)
BI-GA ..CRITICAL PHENOMENA/ BINARY LIQUID METAL
- 70-EG-03 EGELSTAFF, P.A./ WIGNALL, G.D.
CRITICAL OPALESCENCE IN BINARY LIQUID METAL MIXTURES 1. CONCENTRATION DEPENDENCE
J. PHYS., C, LONDON, V.3, P.1673-P.1676 (1970)
BI-GA ..EXPERIMENT/ CRITICAL SCATTERING
- 70-EL-01 ELCOMBE, M.M./ PRYOR, A.W.
THE LATTICE DYNAMICS OF CALCIUM FLUORIDE
J. PHYS., C, LONDON, V.3, P.492-P.499 (1970)
CA.F2 ..EXPERIMENT/ 3-AXIS SPECTROMETER/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY SPECTRA ..SHELL MODEL FITTING
- 70-ER-01 ERIKSSON, J.R.
A SLOW NEUTRON SCATTERING ROUTINE FROM THE GAS MODEL
NUCL. SCI. ENG., V.41, P.307 (1970)
SCATTERING-THEORIES ..SCATTERING THEORY
- 70-FL-01 FLOYD, E.R./ KLEINMAN, L.
EFFECT OF THE DIELECTRIC FUNCTION ON THE PHONON SPECTRUM OF MAGNESIUM
PHYS. REV. B, V.2, P.3947-P.3952 (1970)

- MG .,THEORY/ PHONON DISPERSION RELATION/ METAL/ PSEUDOPOTENTIAL
- 70-FO-01 FORSTER, D./ MARTIN, P.C.
KINETIC THEORY OF A WEAKLY COUPLED FLUID
PHYS. REV. A, V.2, P.1575 (1970)
THEORY-OF-FLUIDS .,KINETIC THEORY
- 70-FR-01 FRAAS, L.M./ PORTO, S.P.S./ LOH, E.
SYMMETRY IN RAMAN SCATTERING FROM THE OPTICAL PHONON IN
SINGLE CRYSTAL BERYLLIUM
SOLID STATE COMMUN., V.8, P.803-P.805 (1970)
BE .,EXPERIMENT/ RAMAN SCATTERING
- 70-FR-02 FRANKS, F./ RAVENHILL, J./ EGELSTAFF, P.A./ PAGE,
D.I.
MOTIONS OF WATER MOLECULES IN DILUTE AQUEOUS SOLUTIONS
OF TERTIARY BUTYL ALCOHOL. A NEUTRON SCATTERING STUDY O
F HYDROPHOBIC HYDRATION
PROC. ROY. SOC., LONDON, SER. A, V.319, P.209-P.235
(1970)
ALCOHOL-WATER .,EXPERIMENT/ NEUTRON SPECTROSCOPY .,DIFF
USION OF WATER IN AQUEOUS SOLUTIONS OF ALCOHOL
- 70-FU-01 FURRER, A./ HALG, W.
EXPERIMENTAL PHONON FREQUENCIES AND WIDTHS OF LEAD AT 5
, 80, AND 290 DEG. K.
PHYS. STATUS SOLIDI, V.42, P.821 (1970)
PB .,ANHARMONIC EFFECT
- 70-GE-01 GELDART, D.J./ TAYLOR, R./ VARSHNI, Y.P.
INFLUENCE OF THE STATIC ELECTRON GAS SCREENING FUNCTION
ON THE LATTICE DYNAMICS OF SODIUM
CAN. J. PHYS., V.48, P.183 (1970)
NA .,DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ DEBYE
TEMPERATURE/ THEORY/ LATTICE DYNAMICS/ SOLID .,SCREENIN
G FUNCTION/ METAL/ OPW METHOD/ RPA
- 70-GI-01 GILAT, G.
ON FLAT PHONONS IN BETA-BRASS
SOLID STATE COMMUN., V.8, P.2053-P.2054 (1970)
CU-ZN .,THEORY/ FLAT PHONON/ ORDER DISORDER TRANSITION
- 70-GI-02 GISSLER, W./ ROTHER, H.
THEORY OF THE QUASIELASTIC NEUTRON SCATTERING BY HYDROG
EN IN BCC METALS APPLYING A RANDOM FLIGHT METHOD
PHYSICA, V.50, P.380-P.390 (1970)
NB-H .,THEORY/ DIFFUSION OF HYDROGEN IN METAL HYDRIDE/
QUASIELASTIC
- 70-GL-01 GLYDE, H.R.
ANHARMONICITY AND POTENTIALS FOR THE SOLIDIFIED INERT G
- ASES
NE/ AR/ KR/ Xe .,THEORY/ ANHARMONICITY
- 70-GL-02 GLYDE, H.R./ COWLEY, R.A.
CUBIC ANHARMONIC CORRECTION TO SELF-CONSISTENT PHONONS
IN B.C.C. HE3
SOLID STATE COMMUN., V.8, P.923 (1970)
HE .,ANHARMONICITY
- 70-GO-01 GOLDMAN, V.V./ HORTON, G.K./ KEIL, T.H./ KLEIN, M.
L, ENERGIES AND LIFETIMES IN SOLID ARGON NEAR O K
PHONON ENERGIES AND LIFETIMES IN SOLID NE AND HE IN THE
FIRST-ORDER SELF-CONSISTENT APPROXIMATION
PHYS. REV. LETT., V.24, P.1424-P.1427 (1970)
NE/ HE .,SELF-CONSISTENT APPROXIMATION/ DISPERSION CURV
E/ LIFE TIME/ THEORY
- 70-GO-02 GOLDMAN, V.V./ HORTON, G.K./ KLEIN, M.L.
PHONON ENERGIES AND LIFETIMES IN SOLID NE AND HE IN THE
FIRST-ORDER SELF-CONSISTENT APPROXIMATION
PHYS. REV. LETT., V.24, P.1424-P.1427 (1970)
NE/ HE .,SELF-CONSISTENT APPROXIMATION/ DISPERSION CURV
E/ LIFE TIME/ THEORY
- 70-GO-03 GOSSLER, W./ ALEFOLD, G./ SPRINGER, T.
QUASIELASTIC NEUTRON SCATTERING BY HYDROGEN IN NIOBIUM
J. PHYS. CHEM. SOLIDS, V.31, P.2361 (1970)
NB-H .,IMPURITY
- 70-GR-01 GRANT, D.M./ PUGMIRE, R.J./ LIVINGSTON, R.C.
METHYL LIBRATION IN PROPANE MEASURED WITH NEUTRON INELA
STIC SCATTERING
J. CHEM. PHYS., V.52, P.4424-P.4436 (1970)
PROPANE .,EXPERIMENT/ MOLECULAR DYNAMICS/ TOF
- 70-GU-01 GUPTA, R.P.
AB INITIO PSEUDOPOTENTIAL CALCULATION OF PHONON FREQUEN
CIES IN LITHIUM
SOLID STATE COMMUN., V.8, P.991 (1970)
LI .,DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMI
CS .,PSEUDOPOTENTIAL/ METAL
- 70-GU-02 GUPTA, H.C./ TRIPATHI, B.B.
PSEUDOPOTENTIAL AND THE PHONON DISPERSION IN ALUMINUM
PHYS. REV. B, V.2, P.248 (1970)
AL .,DISPERSION RELATION/ THEORY/ SOLID/ LATTICE DYNAMI
GS .,PSEUDOPOTENTIAL/ METAL
- 70-GU-03 GUPTA, V.D./ DEOPURA, B.L.
LOW FREQUENCY NEUTRON SPECTRUM OF 1,3,5-TRIAMINO-2,4,6-
TRINITROBENZENE
MOL. PHYS., V.19, P.589-P.592 (1970)

BENZENE ..EXPERIMENT/ FREQUENCY SPECTRUM

70-GU-04 GUPTA, R.K./ GUPTA, N.P.
ANHARMONIC PHONON SPECTRUM AND HEAT CAPACITIES OF SOLID NEON

NE ..THEORY/ PHONON DISPERSION AND SPECTRUM/ PSEUDOANHARMONIC CENTRAL-FORCE RIGID-ATOM MODEL

70-GU-05 GUPTA, V.D./ SINGH, R.D.
LOW FREQUENCY SPECTRA OF GLYCINE
CHEM. PHYS. LETT., V.5, P.218-P.220 (1970)
GLYCINE ..EXPERIMENT/ FREQUENCY SPECTRUM

70-HA-01 HARADA, J./ AXE, J.D./ SHIRANE, G.
DETERMINATION OF THE NORMAL VIBRATIONAL DISPLACEMENTS IN SEVERAL PEROVSKITES
ACTA CRYSTALLOGR., SECT. A, V.26, P.608 (1970)
K.TA,03/ SR,TI,03/ RB,MN,F3 ..EXPERIMENT/INELASTIC STRUCTURE FACTOR/ PHONON EIGENVECTOR/ FERROELECTRICITY

70-HA-02 HARLING, O.K.
HIGH MOMENTUM-TRANSFER NEUTRON-LIQUID-HELIUM SCATTERING BOSE CONDENSATION
PHYS. REV. LETT., V.24, P.1046-P.1048 (1970)
HE ..EXPERIMENT/ EXCITATION CURVE

70-HA-03 HARP, G.D./ BERNE, B.J.
TIME-CORRELATION FUNCTIONS, MEMORY FUNCTIONS, AND MOLECULAR DYNAMICS
PHYS. REV. A, V.2, P.975 (1970)
THEORY-OF-FLUIDS ..THEORY/ LIQUID/ MOLECULAR DYNAMICS .
MEMORY FUNCTIONS/ TIME CORRELATION FUNCTIONS/ INTERMEDIATE SCATTERING FUNCTION/ DYNAMIC FORM FACTOR

70-HE-01 HEWAT, A.W.
LATTICE DYNAMICS OF ZN.O AND BE.O
SOLID STATE COMMUN., V.8, P.187-P.189 (1970)
ZN,O/ BE.O ..THEORY/ LATTICE DYNAMICS/ DISPERSION CURVES

70-HO-01 HORNER, H.
ANHARMONIC PHONONS AND LATTICE SPECIFIC HEAT IN BCC HE
PHYS. REV., V.25, P.147 (1970)
HE ..THEORY/ PHONON/ SPECIFIC HEAT

70-HO-02 HOUNMANN, J.C.G./ NICKLOW, R.M.
LATTICE DYNAMICS OF TERBIUM
PHYS. REV. B, V.1, P.3943-P.3952 (1970)
TB ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES/ CONSTITUTIONAL METHOD ..FREQUENCY SPECTRA/ SPECIFIC HEAT/ DEBYE TEMP.

70-HU-01 HURRELL, J.P./ MINKIEWICZ, V.J.
THE CRYSTAL DYNAMICS OF BARIUM FLUORIDE
SOLID STATE COMMUN., V.8, P.463-P.466 (1970)
BA,F2 ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES / SPECTRAL DENSITY ..SHELL MODEL FIT

70-ID-01 IDA, Y.
ANHARMONICS EFFECT ON HEAT CAPACITY OF SOLIDS UP TO THE CRITICAL TEMPERATURE OF LATTICE INSTABILITY
PHYS. REV. B, V.1, P.2488-P.2496 (1970)
THEORY-OF-SOLIDS ..ANHARMONICITY/ HEAT CAPACITY

70-JA-01 JAIN, S.C./ SAXENA, N.S./ BHANDARI, R.C.
COLLECTIVE ATOMIC MOTIONS IN LIQUID SODIUM
J. CHEM. PHYS., V.52, P.4629 (1970)
NA ..SCATTERING LAW/ THEORY/ LIQUID/ CORRELATION FUNCTION ON LIQUID METAL/ RESPONSE FUNCTION/ POLARIZATION

70-JA-02 JANIK, J.A./ JANIK, J.M./ MAYER, J.
QUASI-FREE ROTATION OF AMMONIUM ION IN CRYSTALLINE N.H₄.CL.O4
INP-726/PS (1970)
N.H₄.CL.O4 ..EXPERIMENT/ FREQUENCY SPECTRA

70-JA-03 JAYALAKSHMI, K./ VISWAMITRA, M.A.
DEBYE WALLER FACTORS OF POTASSIUM CHLORIDE
PHYS. LETT., V.32A, P.83-P.84 (1970)
K.CL ..EXPERIMENT/ X-RAY SCATTERING

70-JO-01 JOHNSON, F.A.
A CLASSICAL THEORY OF LATTICE DYNAMICS
PROC. ROY. SOC., LONDON, SER. A, V.317, P.279 (1970)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ THEORY

70-KA-01 KADOTANI, H.
THROUGH A CODE FOR CALCULATING THERMAL NEUTRON SCATTERING KERNEL
JAERI-MEMO 4211 (1970)
COMPUTER-CODES ..CODE MANUAL

70-KA-02 KAPULLA, H./ GLAESER, W.
SLOW NEUTRON SCATTERING IN THE LOW TEMPERATURE PHASE OF SOLID METHANE
PHYS. LETT., V.31A, P.2-P.3 (1970)
C.H4 ..EXPERIMENT

70-KA-03 KATTIYAR, R.S.
DYNAMICS OF THE RUTILE STRUCTURE
J. PHYS., C, LONDON, V.3, P.1087-P.1096 (1970)
RUTILE ..THEORY/ LATTICE DYNAMICS ..MULTIPLIER GROUP APPROXIMATION

PROACH

- 70-KA-04 KATIYAR, R.S.
DYNAMICS OF THE RUTILE STRUCTURE -2 LATTICE DYNAMICS OF
MAGNESIUM FLUORIDE
J. PHYS., C, LONDON, V.3, P.1693-P.1702 (1970)
MG.F2 .,THEORY/ LATTICE DYNAMICS
- 70-KA-05 KAWASAKI, K.
LONG TIME BEHAVIOR OF THE VELOCITY AUTOCORRELATION FUNC
TION
PHYS. LETT., V.32A, P.379 (1970)
THEORY-OF-FLUIDS .,CORRELATION FUNCTION,
- 70-KE-01 KEARNEY, R.J./ WORLTON, T.G./ SCHMUNK, R.E.
LATTICE DYNAMICS OF MAGNESIUM STANIDE AT ROOM TEMPERATU
RE
J. PHYS. CHEM, SOLIDS, V.31, P.1085-P.1097 (1970)
MG2.SN .,EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE
S .,ROOM TEMP./ 3-AXIS SPECTROMETER
- 70-KE-02 KEARNEY, R.J./ WORLTON, T.G./ SCHMUNK, R.E.
APPLICATION OF GROUP THEORY TO THE LATTICE DYNAMICS OF
MAGNESIUM STANNIDE
J. PHYS. CHEM, SOLIDS, V.31, P.913-P.926 (1970)
MG2.SN .,THEORY/ LATTICE DYNAMICS/ GROUP THEORETICAL TE
CHNIQUES
- 70-KE-03 KEATING, D.T.
A NOTE ON THE DETERMINATION OF THE DENSITY OF PHONON EI
GENSTATES FROM THE INELASTIC INCOHERENT NEUTRON SCATTER
ING
J. PHYS. CHEM, SOLIDS, V.31, P.1317-P.1323 (1970)
V .,EXPERIMENT/ PHONON FREQUENCY DISTRIBUTION
- 70-KE-04 KERR, W.C./ SJOELANDER, A.
SELF CONSISTENT FIELD APPROACH TO LATTICE DYNAMICS
PHYS. REV. B, V.1, P.2723-P.2734 (1970)
THEORY-OF-SOLIDS .,LATTICE DYNAMICS
- 70-KE-05 KERR, W.C./ PATHAK, K.N./ SINGWI, K.S.
NEUTRON SCATTERING FROM LIQUID HELIUM II AT LARGE MOMEN
TUM TRANSFER AND THE CONDENSATE FRACTION
PHYS. REV. A, V.2, P.2416-P.2426 (1970)
HELIUM .,THEORY/ LIQUID/ SCATTERING LAW/ GAUSSIAN APPRO
XIMATION .,LARGE MOMENTUM TRANSFER/ ODC
- 70-KI-01 KINE, H.J./ GOYAL, P.S./ VENKATARAMAN, G./ DASANNA
CHARYA, B.A./ THAPER, C.L.
STUDY OF MOLECULAR REORIENTATION IN SOLIDS BY SLOW-NEUT
RON SCATTERING
SOLID STATE COMMUN., V.8, P.889 (1970)

- (N.H4)2.S.04 .,EXPERIMENT/ SOLID/ MOLECULAR ROTATION
- 70-KI-02 KING, W.F./ CUTLER, P.H.
LATTICE DYNAMICS OF BERYLLIUM FROM A FIRST-PRINCIPLES N
ONLOCAL PSEUDOPOTENTIAL APPROACH
PHYS. REV. B, V.2, P.1733 (1970)
BE .,LATTICE DYNAMICS/ THEORY/ SOLID/ DISPERSION RELATI
ON .,HEXAGONAL CLOSE-PACKED CRYSTAL/ PSEUDOPOTENTIAL
- 70-KI-03 KITAGAWA, T.
LATTICE DYNAMICS AND NEUTRON INELASTIC SCATTERING OF PO
LYMER CRYSTALS
JAERI-1197, P.93-P.100 (1970)
AR/ KR/ POLYETHYLENE .,REVIEW/ LATTICE DYNAMICS
- 70-KI-04 KITAGAWA, T./ MIYAZAWA, T.
FREQUENCY DISTRIBUTION AND DISPERSION CURVES OF CRYSTAL
VIBRATIONS OF PERDEUTERATED POLYETHYLENE
POLYMER J., V.1, P.471-P.479 (1970)
POLYETHYLENE .,THEORY/ PHONON DISPERSION/ FREQUENCY SPE
CTRUM/ PERDEUTERATED PE
- 70-KL-01 KLEIN, M.L./ KOEHLER, T.R.
SELF-CONSISTENT PHONON SPECTRUM OF HCP H2 AND D2
J. PHYS., C, LONDON, V.3, P.102 (1970)
H2 .,DISPERSION RELATION
- 70-KL-02 KLEIN, M.L./ KOEHLER, T.R.
LATTICE DYNAMICS OF HCP ORTHO-DEUTERIUM
PHYS. LETT., A, V.33A, P.253 (1970)
D .,LATTICE DYNAMICS/ SOLID
- 70-KL-03 KLUMP, K.N./ SCHNEPP, O./ NOSANOW, L.H.
ONE-PHONON EXCITED STATES OF SOLID H2 AND D2 IN THE ORD
ERED PHASE
PHYS. REV. B, V.1, P.2496 (1970)
H2/ D2 .,FREQUENCY DISTRIBUTION/ THEORY/ SOLID
- 70-KN-01 KNOPOFF, L./ SHAPIRO, J.N.
PSEUDO-GRUENEISEN PARAMETER FOR LIQUIDS
PHYS. REV. B, V.1, P.3893-P.3895 (1970)
THEORY-OF-FLUIDS .,THEORY
- 70-KO-01 KOEHLER, T.R./ GILLIS, N.S./ WALLACE, D.C.
ANHARMONIC INTERACTION IN ALUMINUM, I
PHYS. REV. B, V.1, P.4321 (1970)
AL .,THEORY/ ANHARMONICITY/ PHONON WIDTHS AND LIFETIMES
/ METAL
- 70-KO-02 KOLLMANNBSBERGER, G./ FRITSCH, G./ LUESCHER, E.
DETERMINATION OF THE STATIC STRUCTURE FUNCTION OF SODIU
M AT 102 AND 149DC (IN GERMANY)

- Z. PHYS., V.233, P.308-P.323 (1970)
 NA ..EXPERIMENT/ X-RAY/ LIQUID ..STRUCTURE FUNCTION/ 10
 ZDC/ 149DC
- 70-KO-03 KOROL, E.N.
 PHONON DISPERSION IN GA,AS
 FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.12 (V
 12), P.644-P.645 (P.497-P.498) (1970 (1970))
 GA,AS ..THEORY/ PHONON DISPERSION
- 70-KR-01 KRISHNAN, M.V./ GUPTA, V.D.
 VIBRATION SPECTRA OF ALPHA-HELIX OF POLY-ALANINE
 CHEM. PHYS. LETT., V.6, P.231-P.234 (1970)
 POLYALANINE ..THEORY/ PHONON DISPERSION/ G.F MATRIX/ AL
 PHA-HELIX
- 70-KR-02 KRISHNAN, M.V./ GUPTA, V.D.
 DISPERSION CURVES OF POLY-ALANINE IN THE BETA-FORM
 CHEM. PHYS. LETT., V.7, P.285-P.287 (1970)
 POLYALANINE ..THEORY/ PHONON DISPERSION/ G.F MATRIX MET
 HOD/ BETA-STRUCTURE
- 70-KU-01 KUCHER, T.I./ TOMASEVICH, O.F.
 LATTICE DYNAMICS OF NA,1 AND THE FOURIER COMPONENTS OF
 THE LAGLESS DIELECTRIC CONSTANT
 FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.12 (V
 12), P.553-P.556 (P.423-P.425) (1970)
 NA,1 ..THEORY/ SOLID/ FREQUENCY DISTRIBUTION
- 70-KU-02 KUCHER, T.I./ SHCHUR, I.A.
 PHONON DISPERSION IN NA,CL CRYSTALS
 UKR. FIZ. ZH., V.15, P.1409 (1970)
 NA,CL ..PHONON DISPERSION
- 70-KU-03 KUNC, K./ BALKANSKI, M./ NUSIMOVICI, M.
 IONIC CHARGE AND LATTICE DYNAMICS OF CUBIC ZINC SULPHID
 E
 ZN,S ..THEORY/ LATTICE DYNAMICS
 PHYS. STATUS SOLIDI, V.41, P.491 (1970)
- 70-KU-04 KUNG, K./ BALKANSKI, M./ NUSIMOVICI, M.
 IONIC CHARGE AND LATTICE DYNAMICS OF CUBIC ZINC SULPHID
 E
 ZN,S ..THEORY/ PHONON DISPERSION AND SPECTRUM/ TEN PAR
 AMETER DEFORMED ION MODEL
 PHYS. STATUS SOLIDI, V.41, P.491-P.498 (1970)
- 70-KU-05 KUSHWAHA, S.S./ RAJPUT, J.S.
 PHONON DISPERSION RELATIONS OF BODY-CENTERED-CUBIC META
 LS
 PHYS. REV. B, V.2, P.3943-P.3947 (1970)
 THEORY-OF-SOLIDS/ NA/ K ..PHONON DISPERSION CURVE/ META

L/ BCC

- 70-LA-01 LADO, F.
 DENSITY AUTOCORRELATION FUNCTION IN A CLASSICAL FLUID F
 ROM INITIAL CORRELATIONS
 PHYS. REV. A, V.2, P.1467-P.1473 (1970)
 NEUTRON-SCATTERING-IN-FLUIDS ..VLASOV EQUATION1 THEORY
 ..TIME-DEPENDENT DIRECT CORRELATION FUNCTION/ CONTINUED
 FRACTION
- 70-LA-02 LAHTENKORVA, E.E.
 AN ELASTIC-CONSTANT MODEL FOR LATTICE DYNAMICS OF HEXAG
 ONAL CLOSE-PACKED METALS
 SOLID STATE COMMUN., V.8, P.947 (1970)
 MG/ Y/ HO ..DISPERSION RELATION/ HARMONIC APPROXIMATION
 / THEORY/ SOLID/ LATTICE DYNAMICS ..ELASTIC CONSTANT/ H
 EXAGONAL CLOSE-PACKED KRYSTAL
- 70-LA-03 LAI, H.W./ SIM, H.K./ WOO, C.W.
 DISPERSION OF PHONONS IN LIQUID HE-4
 PHYS. REV. A, V.1, P.1536-P.1541 (1970)
 HE ..DISPERSION CURVE/ THEORY
- 70-LA-04 LAI, H./ SIM, H./ WOO, C.
 DISPERSION OF PHONONS IN LIQUID HE4
 PHYS. REV. A, V.1, P.1536 (1970)
 HE ..THEORY/ PHONON DISPERSION/ LIQUID
- 70-LE-01 LEADBETTER, A.J./ WRIGHT, A.C.
 INELASTIC COLD NEUTRON SCATTERING FROM CRYSTALLINE AND
 VITREOUS BERYLLIUM FLUORIDE
 J. NON-CRYST. SOLIDS, V.3, P.239 (1970)
 BE,F2 ..INELASTIC SCATTERING/ COLD NEUTRON
- 70-LE-02 LEECH, J.W./ REISSLAND, J.A.
 ANHARMONIC EFFECTS IN INERT GAS SOLIDS. 1 - ASSESSMENT
 OF A NEW APPROXIMATION
 J. PHYS., C, LONDON, V.3, P.975 (1970)
 NE/ AR/ KR/ XE ..THEORY/ LATTICE DYNAMICS/ ANHARMONICIT
 Y ..THERMODYNAMICAL PROPERTIES
- 70-LE-03 LEECH, J.W./ REISSLAND, J.A.
 ANHARMONIC EFFECTS IN INERT GAS SOLIDS. 2 - METHOD APPL
 IED TO NE, AR, KR, XE
 J. PHYS., C, LONDON, V.3, P.987 (1970)
 NE/ AR/ KR/ XE ..THEORY/ ANHARMONICITY ..SPECIFIC HEAT/
 DEBYE TEMPERATURE/ THERMAL EXPANSION
- 70-LE-04 LEFKOWITZ, I./ SHIELDS, M./ DOLLING, G./ BUYERS, W
 J.L./ COWLEY, R.A.
 THE TRANSITION IN SN,TE-GE,TE ALLOYS
 J. PHYS. SOC. JAPAN, V.28 SUPPLEMENT, PROCEEDING O

F THE SECOND INTERNATIONAL MEETING ON FERROELECTRICITY, P.249-P.251 (1970)
SN, TE, .EXPERIMENT/ SNO,94,GEO.05,TE/ PHONON DISPERSION

70-LE-05 LEUNG, P.S./ SAFFORD, G.J.,
A NEUTRON INELASTIC SCATTERING INVESTIGATION OF THE CONCENTRATION AND ANION DEPENDENCE OF LOW FREQUENCY MOTION OF H₂O MOLECULES IN IONIC SOLUTIONS,
J. PHYS. CHEM. SOLIDS, V.74, P.3696-P.3717 (1970)

LI,CL-H₂O/ MG,CL₂-H₂O/ CS,CL-H₂O/ K,CL-H₂O/ NA,CL-H₂O/ LA,(N,03)3-H₂O/ .EXPERIMENT/ LOW FREQUENCY MOTION OF H₂O IN SOLUTION

70-LE-06 LEUNG, P.S./ SANBORN, S.M./ SAFFORD, G.J.,
A NEUTRON INELASTIC SCATTERING OF THE H₂O MOLECULES IN AQUEOUS SOLUTIONS AND SOLID GLASSES OF LANTHANUM NITRATE AND CHROMIC CHLORIDE

J. PHYS. CHEM. SOLIDS, V.74, P.3710-P.3717 (1970)
LA,(N,03)3-H₂O/ CR,CL₃-H₂O/ LA,CL₃-H₂O .EXPERIMENT/ H₂O MOTION IN SOLUTION AND GLASS STATE

70-LO-01 LOGAN, K.W./ TREVINO, S.F./ PRASK, H.J./ GAULT, J.D.,
INELASTIC NEUTRON SCATTERING FROM SOLID BENZENE
J. CHEM. PHYS., V.53, P.3417-P.3420 (1970)
BENZENE .EXPERIMENT/ SOLID/ FREQUENCY DISTRIBUTION .77 K TO 270.K

70-LO-02 LOWENDES, R.P.,
INFLUENCE OF LATTICE ANHARMONICITY ON THE LONGITUDINAL OPTIC MODES OF CUBIC SOLIDS
PHYS. REV. B, V.1, P.2754-P.2763 (1970)
K,8R .ANHARMONICITY .DIELECTRIC CONSTANT

70-LU-01 LUTY, T./ JANIK, J.A./ BAJOREK, A./ NATKANIEC, I./ DOMOSLAWSKI, J.,
LATTICE DYNAMICS OF THE ACENAPHTHENE CRYSTAL
INP-724/PL (1970)
ACENAPHTHENE .EXPERIMENT/ THEORY/ FREQUENCY SPECTRUM/ LATTICE DYNAMICS

70-LU-02 LUTZ, U.A./ HAEGL, W.,
LATTICE DYNAMICS OF DEUTERATED ANTHRACENE
SOLID STATE COMMUN., V.8, P.165 (1970)
ANTHRACENE .THEORY/ EXPERIMENT/ SOLID .COHERENT INELASTIC NEUTRON SCATTERING/ PHONON DISPERSION CURVE/ COMPARISON WITH ULTRASONIC, INFRARED, RAMAN MEASUREMENTS

70-LU-03 LUTZ, U.,
PHONON DISPERSION OF ANTHRACENE
EIR-129 (1970)

ANTHRACENE .EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVE/ FREQUENCY SPECTRUM

70-MA-01 MACHIDA, K.,
SKELETAL DEFORMATION VIBRATIONS OF POLYETHYLENE CHAIN
JAERI-1197, P.101-P.108 (1970)
POLYETHYLENE .THEORY/ EFFECT OF END GROUP VIBRATION/ DISPERSION CURVES

70-MA-02 MAELAND, A.,
VIBRATION SPECTRA OF THE ORTHORHOMBIC ALKALINE-EARTH HYDRIDES BY THE INELASTIC SCATTERING OF COLD NEUTRONS AND BY INFRARED TRANSMISSION MEASUREMENTS
J. CHEM. PHYS., V.52, P.3952-P.3956 (1970)
YB-H/ CA-H/ SR-H/ BA-H .EXPERIMENT/ FREQUENCY SPECTRUM

70-MA-03 MALISZEWSKI, E.F./ SOSNOWSKI, J./ CZACHOR, A.,
LATTICE DYNAMICS OF THE PD-1 PER CENT FE
INR-P-1226/ 2/ PS (1970)
PD-FE .EXPERIMENT/ PHONON DISPERSION CURVE

70-MA-04 MARIS, H.J./ MASSEY, W.E.,
PHONON DISPERSION AND THE PROPAGATION OF SOUND IN LIQUID HELIUM-4 BELOW 0.6 DEG. K,
PHYS. REV. LETT., V.25, P.220 (1970)
HE .THEORY/ PHONON DISPERSION

70-MA-05 MARTINELLI, L.,
THERMOELECTRIC, BAND STRUCTURE AND PHONON FREQUENCIES OF Na FROM THE PSEUDOPOTENTIAL METHOD
NUOVO CIM., B, V.70, P.58-P.72 (1970)
Na .THEORY/ BAND STRUCTURE/ PHONON DISPERSION/ PSEUDOPOTENTIAL MODEL

70-MI-01 MILLER, S.A./ RAST, H.E./ CASPERS, H.H.,
LATTICE VIBRATIONS OF LI,Y,F₄
J. CHEM. PHYS., V.52, P.4172-P.4175 (1970)
LI,Y,F₄ .EXPERIMENT .RAMAN SCATTERING

70-MI-02 MISENTA, R./ OLIVI, L.,
SLOW NEUTRON SCATTERING BY SOLID ORTHO-HYDROGEN BELOW THE LAMBDA-TEMPERATURE
SOLID STATE COMMUN., V.8, P.373-P.375 (1970)
H₂ .THEORY/ DIFFERENTIAL CROSS SECTION

70-NA-01 NAKAHARA, Y.,
THERMAL NEUTRON SCATTERING FROM SIMPLE LIQUID METALS
JAERI-MEMO-4191 (1970)
Na .THEORY/ SCATTERING LAW/ LIQUID .VLASOV EQUATION/ LIQUID METAL

- 70-NI-01 NISHIGORI, T.
QUASICLASSICAL APPROXIMATION FOR SLOW NEUTRON SCATTERING
G
PROGR. THEORET. PHYS., KYOTO, V.43, P.1423-P.1444
(1970)
SCATTERING-THEORIES .THEORY/ QUASICLASSICAL APPROXIMATION
ION
- 70-NU-01 NUSIMOVICI, M.A./ BALKANSKI, M./ BIRMAN, J.L.
LATTICE DYNAMICS OF WURTZITE, CD.S, 2
PHYS. REV. B, V.1, P.595-P.603 (1970)
CD.S .THEORY/ LATTICE DYNAMICS/ DISPERSION CURVES/ FREQUENCY SPECTRUM .SEMI-IONIC COMPOUNDS
- 70-OL-01 OLIVI, L.
THE SCATTERING OF SLOW NEUTRONS BY ORTHOHYDROGEN
EUR-4496E (1970)
HYDROGEN .MOLECULAR ROTATION/ SIGMA(THETA.E) .DIFFERENTIAL CROSS SECTION
- 70-OR-01 ORTOLEVA-JR, P.J.
COLLECTIVE AND PARTICLE MODES IN THE CLASSICAL LIQUID
NYO-3326-29, P.1- P.116 (1970)
NEUTRON-SCATTERING-IN-FLUIDS .VLASOV EQUATION/ THEORY
- 70-OR-02 ORTOLEVA, P./ NELKIN, M.
COLLECTIVE AND SINGLE-PARTICLE EFFECTS IN AUTOCORRELATION FUNCTION FOR DENSE CLASSICAL FLUIDS
PHYS. REV. A, V.2, P.187-P.195 (1970)
NEUTRON-SCATTERING-IN-FLUIDS .THEORY/ VLASOV EQUATION/ COLLECTIVE MODES
- 70-PA-01 PAL, S.
DISPERSION OF LATTICE WAVES IN SILVER (LETTERS)
J. PHYS., C, LONDON, V.3, P.149-P.151 (1970)
SI .THEORY/ DISPERSION RELATION
- 70-PA-02 PAL, S.
FREQUENCY SPECTRUM AND DEBYE TEMPERATURE OF RUBIDIUM
J. PHYS., C, LONDON, V.3, P.182 (1970)
RB .THEORY/ FREQUENCY SPECTRUM/ DEBYE TEMP.
- 70-PA-03 PAL, S.
PHONON DISPERSION IN LITHIUM
PHYS. REV. B, V.2, P.4741-P.4742 (1970)
LI .THEORY/ LATTICE VIBRATION/ DISPERSION/ SHARM-JOSHI MODEL
- 70-PA-04 PARKS, D.E./ NELKIN, M.S./ BEYSTER, J.R./ WIKNER, N.F.
SLOW NEUTRON SCATTERING AND THERMALIZATION, WITH REACTION APPLICATION
- W. A. BENJAMIN, INC. NEW YORK (1970)
REVIEW-ARTICLES .BOOK/ THEORY/ EXPERIMENT/ NEUTRON SCATTERING/ REACTOR PHYSICS
- 70-PA-05 PATHAK, K.N./ SINGWI, K.S.
COLLECTIVE MOTIONS IN CLASSICAL LIQUIDS, II
PHYS. REV. A, V.2, P.2427-P.2434 (1970)
THEORY-OF-FLUIDS/ ARGON .THEORY/ LIQUID/ SCATTERING LAW / GAUSSIAN APPROXIMATION
- 70-PA-06 PAUL, G.L./ COCHRAN, W./ BUYERS, W.J.L./ COWLEY, R.A.
FERROELECTRIC TRANSITION IN K.D2.P.O4
PHYS. REV. B, V.2, P.4603-P.4612 (1970)
K.H2.P.O4 .EXPERIMENT/ THEORY/ PHASE TRANSITION/ NEUTRON SCATTERING
- 70-PA-07 PAWLEY, G.S./ CYVIN, S.J.
LATTICE VIBRATIONS IN CRYSTALS WITH DEFORMABLE MOLECULES, A CALCULATION FOR NAPHTHALENE
J. CHEM. PHYS., V.52, P.4073 (1970)
NAPHTHALENE .THEORY/ DISPERSION RELATION/ MOLECULAR DYNAMICS/ SOLID
- 70-PI-01 PICKETT, H.M./ STRAUSS, H.L.
VIBRATIONAL SPECTRA AND POTENTIAL FUNCTION OF CYCLOHEXANE AND RELATED OXANES
J. CHEM. PHYS., V.53, P.376 (1970)
CYCLOHEXANE .EXPERIMENT/ THEORY/ MOLECULAR VIBRATION/ INTERATOMIC FORCE CONSTANT.FG-METHOD
- 70-PI-02 PINES, D./ WOO, C.
SUM RULES, STRUCTURE FACTORS, AND PHONON DISPERSION IN LIQUID HE (A=4) AT LONG WAVELENGTHS AND LOW TEMPERATURES
PHYS. REV. LETT., V.24, P.1044-P.1045 (1970)
HE .THEORY/ STRUCTURE FACTOR/ PHONON DISPERSION/ LIQUID
- 70-PL-01 PLAKIDA, N.M./ SIKLOS, T.
THEORY OF ANHARMONIC CRYSTALS, 3, THREE-DIMENSIONAL LATTICE
PHYS. STATUS SOLIDI, V.39, P.171-P.180 (1970)
THEORY-OF-SOLIDS .ANHARMONIC THREE DIMENSIONAL LATTICE / F.C.C. LATTICE
- 70-PO-01 POLLING, G./ POWELL, B.M.
INTERMOLECULAR DYNAMICS OF HEXAMETHYLENETETRAMINE
PROC. ROY. SOC., LONDON, SER. A, V.319, P.209-P.235 (1970)
HEXAMETHYLENETETRAMINE .EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION .MODEL FITTING/ FREQUENCY DISTRIBUTION

TION/ SPECIFIC HEAT

- 70-PR-01 PRAKASH, S./ JOSHI, S.K.
PHONON FREQUENCIES OF THE HEXAGONAL METALS BE, MG, AND ZN
PHYS. REV. B, V.1, P.1468-P.1478 (1970)
BE/ MG/ ZN .,THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION .,SINGLE-ORTHOGONALIZED-PLANE-WAVE ELECTRON-ION MATRIX AND DIELECTRICFUNCTION/ HEXAGONAL METAL
- 70-PR-02 PRICE, D.L./ SINGWI, K.S./ POSTI, M.P.
LATTICE DYNAMICS OF ALKALI METAL IN THE SELF-CONSISTENT SCREENING THEORY
PHYS. REV. B, V.2, P.2983-P.2999 (1970)
NA/ K/ LI/ RB .,THEORY/ DISPERSION RELATION .,PHONON LIFE TIMES DUE TO ELECTRON-PHONON INTERACTION
- 70-PR-03 PRICE, D.L./ SHYU, W.W./ SINGWI, K.S./ TOSI, M.P.
A TABULATION OF THE INTERIONIC POTENTIAL IN THE ALKALI METALS
ANL-7761 (1970)
COMPILATIONS .,SOLID/ THEORY .,PAIR POTENTIAL/ METAL
- 70-PU-01 PUFF, R.D./ TENN, J.S.
HIGH-ENERGY NEUTRON-LIQUID HE4-SCATTERING AND THE HE4 CONDENSATE DENSITY
PHYS. REV. A, V.1, P.125 (1970)
HE .,THEORY
- 70-RA-01 RAFIZADEH, H.A./ YIP, S.
LATTICE DYNAMICS OF HEXAMINE, A RIGID, MOLECULAR APPROXIMATION
J. CHEM. PHYS., V.53, P.315 (1970)
HEXAMETHYLENETETRAMINE .,THEORY/ LATTICE DYNAMICS
- 70-RA-02 RAMASESHAN, S./ VISWANATHAN, K.S.
ANOMALOUS NEUTRON SCATTERING BY CRYSTALS AND THE AMPLITUDES OF VIBRATION OF LATTICE WAVES
ACTA CRYSTALLOGR., SECT. A, V.26, P.364 (1970)
CD.5 .,ANOMALOUS SCATTERING
- 70-RA-03 RAO, K.R./ TREVINO, S.F./ LOGAN, K.W.
LATTICE DYNAMICS OF SODIUM NITRATE, A GROUP-THEORETICAL ANALYSIS
J. CHEM. PHYS., V.53, P.4645-P.4661 (1970)
NA,N.O3 .,THEORY/ GROUP-THEORETICAL ANALYSIS/ LATTICE DYNAMICS
- 70-RA-04 RAO, K.R./ TREVINO, S.F.
LATTICE DYNAMICS OF POTASSIUM AZIDE, A GROUP-THEORETICAL ANALYSIS
J. CHEM. PHYS., V.53, P.4661-P.4687 (1970)

K.N3 .,THEORY/ LATTICE DYNAMICS/ GROUP-THEORETICAL ANALYSIS

- 70-RA-05 RAO, K.R./ TREVINO, S.F.
LATTICE DYNAMICS OF SODIUM AZIDE, A GROUP-THEORETICAL ANALYSIS
J. CHEM. PHYS., V.53, P.4624-P.4645 (1970)
NA,N3 .,THEORY/ LATTICE DYNAMICS/ GROUP-THEORETICAL ANALYSIS
- 70-RA-06 RAO, K.R.
ATOMIC CORRELATIONS IN LIQUIDS
PROCEEDINGS OF THE NUCLEAR PHYSICS AND SOLID STATE PHYSICS SYMPOSIUM, DAE, BOMBAY, V.1, P.88-P.110 (1970)
REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-FLUIDS .,ATOMIC CORRELATION/ LIQUID
- 70-RA-07 RAUNIO, G./ ROLANDSON, S.
LATTICE DYNAMICS OF NA,CL, K,CL, RB,CL AND RB,F
AE-384 (1970)
NA,CL/ K,CL/ RB,CL/ RB,F .,SHELL MODEL FITTING/ FREQUENCY SPECTRUM/ DEBYE TEMPERATURE
- 70-RA-08 RAUNIO, G./ ROLANDSON, S.
PHONON DISPERSION RELATIONS IN RB,CL AND RB,F AT 80 K
J. PHYS., C, LONDON, V.3, P.1013-P.1025 (1970)
RB,CL/ RB,F .,EXPERIMENT/ CONST.-Q/ LATTICE DYNAMICS/ DISPERSION RELATION .,80DK/ DEFORMED DIPOL-NEXT-NEAREST-NEIGHBOURS MODEL CALCULATION
- 70-RA-09 RAUNIO, G./ ROLANDSON, S.
LATTICE DYNAMICS OF NA,CL,K,CL, RB,CL AND RB,F
PHYS. REV. B, V.2, P.2098-P.2103 (1970)
NA,CL/ K,CL/ RB,CL/ RB,F .,THEORY/ DISPERSION CURVES/ SHELL MODEL
- 70-RA-10 RAUNIO, G./ ROLANDSON, S.
LATTICE DYNAMICS OF RB,I AT 80DK
PHYS. STATUS SOLIDI, V.40, P.749-P.757 (1970)
RB,I .,EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING
- 70-RE-01 REID, J.S./ SMITH, T./ BUYERS, W.J.L.
PHONON FREQUENCIES IN NA,BR
PHYS. REV. B, V.1, P.1833-P.1844 (1970)
NA,BR .,EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION .,295DK/ RIGID SHELL AND DEFORMABLE SHELL MODEL FITTING
- 70-RE-02 REID, J.S./ SMITH, T.
IMPROVED DEBYE-WALLER FACTORS FOR SOME ALKALI-HALIDES

- J. PHYS. CHEM. SOLIDS, V.31, P.2689 (1970)
NA,F/NA,CL/NA,BR/NA,I/ K.CL/ K.BR ..THEORY/ SOLID/ D
EYBE-WALLER FACTOR ..SHELL MODEL/ ROOT SAMPLING METHOD
- 70-RI-01 RICE, T.M./ HALPERIN, B.I.,
KOHANOMALIES IN TUNGSTEN AND OTHER CR-GROUP METALS
PHYS. REV. B, V.1, P.509-P.516 (1970)
CR ..THEORY/ LATTICE VIBRATION ..FERMI SURFACE/ ELECTRON
SUSCEPTIBILITY/ EFFECT OF THE KOHN ANOMALIES ON PHONON
SPECTRUM AND LIFETIME
- 70-RI-02 RIEDER, K.H.,
LOCALIZED IMPURITY MODES AND FORCE CONSTANT CHANGES IN
DILUTE CUBIC ALLOYS
ACTA PHYS. AUSTR., V.32, P.290-P.298 (1970)
THEORY-OF-SOLIDS ..THEORY/ LIGHT IMPURITY MODE/ ESTIMAT
ION OF FORCE CONSTANT CHANGE
- 70-RI-03 RIEDER, K.H.,
LOCALIZED IMPURITY MODES AND FORCE CONSTANT CHANGES IN
DILUTE CUBIC ALLOYS
SGAE-M-30/1970 (1970)
THEORY-OF-SOLIDS ..THEORY/ LIGHT IMPURITY MODE/ ESTIMAT
ION OF FORCE CONSTANT CHANGE
- 70-RO-01 ROSS, R.G.,
THE HARD-SPHERE MODEL FOR A LIQUID METAL, A COMPARISON
WITH EXPERIMENT
PHIL. MAG., V.22, P.573 (1970)
THEORY-OF-FLUIDS ..STRUCTURE FACTOR/ SIGMA(THETA,E) ..C
OMPRESSIBILITY/ LIQUID METAL
- 70-RO-02 ROTHSCHILD, W.G.,
MOLECULAR MOTION IN LIQUIDS, ON THE PREVALENCE OF LARGE
-SIZE ROTATIONAL AND TRANSLATIONAL DIFFUSION STEPS
J. CHEM. PHYS., V.53, P.3265 (1970)
THEORY-OF-FLUIDS ..LIQUID/ THEORY
- 70-RO-03 ROY, A.P./ BROCKHOUSE, B.N.,
LATTICE FREQUENCY SPECTRA OF PB AND PB40-TL60 BY NEUTRO
N SPECTROMETRY
CAN. J. PHYS., V.48, P.1781 (1970)
PB/ PB-TL ..EXPERIMENT/ FREQUENCY SPECTRA/ POLYCRYSTALL
INE SAMPLES/ TRIPLE AXIS SPECTROMETER/ PHONON LIFETIME/
FORCE-CONSTANT DISORDER/ ALLOY
- 70-RU-01 RUBIN, R./ CLAESSEN, Y.,
INELASTIC AND QUASI-ELASTIC SCATTERING OF SUBTHERMAL NE
UTRONS IN TB-H AND NB-H
SOLID STATE COMMUN., V.8, P.1321 (1970)
TB-H/ NB-H ..SOLID/ QUASI-ELASTIC PEAK

- 70-SA-01 SABINE, T.M./ SVENSON, C.,
THE SCATTERING OF LONG WAVELENGTH NEUTRONS BY NEUTRON I
RRADIATED MAGNESIUM OXIDE
J. PHYS., C, LONDON, V.3, P.86-P.89 (1970)
MG,O ..EXPERIMENT/ TOTAL SCATTERING SIGMA ..DEFECT CLUS
TER SCATTERING
- 70-SA-02 SAKURAI, J./ COWLEY, R.A./ DOLLING, G.,
CRYSTAL DYNAMICS AND THE FERROELECTRIC PHASE TRANSITION
OF SODIUM NITRIDE
J. PHYS. SOC. JAP., V.28, P.1426-P.1445 (1970)
NA,N,O3 ..EXPERIMENT/ 3-AXIS SPECTROMETER/ DISPERSION R
ELATION
- 70-SA-03 SAMUELSEN, E.J./ SHIRANE, G.,
IC INTERACTIONS IN ALPHA-Fe2.O3
INELASTIC NEUTRON SCATTERING INVESTIGATION OF SPIN WAVE
S AND MAGNET
PHYS. STATUS SOLIDI, V.42, P.241-P.256 (1970)
FE2.O3 ..EXPERIMENT/ SPIN WAVE DISPERSION/ 240, 290DK/
PARAMETER FITTING/ MAGNON DENSITY OF STATES
- 70-SA-04 SANDSTROEM, R./ HOEGBERG, T.,
ANHARMONIC WIDTHS AND SHIFTS IN SIMPLE METALS, APPLICAT
ION TO ALUMINIUM
J. PHYS. CHEM. SOLIDS, V.31, P.1595-P.1611 (1970)
AL ..THEORY/ ANHARMONICITY/ PHONON WIDTHS AND LIFETIMES
/ METAL
- 70-SA-05 SANGSTER, M.J.L./ PECKHAM, G./ SAUNDERSON, D.H.,
LATTICE DYNAMICS OF MAGNESIUM OXIDE
J. PHYS., C, LONDON, V.3, P.1026-P.1036 (1970)
MG,O ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES
..BREATHING SHELL MODEL/ FREQUENCY SPECTRUM/ HOT NEUTRO
N SOURCE
- 70-SC-01 SCHMUNK, R.E.,
LATTICE DYNAMICS OF SODIUM CHLORIDE AT ROOM TEMPERATURE
J. PHYS. CHEM. SOLIDS, V.31, P.131 (1970)
NA,CL ..LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENC
Y DISTRIBUTION/ THEORY/ SOLID
- 70-SC-02 SCHMUNK, R.E./ WINDER, D.R.,
LATTICE DYNAMICS OF SODIUM CHLORIDE AT ROOM TEMPERATURE
J. PHYS. CHEM. SOLIDS, V.31, P.131 (1970)
NA,CL ..PHONON DISPERSION
- 70-SC-03 SCHNEIDER, T./ BROUT, R./ THOMAS, H./ FEDER, J.,
DYNAMICS OF THE LIQUID-SOLID TRANSITION
PHYS. REV. LETT., V.25, P.1423 (1970)
AR ..THEORY

- 70-SC-04 SCHOTT, W.,
INELASTIC SCATTERING OF SLOW NEUTRON BY SOLID AND LIQUID
D HYDROGEN
Z. PHYS., V.231, P.243-P.265 (1970)
H ..EXPERIMENT
- 70-SC-05 SCOTT, J.F.,
HYBRID PHONONS AND ANHARMONIC INTERACTIONS IN AL,P.O4
PHYS. REV. LETT., V.24, P.1107-P.1110 (1970)
AL,P.O4 ..ANHARMONICITY/ EXPERIMENT/ RAMAN
- 70-SC-06 SCOTT, W./ RIETSCHEL, H.,
NEUTRON SCATTERING FROM SOLID HYDROGEN
KFK-1327 (1970)
H ..EXPERIMENT/ PHONON STATE DENSITY/ QUADRUPOLE INTERA
CTION CONSTANT
- 70-SE-01 SEARS, V.F.,
HIGH-ENERGY NEUTRON SCATTERING FROM LIQUID HE4,II. INTE
REFERENCE AND TEMPERATURE EFFECTS
PHYS. REV. A, V.1, P.1699 (1970)
HE ..THEORY/ LIQUID
- 70-SH-01 SHAPIRO, J.N.,
LINDEMANN LAW AND LATTICE DYNAMICS
PHYS. REV. B, V.1, P.3982-P.3989 (1970)
THEORY-OF-SOLIDS ..FREQUENCY DISTRIBUTION/ THEORY ..LAT
TICE DYNAMICAL CALCULATION OF LINDEMANN LAW FOR MELTING
POINT/ ALKALI METAL
- 70-SH-02 SHAPIRO, J.N./ KNOPOFF, L.,
GREUNEISEN PARAMETER FOR BORN-VON KARMAN LATTICE
PHYS. REV. B, V.1, P.3990-P.3992 (1970)
THEORY-OF-SOLIDS ..THEORY
- 70-SH-03 SHARAN, B./ BAJPAL, R.P.,
LATTICE DYNAMICS OF HEXAGONAL METALS BASED ON A NEW ELE
CTRON ION INTERACTION
J. PHYS. SOC. JAP., V.28, P.338-P.345 (1970)
BE/ MG/ TL ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELAT
ION ..HEXAGONAL METAL
- 70-SH-04 SHARAN, B./ BAJPAL, R.P.,
LATTICE DYNAMICS OF SILVER BASED ON THE MODELS OF DAYAL
AND SHARMA
J. PHYS. SOC. JAP., V.28, P.334-P.337 (1970)
AG ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATIONS/ SP
ECIFIC HEAT
- 70-SH-05 SHARAN, B./ BAJPAL, R.P.,
LATTICE DYNAMICS OF ZIRCONIUM AND HAFNIUM
J. PHYS. SOC. JAP., V.29, P.66-P.68 (1970)
- ZR/ HF ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/
DEBYE TEMPERATURE
- 70-SH-06 SHARAN, B./ BAJPAL, R.P.,
LATTICE DYNAMICS OF HEXAGONAL-TRANSITION METAL BASED ON
NEW ELECTRON FORCE MODEL
J. PHYS. SOC. JAP., V.29, P.46-P.49 (1970)
Y/ TI ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/
DEBYE TEMPERATURE
- 70-SH-07 SHIRANE, G./ AXE, J.D.,
SOFT FERROELECTRIC MODES IN LEAD TITANATE
PHYS. REV. B, V.2, P.155 (1970)
PB,TI.O3 ..EXPERIMENT/ DISPERSION RELATION/ FERROELECTR
ICITY
- 70-SH-08 SHIRANE, G./ AXE, J.D./ HARADA, J./ LINZ, A.,
INELASTIC NEUTRON SCATTERING FROM SINGLE-DOMAIN BA,TI.O
3
PHYS. REV. B, V.2, P.3651-P.3657 (1970)
BA,TI.O3 ..EXPERIMENT/ LATTICE DYNAMICS
- 70-SH-09 SHIRANE, G./ MINKIEWICZ, V.J./ LINZ, A.,
NEUTRON SCATTERING STUDY OF THE LATTICE DYNAMICAL PHASE
TRANSITIONS IN K,MN.F3
SOLID STATE COMMUN., V.8, P.1941 (1970)
K,MN.F3 ..PHONON DISPERSION/ PHASE TRANSITION
- 70-SI-01 SIKLOS, T.,
THEORY OF ANHARMONIC CRYSTALS IN PSEUDOHARMONIC APPROXI
MATION I. LINEAR CHAIN
JINR-E4-5389 (1970)
THEORY-OF-SOLIDS ..THEORY/ ANHARMONICITY ..LINEAR CHAIN
/ PSEUDOHARMONIC APPROXIMATION/ MORSE POTENTIAL
- 70-SI-02 SIKLOS, T.,
THEORY OF ANHARMONIC CRYSTALS IN PSEUDOHARMONIC APPROXI
MATION II. THREE-DIMENSIONAL LATTICE
JINR-E4-5390 (1970)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ ANHARMONICITY ..PSEUD
OHARMONIC APPROXIMATION/ MORSE POTENTIAL
- 70-SI-03 SINGH, N./ JOSHI, S.K.,
NONLOCAL PSEUDOPOTENTIAL FORMULATION FOR LATTICE DYNAMI
CS, II
PHYSICA, V.47, P.277 (1970)
THEORY-OF-SOLIDS ..DISPERSION RELATION/ THEORY/ SOLID/
LATTICE DYNAMICS ..PSEUDOPOTENTIAL/ METAL
- 70-SI-04 SINGH, S.N./ PRAKASH, S.,
PHONON DISPERSION IN ALKALI METALS
PHYSICA, V.50, P.10 (1970)

- LI/ RB/ K/ CS/ ..THEORY/ LATTICE DYNAMICS/ SOLID/ DISPER
SION RELATION ..ALKALI METAL
- 70-SI-05 SINGH, R.K./ VERMA, M.P.
LATTICE DYNAMICS OF SODIUM HALIDES
PHYS. REV. B, V.2, P.4289 (1970)
NA.F/ NA.BR/ NA.CL/ NA.I ..THEORY/ SOLID/ LATTICE DYNAM
ICS/ DISPERSION RELATION ..MODIFIED SHELL MODEL/ DEBYE T
EMPERATURE
- 70-SI-06 SINGH, B.D./ DAYAL, B.
CRYSTAL VIBRATIONS OF SILICON BY THE USE OF VALENCE FOR
CE POTENTIALS
PHYS. STATUS SOLIDI, V.38, P.141-P.149 (1970)
SI ..THEORY/ PHONON DISPERSION/ SIX VALENCE FORCE MODEL
- 70-SI-07 SINHA, S.K./ BRUN, T.O./ MUHLESTEIN, L.D./ SAKURAI
J.
LATTICE DYNAMICS OF YTTRIUM AT 295K
PHYS. REV. B, V.1, P.2430-P.2441 (1970)
Y ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION .
MODIFIED AXIALLY SYMMETRIC MODEL FITTING/ FREQUENCY DI
STRIBUTION/ SPECIFIC HEAT/ DEBYE TEMP
- 70-SI-08 SINHA, S.K./ BRUN, T.O./ MUHLESTEIN, L.D./ SAKURAI
J.
LATTICE DYNAMICS OF YTTRIUM AT 295K
PHYS. REV. B, V.1, P.2430-P.2441 (1970)
Y ..EXPERIMENT/ LATTICE DYNAMICS/ AS-MODEL FITTING/ FRE
QUENCY SPECTRA/ SPECIFIC HEAT
- 70-SK-01 SKALYO-JR, J./ FRAZER, B.C./ SHIRANE, G.
FERROELECTRIC-MODE MOTION IN K.D2.P.04
PHYS. REV. B, V.1, P.278-P.286 (1970)
K.H2.P.04 ..EXPERIMENT/ OVERDAMPED PHONON MODE/ K.D2.P.
04
- 70-SL-01 SLAGGIE, E.L.
THERMAL EXPANSION AND PHONON FREQUENCY SHIFTS IN NONPRI
MITIVE LATTICES
PHYS. REV. B, V.2, P.2230 (1970)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ SOLID
- 70-SM-01 SMITH, H.G./ GLAESER, W.
PHONON SPECTRA IN TA,C AND HF,C
PHYS. REV. LETT., V.25, P.1611-P.1613 (1970)
TA,C/ HF,C ..EXPERIMENT/ DISPERSION RELATION
- 70-SO-01 SOLBIG, A.W.
VALENCE FORCE POTENTIALS FOR CALCULATING CRYSTAL VIBRAT
IONS IN SILICON

- IN-1424 (1970)
SI ..THEORY/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMI
CS/ FORCE CONSTANTS ..VALENCE FORCE
- 70-ST-01 STIRLING, G.C./ LUDMAN, C.J./ WADDINGTON, T.C.
INELASTIC NEUTRON SCATTERING SPECTRA AND RAMAN SPECTRA
OF CS,H,CL2 AND CS,D,CL2
J. CHEM. PHYS., V.52, P.2730-P.2735 (1970)
CS,H,CL2 ..EXPERIMENT/ MOLECULAR DYNAMICS/ FREQUENCY SP
ECTRA ..COLD NEUTRON SOURCE
- 70-ST-02 STOCKMEYER, R.
DEVELOPMENT OF MANY-CRYSTAL-MONOCROMATOR AND ROTATIONA
L MINIATURE-COLLIMATOR FOR NEUTRON SPECTROSCOPY
JUL-719-FE (1970)
INSTRUMENTS-AND-METHODS ..MONOCROMETER/ CHOPPER
- 70-ST-03 STRONG, K.A./ BRUGGER, R.M./ PUGMIRE, R.J.
VIBRATIONAL MODES IN ETHYL CHLORIDE MEASURED BY NEUTRON
SCATTERING
J. CHEM. PHYS., V.52, P.224 (1970)
ETHYL CHLORIDE ..EXPERIMENT/ FREQUENCY DISTRIBUTION/ LI
QUID/ SOLID
- 70-TA-01 TANI, K.
THEORY OF NEUTRON SCATTERING FROM LATTICE VIBRATIONS
J. PHYS. SOC. JAP., V.29, P.594-P.605 (1970)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ LATTICE VIBRATIO
N/ GENERALIZED THEORY OF NEUTRON SCATTERING
- 70-TA-02 TAYLOR, P.L./ WU, S.Y.
DYNAMICS OF DISORDERED ALLOYS AND GLASSES
PHYS. REV. B, V.2, P.1752-P.1757 (1970)
THEORY-OF-SOLIDS ..GLASS/ DISORDERED LATTICE/ FREQUENCY
SPECTRUM ..AMORPHOUS
- 70-TH-01 THAPER, C.L./ DASANNACHARYA, B.A./ SEQUEIRA, A./ I
YENGAR, P.K.
OBSERVATION OF LIBRATIONAL MODES OF WATER MOLECULES IN
SINGLE CRYSTAL HYDRATES BY NEUTRON SCATTERING
SOLID STATE COMMUN., V.8, P.497-P.499 (1970)
BA,(CL,O3)2*H2,O/ K2.C2.O4*H2.O ..EXPERIMENT/ HYDRATES/
LIBRATION OF H2,O IN HYDRATES
- 70-TO-01 TONG, E./ RASHMI, C./ DESAI, C.
DENSITY FLUCTUATIONS IN SINGLE-COMPONENT FLUIDS
PHYS. REV. A, V.2, P.2129-P.2139 (1970)
THEORY-OF-FLUIDS ..GENERAL THEORY
- 70-TR-01 TRYLOR, J.G.
LATTICE DYNAMICS OF RUTILE
TID-25720 (1970)

TI, O₂ ..EXPERIMENT/ DISPERSION RELATION/ RIGID ION MODE
L/ SHELL MODEL/ FREQUENCY SPECTRUM/ DIELECTRIC CONSTANT

70-UP-01 UPADHYANA, K.S./ SINGH, R.K.
DISPERSION PROPERTIES OF MANGANESE OXIDE
SOLID STATE COMMUN., V.11, P.109 (1970)
MN, O ..THEORY/ DISPERSION RELATIONS

70-VA-01 VADOVIC, C.J./ COLVER, C.P.
TEMPERATURE DEPENDENCE OF SELF-DIFFUSION IN LIQUID METAL
LS

AG/ GA/ HG/ NA/ PB/ SN/ ZN ..THEORY/ SELF-DIFFUSION CONSTANT
PHIL. MAG., V.21, P.971-P.976 (1970)

70-VA-02 VAN-DIJK, C.
LATTICE DYNAMICS OF FE₃-AL
PHYS. LETT., A, V.32, P.255-P.256 (1970)
FE-AL ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION CURVES
..BORN VON-KARMAN FIT/ 3RD NEIGHBOURS/ FE₃-AL

70-VA-03 VAN-DIJK, C.
INVESTIGATION OF THE LATTICE DYNAMICS OF ALPHA-Fe AND Fe
E₃-AL BY NEUTRON INELASTIC SCATTERING
RCN-129 (1970)

FE/ FE-AL ..EXPERIMENT/ LATTICE DYNAMICS/ PHONON DISPERSION

70-VE-01 VENKATARAMAN, G./ SAHNI, V.C.
EXTERNAL VIBRATIONS IN COMPLEX CRYSTALS
REV. MOD. PHYS., V.42, P.409-P.470 (1970)
THEORY-OF-SOLIDS/ REVIEW-ARTICLES ..FORMAL THEORY/ MOLECULAR CRYSTAL/ COMPLEX IONIC CRYSTAL

70-VE-02 VETELINO, J.F./ MITRA, S.S./ NAMJOSHI, K.V.
LATTICE DYNAMICS OF ZN, TE: PHONON DISPERSION, MULTIPHONON
ON INFRARED SPECTRUM, MODE GRUENEISEN PARAMETERS, AND THERMAL EXPANSION
PHYS. REV. B, V.2, P.967 (1970)
ZN, TE ..DISPERSION RELATION, FREQUENCY SPECTRUM, DEBYE
TEMPERATURE, MULTI PHONON INFRARED SPECTRUM, GRUENEISEN
CONSTANT, COEFFICIENT OF THERMAL EXPANSION, RIGID ION
MODEL

70-VE-03 VETELINO, J.F./ MITRA, S.S./ NAMJOSHI, K.V.
LATTICE DYNAMICS, MODE GRUENEISEN PARAMETERS, AND COEFFICIENT
OF THERMAL EXPANSION OF CS, CL, CS, BR AND CS, I
PHYS. REV. B, V.2, P.2167-P.2175 (1970)
CS, CL/ CS, BR/ CS, I ..THEORY/ DISPERSION CURVES ..RIGID
ION MODEL/ BORN-MAYER FORCE/ GRUENEISEN CONSTANTS

70-VI-01 VIJAYARAGHAVAN, P.R./ NICKLOW, R.M./ SMITH, H.G./
WILKINSON, M.K.
LATTICE DYNAMICS OF SILVER CHLORIDE
PHYS. REV. B, V.1, P.4819-P.4826 (1970)
SILVER CHLORIDE ..EXPERIMENT/ LATTICE DYNAMICS/ 70DK/ D
ISPERSION CURVE/ DENSITY SPECTRUM

70-WA-01 WALLACE, D.C.
LATTICE DYNAMICAL CALCULATION OF SOME THERMODYNAMIC PROPERTIES
FOR ALUMINUM
PHYS. REV. B, V.1, P.3963-P.3966 (1970)
AL ..THEORY/ LOCAL PSEUDOPOTENTIAL MODEL

70-WA-02 WASEDA, Y./ SUZUKI, K.
TEMPERATURE DEPENDENCE OF THE STRUCTURE FACTOR OF LIQUID
MERCURY

PHYS. LETT., V.31A, P.573 (1970)
HG ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR ..LIQUID METAL

70-WA-03 WASEDA, Y./ SUZUKI, K./ TAMAKI, S./ TAKEUCHI, S.
NEUTRON DIFFRACTION STUDY OF NICKEL IN THE LIQUID STATE
PHYS. STATUS SOLIDI, V.39, P.181-P.188 (1970)
NI ..EXPERIMENT/ LIQUID/ 1500DC/ RADIAL DISTRIBUTION FUNCTION

70-WE-01 WEGENER, W./ HAUTECLER, S.
PHONON DISPERSION IN ZN, O
PHYS. LETT., V.31A, P.2-P.4 (1970)
ZN, O ..EXPERIMENT/ TOF/ DISPERSION RELATION

70-WE-02 WEGNER, W.
PHONON DISPERSION IN ZINC OXIDE
JUL-673-FF (1970)
ZN, O ..DISPERSION RELATION

70-WE-03 WERTHAMER, N.R.
SELF-CONSISTENT PHONON FORMULATION OF ANHARMONIC LATTICE
DYNAMICS
PHYS. REV. B, V.1, P.572-P.581 (1970)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ ANHARMONICS ..PRESURE/
ELASTIC CONSTANT/ SPECIFIC HEAT

70-WE-04 WERTHAMER, N.R.
NEUTRON SCATTERING FROM PHONONS IN SOLID HELIUM
PHYS. REV. A, V.2, P.2050-P.2060 (1970)
HELIUM ..THEORY/ SOLID ..PHONON RELAXATION

70-WE-05 WEYMOUTH, J.W./ STEDMAN, R.
FERMI SURFACE OF ALUMINUM FROM KOHN ANOMALIES
PHYS. REV. B, V.2, P.4743-P.4751 (1970)
AL ..EXPERIMENT/ LATTICE DYNAMICS/ FERMI SURFACE/ KOHN

ANOMALIES

- 70-WI-01 WILSON, W.D./ JOHNSON, R.A.
NON-CENTRAL-FORCE MODEL OF LI,H PHONON DISPERSION CURVE
S AND HE MIGRATION
LI,H .,THEORY/ PHONON DISPERSION
PHYS. REV. B, V.1, P.3510 (1970)
- 70-WO-01 WOODS, A.D.B./ COWLEY, R.A.
LONG-WAVELENGTH PHONONS IN LIQUID HELIUM
PHYS. REV. LETT., V.24, P.646-P.647 (1970)
HE .,SUPERFLUID
- 70-ZA-01 ZANDVELD, P./ ANDRIESSE, C.D./ BREGMAN, J.D./ HASM
AN, A./ VAN-LOFF, J.J.
TEMPERATURE DEPENDENCE OF THE ATOMIC SELF-MOTION IN LIQ
UID ARGON
PHYSICA, V.50, P.511 (1970)
AR .,EXPERIMENT/ LIQUID/ VELOCITY AUTOCORRELATION FUNCT
ION .,MEAN SQUARE ATOMIC DISPLACEMENT/ QUASI-ELASTIC NE
UTRON SCATTERING/ SELF-DIFFUSION COEFFICIENT/ MODIFIED
LANGEVIN MODEL/ STOCHASTIC MODEL
- 70-ZE-01 ZEIN, N.E./ ZINENKO, V.I./ SHNEIDER, V.E.
LATTICE DYNAMICS OF THE PHASE TRANSITIONS IN PEROVSKITE
-TYPE ANTIFERROELECTRICS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.12 (V
.12), P.2326 (P.1858) (1970 (1971))
SR,TI,03/ PB,ZR,03 .,THEORY/ LATTICE DYNAMICS/ FERROELE
CTRICITY/ PHASE TRANSITION
- 70-ZW-01 ZWANZIG, R./ BIXON, M.
HYDRODYNAMIC THEORY OF THE VELOCITY CORRELATION FUNCTIO
N
PHYS. REV. A, V.2, P.2005-P.2012 (1970)
THEORY-OF-FLUIDS .,CORRELATION FUNCTION/ THEORY/ LIQUID
- 70-ZY-01 JAPAN ATOMIC ENERGY RESEARCH INSTITUTE
PROCEEDINGS OF THE THIRD CONFERENCE ON INELASTIC NEUTRO
N SCATTERING, TOKAI 1969
JAERI-1197 (1970)
REVIEW-ARTICLES .,DYNAMICS OF SPIN SYSTEM AND POLYMER
- 71-AI-01 AILAWADI, N.K./ RAHMAN, A./ ZWANZIG, R.
GENERALIZED HYDRODYNAMICS AND ANALYSIS OF CURRENT CORRE
LATION FUNCTIONS
PHYS. REV. A, V.4, P.1616-P.1625 (1971)
NEUTRON-SCATTERING-IN-FLUIDS .,THEORY/ CURRENT-CORRELAT
ION-FUNCTION .,GAUSSIAN-DECAY-MEMORY/ EXPONENTIAL-DECAY
-MEMORY

- 71-AL-01 ALMÖVIST, L./ STEDMAN, R.
PHONONS IN ZINC AT 80 K
J. PHYS., F, LONDON, V.1, P.785-P.790 (1971)
ZN .,EXPERIMENT/ PHONON DISPERSION/ 80 K
- 71-BA-01 BAIJAL, J.S./ CHATURVEDI, D.K.
CALCULATION OF THE INCOHERENT SCATTERING CROSS SECTION
S(K,OMEGA)-SELF IN NON GAUSSIAN APPROXIMATION FOR CLASS
ICAL LIQUIDS
J. PHYS. SOC. JAP., V.31, P.431-P.435 (1971)
NEUTRON-SCATTERING-IN-FLUIDS .,THEORY/ SCATTERING CROSS
SECTION/ CLASSICAL LIQUID/ NON-GAUSSIAN
- 71-BA-02 BAJOREK, A./ JANIK, J.A.
LATTICE VIBRATIONS IN CRYSTALS OF HYDROXYLS OF ALKALI E
ARTHS
INP-742 (1971)
CALCIUM HYDROXIDE .,FREQUENCY DISTRIBUTION
- 71-BA-03 BAJPAI, R.P./ NEELAKANDAN, K.
PHONON DISPERSION IN SODIUM
SOLID STATE COMMUN., V.9, P.167-P.168 (1971)
NA .,THEORY/ LATTICE DYNAMICS/ DISPERSION CURVE/ AXIAL
Y SYMMETRIC MODEL
- 71-BA-04 BAJPAI, R.P./ NEELAKANDAN, K.
PHONON DISPERSION IN COPPER
PHYSICA, V.53, P.628-P.629 (1971)
CU .,THEORY/ DISPERSION CURVE/ MODIFIED AXIALLY SYMMETR
IC MODEL/ EFFECT OF CONDUCTION ELECTRON
- 71-BA-05 BANERJEE, R./ VARSHNI, Y.P.
LATTICE DYNAMICS AND THERMODYNAMIC PROPERTIES OF BETA-Z
N,S, GA,P AND BETA-SI,C
J. PHYS. SOC. JAP., V.30, P.1015-P.1021 (1971)
ZN,S/ GA,P/ SI,C .,THEORY/ PHONON DISPERSION/ FREQUENCY
SPECTRA/ DEBYE TEMPERATURE
- 71-BA-06 BARKER, J.A./ FISHER, R.A./ WATTS, R.O.
LIQUID ARGON, MONTE CARLO AND MOLECULAR DYNAMICS CALCUL
ATIONS
MOL. PHYS., V.21, P.657-P.673 (1971)
THEORY-OF-FLUIDS/ AR .,COMPUTER-SIMULATION/ MONTE-CARLO
.,THREE-BODY-INTERACTION
- 71-BA-07 BARKER, J.A./ BOBETIC, M.V./ KLEIN, M.L.
LATTICE DYNAMICS OF SOLID KR
PHYS. LETT., A, V.34, P.415-P.416 (1971)
KR .,THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT
- 71-BA-08 BATCHELDER, D.N./ HAYWOOD, B.C.G./ SAUNDERSON, D.H

- TEMPERATURE DEPENDENCE OF PHONON FREQUENCIES IN ARGON B
Y INELASTIC NEUTRON SCATTERING
J. PHYS., C, LONDON, V.4, P.910-P.915 (1971)
AR ., EXPERIMENT/ SOLID/ PHONON DISPERSION/ 4. 40. 77K
- 71-BA-09 BATCHELDER, D.N./ COLLINS, M.F./ HAYWOOD, B.C.G./
SIDEY, G.R.
LATTICE DYNAMICS OF ARGON AT 4 DEGREES KELVIN
J. PHYS., C, LONDON, V.4, P.249 (1971)
AR ., PHONON DISPERSION/ EXPERIMENT
- 71-BE-01 BEHARI, J./ TRIPATHI, B.B.
LATTICE DYNAMICS OF SOLIDIFIED NEON
J. PHYS. SOC. JAP., V.31, P.1639-P.1641 (1971)
NE ., THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT/ DEBYE
TEMP./ FREQUENCY SPECTRA
- 71-BE-02 BERGHMANS, H./ SAFFORD, G.J./ LEUNG, P.S.
STUDY OF LOW-FREQUENCY MOTIONS OF EXTENDED CHAINS IN PO
LYETHYLENE BY NEUTRON INELASTIC SCATTERING
J. POLY. SCI., PART A-2, V.9, P.1219-P.1234 (1971)
POLYETHYLENE ., EXPERIMENT/ FREQUENCY SPECTRA/ LOW-FREQU
ENCY MOTION/ VARIOUS TEMPERATURE/ EXTENDED-CHAIN MATERI
AL
- 71-BE-03 BEZDEK, H.F./ FINEGOLD, L.
LATTICE-DYNAMICAL CALCULATIONS FOR ZINC AND BERYLLIUM
PHYS. REV. B, V.4, P.1390 (1971)
ZN/ BE ., THEORY/ LATTICE DYNAMICS
- 71-BI-01 BIEM, W./ MERTENS, F.G.
PHONONS AND LIBRONS IN SOLID HYDROGEN
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.263-P.267 (1971)
H2 ., THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA/ SOLI
D HYDROGEN
- 71-BI-02 BISCHOFF, F.G./ MOORE, W.E./ YEATER, M.L.
MONTE CARLO CALCULATION OF MULTIPLE SCATTERING AND RESO
LUTION EFFECTS IN DOUBLE DIFFERENTIAL NEUTRON SCATTERIN
G CROSS SECTION MEASUREMENTS
RPI-328-211 (1971)
SCATTERING-THEORIES/ COMPUTER-CODES/ H2.O ., MULTIPLE SC
ATTERING/ THEORY/ SIGMA(E, E-PRIME)
- 71-BR-01 BRIER, P.N./ HIGGINS, J.S./ BRADLEY, R.H.
A NEUTRON INELASTIC SCATTERING STUDY OF THE CHLOROETHAN
ES
MOL. PHYS., V.21, P.721 (1971)
CHLOROETHANE ., THEORY/ EXPERIMENT/ LIQUID/ TIME.OF.FLIG
HT TECHNIQUES

- 71-BR-02 BROADHURST, M.G./ MOPSIK, F.I.
VIBRATIONAL FREQUENCY SPECTRUM FOR POLYMERS
J. CHEM. PHYS., V.55, P.3708-P.3711 (1971)
POLYETHYLENE ., THEORY/ FREQUENCY SPECTRA/ LINEAR POLYME
R
- 71-BR-03 BROMLEY, R.A.
THE LATTICE VIBRATIONS OF THE MO.S2 STRUCTURE
PHIL. MAG., V.23, P.1417-P.1427 (1971)
MO.S2 ., THEORY/ PHONON DISPERSION
- 71-BR-04 BROWN, J.S.
PHONON DISPERSION IN TRANSITION METALS - A NEW 3-PARAME
TER MODEL
J. PHYS., F, LONDON, V.1, P.650-P.656 (1971)
PD ., CALCULATION/ PHONON DISPERSION/ 3-PARAMETER MODEL
- 71-BR-05 BRUNO, R./ TAYLOR, D.W.
CALCULATION OF THE FREQUENCIES AND WIDTHS OF PHONONS IN
CU(CO,97)AU(CO,03)
CAN. J. PHYS., V.49, P.2496-P.2508 (1971)
CU-AU ., THEORY/ GOLD-IMPURITY EFFECT/ EFFECT OF VOLUME C
HANGE ON ALLOYING
- 71-BU-01 BUHRER, W./ HALG, W.
CRYSTAL DYNAMICS OF CESIUM IODIDE
PHYS. STATUS SOLIDI, V.46, P.679 (1971)
CS.I ., PHONON DISPERSION
- 71-BU-02 BURSTEIN, E./ MARAUDIN, A.A./ MINNICK, R.
THE LYDDANE-SACHS-TELLER RELATION AT FINITE WAVE VECTOR
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.48-P.54 (1971)
THEORY-OF-SOLIDS ., LYDDANE-SACHS-TELLER RELATIONS/ FINI
TE WAVE VECTOR
- 71-BU-03 BUYERS, W.J.L./ HOLDEN, T.M./ SVENSSON, E.C./ COWL
EY, R.A./ HUTCHINGS, M.T.
EXCITATIONS IN K.CO.F3 -2, THEORETICAL
J. PHYS., C, LONDON, V.4, P.2139-P.2159 (1971)
K.CO.F3 ., THEORY/ MAGNON DISPERSION/ PHONON-MAGNON INTE
RACTION
- 71-CA-01 CALTIER, M./ MONTANER, A.
DISPERSION CURVES OF ALKALINE EARTH OXIDES WITH NA,CL S
TRUCTURE
PHONON, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCIEN
CE, FRANCE, P.59-P.63 (1971)
MG.O/ CA.O/ SR.O/ BA.O ., THEORY/ PHONON DISPERSION
- 71-CA-02 CARABATOS, C./ HENNION, B./ KUNC, K./ MOUSSA, F./
SCHWAB, C.

NORMAL MODES OF VIBRATIONS IN CU₂CL
PHYS. REV. LETT., V.26, P.770-P.772 (1971)
CU₂CL ..EXPERIMENT/ PHONON DISPERSION CURVES/ ROOM TEMP

71-CA-03 CARABTOS, C./ PREVOT, B.
RIGID ION MODEL LATTICE DYNAMICS OF CUPRITE (CU₂O)
PHYS. STATUS SOLIDI B, V.44, P.701-P.712 (1971)
CU₂O ..THEORY/ PHONON DISPERSION/ RIGID ION MODEL/ PHO
NON SPECTRUM

71-CH-01 CHATURVEDI, D.K./ BAIJAL, J.S.
NON-GAUSSIAN EFFECTS IN THERMAL-NEUTRON SCATTERING IN L
IQUID ARGON
J. PHYS. SOC. JAP., V.31, P.1162-P.1167 (1971)
AR ..THEORY/ SPACE-TIME CORRELATION FUNCTION/ NON-GAUSS
IAN EFFECT

71-CH-02 CHEN, Y/ STEELE, W.A.
STATISTICAL MECHANICS OF LINEAR MOLECULES. VI. SOLUTION
S OF THE PERCUS YEVICK INTEGRAL EQUATION FOR A HARD-COR
E MODEL
J. CHEM. PHYS., V.54, P.703-P.710 (1971)
THEORY-OF-SOLIDS ..THEORY/ MOLECULAR DYNAMICS/ LINIER M
OLECULE

71-CH-03 CHIHARA, J./ SASAKI, K./ OBATA, Y.
EQUIVALENCE OF THREE KINETIC METHODS FOR CALCULATING TH
E SPACE-TIME CORRELATION FUNCTION
J. PHYS. SOC. JAP., V.31, P.1323-P.1328 (1971)
THEORY-OF-FLUIDS ..THEORY/ SPACE-TIME CORRELATION FUNCT
ION/ VLASOV-BOLTZMANN EQUATION

71-CH-04 CHODOS, S.L.
LATTICE DYNAMICS OF CA₂U.BR6
PHONONS. (ED. BY NUSIMOVICI, M.A.). FLAMMARION SCI
ENCE, FRANCE, P.69-P.73 (1971)
CS₂U.BR6 ..THEORY/ PHONON DISPERSION

71-CO-01 COUCH, J.G./ HARLING, O.K./ CLUNE, L.C.
STRUCTURE IN THE NEUTRON SCATTERING SPECTRA OF ZIRCONIU
M HYDRIDE
PHYS. REV. B, V.4, P.2675 (1971)
ZR-H ..EXPERIMENT/ SOLID/ SIGMA(E,E-PRIME,THETA)

71-CO-02 COWLEY, R.A./ WOODS, A.D.B.
INELASTIC SCATTERING OF THERMAL NEUTRONS FROM LIQUID HE
LIUM
CAN, J. PHYS., V.49, P.177-P.200 (1971)
HE ..EXPERIMENT/ LIQUID/ PHONON DISPERSION

71-CO-03 COWLEY, E.R.

LATTICE VIBRATIONS IN DEUTERATED AMMONIUM CHLORIDE AT 8
5 DK, 11, THEORETICAL.
PHYS. REV. B, V.3, P.2743 (1971)
AMMONIUM CHLORIDE ..THEORY/ DISPERSION RELATION/ LATTIC
E DYNAMICS

71-CO-04 COX, D.E./ MINKIEWICZ, V.J.
A REDETERMINATION OF THE COHERENT NEUTRON SCATTERING AM
PLITUDE OF CS
ACTA CRYSTALLOGR., V.27A, P.494 (1971)
CS ..EXPERIMENT/ SCATTERING AMPLITUDE

71-DA-01 DAY, D.H./ SINCLAIR, R.N.
STUDIES OF VIBRATION SPECTRA OF BOUND HYDROGEN ATOMS US
ING A PULSED NEUTRON SOURCE
AERE-R-6717 (1971)
ZR-H/ H₂O/ C₆H₇N/ NA,N,H₂ ..EXPERIMENT/ TOF SPECTRA/
PULSED NEUTRON SOURCE

71-DA-02 DAY, D.H./ SINCLAIR, R.N.
STUDIES OF VIBRATION SPECTRA OF BONDED HYDROGEN ATOMS U
SING A PULSED NEUTRON SOURCE
J. CHEM. PHYS., V.55, P.2807-P.2811 (1971)
ZR-H/ H₂O/ SODAMIDE/ ANILINE ..EXPERIMENT/ MOLECULAR D
YNAMICS/ LINAC PULSED NEUTRON SOURCE

71-DE-01 DEWETTE, F.W./ FOWLER, L.H.
LATTICE DYNAMICS. THERMAL EXPANSION AND SPECIFIC HEAT O
F A LENNARD-JONES SOLID IN THE QUASI-HARMONIC APPROXIMA
TION
PHYSICA, V.54, P.292 (1971)
AR ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION F
UNCTION ..THERMAL EXPANSION/ SPECIFIC HEAT

71-DE-02 DEMPSTER, A.B./ ZERBI, G.
LATTICE DYNAMICS OF METHANOL HYDROGEN BONDING AND INFR
ARED ABSORPTION
J. CHEM. PHYS., V.54, P.3600 (1971)
METHANOL ..THEORY/ EXPERIMENT/ LATTICE DYNAMICS

71-DE-03 DENIZ, U.K./ JANNIK, G./ TAUPIN, D.
NEUTRON SCATTERING BY SMALL CHAINLIKE MOLECULES DISPERS
ED IN C.S₂
J. CHEM. PHYS., V.55, P.2384-P.2390 (1971)
ETHYL ETHER-CARBON DISULFIDE/ DIETHYL DIETHYLENE GLYCOL
-CARBON DISULFIDE ..THEORY/ EXPERIMENT/ QUASI-ELASTIC P
EAK/ KRIEGER,NELKIN MODEL ..CHAIN LIKE MOLECULE

71-DE-04 DESAI, R.C.
SINGLE-PARTICLE MOTION IN SIMPLE CLASSICAL LIQUIDS
PHYS. REV. A, V.3, P.320-P.328 (1971)
THEORY-OF-FLUIDS ..THEORY/ CLASSICAL LIQUID/ SINGLE-PAR

TITLE MOTION

- 71-DE-05 DEVINE, S./ PECKHAM, G.
GROUP THEORETICAL SELECTION RULES FOR INELASTIC NEUTRON
SCATTERING WITH APPLICATIONS TO LI₂NB₂O₃
J. PHYS., C, LONDON, V.4, P.1091 (1971)
- LI₂NB₂O₃ ..THEORY/ GROUP THEORY/ INELASTIC NEUTRON SCAT
TERING
- 71-DI-01 DIETERICH, W./ SCHUSTER, H.
THEORETICAL INTERPRETATION OF NEUTRON SCATTERING EXPERI
MENTS IN V₃SI
PHYS. LETT., A, V.35, P.48-P.49 (1971)
- V₃SI ..THEORY/ PHONON DISPERSION/ SOFT PHONON
- 71-DO-01 DORNER, B./ EGGER, H.
ELASTIC CONSTANTS OF ARGON AT 4.2DK FROM PHONON MEASURE
MENTS
PHYS. STATUS SOLIDI B, V.43, P.611-P.617 (1971)
- AR ..EXPERIMENT/ PHONON DISPERSION/ SOUND VELOCITY/ ELA
STIC CONSTANT
- 71-DR-01 DREXEL, W.
LATTICE DYNAMICS OF SILVER
KFK-1393 (1971)
- AG ..EXPERIMENT/ PHONON DISPERSION
- 71-DZ-01 DZYUB, I.P./ KOCHMARSKY, V.Z.
INELASTIC SCATTERING OF SLOW NEUTRONS IN IMPERFECT CRYST
ALS 1. COHERENT EFFECTS DUE TO THE LOCALIZED VIBRATION
S OF SUBSTITUTIONAL ATOMS
ITP-71-43P (1971)
- NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ LOCALIZED VIBRAT
ION/ NUMERICAL CALCULATION
- 71-EG-01 EGELSTAFF, P.A./ PAGE, D.I./ HEARD, C.R.T.
EXPERIMENTAL STUDY OF THE TRIPLET CORRELATION FUNCTION
FOR SIMPLE LIQUIDS
J. PHYS., C, LONDON, V.4, P.1453-P.1465 (1971)
- RB/ AR/ C.CL4 ..EXPERIMENT/ TRIPLET CORRELATION FUNCTIO
N/ THEORY
- 71-EG-02 EGELSTAFF, P.A./ PAGE, D.I./ POWLES, J.G.
ORIENTATIONAL CORRELATIONS IN MOLECULAR LIQUIDS BY NEUT
RON SCATTERING, CARBON TETRACHLORIDE AND GERMANIUM TETRA
BROMIDE
MOL. PHYS., V.20, P.881 (1971)
- C.CL4/ GE.BR4 ..EXPERIMENT/ MOLECULAR LIQUID DYNAMICS
- 71-EL-01 ELCOMBE, M.M./ PRYOR, A.W.
THE LATTICE DYNAMICS OF CALCIUM FLUORIDE
J. PHYS., C, LONDON, V.4, P.492 (1971)

CA, F2 ..EXPERIMENT/ PHONON DISPERSION

- 71-ER-01 ERNST, M./ SCHELLEN, J./ SCHMATZ, W.
NEUTRON SMALL-ANGLE SCATTERING STUDY OF THE TRANSITION
FROM SINGLE- TO MULTI-DOMAIN BEHAVIOUR IN PRECIPITATIONS
OF CU-1 PER CENT CO
PHYS. STATUS SOLIDI A, V.7, P.477-P.483 (1971)
- CU-CO/ MAGNETIC-SCATTERING/ SCATTERING-BY-DEFECTS ..EXP
ERIMENT/ SMALL ANGLE SCATTERING/ PRECIPITATION/ CU99-CO
1
- 71-ER-02 ERNST, G.
PRESSURE DEPENDENT FREQUENCY-SHIFT OF PHONONS IN SODIUM
MEASURED BY INELASTIC NEUTRON SCATTERING
ACTA PHYS. AUSTRI., V.33, P.27 (1971)
- NA ..EXPERIMENT/ PHONON FREQUENCY/ PRESSURE EFFECT
- 71-ES-01 ESCH, L.J./ YEATER, M.L./ MOORE, W.E./ SEEMANN, K.
W.
THE TEMPERATURE DEPENDENCE OF NEUTRON INELASTIC SCATTER
ING FROM WATER
NUCL. SCI. ENG., V.46, P.223-P.235 (1971)
- H₂O ..EXPERIMENT/ DIFFERENTIAL CROSS SECTION/ 27, 170,
270C/ LINAC
- 71-FE-01 FELDkamp, L.A./ STEINMAN, D.K./ VAGELATOS, N./ KIN
G, J.S./ VENKATARAMAN, G.
LATTICE DYNAMICS OF CUBIC ZINC SULFIDE BY NEUTRON SCATT
ERING
J. PHYS. CHEM. SOLIDS, V.32, P.1573-P.1583 (1971)
- ZN, S ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING
- 71-FI-01 FISHER, I.Z.
THE HYDRODYNAMIC ASYMPTOTIC BEHAVIOR OF THE VELOCITY AD
TOCORRELATION FUNCTION FOR A MOLECULE IN A CLASSICAL FL
UID
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.61 (V.34
) , P.1647-P.1659 (P.878-P.884) (1971 (1972))
- THEORY-OF-FLUIDS ..VELOCITY CORRELATION
- 71-FR-01 FRIKKEE, E.
INTERACTION BETWEEN ELECTRON, MAGNONS AND PHONONS IN NI
CKEL
RCN-140 (1971)
- NI ..EXPERIMENT/ SOLID/ TOF/ DISPERSION RELATION ..META
L
- 71-GH-01 GHEORGHE, D./ RAPEANU, S./ STEFAN, H.
PROGRAM FOR COMPUTING OF THE SCATTERING CROSS-SECTION I
N HEAVY WATER
IFA-DNBR-3 (1971)
- D2.O ..SCATTERING LAW / COMPUTER CODE

- 71-GI-01 GILLESSEN, P./BIEM, W.
THEORY OF PHONON DAMPING IN SOLID HELIUM
Z. PHYS., V.242, P.250-P.261 (1971)
HE ..THEORY/ PHONON DAMPING/ SOLID HE
- 71-GI-02 GILLIS, N.S.
SOME ASPECTS OF COVALENT BONDING IN NaCl STRUCTURE CRY
STALS. APPLICATION TO THE LATTICE DYNAMICS OF MgO
PHYS. REV. B, V.3, P.1482-P.1496 (1971)
MgO ..THEORY/ LATTICE VIBRATION
- 71-GI-03 GILLIS, N.S./ KOEHLER, T.R.
ANHARMONIC INTERACTIONS IN ALUMINUM. 2.
PHYS. REV., V.3, P.3568 (1971)
AL ..THEORY
- 71-GL-01 GLYDE, H.R./ KHANNA, F.C.
LATTICE DYNAMICS AND SHORT RANGE CORRELATIONS IN B.C.C.
HE(A-3)
CAN. J. PHYS., V.49, P.2999 (1971)
HE ..THEORY
- 71-GO-01 GOBEAU, J./ HEURET, M.
CALCULATIONS OF PHONON DISPERSION CURVES ON CADMIUM FLU
ORIDE
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
E. FRANCE, P.94-P.98 (1971)
CD,F2 ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA
- 71-GO-02 GOTOH, Y./ TAKAHASHI, H.
SLOW-NEUTRON SCATTERING BY LIGHT AND HEAVY WATER
NUCL. SCI. ENG., V.45, P.126 (1971)
H2,O/ D2,O ..FREQUENCY DISTRIBUTION/ SCATTERING LAW
- 71-GR-01 GREENFIELD, A.J./ WISER, N.
THE LOW- θ REGION OF THE STRUCTURE FACTOR FOR LIQUID MET
ALS
PHYS. LETT., A, V.34, P.123-P.124 (1971)
NA/ PB ..EXPERIMENT/ STRUCTURE FACTOR ..X-RAY DIFFRACTI
ON
- 71-GU-01 GUPTA, H.C./ TRIPATHI, B.B.
LATTICE DYNAMICS OF LITHIUM USING A PSEUDOPOTENTIAL APP
ROACH
J. PHYS., F. LONDON, V.1, P.12-P.18 (1971)
LI ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT/ COMPR
ESSIBILITY
- 71-GU-02 GUPTA, R.K./ GUPTA, N.P.
THE EFFECT OF ZERO-POINT ANHARMONICITY ON THE VIBRATION
AL PROPERTIES OF HEAVY RARE-GAS SOLIDS
- NUOVO CIM., B, V.6, P.29-P.36 (1971)
AR/ KR/ XE ..THEORY/ PHONON DISPERSION AND SPECTRA/ ANH
ARMONIC POTENTIAL
- 71-GU-03 GUPTA, H.C./ TRIPATHI, B.B.
LATTICE DYNAMICS OF LEAD. A PSEUDOPOTENTIAL APPROACH
PHYS. STATUS SOLIDI B, V.45, P.237-P.241 (1971)
PB ..THEORY/ PHONON DISPERSION/ ELASTIC PROPERTIES/ PSE
UDOPOTENTIAL
- 71-GU-04 GUPTA, H.G./ TRIPATHI, B.B.
LATTICE DYNAMICS OF LEAD. AN ELASTIC FORCE MODEL APPROA
CH
PHYS. STATUS SOLIDI B, V.45, P.235-P.239 (1971)
PB ..THEORY/ PHONON DISPERSION
- 71-HA-01 HALL, C./ MATTEW, J.A.D.
THE EFFECT OF LATTICE VIBRATIONS ON ORDER-DISORDER TRAN
SFORMATIONS IN BINARY ALLOYS
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.304-P.307 (1971)
THEORY-OF-SOLIDS ..LATTICE VIBRATION/ ORDER-DISORDER TR
ANSFORMATION/ BINARY ALLOY
- 71-HA-02 HAMA, J./ NAKAMURA, T.
ROTATIONAL CORRELATION FUNCTION OF SPHERICAL ROTORS AND
NEUTRON SCATTERING
PROGR. THEORET. PHYS., KYOTO, V.46, P.1666-P.1689
(1971)
NEUTRON-SCATTERING-IN-FLUIDS/ METHANE ..THEORY/ MOLECUL
E/ GAS/ ROTATIONAL CORRELATION/ CROSS SECTION
- 71-HA-03 HANKE, W.
MODIFIED SHELL MODEL TREATMENT OF PHONONS IN NOBLE AND
TRANSITION METALS
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.294-P.298 (1971)
NI ..THEORY/ METAL/ MODIFIED SHELL
- 71-HA-04 HARADA, J./ AXE, J.D./ SHIRANE, G.
NEUTRON SCATTERING STUDY OF SOFT MODES IN CUBIC BaTiO
3
PHYS. REV. B, V.4, P.155 (1971)
Ba,TiO3 ..EXPERIMENT/ DISPERSION RELATION/ SOFT OPTIC P
HONON/ TEMPERATURE CHANGE/ MODE INTERACTION/ COUPLED PHO
NON MODEL
- 71-HA-05 HARLING, O.K.
HIGH-ENERGY NEUTRON SCATTERING MEASUREMENTS ON LIQUID H
ELIUM AND BOSE CONDENSATION IN HE II
PHYS. REV. A, V.3, P.1073 (1971)
HE ..DYNAMICS OF LIQUID

- 71-HA-06 HARRYMAN, M.B.M./ REYNOLDS, P.A./ WHITE, J.W.
DENSITY OF STATES MEASUREMENTS FOR PHONONS IN AROMATIC
CRYSTALS
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.209-P.222 (1971)
REVIEW-ARTICLES ..DENSITY OF STATES/ PHONON/ AROMATIC C
RYSTAL
- 71-HA-07 HAYWOOD, B.C./ COLLINS, M.F.
OPTICAL PHONONS IN MN.O
J. PHYS., C, LONDON, V.4, P.1299-P.1305 (1971)
MN.O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTI
NG
- 71-HE-01 HENNION, B./ MOUSSA, F./ PEPEY, G./ KUNC, K.
NORMAL MODES OF VIBRATIONS IN ZN,SE
PHYS. LETT., A, V.36, P.376-P.378 (1971)
ZN,SE ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ P
HONON DENSITY
- 71-HO-01 HOLDEN, T.M./ BUYERS, W.J.L./ SVENSSON, E.C./ COWL
EY, R.A./ HUTCHINGS, M.T.//
EXCITATIONS IN K.CO.F3 -1. EXPERIMENTAL
J. PHYS., C, LONDON, V.4, P.2127-P.2138 (1971)
K.CO.F3 ..EXPERIMENT/ PHONON DISPERSION/ MAGNON DISPERS
ION
- 71-HO-02 HOUK, T.L./ SHAMBROOM, D./ WILSON, R.
CROSS SECTION OF SLOW NEUTRONS ON PARAHYDROGEN
PHYS. REV. LETT., V.26, P.1581-P.1585 (1971)
H ..EXPERIMENT/ PARAHYDROGEN/ SCATTERING LENGTH
- 71-HU-01 HUELLER, A.
MANY BODY FORCES AND ELASTIC CONSTANTS OF RARE GAS CRYSTALS
JUL-754-FF (1971)
THEORY-OF-SOLIDS/ ARGON/ KRYPTON/ XENON ..CAUCHY-RELATI
ON
- 71-IS-01 ISHIBASHI, Y./ TAKAGI, Y.
FORCE CONSTANTS IN BA.TI.O3 AND SR.TI.O3
J. PHYS. SOC. JAP., V.31, P.1712-P.1718 (1971)
BA.TI.O3/ SR.TI.O3 ..THEORY/ CALCULATION/ FORCE CONSTAT
ANALYSIS
- 71-JA-01 JAIN, S.C./ BHANDARI, R.C.
MEMORY EFFECTS AND DYNAMICAL CORRELATIONS IN LIQUID ARGON AND SODIUM
PHYSICA, V.52, P.393-P.409 (1971)
AR/ NA ..THEORY/ MEMORY FUNCTION/ LIQUID DYNAMICS
- 71-JA-02 JANIK, J.M./ JANIK, J.A./ PYTASZ, G./ WASIUTYNSKI, I.
TORSIONAL VIBRATIONS OF H2.O MOLECULES IN CRYSTALLINE L
I2.S.O4*(H2.O)
PHYS. STATUS SOLIDI, V.44, P.497 (1971)
LI2.S.O4*H2.O ..INELASTIC SCATTERING SPECTRA/ H2.O IN CR
YSTAL
- 71-JA-03 JANIK, J.A./ JANIK, J.M./ OTNES, K./ RISTE, T.
ANISOTROPY OF SELF-DIFFUSION IN A LIQUID CRYSTAL STUDIE
D BY NEUTRON QUASIELASTIC SCATTERING
MOL. CRYST. LIQ. CRYST., V.15, P.189-P.195 (1971)
PAA ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ NEMATIC PHA
SE/ DIFFUSION COEFFICIENT
- 71-JE-01 JEX, H.
LATTICE DYNAMICS OF N.D4.CL
PHYS. LETT., A, V.34, P.118-P.119 (1971)
N.H4.CL ..THEORY/ DISPERSION RELATION
- 71-JE-02 JEX, H.
LATTICE DYNAMICS OF N.H4.CL AND N.D4.CL
SOLID STATE COMMUN., V.9, P.2057 (1971)
N.H4.CL ..THEORY/ DISPERSION RELATION/ FREQUENCY DISTRI
BUTION FUNCTION
- 71-JE-03 JEX, H.
ANHARMONIC INTERACTIONS IN DIAMOND-TYPE CRYSTALS
PHYS. STATUS SOLIDI B, V.45, P.343-P.355 (1971)
DIAMOND/ GE/ SI ..THEORY/ PHONON DISPERSION/ THERMAL PR
OPERTIES/ ANHARMONIC INTERACTION
- 71-KA-01 KATIYAR, R.S.
LATTICE DYNAMICS OF RUTILE USING SHELL MODEL
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.84-P.88 (1971)
TI.O2 ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ S
HELL MODEL
- 71-KA-02 KATIYAR, R.S./ DAWSON, P./ HARGREAVE, M.M./ WILKIN
SON, G.R.
DYNAMICS OF THE RUTILE STRUCTURE III
J. PHYS., C, LONDON, V.4, P.2421-P.2431 (1971)
SN.O2 ..EXPERIMENT/ INFRARED/ RAMAN/ OPTICAL FREQUENCY/
DIELECTRIC CONSTANT/ THEORY/ DISPERSION CURVE
- 71-KI-01 KIM, K./ NELKIN, M.
SELF-DIFFUSION MODEL FOR MEMORY FUNCTION IN CLASSICAL F
LUIDS
PHYS. REV. A, V.4, P.2065-P.2075 (1971)
NEUTRON-SCATTERING-IN-FLUIDS ..MORI-METHOD

- 71-KI-02 KING-III, W.F./ CUTLER, P.H.
LATTICE DYNAMICS OF MAGNESIUM FROM A FIRST-PRINCIPLES N
ON-LOCAL PSEUDOPOTENTIAL APPROACH
PHYS. REV. B, V.3, P.2485 (1971)
MG ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATIO
N ..METAL/ PSEUDOPOTENTIAL
- 71-KI-03 KISTNER, G./ RUBIN, R./ SOSNOWSKA, I.
ANISOTROPIC DIFFUSION OF HYDROGEN IN NIOBIUM SINGLE CRY
STALS
PHYS. REV. LETT., V.27, P.1576 (1971)
NB-H ..HYDROGEN DIFFUSION
- 71-KL-01 KLEIN, M.L./ BARKER, J.A./ KOEHLER, T.R.
LATTICE DYNAMICS OF FCC ARGON WITH THREE-BODY FORCE
PHYS. REV. B, V.4, P.1983-P.1990 (1971)
THEORY-OF-SOLIDS/ AR ..4DK/ 40DK/ 77DK
- 71-KL-02 KLEIN, M.
THEORY OF THE PHONON SPECTRUM OF THE BETA-TUNGSTEN COMP
OUNDS
- PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.299-P.303 (1971)
THEORY-OF-SOLIDS ..THEORY/ PHONON SPECTRUM/ BETA-TUNGST
EN COMPOUNDS
- 71-KO-01 KONTI, A.
LATTICE DYNAMICS AND THERMODYNAMIC PROPERTIES OF PLATIN
UM
J. CHEM. PHYS., V.55, P.3997-P.4000 (1971)
PT ..THEORY/ ANGULAR FORCE MODEL/ DISPERSION CURVE/ FRE
QUENCY SPECTRA/ DEBYE-WALLER FACTOR/ DEBYE TEMP.
- 71-KO-02 KORSUNSKII, M.I./ GENKIN, Y.E./ MARKOVIN, V.I./ Z
AVODINSKII, V.G./ SATSUK, V.V.
DISPERSION RELATIONSHIP FOR THE PHONON SPECTRUM OF NIOB
IUM IN THREE HIGH SYMMETRY DIRECTIONS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.13 (V
.13), P.2138-P.2140 (P.1793-P.1795) (1971 (1972))
NB ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL
- 71-KU-01 KUNC, K./ BALKANSKI, M./ NUSIMOVICI, M.A.
DEFORMABLE BOND MODEL AND IONICITY OF ZINC-BLENDE STRUC
TURE COMPOUNDS
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.109-P.114 (1971)
ZN,SE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTANT/ DE
FORMABLE BOND MODEL
- PHYS. LETT., A, V.37A, P.193 (1971)
BE/ TL ..NON-CENTRAL FORCE MODEL
- 71-KU-03 KUSHWAHA, S.S./ RAJPUT, J.S.
LATTICE VIBRATIONS OF ZINC
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.290-P.293 (1971)
ZN ..THEORY/ PHONON DISPERSION/ HEXAGONAL METAL
- 71-KU-04 KUSHWAHA, S.S./ SINGH, O.N.
LATTICE VIBRATIONS FOR BODY CENTERED CUBIC METALS
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.287-P.293 (1971)
THEORY-OF-SOLIDS/ CS ..THEORY/ PHONON DISPERSION
- 71-KU-05 KUSHWAHA, S.S./ RAJPUT, J.S.
PHONON DISPERSION RELATIONS FOR THALLIUM
J. PHYS., F, LONDON, V.1, P.377-P.381 (1971)
TL ..CALCULATION/ KREB MODEL/ PHONON DISPERSION/ DEBYE
TEMP.
- 71-LA-01 LARSSON, K.E.
ROTATIONAL MOLECULAR MOTION AND THE TRANSIENT NATURE OF
LIQUIDS AS SEEN BY SLOW-NEUTRON SCATTERING
PHYS. REV. A, V.3, P.1006-P.1022 (1971)
NEUTRON-SCATTERING-IN-FLUIDS ..QUASI-ELASTIC-PEAK/ THEO
RY ..UNCORRELATED TRANSLATIONAL AND ROTATIONAL MOTION
- 71-LE-01 LEIGH, R.S./ SZIGETI, B./ TEWARY, V.K.
FORCE CONSTANTS AND LATTICE FREQUENCIES
PROC. ROY. SOC., LONDON, SER. A, V.320, P.505-P.52
6 (1971)
THEORY-OF-SOLIDS ..THEORY/ FORCE CONSTANT/ PHONON FREQU
ENCY
- 71-LE-02 LENK, R./ SOLBRIG, H.
MULTIPLE SCATTERING OF THERMAL NEUTRONS BY A PERFECT CR
YSTAL 1 GENERAL FOUNDATION
PHYS. STATUS SOLIDI B, V.46, P.273-P.282 (1971)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MULTIPLE SCATTER
ING/ PERFECT CRYSTAL
- 71-LO-01 LOGAN, K.W./ TREVINO, S.F./ CASELLA, R.C./ SHAW, W
M./ MUHLESTEIN, L.D./
THE LATTICE DYNAMICS OF NA,N.O3
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.104-P.108 (1971)
NA,N.O3 ..EXPERIMENT/ PHONON DISPERSION
- 71-LO-02 LOVESEY, S.W.
DENSITY FLUCTUATIONS IN CLASSICAL MONATOMIC LIQUIDS
J. PHYS., C, LONDON, V.31, P.3057-P.3064 (1971)

THEORY-OF-FLUIDS/ AR ., TRIPLE-PEAK-STRUCTURE

71-LO-03 LOVESEY, S.W.

DENSITY FLUCTUATIONS IN CLASSICAL MONATOMIC LIQUIDS

PHYS. LETT., A, V.36, P.413-P.414 (1971)

THEORY-OF-FLUIDS ., LIQUID/ DENSITY RESPONSE FUNCTION

71-LU-01 LURIE, N.A./ CARPENTER, J.M.

LOW-ENERGY NEUTRON SCATTERING FROM HYDROGEN CHLORIDE

J. CHEM. PHYS., V.54, P.5193-P.5196 (1971)

H,CL ., EXPERIMENT/ THEORY/ GAS STATE/ SCATTERING SIGMA

71-LU-02 LURIE, N.A./ DANNER, H.R.

ON THE VIBRATIONAL SPECTRA OF CARBOXYLIC ACIDS BY NEUTR

ON SPECTROSCOPY

J. CHEM. PHYS., V.55, P.5740 (1971)

CARBOXYLIC ACID ., VIBRATIONAL SPECTRA/ LIQUID DYNAMICS/

DISPERSION RELATION

71-MA-01 MAELAND, A.J./ HOLMES, D.E.

INELASTIC NEUTRON SCATTERING FROM LANTHANUM DIHYDRIDE A

ND LANTHANUM TRIHYDRIDE

J. CHEM. PHYS., V.54, P.3979-P.3982 (1971)

LANTHANUM HYDRIDE ., EXPERIMENT/ FREQUENCY SPECTRA

71-MA-02 MAELAND, A.J./ HOLMES, D.E.

INELASTIC NEUTRON SCATTERING SPECTRA FROM LANTHANUM DIH

YDRIDE AND LANTHANUM TRIHYDRIDE

J. CHEM. PHYS., V.54, P.3979 (1971)

LA-H ., INELASTIC SCATTERING SPECTRA

71-MA-03 MAHLER, G./ SCHROEDER, U.

LATTICE DYNAMICS OF CESIUM HALIDES

PHONONS, (ED. NUSIMOVICI, M.A.), FLAMMARION SCIENC

E, FRANCE, P.89-P.93 (1971)

CS,BR/ CS,CL ., THEORY/ PHONON DISPERSION

71-MA-04 MAIR, S.L./ BARNEA, Z.

NEUTRON DIFFRACTION STUDY OF ANHARMONIC VIBRATIONAL EFF

ECTS IN STRONTIUM FLUORIDE

PHYS. LETT., V.35A, P.286 (1971)

SR,F2 ., ANHARMONIC EFFECT

71-MA-05 MALISZEWSKI, E.F./ SOSNOWSKI, J./ CZACHOR, A.

LATTICE DYNAMICS OF THE PD-1 PERCENT FE ALLOY

J. PHYS., F, LONDON, V.1, P.339-P.344 (1971)

PD-FE ., EXPERIMENT/ PHONON DISPERSION/ FORCE CONSTANT A

NALYSIS

71-MA-06 MARSHALL, W./ LOVESEY, S.W.

THEORY OF THERMAL NEUTRON SCATTERING

OXFORD AT THE CLARENDON PRESS (1971)

SCATTERING-THEORIES ., THEORY/ CORRELATION FUNCTION/ PHO

NON/ MAGNETIC/ SPIN WAVE/ LIQUID/ GAS/ CRITICAL/ DIFFUS

E/ DEFECT

71-MC-01 MCKENZIE, D.R./ PRYOR, A.W.

LATTICE DYNAMICS OF UREA

J. PHYS., C, LONDON, V.4, P.2304-P.2312 (1971)

UREA ., THEORY/ PHONON DISPERSION

71-MC-02 McMULLAN, J.T./ HOGAN, J.N.

COMMENT ON THE LATTICE DYNAMICS OF HEXAMETHYLENETETRAMI

NE

J. CHEM. PHYS., V.10, P.5142-P.5144 (1971)

HEXAMETHYLENETETRAMINE ., THEORY/ LATTICE DYNAMICS/ DISP

ERSION CURVE/ SOLID/ MOLECULAR CRYSTAL

71-MJ-01 MILLER, A.P./ BROCKHOUSE, B.N.

CRYSTAL DYNAMICS AND ELECTRONIC SPECIFIC HEATS OF PALLA

DIUM AND COPPER

CAN, J. PHYS., V.49, P.704-P.723 (1971)

PD/ CU ., EXPERIMENT/ CALCULATION/ NEUTRON SCATTERING/ D

ISPERSION CURVE/ FREQUENCY SPECTRUM/ TEMPERATURE DEPEND

ENCE/ SPECIFIC HEAT

71-MJ-02 MILLINGTON, A.J./ SQUIRES, G.L.

MEASUREMENTS OF THE FREQUENCIES OF THE NORMAL MODES IN

SODIUM

J. PHYS., F, LONDON, V.1, P.545 (1971)

NA ., EXPERIMENT/ PHONON DISPERSION

71-MO-01 MOSCINSKI, J./ NAWALANY, M.

MONTE CARLO RADIAL DISTRIBUTION FUNCTIONS FOR A HARD SP

HERE MODEL OF LIQUID CU

PHYS. LETT., A, V.37, P.57-P.58 (1971)

THEORY-OF-FLUIDS/ CU

71-MU-01 MURTAZIN, I.A.

LATTICE VIBRATIONS WITH A RANDOM DISTRIBUTION OF INTER

STITIAT IMPURITIES

FIZ, TVERD, TELA (SOV. PHYS.,-SOLID STATE), V.13 (V

,13), P.141-P.145 (P.112-P.115) (1971 (1971))

THEORY-OF-SOLIDS/ NEUTRON-SCATTERING-IN-SOLIDS ., THEORY

/ INTERSTITIAL IMPURITIES/ TWO-TIME GREEN FUNCTION

71-MU-02 MUSIMOVICI, M.A.

PHONONS

FLAMMARION SCIENCES, PARIS (1971)

REVIEW-ARTICLES ., PROCEEDING OF THE INTERNATIONAL CONFE

RENCE, RENNES, FRANCE, 1971

71-NA-01 NAKAHARA, Y.

THERMAL NEUTRON SCATTERING FROM SIMPLE LIQUID METALS

- J. NUCL. SCI., TECHNOL., TOKYO, V.8, P.1-P.15 (1971)
NEUTRON-SCATTERING-IN-FLUIDS/ NA .THEORY/ SCATTERING SIGMA/ LIQUID METAL
- 71-NA-02 NAMJOSHI, K.V./ MITRA, S.S./ VETELINO, J.F.
RIGID ION MODEL OF LATTICE DYNAMICS - A RE-EVALUATION
SOLID STATE COMMUN., V.9, P.185-P.189 (1971)
THEORY-OF-SOLIDS/ NA.F/ NA.CL .LATTICE DYNAMICS/ DISPER
SION RELATION/ RIGID ION MODEL USING AN EFFECTIVE ION
C CHARGE
- 71-NA-03 NAMJOSHI, K.V./ MITRA, S.S.
AN ALL PURPOSE LATTICE DYNAMICAL MODEL FOR ALKALI HALID
ES, THE BREATHING SHELL MODEL
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.79-P.83 (1971)
NA.BR .THEORY/ PHONON DISPERSION/ BREATHING SHELL MODE
L
- 71-NI-01 NICKLOW, R.M./ WAKABAYASHI, N./ VIJAYARAGHAVAN, P.
R.
LATTICE DYNAMICS OF HOLMIUM
PHYS, REV, B, V.3, P.1229-P.1234 (1971)
HO .EXPERIMENT/ PHONON DISPERSION CURVES/ FREQUENCY DI
STRIBUTION/ SPECIFIC HEAT/ DEBYE TEMP./ ROOM TEMP.
- 71-NI-02 NIELSEN, M./ MOLLER, H.B.
LATTICE DYNAMICS OF SOLID DEUTERIUM BY INELASTIC NEUTRO
N SCATTERING
PHYS, REV, B, V.3, P.4383-P.4385 (1971)
D .EXPERIMENT/ LATTICE DYNAMICS/ 50K/ DISPERSION RELAT
ION
- 71-NI-03 NIELSEN, M./ MOELLER, H.B.
LATTICE DYNAMICS OF SOLID DEUTERIUM BY INELASTIC NEUTRO
N SCATTERING
PHYS, REV, B, V.3, P.4383-P.4385 (1971)
DEUTERIUM .EXPERIMENT/ ORTHO-DEUTERIUM/ PHONON DISPERS
ION/ SOLID AT 50K/ ELASTIC CONSTANT/ PHONON DENSITY
- 71-NI-04 NIKULIN, V.K./ TSAREV, Y.N.
AB INITIO PSEUDOPOTENTIAL CALCULATION OF PHONON FREQUEN
CIES IN SILVER
PHYS, LETT., A, V.36, P.337 (1971)
AG .CALCULATION/ PHONON FREQUENCY
- 71-NI-05 NILSSON, G./ NELIN, G.
PHONON DISPERSION RELATIONS IN GE AT 800K
PHYS, REV, B, V.3, P.364-P.369 (1971)
GE .EXPERIMENT/ DISPERSION CURVE/ LATTICE DYNAMICS/ 80
DK/ LINE WIDTH
- 71-NI-06 NISHIGORI, T./ SEKIYA, T.
SLOW NEUTRON SCATTERING AND CLASSICAL MEAN-SQUARE DISPL
ACEMENT FUNCTIONS OF ATOMS
J. NUCL. SCI., TECHNOL., TOKYO, V.8, P.406-P.407 (1
971)
NEUTRON-SCATTERING-IN-FLUIDS .THEORY/ SCATTERING SIGMA
/ MEAN-SQUARE DISPLACEMENT
- 71-NI-07 NISHIGORI, T./ SEKIYA, T.
PHONON-TYPE EXPANSION FOR SLOW NEUTRON SCATTERING
J. NUCL. SCI., TECHNOL., TOKYO, V.8, P.319-P.329 (1
971)
NEUTRON-SCATTERING-IN-FLUIDS/ H.CL .THEORY/ SCATTERING
SIGMA/ GAS
- 71-NO-01 NOLTING, W.
SIMPLE MODEL FOR MONOATOMIC CLASSICAL LIQUIDS
Z. PHYS., V.242, P.199-P.209 (1971)
THEORY-OF-FLUIDS/ AL/ AR .THEORY/ VAN-HOVE-CORRELATION
-FUNCTION
- 71-NO-02 NOOLANDI, J.
DETERMINATION OF QUADRUPOLE COUPLING CONSTANT BY NEUTR
ON SCATTERING IN SOLID H2
SOLID STATE COMMUN., V.9, P.1809 (1971)
H2 .THEORY/ SOLID
- 71-O--01 O'REILLY, D.E.
VELOCITY AUTOCORRELATION FUNCTION AND SELF-DIFFUSION IN
LIQUIDS
J. CHEM. PHYS., V.55, P.2876-P.2884 (1971)
THEORY-OF-FLUIDS .VELOCITY-AUTOCORRELATION/ SELF-DIFFU
SION .QUASILATTICE-MODEL
- 71-OT-01 OTNES, K./ RISTE, T./ SHIRANE, G./ FEDER, J.
TEMPERATURE DEPENDENCE OF THE SOFT MODES IN SR.Tl.O3 AB
OVE THE 105 K TRANSITION
SOLID STATE COMMUN., V.9, P.1103-P.1106 (1971)
SR.Tl.O3 .EXPERIMENT/ SOFT PHONON/ CURIE-WEISS LAW/ PH
ASE TRANSITION
- 71-PA-01 PAGE, D.I./ POWLES, J.G.
THE CORRELATION OF MOLECULAR ORIENTATION IN LIQUID WATE
R BY NEUTRON AND X-RAY SCATTERING
MOL. PHYS., V.21, P.901-P.926 (1971)
D2.O .NEUTRON DIFFRACTION/ X-RAY/ STRUCTURE FACTOR/ MO
LECULAR ORIENTATION
- 71-PA-02 PAL, S.
LATTICE VIBRATIONS IN PALLADIUM
J. PHYS., F. LONDON, V.1, P.588-P.592 (1971)

- PD ., CALCULATION/ PHONON DISPERSION/ PHONON DENSITY/ DE
BYE TEMPERATURE
- 71-PA-03 PAWLEY, G.S./ REYNOLDS, P.A./ KJEMS, J.K./ WHITE,
J.W.
A MODEL CALCULATION OF THE INELASTIC NEUTRON SCATTERING
SPECTRA FROM POLYCRYSTALLINE NAPHTHALENE
SOLID STATE COMMUN., V.9, P.1353 (1971)
NAPHTHALENE ., THEORY/ POLYCRYSTAL/ LATTICE DYNAMICS
- 71-PA-04 PAWLEY, G.S./ RINALDI, R.P./ WINDSOR, C.G.
THE LATTICE DYNAMICS OF ORTHORHOMBIC SULPHUR
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.223-P.227 (1971)
S ., THEORY/ EXPERIMENT/ PHONON DISPERSION
- 71-PI-01 PICK, R.M.
MICROSCOPIC THEORY AND SHELL MODEL IN INSULATORS
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.20-P.34 (1971)
THEORY-OF-SOLIDS ., LATTICE DYNAMICS/ MICROSCOPIC THEORY
/ SHELL MODEL/ INSULATORS
- 71-PL-01 PLAKIDA, N.M.
NEUTRON SCATTERING BY HIGHLY ANHARMONIC CRYSTALS (IN RUSSIAN)
JINR-P4-6066 (1971)
NEUTRON-SCATTERING-IN-SOLIDS ., THEORY/ SOLIDS/ LATTICE
DYNAMICS/ ANHARMONICITY/ SCATTERING LAW
- 71-PL-02 PLAKIDA, N.M.
PHONONS IN ANHARMONIC METALS
J. PHYS., C, LONDON, V.4, P.1680-P.1691 (1971)
THEORY-OF-SOLIDS ., THEORY/ ANHARMONIC METAL/ PHONON SPECTRUM
- 71-PL-03 PLIHAL, M./ SCHACK, G.
PHONON DISPERSION IN CRYSTALS OF CALCITE STRUCTURE
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.74-P.78 (1971)
CA.C.03 ., THEORY/ PHONON DISPERSION/ SHELL MODEL
- 71-PR-01 PRAKASH, S./ JOSHI, S.K.
LATTICE DYNAMICS OF TRANSITION METALS-APPLICATION TO PARAMAGNETIC NICKEL
PHYS. REV. B, V.4, P.1770-P.1778 (1971)
N1 ., THEORY/ DISPERSION CURVE/ TWO-BAND MODEL/ HARTREE APPROXIMATION
- 71-PR-02 PRESS, W./ DORNER, B./ STILLER, H.
THE ELASTIC CONSTANTS OF SOLID C.D4 -1. FROM NEUTRON MEASUREMENTS
- SOLID STATE COMMUN., V.9, P.1113-P.1115 (1971)
C.H4 ., EXPERIMENT/ SOLID C.D4/ PHONON DISPERSION
- 71-PR-03 PRESS, W.
NEUTRON SCATTERING EXPERIMENTS ON SOLID C.D4
JUR-738-F (1971)
C.H4 ., EXPERIMENT/ SOLIDS/ LATTICE DYNAMICS/ DISPERSION
RELATION/ MOLECULAR VIBRATIONS
- 71-PR-04 PRICE, D.L./ ROWE, J.M./ NICKLOW, R.M.
LATTICE DYNAMICS OF GREY TIN AND INDIUM ANTIMONIDE
PHYS. REV. B, V.3, P.1268-P.1279 (1971)
SN/ IN.SB ., EXPERIMENT/ PHONON DISPERSION CURVE ., 900K
FOR SN/ 300K FOR IN.SB
- 71-PR-05 PRICE, D.L./ ROWE, J.M.
LATTICE DYNAMICS OF GREY TIN AND INDIUM ANTIMONIDE
PHYS. REV. B, V.3, P.1268-P.1279 (1971)
SN/ IN.SB ., EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL
CALCULATION
- 71-PR-06 PRUEITT, M.L.
COMPUTER SIMULATION OF MOLECULAR DYNAMICS
LA-4696 (1971)
THEORY-OF-FLUIDS ., HYDRODYNAMICS
- 71-RA-01 RAHMAN, A./ STILLINGER, F.H.
MOLECULAR DYNAMICS STUDY OF LIQUID WATER
J. CHEM. PHYS., V.55, P.3336-P.3359 (1971)
H2.O ., COMPUTER SIMULATION/ CORRELATION FUNCTION/ SELF-DIFFUSION/ FREQUENCY SPECTRA
- 71-RA-02 RAICH, J.C./ ETTERS, R.D.
SOFT MODES IN MOLECULAR CRYSTALS
J. CHEM. PHYS., V.55, P.3901 (1971)
THEORY-OF-SOLIDS ., THEORY/ FREQUENCY DISTRIBUTION FUNCTION
ION ., ORIENTATIONAL ORDER DISORDER TRANSITION
- 71-RA-03 RAO, K.R./ DASARUNACHARYA, B.A./ YIP, S.
MULTIPLE SCATTERINGS IN LIQUID METHANE
J. PHYS., C, LONDON, V.4, P.2725-P.2733 (1971)
METHANE ., MULTIPLE SCATTERING/ CALCULATION/ CORRECTION
- 71-RA-04 RAO, K.R./ TREVINO, S.F./ PRASK, H./ MICAL, R.D.
LATTICE DYNAMICS OF K.N3
PHYS. REV. B, V.4, P.4551-P.4555 (1971)
K.N3 ., EXPERIMENT/ PHONON DISPERSION/ RIGID-ION MODEL FITTING
- 71-RA-05 RAO, K.R./ TREVINO, S.F./ PRASK, H.
LATTICE DYNAMICS OF K.N3
PHYS. REV. B, V.4, P.4551-P.4555 (1971)

- K.N3 ..EXPERIMENT/ PHONON DISPERSION/ RIGID ION MODEL C
ALCULATION
- 71-RE-01 REESE, R.A./ SINHA, S.K./ BRUN, T.O./ TILFORD, C.R
PHONON DISPERSION RELATIONS FOR HCP HE-4 AT A MOLAR VOL
UME OF 16CC
PHYS. REV. A, V.3, P.1688-P.1698 (1971)
HE ..EXPERIMENT/ PHONON DISPERSION/ 4.2K/ PHONON DENSIT
Y
- 71-RE-02 RENKER, B.
LATTICE DYNAMICS OF D2.O - ICE IH
PHONONS. (ED. BY NUSIMOVICI, M.A.). FLAMMARION SCI
ENCE, FRANCE, P.167-P.170 (1971)
D2.O ..EXPERIMENT/ ICE/ HEXAGONAL/ PHONON DISPERSION
- 71-RE-03 RENKER, B.
GITTERDYNAMIK VON D2.O-EIS IH
KFK-1497 (1971)
D2.O ..LATTICE DYNAMICS/ SOLID/ THEORY/ EXPERIMENT/ BOR
N-VON KARMAN MODEL/ DISPERSION RELATION/ FREQUENCY DIST
RIBUTION ..ICE
- 71-RI-01 RISTE, T./ SAMUELSEN, E.J./ OTNES, K./ FEDER, J.
CRITICAL BEHAVIOUR OF SR.TI.O3 NEAR THE 105 K PHASE TRA
NSITION
SOLID STATE COMMUN., V.9, P.1455-P.1458 (1971)
SR.TI.O3 ..PHASE TRANSITION/ CRITICAL SCATTERING/ SOFT
PHONON/ CENTRAL PEAK
- 71-RO-01 ROLANDSON, S./ RAUNIO, G.
LATTICE DYNAMICS OF CS.BR
AE-435 (1971)
CS.BR ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITT
ING/ PHONON DENSITY
- 71-RO-02 ROLANDSON, S./ RAUNIO, G.
LATTICE DYNAMICS OF RB.BR
J. PHYS., C, LONDON, V.4, P.958-P.965 (1971)
RB.BR ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITT
ING/ ELASTIC CONSTANT/ DIELECTRIC CONSTANT/ FREQUENCY S
PECTRA
- 71-RO-03 ROLANDSON, S./ RAUNIO, G.
LATTICE DYNAMICS OF CS.BR
PHYS. REV. B, V.4, P.4617-P.4623 (1971)
CS.BR ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITT
ING/ PHONON DENSITY/ DEBYE-TEMP.
- 71-RO-04 ROSCISZEWSKI, K.
INCOHERENT CROSS-SECTION FOR NEUTRON QUASIELASTIC SCATT

- ERING IN A LIQUID CRYSTAL
INP-776/PS (1971)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ INCOHERENT/ QUES
ELASTIC/ LIQUID CRYSTAL
- 71-RO-05 ROWE, J.M./ SKOELD, K./ FLOTOW, H.E./ RUSH, J.J.
QUASIELASTIC NEUTRON SCATTERING BY HYDRO GEN IN THE ALP
HA AND BETA PHASES OF VANADIUM HYDRIDE
J. PHYS. CHEM. SOLIDS, V.32, P.41-P.54 (1971)
PD-H ..EXPERIMENT/ QUASIELASTIC SCATTERING ..DIFFUSIVE
MOTION
- 71-RO-06 ROWELL, J.M./ MCMILLAN, W.L./ FELDMANN, W.L.
SUPERCONDUCTIVITY AND LATTICE DYNAMICS OF WHITE TIN
PHYS. REV. B, V.3, P.4065-P.4073 (1971)
SN ..EXPERIMENT/ ELECTRON TUNNELING/ PHONON SPECTRUM
- 71-RO-07 ROY, A.P.
TEMPERATURE VARIATION OF THE FREQUENCY OF LONGITUDINAL
INTER-PLANAR OSCILLATIONS IN PYROLITIC GRAPHITE
CAN. J. PHYS., V.49, P.277-P.279 (1971)
GRAPHITE ..EXPERIMENT/ TEMPERATURE EFFECT/ PHONON FREQU
ENCY
- 71-SA-01 SAASTAMOINEN, J./ PALMGREN, A.
SCATTERING CROSS-SECTION AT SUBTHERMAL ENERGIES AND GEN
ERALIZED PHONON FREQUENCY SPECTRUM OF ZIRCONIUM HYDRIDE
J. NUCL. ENERGY, V.25, P.189 (1971)
ZR-H ..EXPERIMENT/ SOLID/ SCATTERING CROSS SECTION
- 71-SA-02 SAUNDERSON, D.H./ PECKHAM, G.E.
DISPERSION RELATIONS IN CALCIUM OXIDE BY NEUTRON SPECTR
OSCOPY
PHONONS. (ED. BY NUSIMOVICI, M.A.). FLAMMARION SCI
ENCE, FRANCE, P.171-P.176 (1971)
CA.O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITT
ING
- 71-SA-03 SAUNDERSON, D.H./ PECKHAM, G.E.
THE LATTICE DYNAMICS OF CALCIUM OXIDE
J. PHYS., C, LONDON, V.4, P.2009-P.2016 (1971)
CA.O ..EXPERIMENT/ DISPERSION CURVE/ NEUTRON SCATTERING
/ THEORY/ FREQUENCY SPECTRUM ..TRIPLE AXIS SPECTROMETER/
MG.O COMPARISON
- 71-SC-01 SCHMUCK, P.
A PSEUDOPOTENTIAL CALCULATION OF THE PHONON SPECTRUM OF
ALUMINIUM
Z. PHYS., V.248, P.111 (1971)
AL ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATI
ON ..PSEUDOPOTENTIAL/ OPW METHOD

- 71-SH-01 SHARMA, P.K./ SINGH, N.
PHONON DISPERSION IN NOBLE METALS
PHYS. REV. B, V.4, P.4636-P.4639 (1971)
CU/ AG/ AU ..THEORY/ PHONON DISPERSION/ METAL
- 71-SH-02 SHARP, R.I./ WARMING, E.
THE LATTICE DYNAMICS OF ANTIMONY
J. PHYS., F, LONDON, V.1, P.570-P.587 (1971)
SB ..EXPERIMENT/ PHONON DISPERSION
- 71-SH-03 SHAW, W.M./ MUHLESTEIN, L.D.
INVESTIGATION OF THE PHONON DISPERSION RELATIONS OF CHROMIUM BY INELASTIC NEUTRON SCATTERING
PHYS. REV. B, V.4, P.989-P.973 (1971)
CR ..EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ KOHN EFFECT/ FREQUENCY SPECTRA
- 71-SH-04 SHAW, W.M./ MUHLESTEIN, L.D.
INVESTIGATION OF THE PHONON DISPERSION RELATIONS OF CHROMIUM BY INELASTIC NEUTRON SCATTERING
PHYS. REV. B, V.4, P.969-P.973 (1971)
CR ..EXPERIMENT/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ KOHN ANOMALY
- 71-SH-05 SHIRANE, G./ AXE, J.D./ BIRGENEAU, R.J.
LATTICE DYNAMICAL PHASE TRANSITION IN V₃SI
SOLID STATE COMMUN., V.9, P.397-P.398 (1971)
V₃SI ..EXPERIMENT/ PHONON DISPERSION/ TEMPERATURE DEPENDENCE
- 71-SH-06 SHIRANE, G./ AXE, J.D.
ACOUSTIC-PHONON INSTABILITY AND CRITICAL SCATTERING IN Nb₃SB
PHYS. REV. LETT., V.27, P.1803-P.1806 (1971)
Nb₃SB ..EXPERIMENT/ PHONON DISPERSION/ SOFT PHONON/ PHASE TRANSITION
- 71-SH-07 SHUKLA, M.M./ CAVALHEIRO, R.
THE EXTENDED DE LAUNAY'S MODEL FOR LATTICE DYNAMICS OF CUBIC METALS
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCIENCE, FRANCE, P.313-P.317 (1971)
CU ..THEORY/ METAL/ PHONON DISPERSION/ DE-LAUNAY MODEL
- 71-SI-01 SINGH, N./ SHARMA, P.K.
DEBYE-WALLER FACTORS OF CUBIC METALS
PHYS. REV. B, V.3, P.1141-P.1148 (1971)
CU/ AG/ AU/ AL/ NI/ NA/ CR/ FE ..THEORY/ DEBYE-WALLER FACTOR
- 71-SI-02 SINGH, R.D./ GUPTA, V.D.
VIBRATIONAL PROPERTIES OF HELICAL POLYGLYCINE
- 71-SH-01 SHARMA, P.K./ SINGH, N.
PHONON DISPERSION IN NOBLE METALS
PHYS. REV. B, V.4, P.4636-P.4639 (1971)
CU/ AG/ AU ..THEORY/ PHONON DISPERSION/ METAL
- 71-SI-03 SINHA, S.K./ GUPTA, R.P.
UNIFIED MICROSCOPIC APPROACH TO THE LATTICE DYNAMICS OF CRYSTALS
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCIENCE, FRANCE, P.35-P.42 (1971)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ MICROSCOPIC APPROACH
- 71-SM-01 SMITH, H.G./ GLAESER, W.
PHONON SPECTRA AND SUPERCONDUCTIVITY IN SOME TRANSITION METAL CARBIDES
PHONON, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCIENCE, FRANCE, P.145-P.149 (1971)
TA, C/ HF, C/ Nb, C ..EXPERIMENT/ PHONON DISPERSION/ SUPERCONDUCTIVITY
- 71-SO-01 SOKOLOFF, J.B.
EFFECTS OF PHONONS AND IMPURITIES ON SINGLE-PARTICLE-MODE NEUTRON SCATTERING IN CHROMIUM
PHYS. REV. B, V.3, P.2367 (1971)
CR ..THEORY
- 71-SO-02 SOLBRIG-JR, A.W.
VALENCE FORCE POTENTIALS FOR CALCULATING CRYSTAL VIBRATIONS IN SILICON
J. PHYS. CHEM, SOLIDS, V.32, P.1761-P.1768 (1971)
SI ..THEORY/ PHONON DISPERSION/ VALENCE FORCE POTENTIAL
- 71-SO-03 SOLBRIG, H.
MULTIPLE SCATTERING OF THERMAL NEUTRON BY A PERFECT CRYSTAL 2. CALCULATION OF APPROXIMATE VALUES FOR THE INFORMATION QUANTITIES
PHYS. STATUS SOLIDI B, V.47, P.143-P.151 (1971)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MULTIPLE SCATTERING/ PERFECT CRYSTAL
- 71-SO-04 SOSNOWSKI, J./ MALISZEWSKI, E.F./ BEDNARSKI, S./ ZACHOR, A.
PHONON DISPERSION RELATIONS IN ANTIMONY
INR-P-1263/2/PS (1971)
SB ..EXPERIMENT/ PHONON DISPERSION/ 5-NEIGHBOURS MODEL FITTING
- 71-SO-05 SOSNOWSKI, J./ MALISZEWSKI, E.F./ BEDNARSKI, S./ ZACHOR, A.
PHONON DISPERSION RELATIONS IN ANTIMONY
PHYS. STATUS SOLIDI B, V.44, P.65-P.68 (1971)
SB ..EXPERIMENT/ PHONON DISPERSION/ MODEL CALCULATION

- 71-SO-06 SOSNOWSKI, J./ MALISZEWSKI, E.F./ BEDNARSKI, S./ C ZACHOR, A.
PHONON DISPERSION RELATIONS IN ANTIMONY
PHYS. STATUS SOLIDI B, V.44K, P.65-P.68 (1971)
SB ..EXPERIMENT/ PHONON DISPERSION
- 71-SP-01 SPCSITO, G.
HIGH-ENERGY NEUTRON SCATTERING AND THE MIHARA-PUFF THEO
RY OF THE STRUCTURE FACTOR FOR LIQUID HELIUM-FOUR
PHYS. REV. A, V.3, P.820 (1971)
HE ..THEORY
- 71-SP-02 SPIELBERG, D.H./ ARNDT, R.A./ DAMASK, A.C./ LEFKOW
ITZ, I.
DIELECTRIC AND NEUTRON INELASTIC SCATTERING MEASUREMENT
S ON PHENANTHRENE
J. CHEM. PHYS., V.54, P.2597 (1971)
PHENANTHRENE ..SOLID/ EXPERIMENT ..HINDERED VIBRATION
- 71-SR-01 SRINIVASAN, R./ RAD, R.R.
ANHARMONIC PROPERTIES OF THE HEXAGONAL METALS, MAGNESIU
M, ZINC AND BERYLLIUM - 1. LATTICE DYNAMICS AND THIRD O
RDER ELASTIC CONSTANTS
J. PHYS. CHEM. SOLIDS, V.32, P.1769-P.1788 (1971)
MG/ ZN/ BE ..THEORY/ PHONON DISPERSION/ ELASTIC CONSTAN
T/ ANHARMONICS
- 71-ST-01 STAMENKOVIC, S.
THEORY OF COHERENT NEUTRON SCATTERING BY HYDROGEN-BONDE
D FERROELECTRICS AT LOW TEMPERATURES. 1. GENERAL EXPRES
SION FOR INELASTIC COHERENT SCATTERING OF SLOW NEUTRONS
AND EFFECTIVE THERMAL FACTORS
JINR-E4-6171 (1971)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ FERROELECTRICS
- 71-ST-02 STAMENKOVIC, S.
THEORY OF COHERENT NEUTRON SCATTERING BY HYDROGEN-BONDE
D FERROELECTRICS AT LOW TEMPERATURES. 2. SCATTERING CHA
RACTERISTICS AND VARIOUS CONCEPTIONS OF THE TUNNELLING Q
UASI-SPIN MODEL
JINR-E4-9172 (1971)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ FERROELECTRICS
- 71-ST-03 STEIN, H./ STOCKMEYER, R./ STILLER, H.
SLOW NEUTRON SCATTERING FROM HCP AND FCC SOLID HYDROGEN
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.156-P.161 (1971)
H2 ..EXPERIMENT/ SOLID HYDROGEN/ I-O-F SPECTRA/ PHONON
DENSITY
- 71-ST-04 STILLER, H./ SPRINGER, T.
- QUASI-ELASTIC SCATTERING OF NEUTRONS FOR THE STUDY OF R
ANDOM MOTIONS IN SOLIDS
2. NATURFORSCH, A, V.26A, P.575 (1971)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ QUASI-ELASTIC SC
ATTERING/ RANDOM MOTION
- 71-ST-05 STOCKMEYER, R.
ON THE SCATTERING OF SLOW NEUTRONS BY ORTHOHYDROGEN IN
THE CUBIC PHASE
JUL-724-FE (1971)
H ..THEORY/ SOLID HYDROGEN/ PHONON
- 71-SU-01 SUZUKI, M./ SCHNEPP, O.
INTERMOLECULAR POTENTIAL AND LATTICE DYNAMICS OF THE C,
O2 CRYSTAL
J. CHEM. PHYS., V.55, P.5347 (1971)
C.O2 ..THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION
FUNCTION ..SPECIFIC HEAT
- 71-SV-01 SVENSSON, E.C./ KAMITAKAHARA, W.A.
RESONANT PERTURBATION OF PHONONS IN CU(AU) ALLOYS STUDI
ED BY NEUTRON SCATTERING
CAN, J. PHYS., V.49, P.2291-P.2306 (1971)
CU-AU ..EXPERIMENT/ RESONANT MODE/ SHIFT AND WIDTH OF P
HONON
- 71-SW-01 SWAROOP, A./ TIWARI, L.M.
DISPERSION RELATIONS IN GOLD
PHYS. STATUS SOLIDI B, V.43K, P.153-P.155 (1971)
AU ..THEORY/ PHONON DISPERSION
- 71-SZ-01 SZIGETI, B.
FORCE CONSTANTS AND EXPERIMENTAL DATA
PHONONS, (ED. BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.43-P.47 (1971)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ FORCE CONSTANTS
- 71-TA-01 TAKAHASHI, H.
QUANTUM THEORY OF CORRELATION FUNCTIONS FOR LIQUID META
LS AND NORMAL LIQUIDS IN THE ZERO SOUND WAVE RANGE
PHYSICA, V.51, P.333 (1971)
THEORY-OF-FLUIDS ..THEORY/ LIQUID/ CORRELATION FUNCTION
/ SCATTERING LAW ..LIQUID METAL/ TWO TIME GREEN FUNCTIO
N/ NORMAL LIQUID/ EFFECTIVE POTENTIAL
- 71-TA-02 TAKENO, S./ GODA, M.
A THEORY OF PHONONS IN AMORPHOUS SOLIDS AND ITS IMPLICA
TIONS TO COLLECTIVE MOTION IN SIMPLE LIQUIDS
PROGR. THEORET. PHYS., KYOTO, V.45, P.331-P.352 (1
971)
THEORY-OF-FLUIDS/ THEORY-OF-SOLIDS ..THEORY/ DISORDERED
SYSTEM/ AMORPHOUS SOLID/ CLASSICAL LIQUID

- 71-TE-01 TEH, H.C./ BROCKHOUSE, B.N.
LATTICE VIBRATION IN DEUTERATED AMMONIUM CHLORIDE AT 85
DK, J. EXPERIMENTAL,
PHYS. REV. B, V.3, P.2733 (1971)
AMMONIUM CHLORIDE ..EXPERIMENT/ CRYSTAL SPECTROMETER/
DISPERSION RELATION
- 71-TH-01 THAPER, C.L./ RAO, K.R./ DASANNACHARYA, B.A./ ROY,
A.P./ IYENGAR, P.K.
PHONON DISPERSION CURVES IN BERYLLIUM
PHONONS, (ED, NUSIMOVICI, M.A.), FLAMMARION SCIENC
E, FRANCE, P.140-P.143 (1971)
BE ..EXPERIMENT/ PHONON DISPERSION/ MODIFIED AXIAL SYMM
ETRIC MODEL FITTING
- 71-TH-02 THOMAS, I.L.
MOTION OF THE CENTER OF MASS OF ATOMS AND MOLECULES
PHYS. REV. A, V.3, P.1022-P.1026 (1971)
MISCELLANEOUS ..THEORY ..MOTION OF CENTER OF MASS IN PR
ESSENCE OF EXTERNAL RADIATION
- 71-TI-01 TIITTA, A./ TUNKALO, E.
MULTIPLE SCATTERING IN AN INELASTIC NEUTRON SCATTERING
WITH LIQUID METHANE
PHYSICA, V.54, P.393 (1971)
METHANE ..LIQUID/ MULTIPLE SCATTERING
- 71-TO-01 TOUSSAINT, G.
STUDY ON LATTICE DYNAMICS OF CADMIUM BY X-RAY SCATTERIN
G, AT 88K
PHONONS, (ED, BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.129-P.133 (1971)
CD ..EXPERIMENT/ PHONON DISPERSION/ X-RAY SCATTERING
- 71-TO-02 TOWERS, G.R.
INFLUENCE OF SHORT-RANGE ORDER ON THE LATTICE VIBRATION
S OF ALLOYS
PHONONS, (ED, BY NUSIMOVICI, M.A.), FLAMMARION SCI
ENCE, FRANCE, P.308-P.312 (1971)
THEORY-OF-SOLIDS ..LATTICE VIBRATION/ ALLOYS/ SHORT-RAN
GE ORDER
- 71-TR-01 TRAYLOR, J.G./ SMITH, H.G./ NICKLOW, R.M./ WILKINS
ON, M.K.
LATTICE DYNAMICS OF RUTILE
PHYS. REV. B, V.3, P.3457-P.3472 (1971)
TI.02 ..EXPERIMENT/ DISPERSION CURVE/ NEUTRON SCATTERIN
G/ THEORY/ FREQUENCY SPECTRUM ..TEMPERATURE DEPENDENCE
- 71-TR-02 TRAYLOR, J.G./ STASSIS, C./ REESE, R.A./ SINHA, S.
K.
PHONON SPECTRA OF FCC HE-4
IS-2778 (1971)
HE ..EXPERIMENT/ PHONON DISPERSION/ FCC HE
- 71-TR-03 TREFLER, M.
THE DYNAMICS OF AMMONIUM ION IN (N,H4)2.S.O4
CAN, J. PHYS., V.49, P.1694-P.1696 (1971)
(N,H4)2.S.O4 ..FAR INFRARED EXPERIMENT
- 71-TR-04 TRIPATHI, B.B./ BEHARI, J.
CRYSTAL DYNAMICS OF LIGHT WEIGHT ALKALI METALS
J. PHYS., F. LONDON, V.1, P.19-P.27 (1971)
LI/ NA/ K ..CALCULATION/ PHONON DISPERSION/ DEBYE TEMP.
- 71-TR-05 TROTT, A.J./ HEALD, P.T.
THE LATTICE DYNAMICS OF THE HEXAGONAL CLOSE-PACKED META
LS
PHYS. STATUS SOLIDI B, V.46, P.361-P.368 (1971)
BE/ MG/ ZN ..THEORY/ PHONON DISPERSION AND SPECTRA/ HEX
AGONAL LATTICE
- 71-VA-01 VAN-LOEF, J.J.
THE SELF-DIFFUSION COEFFICIENT IN ARGON AT LIQUID DENS
ITIES
PHYS. LETT., A, V.35, P.169 (1971)
AR ..EXPERIMENT/ LIQUID/ SELF-DIFFUSION
- 71-VE-01 VERMA, M.P./ SINGH, R.K.
LATTICE DYNAMICS OF LI,H, LI,F AND LI,CL
J. PHYS., C. LONDON, V.4, P.2749-P.2758 (1971)
LI,H/ LI,F/ LI,CL ..THEORY/ PHONON DISPERSION/ STATE DE
NSITY
- 71-WA-01 WAKABAYASHI, N./ SINHA, S.K./ SPEDDING, F.H.
PHONON SPECTRUM OF SCANDIUM METAL BY INELASTIC SCATTERI
NG OF NEUTRONS
PHYS. REV. B, V.4, P.2398-P.2406 (1971)
SC ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ PHON
ON DENSITY/ DEBYE TEMPERATURE
- 71-WA-02 WAKABAYASHI, N./ NICKLOW, R.M./ SMITH, H.G.
NEUTRON SCATTERING INVESTIGATION OF IMPURITY PHONON MOD
ES IN GE(9,2 PERCENT SI)
PHYS. REV. B, V.4, P.2558-P.2560 (1971)
GE-SI ..EXPERIMENT/ LOCAL MODE/ IMPURITY EFFECT
- 71-WA-03 WAKABAYASHI, N./ NICKLOW, R.M./ SMITH, H.G.
NEUTRON SCATTERING INVESTIGATION OF IMPURITY PHONON MOD
ES IN GE(9,2PERCENT SI)
PHYS. REV. B, V.4, P.2558-P.2560 (1971)
GE-SI ..EXPERIMENT/ IMPURITY EFFECT/ LOCAL MODE/ MASS D

EFFECT

- 71-WA-04 WARSHEL, A.
ANHARMONICITY IN CRYSTAL VIBRATIONS
J. CHEM. PHYS., V.54, P.5324-P.5330 (1971)
THEORY-OF-SOLIDS ..LATTICE VIBRATION/ MOLECULAR CRYSTAL
/ ANHARMONICITY
- 71-WA-05 WASEDA, Y./ SUZUKI, K.
PAIR POTENTIALS IN LIQUID CS AND AR BY THE BORN-GREEN E
QUATION
PHYS. LETT., A, V.34, P.69 (1971)
CS/ AR ..THEORY/ LIQUID ..PAIR POTENTIAL/ BORN-GREEN E
QUATION
- 71-WA-06 WASEDA, Y./ SUZUKI, K.
STRUCTURE OF LIQUID ANTIMONY BY NEUTRON DIFFRACTION
PHYS. STATUS SOLIDI B, V.47, P.581-P.590 (1971)
SB ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR
- 71-WE-01 WERNER, S.A./ PYNN, R.
RESOLUTION EFFECTS IN THE MEASUREMENT OF PHONONS IN SOD
IUM METAL
J. APPL. PHYS., V.42, P.4736 (1971)
NA ..PHONON DISPERSION
- 71-WI-01 WINFIELD, D.J.
MEASUREMENT OF THE APPARENT DIFFUSION COEFFICIENT OF TO
LUENE BY QUASIELASTIC NEUTRON SCATTERING
J. CHEM. PHYS., V.54, P.3643 (1971)
TOLUENE ..LIQUID/ QUASIELASTIC PEAK/ EXPERIMENT.
- 71-WO-01 WORLTON, T.G./ SCHMUNK, R.E.
LATTICE VIBRATIONS OF THALLIUM AT 77 AND 296K
PHYS. REV. B, V.3, P.4115-P.4123 (1971)
TL ..EXPERIMENT/ PHONON DISPERSION/ FREQUENCY SPECTRA .
.77OK/ 296OK
- 71-YA-01 YASUKAWA, T./ KIMURA, M./ WATANABE, N./ YAMADA, Y.
NEUTRON DOWN-SCATTERING SPECTRUM OF ISOTACTIC POLYPROP
YLENE
J. CHEM. PHYS., V.55, P.983-P.984 (1971)
POLYPROPYLENE ..EXPERIMENT/ TOF SPECTRUM/ FREQUENCY DIS
TRIBUTION
- 71-ZE-01 ZEIDLER, M.D.
A COMPARATIVE STUDY OF QUASIELASTIC NEUTRON SCATTERING
AND NMR RELAXATION IN LIQUID ACETONITRILE
BER, BUNSENES, PHYS. CHEM., V.75, P.769 (1971)
ACETONITRILE ..QUASIELASTIC SCATTERING/ LIQUID
- 71-ZE-02 ZERBI, G./ PISERI, L./ CABASSI, F.

- VIBRATIONAL SPECTRUM OF CHAIN MOLECULES WITH CONFORMATI
ONAL DISORDER, POLYETHYLENE
MOL. PHYS., V.22, P.241-P.256 (1971)
POLYETHYLENE ..THEORY/ FREQUENCY SPECTRA/ PERFECT AND I
RREGULAR POLYMER CHAIN
- 72-AG-01 AGRAWAL, B.K./ RAM, P.N.
LATTICE DYNAMICS OF CS.I CONTAINING IMPURITY IONS
PHYS. REV. B, V.4, P.2774-P.2780 (1972)
CS.I ..THEORY/ IMPURITY EFFECT/ LATTICE DYNAMICS
- 72-AH-01 AHMAD, A.A.Z./ SMITH, H.G./ WAKABAYASHI, N./ WILKI
NSON, M.K.
LATTICE DYNAMICS OF CESIUM CHLORIDE
PHYS. REV. B, V.6, P.3956-P.3961 (1972)
CS.CL ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ F
REQUENCY SPECTRUM
- 72-AH-02 AHTEE, M./ GLAZER, A.M./ MEGAW, H.D.
THE STRUCTURES OF SODIUM NIOBATE BETWEEN 480 AND 575C,
AND THEIR RELEVANCE TO SOFT-PHONON MODES
PHIL. MAG., V.26, P.995-P.1014 (1972)
NA,NB.O3 ..THEORY/ PHASE TRANSITION/ SOFT PHONON
- 72-AK-01 AKCASU, A.Z./ LINNEBUR, E.J.
A MODELLED KINETIC EQUATION WITH TWO RELAXATION TIMES
NEUTRON INELASTIC SCATTERING, IAEA, P.365-P.380 (1
972)
THEORY-OF-FLUIDS ..MODELLED KINETIC EQUATION/ TWO DAMPIN
G CONSTANT
- 72-AL-01 ALDRED, B.K./ STIRLING, G.C./ WHITE, J.W.
HIGH FREQUENCY DYNAMICS OF LIQUID METHANOL AND TOLUENE
-CONTRIBUTION OF MOLECULAR ROTATIONAL DIFFUSION TO INE
LASTIC NEUTRON SCATTERING
FARADAY SOC. SYMP., V.6, P.135-P.160 (1972)
METHANOL/ TOLUENE ..EXPERIMENT/ QUASI-ELASTIC SCATTERIN
G/ LIQUID/ DEUTERIUM SUBSTITUTION/ TRANSLATIONAL AND RO
TATIONAL DIFFUSION
- 72-AL-02 ALDRED, B.K./ STIRLING, G.C./ WHITE, J.W.
HIGH FREQUENCY DYNAMICS OF LIQUID METHANOL AND TOLUENE,
CONTRIBUTION OF MOLECULAR ROTATIONAL DIFFUSION TO INE
LASTIC NEUTRON SCATTERING
FARADAY SYMP. CHEM. SOC., V.6, P.135-P.168 (1972)
METHANOL/ TOLUENE ..QUASIELASTIC/ MODEL ANALYSIS/ DIFFU
SION
- 72-AL-03 ALEFELD, B./ BOHN, H.G./ STUMP, N.
INVESTIGATION OF THE JUMP RATE OF PROTONS IN BETA-NB-H
BY MEANS OF HIGH RESOLUTION QUASI-ELASTIC NEUTRON SCATT
ERING AND NMR

- JUL-CONF-6, V.1, P.286-P.300 (1972)
NB-H ..EXPERIMENT/ HYDROGEN DIFFUSION/ QUASI-ELASTIC
- 72-AL-04 ALLEN, G.
THE DYNAMICS OF POLYMER CHAINS
NEUTRON INELASTIC SCATTERING. IAEA, P.261-P.274 (1972)
REVIEW-ARTICLES ..POLYMER CHAIN/ DYNAMICS
- 72-AL-05 ALLEN, P.B.
NEUTRON SPECTROSCOPY OF SUPERCONDUCTORS
PHYS. REV. B, V.6, P.2577-P.2579 (1972)
THEORY-OF-SOLIDS ..PHONON WIDTHS/ ELECTRON-PHONON INTERACTION/ SUPERCONDUCTIVITY
- 72-AL-06 ALLEN, G./ BRIER, P.N./ GOODYEAR, G./ HIGGINS, J.S.
MOTIONAL BROADENING OF THE QUASI-ELASTIC PEAK IN NEUTRON SCATTERED FROM POLYMERIC MATERIALS
FARADAY SYM., CHEM. SOC., V.6, P.169-P.175 (1972)
POLYDIMETHYLSILOXANE ..EXPERIMENT/ QUASI-ELASTIC/ RUBBER STATE/ DOPPLER BROADENING/ INTERNAL ROTATION
- 72-AL-07 ALLEN, G./ BRIER, P.N./ GOODYEAR, G./ HIGGINS, J.S.
MOTIONAL BROADENING OF THE QUASI-ELASTIC PEAK IN NEUTRON SCATTERED FROM POLYMERIC MATERIALS
FARADAY SYM., CHEM. SOC., V.6, P.169-P.175 (1972)
POLYDIMETHYLSILOXANE ..QUASIELASTIC/ DIFFUSION
- 72-AL-08 ALPENIN, H.A./ PICANT, S.J./ RHYNE, J.J./ MINKIEWICZ, V.J.
SOFTENING OF THE TRANSVERSE-OPTIC MODE IN Pb,Te
PHYS. LETT., A, V.40, P.295-P.296 (1972)
Pb,Te ..EXPERIMENT/ DISPERSION RELATION/ SOFT PHONON/ CURIE LAW/ TEMPERATURE CHANGE
- 72-AN-01 ANDRIESSE, C.D./ LEGRAND, E.
PAIR POTENTIAL FOR ARGON FROM NEUTRON DIFFRACTION AT LOW DENSITY
PHYSICA, V.57, P.191-P.204 (1972)
AR ..EXPERIMENT/ NEUTRON DIFFRACTION
- 72-AN-02 ANTONINI, B./ MINKIEWICZ, V.J.
NEUTRON SCATTERING STUDY OF SPIN WAVES AND PHONONS IN Mn-PT3
SOLID STATE COMMUN., V.10, P.203 (1972)
Mn-PT ..EXPERIMENT/ DISPERSION RELATION/ Mn-PT3 ..SPIN WAVE AND PHONON
- 72-AN-03 ANTONINI, M./ CORCHIA, M.
MULTIPLE SCATTERING OF NEUTRONS IN LIQUID GALLIUM
- GA ..EXPERIMENT/ LIQUID STRUCTURE/ MULTIPLE SCATTERING
- 72-AN-04 ANTONINI, M./ SOSNOWSKA, I./ VADACCHINO, M.
INCOHERENT NEUTRON SCATTERING FROM HYDROGEN BOND IN KDP AND ADP
RT/FT (72)36 (1972)
K.H2.P.04/ N.H4.H2.P.04 ..ELASTIC SCATTERING/ INTERFERENCE EFFECT/ PARAELECTRIC PHASE
- 72-AN-05 ANTONINI, M./ CORCHIA, M.
MULTIPLE SCATTERING OF NEUTRONS IN LIQUID GALLIUM
NUOVO CIM., B, V.10B, P.117 (1972)
GA ..DYNAMICS OF LIQUIDS
- 72-AR-01 ARSIC-ESKINJA, M./ GRIMM, H./ STILLER, H.
NEUTRON MEASUREMENTS ON THE FERROELECTRIC PHASE TRANSFORMATION IN K.H2.P.04
NEUTRON INELASTIC SCATTERING. IAEA, P.825-P.840 (1972)
K.H2.P.04 ..EXPERIMENT/ ELASTIC SCATTERING/ PHASE TRANSITION
- 72-BA-01 BAJPAL, R.P.
ON PHONON DISPERSION IN HCP METALS
PHYSICA, V.62, P.574-P.586 (1972)
Mg/ Zr/ Y/ Ti/ Ta/ Nb ..THEORY/ PHONON DISPERSION/ FOURTH NEIGHBOURS MODEL/ HEXAGONAL LATTICE
- 72-BA-02 BAJPAL, R.P./ NEELAKANDAN, K.
ON THE PHONON DISPERSION IN ALKALI METALS
PHYSICA, V.62, P.587-P.594 (1972)
Li/ Na/ K ..THEORY/ PHONON DISPERSION/ BCC METAL/ AXIAL LATTICE SYMMETRIC MODEL
- 72-BA-03 BAJPAL, R.P.
PHONON DISPERSION IN ZINC(A PSEUDOPOTENTIAL APPROACH)
PHYS. LETT., A, V.42, P.163 (1972)
Zn ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ PSEUDOPOTENTIAL
- 72-BA-04 BAJPAL, R.P./ ONO, M.
LATTICE VIBRATIONS OF MAGNESIUM: A MODEL POTENTIAL APPROACH
PHYS. LETT., A, V.41, P.141 (1972)
Mg ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
- 72-BA-05 BAJPAL, R.P./ NEELAKANDAN, K.
LATTICE DYNAMICS OF TRANSITION METALS
NUOVO CIM., B, V.7, P.177-P.184 (1972)
Fe/ Nb/ Ta/ W ..THEORY/ PHONON DISPERSION/ BCC METAL/ FCC METAL

ODIFIED AXIALLYSYMMETRIC MODEL

- 72-BA-06 BARKER, M.I./ GASKELL, T.
DENSITY FLUCTUATIONS IN SIMPLE LIQUIDS, A GENERALIZED
HYDRODYNAMIC APPROACH
J. PHYS., C. LONDON, V.5, P.3279-P.3288 (1972)
ARGON/ THEORY-OF-FLUIDS, CORRELATION FUNCTION
- 72-BA-07 BARNES, J.D.
NEUTRON INELASTIC SCATTERING STUDY OF THE ROTATOR* PHA
SE TRANSITION IN N-ALKANES
NEUTRON INELASTIC SCATTERING, IAEA, P.287-P.298 (1
972)
NONADECANE/ EICOSANE, EXPERIMENT/ QUASI-ELASTIC PEAK/
ROTATIONAL DIFFUSION/ PLASTIC CRYSTAL
- 72-BA-08 BASU, A.N./ SENGUPTA, S.
DEFORMABLE SHELL MODEL AND THE PROPERTIES OF LI, F CRYST
AL
J. PHYS., C. LONDON, V.5, P.1158-P.1164 (1972)
LI, F, CALCULATION/ DEFORMABLE SHELL MODEL/ PHONON DISP
ERSION/ STATE DENSITY/ ELASTIC CONSTANT
- 72-BA-09 BAUR, H.
ACOUSTIC PHONONS IN POLYMER-CRYSTALS
KOLLOID-Z. Z. POLYM., V.250, P.1000-P.1015 (1972)
REVIEW-ARTICLES, POLYMER-CRYSTAL/ PHONON/ DISPERSION C
URVE/ THERMAL PROPERTIES
- 72-BE-01 BEHARI, J./ TRIPATHI, B.B.
LATTICE DYNAMICS OF SOME BCC TRANSITION METALS
J. PHYS. SOC. JAP., V.33, P.1207-P.1213 (1972)
FE/ MO/ W, THEORY/ PHONON DISPERSION/ FREQUENCY SPECTR
A
- 72-BE-02 BEHARI, J.
SOME LATTICE DYNAMICAL PROPERTIES OF LEAD ON A PSEUDOPO
TENTIAL APPROACH
PHIL. MAG., V.26, P.737 (1972)
PB, THEORY/ SOLID/ LATTICE DYNAMICS
- 72-BI-01 BIRCHALL, J.H.L./ ROSS, D.K.
A NEUTRON SCATTERING STUDY OF HYDROGEN MOTIONS IN NIOBI
UM
JUL-CONF-6, V.6, P.313-P.345 (1972)
NB-H, EXPERIMENT/ LOCAL MODE/ SINGLE CRYSTAL/ 130C-400
C
- 72-BI-02 BIRCHALL, J.H.L./ ROSS, D.K.
A NEUTRON SCATTERING STUDY OF HYDROGEN MOTIONS IN NIOBI
UM
BER, BUNSENGES, PHYS. CHEM., V.76, P.782 (1972)

NB-H, HYDROGEN MOTION

- 72-BO-01 BOBETIC, M.V./ BARKER, J.A./ KLEIN, M.L.
LATTICE DYNAMICS WITH THREE-BODY FORCES, 2, KRYPTON
PHYS. REV. B, V.5, P.3185-P.3189 (1972)
KR, THEORY/ DEBYE PARAMETER/ THERMAL EXPANSION/ BULK M
ODULVS
- 72-BO-02 BOERIO, F.J./ CORNELL, D.D.
LATTICE MODES AND INTERMOLECULAR POTENTIAL OF ORTHORHOM
BIC POLYOXYMETHYLENE
J. CHEM. PHYS., V.56, P.1516-P.1519 (1972)
POLYOXYMETHYLENE, THEORY/ DISPERSION CURVE/ FREQUENCY
SPECTRA/ RAMAN EXPERIMENT
- 72-BO-03 BOHLIN, L.
INTERFERENCE EFFECTS IN THE INELASTIC SCATTERING OF NEU
TRONS BY AN ANHARMONIC NEON CRYSTAL
SOLID STATE COMMUN., V.10, P.1219-P.1222 (1972)
NE, THEORY/ INELASTIC SCATTERING PROFIL/ NUMERICAL CAL
CULATION/ SOLID
- 72-BR-01 BRIER, P.N./ HIGGINS, J.S.
MODEL CALCULATIONS FOR THE LOW-ENERGY SCATTERING FROM C
.H2.CL2
NEUTRON INELASTIC SCATTERING, IAEA, P.461-P.474 (1
972)
C.H2.CL2, EXPERIMENT/ MOLECULAR LIQUID/ TOF SPECTRA/ M
ODEL ANALYSIS
- 72-BR-02 BRIGGS, G.A./ DUFFILL, C./ HUTCHINGS, M.T./ LOWDE,
R.D./ SATYA-MURTHY, N.S./
PHONON AND MAGNON EXCITATIONS IN NI-S
NEUTRON INELASTIC SCATTERING, IAEA, P.669-P.677 (19
72)
NI, S, EXPERIMENT/ PHONON AND MAGNON DISPERSION
- 72-BU-01 BURENKOV, Y.A./ VALIEV, A.A./ NIKANOROV, S.P./ STE
PANOV, A.V.
TEMPERATURE DEPENDENCES OF THE ELASTIC CONSTANTS OF BIS
MUTH
FIZ. TVERD. TELA (SOV. PHYS. SOLID STATE), V.14 (V
.14), P.264-P.265 (P.215-P.216) (1972 (1972))
BI, EXPERIMENT/ ELASTIC CONSTANTS/ 300-544DK
- 72-BU-02 BUTLAND, A.T.D./ MADDISON, R.J.
THE SPECIFIC HEAT OF GRAPHITE, AN EVALUATION OF MEASURE
MENT
AEEW-R-815 (1972)
GRAPHITE, REVIEW/ EVALUATION/ SPECIFIC HEAT
- 72-BU-03 BUTLAND, A.T.D./ CHUDLEY, C.T.,

- A COMPARATIVE STUDY OF VARIOUS LIGHT WATER SCATTERING MODELS USED IN THERMAL REACTOR CALCULATIONS
AEEW-R-814 (1972)
H2.O ..SCATTERING MODEL CALCULATION/ INTEGRAL PARAMETER
- 72-BU-04 BUTLAND, A.T.D.,
COMPARISON OF LEAP, TOR AND SLAB, PROGRAMMES FOR COMPUTING THE SCATTERING LAW SCALPHA, BETA) FROM A PHONON FREQUENCY FUNCTION
AEEW-M-1136 (1972)
COMPUTER-CODES ..PHONON SPECTRA/ SCATTERING LAW
- 72-BU-05 BUTLAND, A.T.D.,
THERMAL NEUTRON SCATTER BY GRAPHITE ASSUMING THE CRYSTAL HAS AN ISOTROPIC STRUCTURE
AEEW-R-813 (1972)
GRAPHITE ..SCATTERING MATRICES/ PHONON SPECTRUM/ SPECIFIC HEAT/ ASSUMING ISOTROPIC STRUCTURE
- 72-BU-06 BUYERS, W.J.L./ SEARS, V.F./ LONNGI, P.A./ LONNGI, D.A.,
COLLECTIVE AND SINGLE-PARTICLE EXCITATIONS IN LIQUID NEUTRON INELASTIC SCATTERING, IAEA, P.399-P.411 (1972)
NE/ SCATTERING-THEORIES ..THEORY/ EXPERIMENT/ LIQUID DYNAMICS/ COLLECTIVE MOTION/ SINGLE PARTICLE EXCITATION
- 72-BU-07 BUYERS, W.J.L./ POWELL, B.M./ WOODS, A.D.B.,
TEMPERATURE DEPENDENCE OF A KOHN ANOMALY IN MOLYBDENUM CAN, J. PHYS., V.50, P.3069-P.3070 (1972)
MO ..EXPERIMENT/ PHONON DISPERSION/ KOHN ANOMALY/ TEMPERATURE EFFECT
- 72-CA-01 CARABATOS, C./ PREVOT, B.,
SHELL-MODEL LATTICE DYNAMICS OF CS,CL,CS,BR, AND CS,I CAN, J. PHYS., V.50, P.122 (1972)
CS,CL/ CS,BR/ CS,I ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..SHELL MODEL
- 72-CH-01 CHAY, T.R./ FRANK, H.S.,
DENSITY FLUCTUATION IN WATER AND IN SIMPLE FLUIDS J. CHEM. PHYS., V.57, P.2910-P.2919 (1972)
H2.O/ THEORY-OF-FLUIDS ..CORRELATION FUNCTION
- 72-CH-02 CHIHARA, J.,
A GENERALIZATION OF THE HARTREE APPROXIMATION AND THE QUANTAL SPACE-TIME CORRELATION FUNCTION
PROGR. THEORET. PHYS., KYOTO, V.47, P.395-P.415 (1972)
- A COMPARATIVE STUDY OF VARIOUS LIGHT WATER SCATTERING MODELS USED IN THERMAL REACTOR CALCULATIONS
AEEW-R-814 (1972)
H2.O ..SCATTERING MODEL CALCULATION/ INTEGRAL PARAMETER

- THEORY-OF-FLUIDS ..THEORY/ QUANTAL SPACE-TIME CORRELATION/ HARTREE APPROXIMATION
- 72-CH-03 CHODOS, S.L.,
LATTICE DYNAMICS OF M2,X,Y6 HEXABOROMOMETALLATES, CS2.U, BR6
J. CHEM. PHYS., V.57, P.2712 (1972)
CS2.U, BR6 ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
- 72-CH-04 CHOWDHURY, M.R./ ROSS, D.K.,
THE DIFFUSIVE MOTIONS OF HYDROGEN IN PD-AG ALLOYS
JUL-CONF-6, V.1, P.346-P.374 (1972)
PD-AG-H ..EXPERIMENT/ QUASIELASTIC/ DIFFUSION/ 100C-360C
- 72-CO-01 COHEN, S.S./ GILAT, G.,
PHONON FREQUENCY SHIFTS AND FORCE-CONSTANT CHANGES IN DILUTE ALLOYS
SOLID STATE COMMUN., V.11, P.1269-P.1272 (1972)
CR-W ..THEORY/ PHONON/ ALLOY/ IMPURITY EFFECT/ FORCE-CONSTANT CHANGE
- 72-CO-02 COHEN, S.S.,
INELASTIC INCOHERENT NEUTRON SCATTERING FROM IMPURITIES IN CRYSTALS
PHYS. STATUS SOLIDI, V.50, P.673-P.679 (1972)
NEUTRON-SCATTERING-IN-SOLIDS/ SCATTERING-BY-DEFECTS ..THEORY/ INELASTIC INCOHERENT SCATTERING FROM IMPURE CRYSTALS
- 72-CO-03 COMES, R./ SHIRANE, G.,
NEUTRON-SCATTERING ANALYSIS OF THE LINEAR-DISPLACEMENT CORRELATIONS IN K,TaO3
PHYS. REV. B, V.5, P.1886-P.1891 (1972)
K,TaO3 ..EXPERIMENT/ PHONON DISPERSION/ ANISOTROPY
- 72-CO-04 CORNGOLD, N.,
BEHAVIOR OF AUTOCORRELATION FUNCTIONS
PHYS. REV. A, V.6, P.1570-P.1573 (1972)
THEORY-OF-FLUIDS ..THEORY/ AUTOCORRELATION/ MEMORY FUNCTION
- 72-CO-05 COWLEY, R.A.,
NORMAL MODES OF VIBRATION IN CRYSTALS HAVING AN ORDER-DISORDER TRANSITION
NEUTRON INELASTIC SCATTERING, IAEA, P.813-P.824 (1972)
THEORY-OF-SOLIDS/ SCATTERING-THEORIES ..THEORY/ PHONON/ ALLOYS/ ORDER-DISORDER STATE
- 72-DA-01 DAHLBORG, U./ GRAESLUND, C./ LARSSON, K.E.,

PHASE TRANSITIONS IN NEOPENTANE STUDIED BY COLD NEUTRON
S

PHYSICA, V.59, P.672-P.692 (1972)
PENTANE ..EXPERIMENT/ CRYSTAL SPECTROMETER ..PHASE TRANSITION/ OSCILLATIONAL AND ROTATIONAL MOTION/ BARRIER HEIGHT

72-DA-02 DASANNACHARYA, B.A./ THAPER, C.L./ GOYAL, P.S.
NEUTRON SCATTERING FROM LIQUID AMMONIA
NEUTRON INELASTIC SCATTERING, IAEA, P.477-P.486 (1972)

N.H3 ..EXPERIMENT/ MOLECULAR LIQUID/ 218K/ MODEL ANALYSIS/ SIMPLE DIFFUSION/ HINDERED RELAXATION FUNCTION

72-DA-03 DAUBERT, J.
PHONON DISPERSION IN CS₂
NEUTRON INELASTIC SCATTERING, IAEA, P.85-P.94 (1972)
CS₂ ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING

72-DA-04 DAVIDOVIC, M./ RATKOVIC, S./ JOVIC, D./ ZIVANOVIC, M.
INELASTIC INCOHERENT NEUTRON SCATTERING ON POLYCRYSTALLINE TAURINE AND ALPHA-AMINO-ISO-BUTYRIC ACID
CHEM, PHYS, LETT., V.17, P.53-P.56 (1972)
TAURINE/ ALPHA-AMINO-ISO-BUTYRIC-ACID ..EXPERIMENT/ VIBRATIONAL SPECTRUM

72-DA-05 DAVIDOVIC, M./ RATKOVIC, S./ JOVIC, D./ ZIVANOVIC, M.
INELASTIC INCOHERENT NEUTRON SCATTERING ON POLYCRYSTALLINE TAURINE AND ALPHA-AMINO-ISO-BUTYRIC ACID
CHEM, PHYS, LETT., V.17, P.53 (1972)
TAURINE/ BUTYRIC ACID ..INELASTIC NEUTRON SCATTERING/ INCOHERENT

72-DE-01 DE-GRAAF, L.A./ RUSH, J.J./ FLOTOW, H.E./ ROWE, J.M.
QUASIELASTIC THERMAL NEUTRON SCATTERING BY HYDROGEN IN ALPHA-VANDIUM HYDRIDE
J. CHEM, PHYS., V.56, P.4574-P.4581 (1972)
V-H ..EXPERIMENT/ QUASIELASTIC/ DIFFUSION BROADENING

72-DE-02 DE-GRAAF, L.A./ RUSH, J.J./ LIVINGSTON, R.C./ FLOTOW, H.E./ ROWE, J.M.
STUDY OF HYDROGEN DIFFUSION IN VANADIUM AND TANTALUM HYDRIDE BY QUASIELASTIC THERMAL NEUTRON SCATTERING
JUL-CONF-6, V.1, P.301-P.312 (1972)
V-H/ TA-H ..EXPERIMENT/ QUASIELASTIC/ HYDROGEN DIFFUSION IN METAL

72-DE-03 DE-GRAAF, L.A./ RUSH, J.J./ LIVINGSTON, R.C.

NEUTRON SCATTERING STUDY OF THE ROTATIONAL MOTIONS AND PHASE TRANSITIONS IN SODIUM- AND CAESIUM-HYDROSULFIDES
NEUTRON INELASTIC SCATTERING, IAEA, P.247-P.257 (1972)

NA.S.H/ CE.S.H ..EXPERIMENT/ MOLECULAR ROTATION/ PHASE TRANSITION/ QUASI-ELASTIC

72-DE-04 DE-MUL, F.F.
ON THE MODELS FOR MOLECULAR ROTATION IN PLASTIC CRYSTALS STUDIED BY COLD NEUTRON SCATTERING
PHYS. LETT., V.41A, P.272 (1972)
CYCLOHEXANOL ..CRYSTAL/ MOLECULAR ROTATION

72-DI-01 DIETRICH, O.W./ GRAF, E.H./ HUANG, C.H./ PASSELL, L.
NEUTRON SCATTERING BY ROTONS IN LIQUID HELIUM
PHYS. REV. A, V.5, P.1377-P.1391 (1972)
HE ..EXPERIMENT/ LIQUID/ ROTON DISPERSION/ LINE WIDTH

72-DI-02 DIMIC, V./ BARBIC, L./ BLINC, R.
STUDY OF MOLECULAR MOTIONS IN LIQUID CRYSTALLINE MBBA BY COLD NEUTRON SCATTERING
PHYS. STATUS SOLIDI B, V.54, P.121-P.124 (1972)
MBBA/ LIQUID-CRYSTAL ..INCOHERENT QUASIELASTIC SCATTERING/ DIFFUSION CONSTANT

72-DR-01 DREXEL, W.
LATTICE DYNAMICS OF SILVER
Z. PHYS., V.255, P.281-P.299 (1972)
AG ..EXPERIMENT/ PSEUDOPOTENTIAL ANALYSIS/ PHONON DISPERSION

72-DR-02 DROZ, M.
LONG WAVELENGTH PHONON DISPERSION IN HE II
HELV. PHYS. ACTA, V.45, P.34 (1972)
HE ..LIQUID DYNAMICS

72-DU-01 DUBOIS, D.M.
LIQUID-ARGON DYNAMICS FROM THE FIRST MOMENTS OF THE COHERENT SCATTERING FUNCTION: THE DENSITY RESPONSE FUNCTION, THE DISPERSION CURVE AND THE INTERMEDIATE SCATTERING FUNCTION
PHYSICA, V.60, P.27-P.40 (1972)
AR ..THEORY/ DISPERSION/ SCATTERING FUNCTION/ LIQUID DYNAMICS

72-DU-02 DUFTY, J.W.
LONG-TIME BEHAVIOR OF SPACE-AND TIME-DEPENDENT CORRELATION FUNCTIONS
PHYS. REV. A, V.5, P.2247 (1972)
THEORY-OF-FLUIDS ..CORRELATION FUNCTION

- 72-DU-03 DUTTON, D.H./ BROCKHOUSE, B.N./ MILLER, A.P.
CRYSTAL DYNAMICS OF PLATINUM BY INELASTIC NEUTRON SCATTERING
- CAN, J. PHYS., V.50, P.2915-P.2927 (1972)
PT., EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ FORCE
E CONSTANT/ PHONON SPECTRUM/ TEMPERATURE VARIATION/ KHN
N ANOMALY
- 72-DZ-01 DZYUB, I.P./ KOCHMARSKY, V.Z.
PECULIARITIES OF PHONON DISPERSION IN CRYSTAL WITH SUBSTITUTIONAL IMPURITIES
ITP-72-88R (1972)
THEORY-OF-SOLIDS., PHONON DISPERSION/ WITH SUBSTITUTION
A IMPURITIES
- 72-DZ-02 DZYUB, I.P./ KOCHMARSKY, V.Z.
INELASTIC SCATTERING OF SLOW NEUTRONS BY IMPURITY CRYSTALS 2, PECULIARITIES OF SCATTERING CROSS-SECTION IN THE
RESONANCE FREQUENCY REGION OF SUBSTITUTIONAL ATOMS
ITP-72-92P (1972)
NEUTRON-SCATTERING-IN-SOLIDS., THEORY/ RESONANCE MODE/
FORCE CONSTANT CHANGE
- 72-EG-01 EGELSTAFF, P.A.,
TIME-DEPENDENT TRIPLET CORRELATION FUNCTIONS IN SIMPLE LIQUIDS
NEUTRON INELASTIC SCATTERING, IAEA, P.383-P.397 (1972)
THEORY-OF-FLUIDS/ SCATTERING-THEORIES., TIME DEPENDENT
TRIPLET FUNCTION/ PRESSURE DERIVATIVE OF NEUTRON SCATTERING LAW
- 72-EG-02 EGELSTAFF, P.A./ WANG, S.S.
DENSITY DEPENDENT POTENTIALS IN SIMPLE LIQUIDS
CAN, J. PHYS., V.50, P.2461-P.2463 (1972)
RB/ NE., THEORY/ EXPERIMENT/ LIQUID/ STRUCTURE FACTOR.,
DENSITY DEPENDENT POTENTIAL
- 72-EG-03 EGELSTAFF, P.A./ PAGE, D.I./ DUFFILL, C.
THE MEAN SQUARE FORCE ON IONS IN LIQUID RUBIDIUM
CAN, J. PHYS., V.50, P.3062 (1972)
RB., MEAN SQUARE FORCE
- 72-EL-01 ELCOMBE, M.M.
THE LATTICE DYNAMICS OF STRONTIUM FLUORIDE
J. PHYS., C, LONDON, V.5, P.2702-P.2710 (1972)
SR,F2., EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTING/ STATE DENSITY
- 72-EN-01 ENZ, C.P.
LATTICE DYNAMICS ABOVE STRUCTURAL PHASE TRANSITIONS, SR,
TI,03

- PHYS. REV. B, V.6, P.4695-P.4702 (1972)
SR,TI,03., THEORY/ SOFT MODE/ CENTRAL PEAK S(0,0)/ PHASE
E TRANSITION
- 72-ES-01 ESCHRIG, H./ URWANK, P./ FELDMANN, K./ HENNIG, K./
WEISS, L.
PHONONS IN MG,ZN2, MODEL POTENTIAL CALCULATIONS AND NEUTRON
SCATTERING EXPERIMENTS
JINR-E14-6266 (1972)
MG,ZN2., THEORY/ EXPERIMENT/ MODEL-POTENTIAL/ PHONON
DISPERSION/ FREQUENCY DISTRIBUTION
- 72-ES-02 ESCHRIG, H./ FELDMANN, K./ HENNIG, K./ WEISS, L.
PHONONS IN MG,ZN2, MODEL POTENTIAL CALCULATIONS AND NEUTRON
SCATTERING EXPERIMENTS
NEUTRON INELASTIC SCATTERING, IAEA, P.157-P.169 (1972)
MG,ZN2., CALCULATION/ MODEL POTENTIAL THEORY/ EXPERIMENT/
T/ PHONON DENSITY
- 72-ES-03 ESCHRIG, H./ URWANK, P./ WONN, H.
CALCULATED PHONON SPECTRA AND INS CROSS SECTIONS OF MG,
ZN2
PHYS. STATUS SOLIDI B, V.49, P.807-P.816 (1972)
MG,ZN2., THEORY/ PHONON SPECTRA/ A.B2 TYPE INTERMETALLIC
COMPOUNDS
- 72-ES-04 ESCHRIG, J./ URWANK, P./ WONN, H.
CALCULATED PHONON SPECTRA AND INS CROSS SECTIONS OF MG,
ZN2
PHYS. STATUS SOLIDI, V.49, P.807 (1972)
MG,ZN2., THEORY
- 72-FA-01 FANCONI, B.
LATTICE DYNAMICS OF POLYGLYCINE I
J. CHEM. PHYS., V.57, P.2109 (1972)
POLYGLYCINE., THEORY/ DISPERSION RELATION., 2-DIMENSIONAL
LATTICE VIBRATION
- 72-FI-01 FISCHER, K./ BILZ, H./ HABERKORN, R./ WEBER, W.
COVALENCY AND DEFORMABILITY OF AG+ IONS IN THE LATTICE
DYNAMICS OF SILVER HALIDES
PHYS. STATUS SOLIDI B, V.54, P.285-P.294 (1972)
AG,CL/ AG,BR., THEORY/ PHONON DISPERSION/ PHONON DENSITY/
SHELL MODEL
- 72-FR-01 FRANCHETTI, S.
NEXT-NEIGHBOUR DISTRIBUTIONS IN SIMPLE LIQUIDS
NUOVO CIM., B, V.10, P.211-P.228 (1972)
AR/ ZN., THEORY/ RADIAL DENSITY FUNCTION
- 72-GA-01 GAUSTER, W.B.

ELASTIC CONSTANTS AND GRUENEISEN PARAMETERS OF PYROLYTIC GRAPHITE

PHIL, MAG., V.25, P.687 (1972)
GRAPHITE ..THEORY/ SOLID ..ELASTIC CONSTANTS

72-GE-01 GENZEL, L./ MARTIN, T.P.
LATTICE DYNAMICS OF MG.O MICROCRYSTALS
PHYS. STATUS SOLIDI, V.51, P.101-P.106 (1972)
MG.O ..THEORY/ FREQUENCY SPECTRA/ RIGID ION MODEL/ SMALL CRYSTAL

72-GE-02 GESI, K./ AXE, J.D./ SHIRANE, G./ LINZ, A.
DISPERSION AND DAMPING OF SOFT ZONE-BOUNDARY PHONONS IN K.MN.F3
PHYS. REV. B, V.5, P.1933-P.1941 (1972)
K.MN.F3 ..EXPERIMENTS/ SOFT PHONON/ DISPERSION RELATION / CURIE-WEISS LAW/ DAMPING PARAMETER/ DIFFUSE SCATTERING

72-GE-03 GESI, K.
LATTICE INSTABILITY AND PHASE TRANSITIONS IN K.MN.F3 (JAPANESE)
JAERI-M-4841, PROC. 4TH CONF. ON INELASTIC NEUTRON SCATTERING, P.86-P.90 (1972)
K.MN.F3 ..EXPERIMENT/ SOFT PHONON/ PHASE TRANSITION

72-GH-01 GHATAK, A.K./ KOTHARI, L.S.
AN INTRODUCTION TO LATTICE DYNAMICS
ADDITION-WESLEY PUBLISHING COMPANY, LONDON (1972)
REVIEW-ARTICLES ..BOOK/ LATTICE DYNAMICS/ NEUTRON SCATTERING

72-GH-02 GHOSH, R.E./ WADDINGTON, T.C./ TEMME, F.P.
ENERGY-LOSS NEUTRON SPECTROSCOPY APPLIED TO STRONGLY HYDROGEN BONDED MOLECULAR SYSTEMS
NEUTRON INELASTIC SCATTERING, IAEA, P.345-P.353 (1972)

NA.H.F2/ CS.H.CL2/ H.CR.O2/ H.CO.O2/ K.H.(C.CL3.C.O2)2
..EXPERIMENT/ NEUTRON SPECTROSCOPY/ ENERGY LOSS/ MOLECULAR DYNAMICS

72-GI-01 GILBERT, E.
FOURIER TRANSFORM OF INELASTIC NEUTRON SCATTERED INTENSITY FOR SOLID HE-4
BNL-16935 (1972)
HE ..FOURIER TRANSFORM OF SCATTERED INTENSITY/ PROBABILITY DENSITY

72-GI-02 GISSLER, W.
INELASTIC NEUTRON SCATTERING BY HYDROGEN IN METALS
JUL-CONF-6, V.1, P.284-P.285 (1972)
NEUTRON-SCATTERING-IN-SOLIDS ..HYDROGEN IN METAL

72-GL-01 GLYDE, H.R./ TAYLOR, R.
ANHARMONIC LATTICE DYNAMICS IN NA
PHYS. REV. B, V.5, P.1206-P.1213 (1972)
NA ..THEORY/ PHONON DISPERSION/ LIFE TIME/ ANHARMONIC/

5, 90, 160, 293, 361K
72-GL-02 GLYDE, H.R./ KHANNA, F.C.
ANHARMONIC PHONONS IN B.C.C. HE-4
CAN, J, PHYS., V.50, P.1152-P.1155 (1972)
HE ..THEORY/ PHONON DISPERSION/ T-MATRIX/ SCH APPROXIMATION

72-GO-01 GODA, M.
PHONONS IN RARE-GAS CONDENSATES AND THE LAW OF CORRESPONDING STATES
PROGR. THEORET. PHYS., KYOTO, V.47, P.1064-P.1066 (1972)
THEORY-OF-FLUIDS ..THEORY/ PHONON DISPERSION/ LIQUID/ LAW OF CORRESPONDING STATES

72-GO-02 GOMPF, F./ LAU, H./ REICHAERT, W./ SALGADO, J.
STUDIES ON THE DETERMINATION OF THE PHONON DENSITY OF STATES BY COHERENT INELASTIC SCATTERING OF SLOW NEUTRONS FROM POLYCRYSTALLINE SAMPLES
NEUTRON INELASTIC SCATTERING, IAEA, P.137-P.147 (1972)
PB/ AL/ CA ..EXPERIMENT/ PHONON SPECTRA/ COHERENT SCATTERING

72-GO-03 GOYAL, P.S./ DASANNACHARYA, B.A./ THAPER, C.L./ IYENGAR, P.K.
FREQUENCY DISTRIBUTION FUNCTION OF SOLID AMMONIA
PHYS. STATUS SOLIDI, V.50, P.701-P.708 (1972)
AMMONIA ..EXPERIMENT/ PHONON DENSITY

72-GR-01 GREENFIELD, A.J./ WISER, N./ LEENSTRA, M.R./ VAN-DER-LUGT, W.
COMPARISON OF EXPERIMENTAL AND THEORETICAL STRUCTURE FACTORS FOR LIQUID NA AND K
PHYSICA, V.59, P.571-P.581 (1972)
NA/ K ..THEORY/ LIQUID/ STRUCTURE FACTOR/ HARD-SPHERE MODEL

72-HA-01 HANKE, W./ BILZ, H.
PHONONS IN METALS
NEUTRON INELASTIC SCATTERING, 1972, IAEA, P.3-P.28 (1972)

THEORY-OF-SOLIDS/ REVIEW-ARTICLES ..MICROSCOPIC THEORY/ PHONON/ METAL/ REVIEW

72-HA-02 HARADA, J.

- SOFT MODES AND THE INELASTIC SCATTERING OF NEUTRONS (IN JAPANESE)
JAERI-M-4841, PROC. 4TH CONF. ON INELASTIC NEUTRON SCATTERING, P.77-P.85 (1972)
8A,TI.03 .,SOFT PHONON MODE/ EXPERIMENT/ PHASE TRANSITION ON
- 72-HA-03 HASSAN, M./ LADO, F.
DIFFUSIVE AND COLLECTIVE MOTION IN CLASSICAL FLUIDS
J. CHEM. PHYS., V.57, P.3003-P.3006 (1972)
THEORY-OF-FLUIDS .,DIFFUSION CONSTANT
- 72-HA-04 HAUTECLER, S./ VORDERWISCH, P.
MOLECULAR MOTIONS IN SILANENE
NEUTRON INELASTIC SCATTERING, IAEA, P.489-P.499 (1972)
SI,H4 .,EXPERIMENT/ TOF SPECTRA/ GAS AND LIQUID STATE
- 72-HA-05 HAVLIN, S./ LUBAN, M.
PHONON SPECTRUM OF SUPERFLUID HELIUM
PHYS. LETT., A, V.42A, P.133 (1972)
HE .,THEORY
- 72-HA-06 HAWRANEK, J.P./ LOWNDES, R.P.
LATTICE DYNAMICS OF SILVER BROMIDE
SOLID STATE COMMUN., V.11, P.1473-P.1475 (1972)
AG,BR .,THEORY/ PHONON DISPERSION/ STATE DENSITY/ DEFORMATION DIPOLE MODEL
- 72-HE-01 HEARN, C.J.
PHONON SOFTENING AND THE METAL-INSULATOR TRANSITION IN V.02
J. PHYS., C, LONDON, V.5, P.1317-P.1334 (1972)
V.02 .,THEORY/ METAL-NONMETAL PHASE TRANSITION/ SOFT PHONON
- 72-HE-02 HENNION, B./ MOUSSA, F.
NORMAL MODES OF VIBRATION IN CU,I
PHYS. REV. LETT., V.28, P.964-P.966 (1972)
CU,I .,EXPERIMENT/ DISPERSION RELATION/ RIGID ION MODEL / FREQUENCY DISTRIBUTION/ ELASTIC CONSTANT
- 72-HO-01 HORNER, H.
THE EFFECT OF HARD-CORE INTERACTIONS ON CALCULATIONS OF PHONON FREQUENCIES AND DAMPING IN RARE GAS CRYSTALS
NEUTRON INELASTIC SCATTERING, IAEA, P.119-P.127 (1972)
HE/ NE/ AR .,THEORY/ PHONON DISPERSION/ SELFCONSISTENT TREATMENT
- 72-HO-02 HORNER, H.
QUANTUM CRYSTALS, THEORY OF THE PHONON SPECTRUM

- BNL-17121 (1972)
THEORY-OF-SOLIDS/ HE/ NE .,QUANTUM CRYSTALS/ PHONON SPECTRUM
- 72-HO-03 HORNER, H.
MULTIPHONON AND SINGLE-PARTICLE EXCITATIONS IN QUANTUM CRYSTALS
BNL-17120 (1972)
HE/ NE .,THEORY/ SCATTERING FUNCTION/ SINGLE-PARTICLE EXCITATION/ QUANTUM CRYSTAL
- 72-HO-04 HOROVITZ, B./ GUTFREUND, H./ WEGER, M.
PHONON DISPERSION IN SYSTEMS WITH A PLANAR FERMI SURFACE
SOLID STATE COMMUN., V.11, P.1361-P.1364 (1972)
THEORY-OF-SOLIDS .,THEORY/ PHONON SPECTRUM/ EFFECT OF A PLANAR FERMI SURFACE
- 72-HU-01 HULLER, A./ PRESS, W.
CRITICAL SCATTERING IN SOLID C*O4
PHYS. REV. LETT., V.29, P.266 (1972)
C,H4 .,CRITICAL SCATTERING/ C.O4
- 72-II-01 IIZUMI, M.
A METHOD OF DYNAMICAL STRUCTURE ANALYSIS AND ITS APPLICATION TO CALCIUM FLUORIDE
J. PHYS. SOC. JAP., V.33, P.647-P.665 (1972)
CA,F2
- 72-II-02 IIZUMI, M./ GESI, K./ HARADA, J.
LATTICE VIBRATION IN SR-TI.O3 (IN JAPANESE)
JAERI-M-4841, PROC. 4TH CONF. ON INELASTIC NEUTRON SCATTERING, P.91-P.93 (1972)
SR,TI.O3 .,EXPERIMENT/ PHONON DISPERSION
- 72-IN-01 INOUE, K./ OTOMO, N./ UTSURO, M./ FUJITA, Y.
SLOW NEUTRON SPECTRA IN THE LIQUID AND SOLID METHANE
J. NUCL. SCI. TECHNOL., TOKYO, V.9, P.374 (1972)
METHANE .,NEUTRON SPECTRA
- 72-IR-01 IRWIN, J.C./ LACOMBE, J.
PHONON DISPERSION IN ZN,SE
CAN. J. PHYS., V.50, P.2596-P.2604 (1972)
ZN,SE .,RAMAN SPECTRA/ MODEL FITTING/ STATE DENSITY/ SPECIFIC HEAT
- 72-IS-01 ISHIBASHI, Y./ TAKAGI, Y.
COMPUTER EXPERIMENT ON LINEAR CHAIN OF ATOMS LYING IN DOUBLE MINIMUM POTENTIAL
J. PHYS. SOC. JAP., V.33, P.1-P.5 (1972)
THEORY-OF-SOLIDS .,COMPUTER EXPERIMENT/ DYNAMICS/ LINEAR CHAIN/ DOUBLE MINIMUM

- 72-IS-02 ISHIBASHI, Y.
FORCE CONSTANTS IN BA.TI.03 AND SR.TI.03
JAERI-M-4841, PROC. 4TH CONF. ON INELASTIC NEUTRON
SCATTERING, P.98-P.102 (1972)
BA.TI.03/ SR.TI.03 ..THEORY/ FORCE CONSTANT
- 72-JV-01 IVANOV, M.A./ FISHMAN, A.Y.
INELASTIC SCATTERING OF NEUTRONS IN CRYSTALS CONTAINING
LINEAR DEFECTS
PHYS. STATUS SOLIDI B, V.51, P.853-P.861 (1972)
NEUTRON-SCATTERING-IN-SOLIDS/ SCATTERING-BY-DEFECTS ..T
HEORY/ LINEAR DEFECT
- 72-JA-01 JACOBI, N./ SCHNEPP, O.
QUANTUM LATTICE DYNAMICS OF MOLECULAR SOLIDS.2.APPLICATION
ON TO THE LIBRATIONS OF SOLID C.O2, ALPHA-N2 AND ORTHO-
H2
J. CHEM. PHYS., V.57, P.2516 (1972)
C.O2/ H2/ N2 ..THEORY/ LATTICE DYNAMICS ..QUADRAPOL-QUA
DRAPOL POTENTIAL
- 72-JA-02 JACOBI, N.
QUANTUM LATTICE DYNAMICS OF MOLECULAR SOLIDS.1.GENERAL
THEORY
J. CHEM. PHYS., V.57, P.2505 (1972)
THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS ..TRANSLATI
ONAL AND LIBRATIONAL MODES
- 72-JA-03 JACROT, B./ KROO, N./ SPRINGER, T.
SUMMARY OF THE SYMPOSIUM ON NEUTRON INELASTIC SCATTERIN
G
NEUTRON INELASTIC SCATTERING, IAEA, P.859-P.865 (1
972)
REVIEW-ARTICLES ..SUMMARR OF THE SYMPOSIUM
- 72-JA-04 JANIK, J.A./ JANIK, J.M./ OTNES, K./ PYNN, R.
A STUDY OF THE ANISOTROPY OF SELF-DIFFUSION IN MAGNETIC
ALLY ORIENTED PARA-AZOXYANISOLE
NEUTRON INELASTIC SCATTERING, IAEA, P.515-P.525 (1
972)
P-AZOXYANISOLE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/
NEMATIC LIQUID CRYSTAL/ 396-399K/ EXTERNAL MAGNETIC FIL
ED
- 72-JA-05 JANNINK, G./ SUMMERFIELD, G.C.
CONFORMATIONAL MOTIONS OF POLYMERS
NEUTRON INELASTIC SCATTERING, IAEA, P.277-P.286 (1
972)
SCATTERING-THEORIES ..THEORY/ POLYMER CHAINS IN SOLUTIO
N/ DIFFUSIVE MOTION
- 72-JE-01 JEX, H.
ANHARMONIC INTERACTIONS IN GE AND SI
NEUTRON INELASTIC SCATTERING, 1972, IAEA, P.29-P.3
9 (1972)
GE/ SI ..THEORY/ PHONON/ ANHARMONIC INTERACTION
- 72-JO-01 JOGI, S./ TRIPATHI, B.B./ BEHARI, J.
EFFECT OF ANGULAR FORCES ON THE CRYSTAL DYNAMICS OF SOL
IDIFIED XENON
NUOVO CIM., B, V.10, P.111-P.116 (1972)
XE ..THEORY/ PHONON DISPERSION AND SPECTRA/ ELASTIC FOR
CE MODEL
- 72-KA-01 KACHHAVA, C.M.
PHONON FREQUENCIES OF METALLIC LITHIUM
PHYS. STATUS SOLIDI B, V.54K, P.29-P.32 (1972)
LI ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL CALCULAT
ION
- 72-KA-02 KACHHAVA, C.M.
PHONON FREQUENCIES OF METALLIC LITHIUM
PHYS. STATUS SOLIDI B, V.54, P.29 (1972)
LI ..THEORY/ PHONON DISPERSION
- 72-KA-03 KAM, Z./ GILAT, G.
OPTIMUM-MODEL-POTENTIAL LATTICE DYNAMICS OF BETA-SN
PHYS. REV. B, V.5, P.2887-P.2896 (1972)
SN ..THEORY/ PHONON DISPERSION/ STATE DENSITY/ MODEL PO
TENTIAL
- 72-KA-04 KAMITAKAHARA, W.A./ BROCKHOUSE, B.N.
NEUTRON SCATTERING BY VIBRATIONS IN A MASS DISORDERED L
ATTICE, NI(55 PERCENT) PD(45 PERCENT
NEUTRON INELASTIC SCATTERING, IAEA, P.73-P.84 (197
2)
NI-PD ..EXPERIMENT/ PHONON DISPERSION/ ALLOY/ MASS EFTE
CT
- 72-KA-05 KAMMER, E.W./ CARDINAL, L.C./ VOLD, C.L./ GLICKSMA
N, M.E.
THE ELASTIC CONSTANTS FOR SINGLE-CRYSTAL BISMUTH AND TI
N FROM ROOM TEMPERATURE TO THE MELTING POINT
J. PHYS. CHEM. SOLIDS, V.33, P.1891-P.1898 (1972)
BI/ SN ..EXPERIMENT/ ELASTIC CONSTANT
- 72-KA-06 KANAMORI, J.
COOPERATIVE YAHN-TELLER EFFECT (IN JAPANESE)
JAERI-M-4841, PROC. 4TH CONF. ON INELASTIC NEUTRON
SCATTERING, P.106-P.107 (1972)
THEORY-OF-SOLIDS ..JAHN-TELLER EFFECT/ PHONON
- 72-KA-07 KAPULLA, H.

- UNTERSUCHUNG DER MOLEKUELROTATION IM FESTEN METHAN DURCH
H INELASTISCHE NEUTRONENSTREUUNG
KFK-1489 (1972)
C.H4 ..EXPERIMENT/ SOLID/ ROTATING CRYSTAL SPECTROMETER
/ SIGMA (E, E-PRIME, THETA)
- 72-KA-08 KAPULLA, H./ GLAESER, W.
MOLECULAR ROTATIONS IN THE LOW-TEMPERATURE PHASE OF SOLID METHANE
NEUTRON INELASTIC SCATTERING, IAEA, P.841-P.849 (1972)
METHANE ..EXPERIMENT/ SOLID METHANE/ SMALL ENERGY PEAKS
- 72-KA-09 KATZ, I./ RICE, S.A.
ON THE CALCULATION OF THE DENSITY OF LOCALIZED STATES IN A DENSE FLUID
J. PHYS., C. LONDON, V.5, P.1165-P.1182 (1972)
THEORY-OF-FLUIDS ..DENSITY OF LOCALIZED STATE/ FLUID
- 72-KE-01 KERR, W.C./ PATAK, K.N./ SINGWI, K.S.
ADDENDUM TO NEUTRON SCATTERING FROM LIQUID HELIUM II AT LARGE MOMENTUM TRANSFER AND THE CONDENSATE FRACTION
PHYS. REV. A, V.4, P.2414 (1972)
HE ..THEORY
- 72-KE-02 KESHARWANI, K.M./ AGRAWAL, B.K.
FREQUENCIES AND WIDTHS OF PHONONS IN DILUTE CR-W ALLOYS
PHYS. REV. B, V.6, P.2178-P.2192 (1972)
CR-W ..THEORY/ DILUTE ALLOY/ PHONON DISPERSION AND WIDTH
HS/ MASS AND FORCE CONSTANT CHANGE
- 72-KE-03 KESHARWANI, K.M./ AGRAWAL, B.K.
PHONON FREQUENCIES IN CR-1.6AT-PERCENT W ALLOY
SOLID STATE COMMUN., V.11, P.771-P.774 (1972)
CR-W ..EXPERIMENT/ PHONON/ ALLOY/ IMPURITY EFFECT
- 72-KI-01 KIM, C.H./ RAFIZADEH, H.A./ YIP, S.
LATTICE VIBRATIONS IN AMMONIUM CHLORIDE IN THE LOW-TEMPERATURE ORDERED PHASE
J. CHEM. PHYS., V.57, P.2291-P.2298 (1972)
N.H4.CL ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM
/ RIGID-MOLECULAR MODEL/ ORDERED PHASE
- 72-KI-02 KITCHENS, T.A./ SHIRANE, G./ MINKIEWICZ, V.J./ OSGOOD, E.B.
SINGLE PARTICLE EXCITATIONS IN SOLID HELIUM
BNL-17101 (1972)
HE ..EXPERIMENT/ SOLID HE/ SINGLE PARTICLE EXCITATIONS
- 72-KO-01 KOEHLER, T.R./ WERTHAMER, N.R.
COMPUTATION OF PHONON SPECTRAL FUNCTIONS AND GROUND-STATE
- TE ENERGY OF SOLID HELIUM, I, BCC PHASE
PHYS. REV. A, V.5, P.2230-P.2237 (1972)
HE ..THEORY/ DISPERSION RELATION
- 72-KO-02 KOLLMAR, A.
QUASIELASTIC SCATTERING OF NEUTRONS FOR INVESTIGATION OF UNPERIODICAL ATOMIC MOTIONS IN LIQUID SELENIUM
JUL-829-FE (1972)
SE ..EXPERIMENT/ QUASIELASTIC SCATTERING/ LIQUID STATE
- 72-KO-03 KOTHARI, L.S./ SINGHAL, U.
LATTICE DYNAMICS OF SODIUM - COMPARISON OF DE LAUNAY AND CGW MODELS
J. PHYS., C. LONDON, V.5, P.293 (1972)
NA ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
ON ..ANGULAR FORCE
- 72-KR-01 KRESS, W.
LATTICE DYNAMICS OF HIGHLY POLARIZABLE HOMOPOLAR CRYSTALS WITH DIAMOND STRUCTURE
PHYS. STATUS SOLIDI B, V.49, P.235-P.245 (1972)
GE/ SN ..THEORY/ PHONON DISPERSION/ MODIFIED SHELL MODEL
- 72-KU-01 KUEHNER, D./ WAGNER, M.
LATTICE DYNAMICS FROM VIBRONIC SPECTRA, EXAMINATION OF A GENERALIZED SHELL MODEL FOR SR.F2 AND BA.F2
Z. PHYS., V.256, P.22-P.42 (1972)
SR.F2/ BA.F2 ..THEORY/ PHONON DISPERSION/ GENERALIZED SHELL MODEL/ VIBRONIC SPECTRA
- 72-KU-02 KUGLER, A.A.
SELF-MOTION RESPONSE AND INCOHERENT SCATTERING FUNCTION IN CLASSICAL LIQUIDS
J. PHYS. CHEM. LIQUIDS, V.3, P.205-P.223 (1972)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/CLASSICAL LIQUID/ INCOHERENT
- 72-KU-03 KUMAR, A./ SHARAN, B.
LATTICE DYNAMICS AND THE HEAT CAPACITY OF INDIUM
J. PHYS., C. LONDON, V.5, P.3161-P.3163 (1972)
IN ..THEORY/ PHONON DISPERSION/ DEBYE TEMPERATURE
- 72-KU-04 KUSHWAHA, S.S./ KUMAR, A.
NONCENTRAL-FORCE MODEL FOR TRANSITION H.C.P. METALS
NUOVO CIM., B, V.11, P.301-P.312 (1972)
TI/ HF/ Y ..THEORY/ PHONON DISPERSION/ H.C.P. TRANSITION METAL
- 72-LA-01 LADO, F.
NUMERICAL CALCULATION OF THE DENSITY AUTOCORRELATION FUNCTION FOR LIQUID ARGON

- PHYS. REV. A, V.5, P.2238-P.2244 (1972)
AR .,THEORY/ DENSITY AUTOCORRELATION FUNCTION
- 72-LA-02 LAL, H.H./ VERMA, M.P.
LATTICE DYNAMICS OF RUBIDIUM HALIDES
J. PHYS., C, LONDON, V.5, P.543-P.548 (1972)
RB.F/ RB.CL/ RB.BR/ RB.I .,THEORY/ PHONON DISPERSION/ S
HELL MODEL
- 72-LA-03 LAL, H.H./ VERMA, M.P.
LATTICE DYNAMICS OF CS.CL, CS.BR AND CS.I
J. PHYS., C, LONDON, V.5, P.1038-P.1045 (1972)
CS.CL/ CS.BR/ CS.I .,CALCULATION/ PHONON DISPERSION/ TH
REE BODY FORCE SHELL MODEL
- 72-LA-04 LARSSON, K.
MOLECULAR DYNAMICS OF LIQUIDS IN RELATION TO THE SOLID
AND GAS PHASES AS SEEN BY NEUTRON SCATTERING
FARADAY SYMP, CHEM. SOC., V.6, P.122-P.134 (1972)
NEUTRON-SCATTERING-IN-FLUIDS .,THEORY/ LIQUID/ DIFFUSIO
N/ CENTER-OF-MASS MOTION/ ROTATIONAL MOTION
- 72-LA-05 LARSSON, K.E.
MOLECULAR DYNAMICS OF LIQUIDS IN RELATION TO THE SOLID
AND GAS PHASES AS SEEN BY NEUTRON SCATTERING
FARADAY SYMP, CHEM. SOC., V.6, P.122-P.134 (1972)
REVIEW-ARTICLES .,MOLECULAR DYNAMICS/ SIMPLE LIQUID
- 72-LE-01 LEADBETTER, A.J./ LITCHINSKY, D./ TURNBULL, A.
ROTATIONAL MOTIONS IN THE PLASTIC CRYSTAL PHASES OF C6,
F12, C6.F11.H AND C6.F9.H3
NEUTRON INELASTIC SCATTERING, IAEA, P.231-P.243 (1
972)
FLUORINATED CYCLOHEXANE .,EXPERIMENT/ MOLECULAR ROTATIO
N/ QUASI-ELASTIC SCATTERING
- 72-LE-02 LEADBETTER, A.J./ STRINGFELLOW, M.W.
THE FREQUENCY SPECTRUM OF THE NORMAL MODES OF VIBRATION
OF VITREOUS SILICA AND ALPHA QUARTZ
NEUTRON INELASTIC SCATTERING, IAEA, P.501-P.513 (1
972)
SI.O2 .,EXPERIMENT/ VITREOUS SILICA/ ALPHA QUARTZ/ PHON
ON SPECTRA
- 72-LE-03 LEE, Y./ JONAS, J.
DENSITY EFFECTS ON THE DYNAMIC STRUCTURE OF LIQUID DEUT
ERIUM OXIDE
J. CHEM. PHYS., V.57, P.4233-P.4240 (1972)
D2.O .,VISCOSITY/ DENSITY
- 72-LE-04 LEFEVRE, Y./ CHEN, S.H./ YIP, S.
TRANSLATIONAL LINE NARROWING IN PRESSURIZED HYDROGEN GA

- S
NEUTRON INELASTIC SCATTERING, IAEA, P.445-P.459 (1
972)
H .,EXPERIMENT/ QUASI-ELASTIC SCATTERING/ PRESSURE DEPE
NDENCE/ KINETIC THEORY ANALYSIS
- 72-LI-01 LITZMAN, O./ BARTUSEK, M./ ZAVADIL, V.
LATTICE DYNAMICS OF A CRYSTAL CONTAINING A POINT DEFECT
WITH A LONG RANGE INTERACTION
J. PHYS., C, LONDON, V.5, P.287-P.292 (1972)
THEORY-OF-SOLIDS .,LATTICE DYNAMICS/ DEFECT/ LONG RANGE
INTERACTION/ GREEN FUNCTION
- 72-LO-01 LOVESEY, S.W.
THEORY OF THE MAGNON AND PHONON INTERACTION IN FE-F2
J. PHYS., C, LONDON, V.5, P.2769 (1972)
FE,F2 .,THEORY
- 72-MA-01 MARSH, D.I./ MARTIN, D.H.
LATTICE VIBRATION OF POLYETHYLENE
J. PHYS., C, LONDON, V.5, P.2309-P.2316 (1972)
POLYETHYLENE .,THEORY/ PHONON DISPERSION/ PHONON SPECTR
UM/ PROPAGATING TRASVERSELY TO CHAIN AXIS
- 72-MA-02 MARTIN, P.C./ PARODI, O./ PERSHAN, P.S.
UNIFIED HYDRODYNAMIC THEORY FOR CRYSTALS, LIQUID CRYSTA
LS, AND NORMAL FLUID
PHYS. REV. A, V.6, P.2401 (1972)
THEORY-OF-FLUIDS .,THEORY/ SCATTERING LAW .,HYDRODYNAMI
CS AND THERMODYNAMICS
- 72-MA-03 MAZENKO, G.F.
PROPERTIES OF THE LOW-DENSITY MEMORY FUNCTION
PHYS. REV. A, V.5, P.2545 (1972)
THEORY-OF-FLUIDS .,MEMORY FUNCTION
- 72-MA-04 MAZENKO, G.F./ WEI, Y.C./ YIP, S.
THERMAL FLUCTUATIONS IN A HARD-SHERE GAS
PHYS. REV. A, V.6, P.1981-P.1995 (1972)
THEORY-OF-FLUIDS .,THEORY/ DENSITY FLUCTUATION/ DILUTE
GAS/ HARD SPHERE/ KINETIC EQUATION
- 72-MC-01 MCDOWELL, R.S./ ASPREY, L.B./ HOSKINS, L.C.
VIBRATIONAL SPECTRUM AND FORCE FIELD OF RUTHENIUM TETRO
XIDE
J. CHEM. PHYS., V.56, P.5712-P.5721 (1972)
RU.O4 .,EXPERIMENT .,INFRARED AND RAMAN SPECTRA/ VAPOR
AND LIQUID PHASE/ ANHARMONICITY/ CORIOLIS CONSTANTS
- 72-MC-02 MCDOWELL, R.S./ ASPREY, L.B.
VIBRATIONAL SPECTRUM AND FORCE FIELD OF XENON TETROXIDE
J. CHEM. PHYS., V.57, P.3062 (1972)

THEORY-OF-SOLIDS ..THEORY/ QUANTUM LATTICE DYNAMICS/ PHONON DISPERSION

72-NA-05 NARTEN, A.
LIQUID WATER; ATOM PAIR CORRELATION FUNCTIONS FROM NEUTRON AND X-RAY DIFFRACTION
J. CHEM. PHYS., V.56, P.5681 (1972)
H2,O/ D2,O ..PAIR CORRELATION/ EXPERIMENT

72-NA-06 NATHANS, R.
THERMAL NEUTRON SCATTERING ON MAGNETIC MATERIALS AND LIQUIDS
TID-26355, P.8 (1972)
MISCELLANEOUS

72-NE-01 NELIN, G./ NILSSON, G.
PHONON DENSITY OF STATES IN GERMANIUM AT 80K MEASURED BY NEUTRON SPECTROMETRY
PHYS. REV. B, V.5, P.3151-P.3160 (1972)
GE ..EXPERIMENT/ CALCULATION/ PHONON DENSITY

72-NI-01 NICKLOW, R./ WAKABAYASHI, N./ SMITH, H.G.
LATTICE DYNAMICS OF PYROLYTIC GRAPHITE
PHYS. REV. B, V.5, P.4951 (1972)
GRAPHITE ..PHONON DISPERSION

72-NI-02 NIELSEN, M./ CARNEIRO, K.
LATTICE DYNAMICS OF SOLID HYDROGEN
NEUTRON INELASTIC SCATTERING, IAEA, P.111-P.117 (1972)
H ..EXPERIMENT/ PHONON DISPERSION/ SOLID PARAHYDROGEN

72-NI-03 NILSSON, G./ NELIN, G.
STUDY OF THE HOMOLOGY BETWEEN SILICON AND GERMANIUM BY THERMAL-NEUTRON SPECTROMETRY
PHYS. REV. B, V.6, P.3777 (1972)
GE/ SI ..LATTICE DYNAMICS/ NEUTRON SPECTROSCOPY

72-OS-01 OSGOOD, E.B./ MINKIEWICZ, V.J./ KITCHENS, T.A./ SHIRANE, G.
INELASTIC-NEUTRON SCATTERING FROM BCC HE-4
PHYS. REV. A, V.5, P.1537-P.1547 (1972)
HE ..EXPERIMENT/ PHONON DISPERSION

72-PA-01 PAGE, D.I.
THE STRUCTURE FACTOR FOR LIQUID ARGON AT 84.5DK
AERE-R-6828 (1972)
AR ..EXPERIMENT/ LIQUID/ STRUCTURE FACTOR/ NEUTRON DIFFRACTION/ 84.5DK

72-PA-02 PANDEY, R.N./ DAYAL, B.
PHONON DISPERSION-RELATIONS IN RUBIDIUM CHLORIDE ON THE

BASIS OF SHELL MODEL

SOLID STATE COMMUN., V.11, P.185-P.188 (1972)
RB.CL ..THEORY/ PHONON DISPERSION/ SHELL MODEL

72-PA-03 PANDY, B.P./ DAYAL, B.
LATTICE DYNAMICS OF GERMANIUM BY THE C.G.W. TYPE OF ANGULAR FORCE MODEL
SOLID STATE COMMUN., V.11, P.775-P.777 (1972)
GE ..THEORY/ LATTICE/ DYNAMICS/ DISPERSION RELATION

72-PA-04 PASZKIEWICZ, T.
SELF-CONSISTENT THEORY OF SECOND ORDER ELASTIC CONSTANT S FOR NONIONIC ANHARMONIC CRYSTALS
JINR-E4-6444 (1972)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ ANHARMONICITY ..ELASTIC CONSTANTS

72-PA-05 PAWLEY, G.S.
DYNAMICS OF MOLECULAR CRYSTALS
NEUTRON INELASTIC SCATTERING, IAEA, P.175-P.192 (1972)
REVIEW-ARTICLES ..MOLECULAR CRYSTAL/ DYNAMICS

72-PA-06 PAWLEY, G.S.
ANALYTIC FORMULATION OF MOLECULAR LATTICE DYNAMICS BASED ON PAIR POTENTIAL FUNCTIONS
PHYS. STATUS SOLIDI B, V.49, P.475-P.488 (1972)
THEORY-OF-SOLIDS ..THEORY/ MOLECULAR LATTICE DYNAMICS/ ANALYTIC FORMULATION/ PAIR POTENTIAL

72-PL-01 PLAKIDA, N.M.
INTERFERENCE IN NEUTRON SCATTERING IN ANHARMONIC CRYSTALS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.14 (V.14), P.2841-P.2848 (P.2462-P.2467) (1972 (1973))
NEUTRON-SCATTERING-IN-SOLIDS ..ANHARMONIC CRYSTAL/ ONE PHONON COHERENT CROSS SECTION

72-PO-01 POLLOCK, E.L.
APPROXIMATE PHONON FREQUENCY DISTRIBUTIONS FOR FCC LENS
ARD-JONES HARMONIC CRYSTALS
COO-3161-3 (1972)
AR ..THEORY/ LENNARD-JONES HARMONIC CRYSTALS

72-PO-02 POWELL, B.M./ WOODS, A.D.B./ MARTEL, P.
TEMPERATURE DEPENDENCE OF THE NORMAL MODES OF NIOBIUM NEUTRON INELASTIC SCATTERING, 1972, IAEA, P.43-P.51 (1972)
NB ..EXPERIMENT/ PHONON DISPERSION/ 296 TO 1050K

72-PO-03 POWELL, B.M./ DOLLING, G./ FISHER, L./ MARTEL, P.
NORMAL MODES OF SOLID CARBON DIOXIDE

XE,04 ..EXPERIMENT ..VAPOR/ FREQUENCY SHIFT AND ANHARMONICITY CORRECTIONS/ INFRARED AND RAMAN SPECTRA

72-ME-01 MELCHER, R.H./ SCOTT, B.A.
SOFT ACOUSTIC MODE AT THE COOPERATIVE JAHN-TELLER PHASE TRANSITION IN DY,V.04
PHYS. REV. LETT., V.28, P.607-P.610 (1972)
DY,V.04 ..EXPERIMENT/ ELASTIC CONSTANT/ SOFT MODE/ MEAN FIELD THEORY/ CRITICAL FLUCTUATION

72-ME-02 MENON, C.S./ RAO, R.R.
LATTICE DYNAMICS AND SOE CONSTANTS OF TERBIUM USING KEATING'S APPROACH
SOLID STATE COMMUN., V.10, P.179 (1972)
TE ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION

72-ME-03 MENON, C.S./ RAO, R.R.
LATTICE DYNAMICS AND THE SOE CONSTANTS OF THALLIUM AT 77 AND 296K
SOLID STATE COMMUN., V.10, P.701-P.704 (1972)
TL ..THEORY/ PHONON DISPERSION/ SECOND ORDER ELASTIC CONSTANT

72-ME-04 MENON, C.S./ RAO, R.R.
LATTICE DYNAMICS, THIRD ORDER ELASTIC CONSTANTS AND THERMAL EXPANSION OF CADMIUM
J. PHYS. CHEM. SOLIDS, V.33, P.2129-P.2139 (1972)
CD ..THEORY/ SOE, TOE/ THERMAL EXPANSION/ GRUNEISEN CONSTANT

72-ME-05 MENON, C.S./ RAO, R.R.
LATTICE DYNAMICS AND ELASTIC CONSTANTS OF HOLMIUM AND YTTRIUM
PHYS. STATUS SOLIDI B, V.49, P.843-P.855 (1972)
HO/ Y ..THEORY/ PHONON DISPERSION/ HEXAGONAL METAL

72-MI-01 MIKULI, E./ JANIK, J.M./ PYTASZ, G./ JANIK, J.A./ SCIESINSKI, J.
LOW FREQUENCY MOTIONS OF WATER MOLECULES IN CRYSTALLINE L12.S.04*H2.O
INP-791/PS (1972)
L12.S.04*H2.O ..EXPERIMENT/ FREQUENCY SPECTRUM

72-MI-02 MITRA, S.K.
VELOCITY AUTOCORRELATION IN LIQUID SODIUM
PHYS. LETT., A, V.38, P.471 (1972)
SODIUM ..VELOCITY AUTOCORRELATION

72-MI-03 MITRA, S.K./ DASS, N./ VORSHNEYA, N.C.
MEMORY FUNCTION OF VELOCITY AUTOCORRELATION OF CLASSICAL LIQUIDS

PHYS. REV. A, V.6, P.1214-P.1217 (1972)
THEORY-OF-FLUIDS ..THEORY/ LIQUID/ VELOCITY AUTOCORRELATION/ MEMORY FUNCTION

72-MO-01 MOOK, H.A./ SCHERM, R./ WILKINSON, M.K.
NEUTRON SCATTERING INVESTIGATION OF BOSE-EINSTEIN CONDENSATION IN SUPERFLUID HE-4
CONF-720833-10 (1972)
HE ..EXPERIMENT/ HIGH ENERGY NEUTRON SCATTERING

72-MO-02 MOSTOLLER, M.
PHONON SPECTRA OF SOME TRANSITION METAL CARBIDES FROM A SIMPLE PSEUDOPOTENTIAL APPROACH
PHYS. REV. B, V.5, P.1260-P.1265 (1972)
U,C/ HF,C/ TA,C/ NB,C ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH

72-MU-01 MUHLESTEIN, L.D./ GUERMAN, E./ CUNNINGHAM, R.M.
INVESTIGATION OF THE PHONON DISPERSION RELATIONS OF PARAMAGNETIC AND ANTIFERROMAGNETIC CHROMIUM
NEUTRON INELASTIC SCATTERING, 1972, IAEA, P.53-P.59 (1972)
CR ..EXPERIMENT/ PHONON DISPERSION/ 300DK TO 503DK

72-NA-01 NAKAHARA, Y./ KADOTANI, H.
A COMPUTATIONAL METHOD OF THERMAL NEUTRON SCATTERING KERNELS FOR HIGH TEMPERATURE CRYSTALS
JAERI-1220 (1972)
ZR-H/ COMPUTER-CODES ..THEORY/ SIGMA (E,E-PRIME)/ SIGMA (E)/ SIGMA-TRANSPORT(E)/ SOLID ..HIGH TEMPERATURE

72-NA-02 NAKAMURA, M./ YONEZAWA, F.
A SYSTEMATIC APPROACH TO THE PROBLEMS OF RANDOM LATTICE S,2 - A DOUBLE-SITE APPROXIMATION AND AN APPLICATION TO THE CALCULATION OF FREQUENCY SPECTRA OF DISORDERED SYSTEMS
PROGR. THEORET. PHYS., KYOTO, V.47, P.1124-P.1139 (1972)

THEORY-OF-SOLIDS ..THEORY/ DISORDERED SYSTEM/ PHONON FREQUENCY SPECTRA

72-NA-03 NAKAYAMA, T./ ODAJIMA, A.
A MODIFIED VALENCE FORCE FIELD APPROACH TO LATTICE DYNAMICS OF TRIGONAL SELENIUM
J. PHYS. SOC. JAP., V.33, P.12-P.20 (1972)
SE ..THEORY/ VALENCE-FORCE-FIELD/ ELASTIC CONSTANT

72-NA-04 NAMAIZAWA, H.
DYNAMICAL THEORY OF QUANTUM SOLIDS - PHONON DISPERSION RELATION
PROGR. THEORET. PHYS., KYOTO, V.48, P.709-P.723 (1972)

- NEUTRON INELASTIC SCATTERING, IAEA, P.207-P.217 (1972)
C.02 ..EXPERIMENT/ PHONON DISPERSION/ MODEL CALCULATION
- 72-PO-04 POWLES, J.G./ DORE, J.C./ PAGE, D.I.
COHERENT NEUTRON SCATTERING BY LIGHT WATER (H₂O) AND A
LIGHT-HEAVY WATER MIXTURE (64 PER CENT H₂O/36 PER CENT
D₂O)
MOL. PHYS., V.24, P.1025-P.1037 (1972)
H₂O/ D₂O ..EXPERIMENT/ STRUCTURE FACTOR/ H₂O-D₂O MI
XTURE/ ISOTOPIC SUBSTITUTION
- 72-PR-01 PRAKASH, S./ JOSHI, S.K.
LATTICE DYNAMICS OF NOBLE METALS-APPLICATION TO COPPER
PHYS. REV. B, V.5, P.2880-P.2887 (1972)
CU ..THEORY/ DISPERSION RELATION
- 72-PR-02 PRASAD, B./ SRIVASTAVA, R.S.
LATTICE VIBRATIONS OF ALUMINUM: A MODEL POTENTIAL APPRO
ACH
PHYS. LETT., A, V.38A, P.527 (1972)
AL ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATI
ON/ DEBYE TEMPERATURE ..METAL/ TWO PARAMETER MODEL POTE
NTIAL
- 72-PR-03 PRASAD, B./ SRIVASTAVA, R.S.
CRYSTAL DYNAMICS OF LITHIUM BASED ON THE PSEUDOPOTENTIAL
TECHNIQUE
PHYS. REV. B, V.6, P.2192 (1972)
LI ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATI
ON ..PSEUDOPOTENTIAL
- 72-PR-04 PRASK, H.J./ TREVINO, S.F./ GAULT, J.D./ LOGAN, K.
W.
ICE I - LATTICE DYNAMICS AND INCOHERENT NEUTRON SCATTER
ING
J. CHEM. PHYS., V.56, P.3217 (1972)
H₂O/ D₂O ..THEORY/ EXPERIMENT/ LATTICE DYNAMICS/ FREQ
UENCY RELATION/ DISPERSION RELATION/ TOF/ INCOHERENT AP
PROXIMATION/ SOLID ..ROOT MEAN SQUARE DISPLACEMENTS/ IC
E/ SPECIFIC HEAT
- 72-PR-05 PREVENDER, T.S./ SINHA, S.K./ SMITH, J.F.
LATTICE DYNAMICS OF Y-ZN
PHYS. REV. B, V.6, P.4438-P.4445 (1972)
Y-ZN ..EXPERIMENT/ PHONON DISPERSION/ ALLOY/ MODEL ANAL
YSIS/ FREQUENCY DISTRIBUTION/ DEBYE TEMPERATURE
- 72-PU-01 PUSTOVOIT, V.I.
HARD PHOTON AND SLOW NEUTRON SCATTERING IN SEMICONDUCTO
R CRYSTALS UNDER CONDITIONS OF SOUND INSTABILITY
- ZH, EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.62 (V.35
), P.754-P.761 (P.399-P.402) (1972 (1972))
THEORY-OF-SOLIDS/ NEUTRON-SCATTERING-IN-SOLIDS ..SEMICO
NDUCTOR/ SOUND-INSTABILITY CONDITION/ X-RAY, GAMMA-RAY
AND NEUTRON SCATTERING
- 72-PY-01 PYNN, R./ SQUIRES, G.L.
MEASUREMENTS OF THE NORMAL-MODE FREQUENCIES OF MAGNESIU
M
PROC. ROY. SOC., LONDON, SER. A, V.326, P.347-P.36
0 (1972)
MG ..EXPERIMENT/ PHONON DISPERSION/ PHONON DENSITY/ DEB
YE TEMP.
- 72-PY-02 PYNN, R./ OTNES, K./ RISTE, T.
COHERENT NEUTRON SCATTERING BY A NEMATIC LIQUID CRYSTAL
SOLID STATE COMMUN., V.11, P.1365-P.1367 (1972)
P-AZOXYANISOLE ..EXPERIMENT/ NEUTRON DIFFRACTION/ PHASE
DIAGRAM
- 72-QU-01 QUILICHINI, M./ POULET, H.
THE ANOMALOUS BEHAVIOR OF PHONON HEAR THE 60DC PHASE TR
ANSITION IN LEAD DICALCIUM PROPIONATE
SOLID STATE COMMUN., V.10, P.239 (1972)
DICALCIUM LEAD PROPIONATE ..EXPERIMENT/ FREQUENCY DISTR
IBUTION FUNCTION ..PHASE TRANSITION
- 72-RA-01 RAE, A.I.M.
THE LATTICE DYNAMICS OF H.C.N
H.C.N ..CALCULATION/ PHONON DISPERSION/ FREQUENCY SPECT
RUM/ PHASE CHANGE/ SOFT PHONON
- 72-RA-02 RAFIZADEH, H.A./ YIP, S./ PRASK, H.
LATTICE DYNAMICS OF RHOMBOHEDRAL SODIUM AZIDE
J. CHEM. PHYS., V.56, P.5377-P.5392 (1972)
NA,N3 ..EXPERIMENT/ THEORY/ TIME OF FLIGHT/ DISPERSION
RELATION/ FREQUENCY/ DISTRIBUTION
- 72-RA-03 RAINFORD, B.D./ HOUMANN, J.G./ GUGGENHEIM, H.J.
MAGNONS AND THE MAGNON-PHONON INTERACTION IN FE,F2
NEUTRON INELASTIC SCATTERING, IAEA, P.655-P.667 (1
972)
FE,F2 ..EXPERIMENT/ PHONON AND MAGNON DISPERSION/ MAGNO
N-PHONON INTERACTION
- 72-RA-04 RAJPUT, J.S./ KUSHWAHA, S.S.
PHONON DISPERSION RELATIONS FOR ZINC
PHYS. LETT., V.38A, P.497 (1972)
ZN ..THEORY/ PHONON DISPERSION
- 72-RA-05 RAM, P.N./ AGRAWAL, B.K.

- IMPURITY MODES AND EFFECTIVE FORCE CONSTANT IN CS,CL
PHYS. REV. B, V.5, P.2335-P.2337 (1972)
CS,CL ..THEORY/ LOCALIZED MODE/ GAP MODE/ H, D, K IMPUR
ITY
- 72-RA-06 RAO, R.R./ MENON, C.S.
PHONON DISPERSION RELATIONS AND ELASTIC CONSTANTS OF H,
C,P, HELIUM AT MOLAR VOLUME OF 16 CC
SOLID STATE COMMUN., V.11, P.1193 (1972)
HELIUM ..DISPERSION-RELATION
- 72-RE-01 RESIBOIS, P.
REMARKS ON THE KINETIC ENERGY DENSITY FLUCTUATIONS IN C
LASSICAL LIQUIDS
PHYSICA, V.59, P.587-P.591 (1972)
THEORY-OF-FLUIDS ..CLASSICAL LIQUID/ THORY
- 72-RE-02 REYNOLDS, P.A./ KJEMS, J.K./ WHITE, J.W.
HIGH-RESOLUTION INELASTIC NEUTRON SCATTERING FROM SOME
AROMATIC MOLECULAR POLYCRYSTALS FOR STUDY OF CRYSTAL EX
CITATIONS AND ANHARMONICEFFECTS
J. CHEM. PHYS., V.56, P.2928-P.2943 (1972)
C6,H4,CL2/ C6,H4,BR2 ..NEUTRON SPECTRUM/ THEORY/ EXPERI
MENT/ INELASTIC NEUTRON SCATTERING ..ANHARMONICITY
- 72-RE-03 REYNOLDS, P.A./ KJEMS, J.K./ WHITE, J.W.
EXPERIMENTAL LATTICE VIBRATIONAL DISPERSION CURVES FOR
BETA-PHASE P-C6,H4,CL2 AT 295K AND 90K, AND ACOUSTIC VE
LOCITIES FOR BETA-PHASE P-C6,H4,CL2 AT 295K COMPARED WI
TH A GENERAL CRYSTAL POTENTIAL FOR THE CHLOROBENZENES
NEUTRON INELASTIC SCATTERING, IAEA, P.195-P.206 (1
972)
C6,H4,CL2 ..EXPERIMENT/ PHONON DISPERSION/ TRICLINIC PH
ASE/ 295K TO 90K
- 72-RE-04 REYNOLDS, P.A./ WHITE, J.W.
INELASTIC NEUTRON SCATTERING SPECTRUM OF P-TERPHENYL
J, C. S. FARADAY TRANS. 2, V.68, P.1434-P.1438 (19
72)
TERPHENYL ..EXPERIMENT/ NEUTRON SPECTROSCOPY/ MOLECULAR
VIBRATION
- 72-RO-01 RODRIGUES, C./ VINHAS, L.A./ HERDADE, S.B./ DO-AMA
RAL, L.O.
SLOW-NEUTRON SCATTERING CROSS-SECTION FOR METHANOL, ETH
ANOL, PROPANOL, ISO-PROPANOL, BUTANOL, ETHANEDIOL AND P
ROPANETRIOL
J. NUCL. ENERGY, V.26, P.379-P.383 (1972)
METHANOL/ ETHANOL/ PROPANOL/ BUTANOL/ ETHANEDIOL/ PROPA
NETRIOL ..EXPERIMENT/ TOTAL SIGMA/ LIQUID
- 72-RO-02 RODRIGUEZ, C./ DO-AMARAL, L.O./ VINHAS, L.A./ HERO

- ADE, S.B.
PROTON MOTIONS IN METHANOL BY COLD NEUTRON SCATTERING
J. CHEM. PHYS., V.56, P.3118-P.3121 (1972)
METHANOL ..EXPERIMENT/ QUASIELASTIC SCATTERING/ MOLECUL
AR MOTION/ DIFFUSION
- 72-RO-03 ROWE, J.M./ SKOELD, K.
THE COHERENT SCATTERING FUNCTION OF LIQUID ARGON AT 85,
20K
NEUTRON INELASTIC SCATTERING, IAEA, P.413-P.429 (1
972)
AR ..EXPERIMENT/ LIQUID/ 85,2K/ SCATTERING FUNCTION
- 72-RO-04 ROWE, J.M.
A NEUTRON SCATTERING STUDY OF THE VIBRATIONAL AND DIFFU
SIONAL MOTIONS OF DEUTERIUM IN THE ALPHA AND BETA PHASE
S OF V.D0,5
SOLID STATE COMMUN., V.11, P.1299-P.1302 (1972)
V-H ..EXPERIMENT/ PHONON SPECTRA/ 300K,425K
- 72-RO-05 ROWE, J.M./ RUSH, J.J./ DE-GRAAF, L.A./ FERGUSON,
G.A.
NEUTRON QUASIELASTIC SCATTERING STUDY OF HYDROGEN DIFFU
SION IN A SINGLE CRYSTAL OF PALLADIUM
PHYS. REV. LETT., V.29, P.1250 (1972)
PD-H ..QUASIELASTIC SCATTERING/ HYDROGEN DIFFUSION
- 72-RU-01 RUSH, J.J./ SCHROEDER, L.W./ MELVEGER, A.J.
DYNAMICS OF SODIUM AND POTASSIUM BIFLUORIDE, INFRARED,
RAMAN, AND NEUTRON STUDIES
J. CHEM. PHYS., V.56, P.2793 (1972)
K,H,F2/ NA,H,F2 ..NEUTRON SPECTROSCOPY/ RAMAN, INFRARED
SPECTROSCOPY
- 72-RU-02 RUVALDS, J./ TUEITTO, I./ ZAWADOWSKI, A.
BOUND PHONON PAIRS IN SOLIDS
KFKI-72-22 (1972)
THEORY-OF-SOLIDS ..THEORY/ RESONANCE STATE OF TWO PHONO
NS
- 72-SA-01 SAKAMOTO, M./ IIZUMI, M./ MOTOHASHI, H.
ENERGY DISTRIBUTIONS OF NEUTRONS SCATTERED FROM K,H,F2,
(N,H4)2,S,O4 AND POLYETHYLENE BY NEUTRON ENERGY-LOSS M
ETHOD
JAERI-M-5033 (1972)
K,H,F2/ (N,H4)2,S,O4/ POLYETHYLENE ..EXPERIMENT/ BE-FIL
TER-DETECTOR/ MOLECULAR DYNAMICS
- 72-SC-01 SCHOMMERS, W.
MOLECULAR-DYNAMICS CALCULATIONS FOR RUBIDIUM
KFK-1413 (1972)
RB ..SCATTERING LAW/ FLUID STATE/ STRUCTURE FACTOR

- 72-SE-01 SEARS, V.F.,
INCOHERENT NEUTRON SCATTERING BY SIMPLE LIQUIDS FOR LARGE
MOMENTUM TRANSFER
PHYS. REV. A, V.5, P.452 (1972)
NEUTRON-SCATTERING-IN-FLUIDS, .THEORY/ LIQUID/ SCATTERING
FUNCTION/ SCATTERING THEORY
- 72-SE-02 SEARS, V.F.,
NEUTRON SCATTERING IN SOLID HE-4 AT LARGE MOMENTUM TRANSFER
SOLID STATE COMMUN., V.11, P.1307-P.1310 (1972)
HELIUM .ANARMONICITY/ FREQUENCY-SPECTRUM
- 72-SH-01 SHAM, L.J.,
MICROSCOPIC THEORY OF LATTICE DYNAMICS IN CONDUCTING CRYSTALS
PHYS. REV. B, V.6, P.3581 (1972)
THEORY-OF-SOLIDS .THEORY/ SOLID/ LATTICE DYNAMICS/ ELASTIC
CONSTANT .METAL
- 72-SH-02 SHAM, L.J.,
THEORY OF LATTICE DYNAMICS OF NB₃SN TYPE COMPOUNDS
PHYS. REV. B, V.6, P.3584 (1972)
NB₃SN/ THEORY-OF-SOLIDS .THEORY/ SOLID/ LATTICE DYNAMICS
- 72-SH-03 SHAPIRO, S.M./ AXE, J.D./ SHIRANE, G./ RISTE, T.,
CRITICAL NEUTRON SCATTERING IN SR.TI.O₃ AND K.MN.F₃
PHYS. REV. B, V.6, P.4332-P.4341 (1972)
SR.TI.O₃/ K.MN.F₃ .EXPERIMENT/ CRITICAL SCATTERING/ PHASE
TRANSITION
- 72-SH-04 SHAWVER, R.E./ DEAN, P.,
ATOMIC VIBRATIONS IN ORIENTATIONALLY DISORDERED SYSTEMS
1. HEXAGONAL ICE
J. PHYS., C, LONDON, V.5, P.1028 (1972)
H₂O/ D₂O .THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY
DISTRIBUTION .ICE/ DISORDERED SYSTEM
- 72-SH-05 SHAWVER, R.E./ DEAN, P.,
ATOMIC VIBRATIONS IN ORIENTATIONALLY DISORDERED SYSTEMS
1. A TWO DIMENSIONAL MODEL
J. PHYS., C, LONDON, V.5, P.1017 (1972)
THEORY-OF-SOLIDS .THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY
SPECTRUM/ BORN-VON KARMAN MODEL .DISORDERED SYSTEM
- 72-SH-06 SHUKLA, M.M./ DA-CUNHA-LIMA, I.C./ BRESCANSIN, L.M.,
A MODEL FOR LATTICE DYNAMICS OF B.C.C. METALS
SOLID STATE COMMUN., V.11, P.1431 (1972)
- NA .THEORY/ PHONON DISPERSION
- 72-SI-01 SILBERGLITT, R.,
MICROSCOPIC CALCULATION OF THE RESPONSE FUNCTION OF THE
SOFT ZONE BOUNDARY PHONON IN SR.TI.O₃,
SOLID STATE COMMUN., V.11, P.247 (1972)
SR.TI.O₃ .THEORY/ SOFT MODE
- 72-SI-02 SINGH, S.N./ PRAKASH, S.,
PHONON DISPERSION IN ALKALI METALS, 2
PHYSICA, V.58, P.71-P.76 (1972)
LI/ NA/ K/ RB/ CS .THEORY/ DISPERSION CURVE
- 72-SI-03 SINGH, S.N./ PRAKASH, S.,
PHONON DISPERSION IN ALKALI METALS, 2
PHYSICA, V.58, P.71-P.76 (1972)
LI/ NA/ K/ RB/ CS .THEORY/ PHONON DISPERSION
- 72-SI-04 SINGH, K./ SRIVASTAVA, R.S.,
LATTICE DYNAMICAL CALCULATION OF THERMAL EXPANSION COEFFICIENT
AND GRUENEISEN PARAMETER FOR LITHIUM
J. PHYS. SOC. JAP., V.33, P.1214-P.1217 (1972)
LI .THEORY/ PHONON DISPERSION/ THERMAL EXPANSION/ GRUENEISEN
PARAMETER
- 72-SI-05 SINGH, R.K.,
A GENERALIZED SHELL MODEL OF LATTICE DYNAMICS
SOLID STATE COMMUN., V.11, P.65 (1972)
THEORY-OF-SOLIDS .THEORY/SHELL MODEL
- 72-SI-06 SINGH, R.K./ UPADHYAYA, K.S.,
CRYSTAL DYNAMICS OF MAGNESIUM OXIDE
PHYS. REV. B, V.6, P.1589-P.1596 (1972)
MgO .THEORY/ SHELL MODEL/ PHONON DISPERSION/ SPECIFIC
HEAT
- 72-SI-07 SINGH, R.K.,
DISPERSION OF PHONONS IN LITHIUM DEUTERIDE
SOLID STATE COMMUN., V.11, P.559-P.561 (1972)
LI.H .THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
- 72-SI-08 SINGH, R.K.,
THE DYNAMICAL BEHAVIOR OF SILVER CHLORIDE WITH MODIFIED
SHELL MODEL
PHYS. STATUS SOLIDI B, V.51, P.389 (1972)
AgCl .MODEIFIED SHELL MODEL/ THEORY
- 72-SI-09 SINK, C.W./ HARVEY, A.B.,
VIBRATIONAL SPECTRUM OF METHANETELLUROL
J. CHEM. PHYS., V.57, P.4434 (1972)
C.H₄TE .EXPERIMENT .INFRARED AND RAMAN SPECTRA

- 72-SK-01 SKALYO-JR, J./ MINKIEWICZ, V.J./ SHIRANE, G.
INELASTIC NEUTRON SCATTERING FROM SOLID NEON
PHYS. REV. B, V.6, P.4766-P.4779 (1972)
NE ..EXPERIMENT/ PHONON DISPERSION/ A-S MODEL FITTING/
FREQUENCY DISTRIBUTION
- 72-SK-02 SKOELD, K.S./ ROWE, J.M./ OSTROWSKI, G./ RANDOLPH,
P.V.
COHERENT- AND INCOHERENT-SCATTERING LAWS OF LIQUID ARGON
N
PHYS. REV. A, V.6, P.1107-P.1131 (1972)
AR ..EXPERIMENT/ LIQUID/ SCATTERING LAW/ COHERENT AND I
NCOHERENT
- 72-SK-03 SKOELD, K./ ROWE, J.M./ OSTROWSKI, G./ RANDOLPH, P
D.
NEUTRON INELASTIC SCATTERING STUDY OF LIQUID ARGON
AE-445 (1972)
AR ..EXPERIMENT/ INELASTIC SCATTERING FUNCTION/ 85.20K
- 72-SM-01 SMITH, H.G./ WAKABAYASHI, N./ NICKLOW, R.M.,
LOCALIZED TORSIONAL AND TRANSLATIONAL MODES IN K₂CL₂(N,
H4)
NEUTRON INELASTIC SCATTERING, IAEA, P.103 (1972)
K.N.H4.CL ..EXPERIMENT/ LOCALIZED PHONON
- 72-SM-02 SMITH, H.G./ WAKABAYASHI, N./ NICKLOW, R.M./ MIHAI
LOVICH, S.
NEUTRON SCATTERING, PHONON SPECTRA, AND SUPERCONDUCTIVI
TY
CONF-720833-12 (1972)
NB,C/ ZR,C/ TC/ ZR/ Y ..EXPERIMENT/ SUPERCONDUCTIVITY/
ELECTRON-PHONON INTERACTION
- 72-SM-03 SMITH, H.C.
PHONON ANOMALIES IN TRANSITION-METAL CARBIDES
PHYS. REV. LETT., V.29, P.353 (1972)
T.A.C ..PHONON DISPERSION
- 72-SO-01 SOLANA, J./ CELLI, V./ RUVALDS, J./ TUETTO, I./ ZA
WADOWSKI, A.
THEORY OF THE ROTON LIFETIME IN SUPERFLUID HELLIUM
KFKI-72-23 (1972)
HE ..THEORY/ TWO-ROTON RESONANCE/ ROTON DISPERSION/ LIN
EWIDTH
- 72-SO-02 SOLBRIG, H.
MULTIPLE SCATTERING OF THERMAL NEUTRONS BY A PERFECT CR
YSTAL, 3 CALCULATION OF THE NEUTRON WAVE FIELD
PHYS. STATUS SOLIDI B, V.51, P.555-P.564 (1972)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MULTIPLE SCATTER
ING/ PERFECT CRYSTAL

- 72-SO-03 SOSNOWSKI, J./ CZACHOR, A./ MALISZEWSKI, E.
PHONON DISPERSION CURVES IN ANTIMONY
NEUTRON INELASTIC SCATTERING, IAEA, P.61-P.70 (197
2)
SB ..EXPERIMENT/ PHONON DISPERSION/ FIVE-NEIGHBOUR MODE
L FITTING
- 72-SO-04 SOSNOWSKI, J./ CZACHOR, A./ MALISZEWSKI, E.
PHONON DISPERSION CURVES IN ANTIMONY
INR-P-1379/11/PS (1972)
SB ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/ FREQ
UENCY SPECTRUM
- 72-SP-01 SPRINGER, T.
INVESTIGATION OF MOLECULAR MOTIONS IN CRYSTALS WITH NEU
TRON SPECTROSCOPIES
KOLLOID-Z, Z. POLYM., V.250, P.993-P.999 (1972)
REVIEW-ARTICLES ..NEUTRON SCATTERING/ ORGANIC MOLECULAR
CRYSTAL/ PHONON
- 72-ST-01 STEELE, D./ CHILDS, P.E./ FENDER, B.E.F.
DEFECT STRUCTURE OF CALCIUM FLUORIDE CONTAINING EXCESS
ANIONS, II. DIFFUSE SCATTERING
J. PHYS., C, LONDON, V.5, P.2677 (1972)
CA,F2/ SCATTERING-BY-DEFECTS ..DIFFUSE SCATTERING
- 72-ST-02 STEIN, H.
THE LATTICE DYNAMICS OF CRYSTALLINE HYDROGEN IN CUBIC A
ND HEXAGONAL PHASE
JUL-838-FF (1972)
H2 ..EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ SCATTERING LA
W/ FREQUENCY DISTRIBUTION
- 72-ST-03 STEIN, N./ STILLER, H./ STOCKMEYER, R.
PHONONS, LIBRONS, AND THE ROTATIONAL STATE J=1 IN HCP A
ND FCC SOLID HYDROGEN BY NEUTRON SPECTROSCOPY
J. CHEM. PHYS., V.57, P.1726 (1972)
H2 ..LATTICE AND MOLECULAR DYNAMICS
- 72-ST-04 STEINMAN, D.K./ KING, J.S./ SMITH, H.G.
EXTERNAL MODES IN CA₂W₂O₄
NEUTRON INELASTIC SCATTERING, IAEA, P.219-P.229 (1
972)
CA,W₂O₄ ..EXPERIMENT/ PHONON DISPERSION/ RIGID-ION, SHE
LL MODEL CALCULATION
- 72-ST-05 STIRLING, W.G.
NEUTRON INELASTIC SCATTERING STUDY OF THE LATTICE DYNAM
ICS OF STRONTIUM TITANATE, HARMONIC MODELS
J. PHYS., C, LONDON, V.5, P.2711-P.2730 (1972)
SR,TiO₃ ..EXPERIMENT/ PHONON DISPERSION/ VARIOUS MODEL

FITTING/ FREQUENCY DISTRIBUTION/ SPECIFIC HEAT

- 72-ST-06 STIRLING, W.G./ COWLEY, R.A./ STRINGFELLOW, M.W.
CRYSTAL DYNAMICS OF PD3*FE AT 80 DEG.K.
J, PHYS., F, LONDON, V.2, P.421 (1972)
PD-FE ., LATTICE DYNAMICS/ PHONON DISPERSION/ 80 DK
- 72-ST-07 STUMP, N./ GISSLER, W./ RUBIN, R.
QUASIELASTIC NEUTRON SCATTERING ON HYDROGEN IN NIOBIUM
SINGLE CRYSTALS
JUL-CONF-6, V.1, P.375-P.387 (1972)
NB-H ., EXPERIMENT/ HYDROGEN DIFFUSION/ SINGLE CRYSTAL
- 72-ST-08 STUMP, N./ GISSLER, W./ RUBIN, R.
QUASI-ELASTIC NEUTRON SCATTERING ON HYDROGEN IN NIOBIUM
SINGLE CRYSTALS
PHYS. STATUS SOLIDI B, V.54, P.295-P.302 (1972)
NB-H ., EXPERIMENT/ QUASI-ELASTIC SCATTERING/ DIFFUSION
BROADENING/ 235C.256C/ NB-HO.07
- 72-SU-01 SUCK, J.B./ GLAESER, W.
COLLECTIVE EXCITATIONS IN LIQUID RUBIDIUM AND THE LIQUID
D-SOLID PHASE
NEUTRON INELASTIC SCATTERING. IAEA, P.435-P.442 (1972)
- RB ., EXPERIMENT/ LIQUID AND SOLID/ COLLECTIVE EXCITATION
- 72-SV-01 SVENSSON, E.C./ WOODS, A.D.B./ MARTEL, P.
PHONON DISPERSION IN LIQUID HELIUM UNDER PRESSURE
PHYS. REV. LETT., V.29, P.1148 (1972)
HE ., LIQUID DYNAMICS/ PHONON DISPERSION
- 72-TA-01 TAKENO, S./ GODA, M.
PHONON-LIKE EXCITATIONS IN LIQUID HELIUM
PROGR. THEORET. PHYS., KYOTO, V.48, P.724-P.730 (1972)
THEORY-OF-FLUIDS/ HE ., THEORY/ PHONON-LIKE EXCITATION/
LIQUID HELIUM
- 72-TA-02 TAKENO, S./ GODA, M.
A THEORY OF PHONON-LIKE EXCITATIONS IN NON-CRYSTALLINE
SOLIDS AND LIQUIDS
PROGR. THEORET. PHYS., KYOTO, V.47, P.790-P.806 (1972)
THEORY-OF-SOLIDS/ THEORY-OF-FLUIDS/ HE ., THEORY/ PHONON
-LIKE EXCITATION
- 72-TA-03 TALWAR, D.N./ AGRAWAL, B.K.
LATTICE DYNAMICS OF 11-VI, 111-V COMPOUNDS
SOLID STATE COMMUN., V.11, P.1691-P.1694 (1972)
ZN, SE/ IN, SB ., THEORY/ PHONON DISPERSION

- 72-TA-04 TANI, K.
NEUTRON SCATTERING DUE TO THE LATTICE VIBRATION NEAR THE
TRANSITION TEMPERATURE (IN JAPANESE)
JAERI-M-4841, PROC. 4TH CONF. ON INELASTIC NEUTRON
SCATTERING, P.103-P.105 (1972)
NEUTRON-SCATTERING-IN-SOLIDS ., THEORY/ NEUTRON SCATTERING
BY PHONON/ PHASE TRANSITION
- 72-TH-01 THE, H.C.
MODEL CALCULATIONS FOR LATTICE VIBRATIONS IN N.D4, CL AT
85DK
CAN, J. PHYS., V.50, P.2807-P.2814 (1972)
N.H4, CL ., THEORY/ PHONON DISPERSION/ RIGID ION, SHELL MODEL/
FREQUENCY DISTRIBUTION
- 72-TH-02 THOMA, K./ ZIMMERMANN, R.
LATTICE VIBRATIONS AT IDEAL Si(111) SURFACES
Z, PHYS., V.252, P.168-P.173 (1972)
Si ., CALCULATION/ SURFACE PHONON
- 72-TI-01 TIJTA, A./ TUNKALO, E.
CORRECTION FOR MULTIPLE SCATTERING IN COLD NEUTRON EXPERIMENTS
NUCL. INSTRUM. METHODS, V.103, P.575 (1972)
METHANE ., MULTIPLE SCATTERING
- 72-TO-01 TOKUNAGA, M.
EFFECT OF DIPOL-DIPOL INTERACTION ON THE DISPERSION RELATION
IN FERROELECTRICS OF PEROVSKITE STRUCTURE (IN JAPANESE)
JAERI-M-4841, PROC. 4TH CONF. ON INELASTIC NEUTRON
SCATTERING, P.94-P.97 (1972)
THEORY-OF-SOLIDS ., LATTICE VIBRATION/ DIPOL INTERACTION/
PEROVSKITE STRUCTURE
- 72-TO-02 TOLPYGO, K.B./ TROITSKAYA, E.P.
FORCE CONSTANTS AND PHONON DISPERSION IN RARE-GAS CRYSTALS
FIZ. TVERD. TELA (SOV. PHYS. SOLID STATE), V.14, P.2867-P.2872 (P.2480-P.2483) (1972)
NE/ AR/ KR ., DISPERSION CURVE
- 72-TO-03 TONG, B.Y.
KOHN-SHAM SELF-CONSISTENT CALCULATION OF THE STRUCTURE
OF METALLIC SODIUM
PHYS. REV. B, V.6, P.1189-P.1194 (1972)
NA ., THEORY/ LOCAL-EFFECTIVE-POTENTIAL APPROX./ LATTICE
PARAMETER/ COMPRESSIBILITY/ COHESIVE ENERGY
- 72-TO-04 TOUSSAINT, G./ CHAMPIER, G.
LATTICE DYNAMICS OF CADMIUM AT 88DK

- PHYS. STATUS SOLIDI B. V.54. P.165-P.172 (1972)
CD ..X-RAY DIFFUSE SCATTERING/ 88DK/ PHONON DISPERSION/
MODEL FITTING/ FREQUENCY SPECTRUM
- 72-TR-01 TRICKEY, S.B./ WITRIOL, N.M./ MORLEY, G.L.
LATTICE DYNAMICS OF HARD-CORE, HIGHLY ANHARMONIC CRYSTALS
LS
SOLID STATE COMMUN., V.11, P.139-P.143 (1972)
THEORY-OF-SOLIDS ..THEORY/ SELF-CONSISTENT HARMONIC TRE
ATMENT/ HARD-CORE QUANTUM CRYSTAL
- 72-TR-02 TRYLOR, J.G./ STASSIS, C./ REESE, R.A./ SINHA, S.K.
PHONON SPECTRA OF FCC HE-4
NEUTRON INELASTIC SCATTERING, IAEA, P.129-P.134 (1972)
HE ..EXPERIMENT/ PHONON DISPERSION/ FCC HE-4
- 72-TU-01 TUBINO, R./ PISERI, L./ ZERBI, G.
LATTICE DYNAMICS AND SPECTROSCOPIC PROPERTIES BY A VALE
NCE FORCE POTENTIAL OF DIAMOND-LIKE CRYSTAL: C, SI, GE,
AND SN
J. CHEM. PHYS., V.56, P.1022-P.1039 (1972)
DIAMOND/ SI/ GE/ SN ..THEORY/ PHONON DISPERSION/ PHONON
DENSITY/ VALENCE FORCE POTENTIAL
- 72-TW-01 TWISLETON, J.F./ WHITE, J.W.
INTERCHAIN FORCE FIELD OF POLYETHYLENE BY NEUTRON SCATTERING
NEUTRON INELASTIC SCATTERING, IAEA, P.301-P.313 (1972)
POLYETHYLENE ..EXPERIMENT/ PHONON DISPERSION/ PERPENDICULAR TO CHAIN AXES
- 72-UP-01 UPADHYAYA, K.S./ SINGH, R.K.
PHONON SPECTRA OF PARAMAGNETIC COBALTOUS OXIDE
PHYS. LETT., A, V.40, P.291-P.292 (1972)
CO.O ..THEORY/ PHONON DISPERSION/ THREE-BODY FORCE SHEL
L MODEL
- 72-UP-02 UPADHYAYA, K.S./ SINGH, R.K.
THREE-BODY FORCE SHEL MODEL-AN APPLICATION TO CA.O
SOLID STATE COMMUN., V.11, P.567-P.569 (1972)
CA.O ..THEORY/ LATTICE/ DYNAMICS/ DISPERSION RELATION
- 72-UP-03 UPADHYAYA, K.S./ SINGH, R.K.
DISPERSTION PROPERTIES OF MANGANOUS OXIDE
SOLID STATE COMMUN., V.11, P.109 (1972)
MN.O ..THEORY/ PHONON DISPERSION
- 72-VI-01 VIJAYARAGHAVAN, P.R./ MARSONGKOHADI, ./ IYENGAR, P.K.

- LATTICE DYNAMICS OF CALCIUM OXIDE
NEUTRON INELASTIC SCATTERING, IAEA, P.95-P.102 (1972)
CA.O ..EXPERIMENT/ PHONON DISPERSION/ SHEL MODEL FITTING/ PHONON SPECTRA
- 72-WA-01 WAEBER, W.B.
A CONTRIBUTION TO THE THEORY OF LATTICE VIBRATIONS
J. PHYS., C, LONDON, V.5, P.1773 (1972)
GA/ THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS
..METAL/ ORTHORHOMBIC
- 72-WA-02 WAKABAYASHI, N./ AHMAD, A.A.Z./ SHANKS, H.R./ DANIELSON, G.C.
LATTICE DYNAMICS OF MG2.PB AT ROOM TEMPERATURE
PHYS. REV. B, V.5, P.2103-P.2107 (1972)
MG2.PB ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING/
FREQUENCY SPECTRA
- 72-WA-03 WASIUTYNSKI, T./ LUTY, T.
LATTICE DYNAMICS CALCULATION FOR LOW TEMPERATURE PHASE
OF SOLID METHANE
JNP-794/PS (1972)
C.H4 ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/
FREQUENCY DISTRIBUTION ..SPECIFIC HEAT
- 72-WE-01 WERTHAMER, N.R.
INTERPRETATION OF INELASTIC NEUTRON-SCATTERING OBSERVATIONS
IN BCC SOLID AND SUPERFLUID HE (ISOTOPE - A-4)
PHYS. REV. LETT., V.28, P.1102 (1972)
HE ..THEORY
- 72-WH-01 WHITE, J.W.
SOME APPLICATIONS OF INELASTIC NEUTRON SCATTERING SPECTROSCOPY TO SURFACE CHEMISTRY AND CATALYSIS
NEUTRON INELASTIC SCATTERING, IAEA, P.315-P.343 (1972)
REVIEW-ARTICLES ..NEUTRON SPECTROSCOPY/ SURFACE CHEMISTRY/ CATALYSIS
- 72-WH-02 WHITE, J.W./ WRIGHT, C.J.
INTERNAL VIBRATIONS AND HINDERED ROTATION OF RE,H9(X2-) BY
NEUTRON SCATTERING SPECTROSCOPY
J. C. S. FARADAY TRANS, 2, V.68, P.1414-P.1422 (1972)
K2.RE,H9/ NA2.RE,H9 ..EXPERIMENT/ N-SPECTROSCOPY/ MOLECULAR VIBRATION
- 72-WH-03 WHITE, J.W./ WRIGHT, C.J.
NEUTRON SCATTERING SPECTRA OF HYDRIDCARBONYLS IN THE 90
0-200K ENERGY REGION
J. C. S. FARADAY TRANS, 2, V.68, P.1423-P.1433 (1972)

72)

H₂CO, (C.O.)₄/ H₂FE, (C.O.)₄/ H₂MN, (C.O.)₅/ K₂H₂FE, (C.O.)₄/ H₃MN₃, (C.O.)₁₂/ CS₂H₂FE₃, (C.O.)₁₁ ..EXPERIMENT/ N-SPECTROSCOPY/ HYDROGEN VIBRATION

72-WI-01 WINFIELD, D.J./ ROSS, D.K.
THE QUASI-ELASTIC SCATTERING OF NEUTRONS FROM C₆H₆ AND C₆D₆

MOL. PHYS., V.24, P.753-P.772 (1972)
C₆H₆ ..EXPERIMENT/ TIME OF FLIGHT/ QUASIELASTIC SCATTERING ..MEAN INTERVAL BETWEEN JUMP

72-WO-01 WOODS, A.D.B./ SVENSSON, E.C./ MARTEL, P.
LOW-MOMENTUM-TRANSFER NEUTRON SCATTERING IN LIQUID HELIUM

NEUTRON INELASTIC SCATTERING, IAEA, P.359-P.362 (1972)
HE ..EXPERIMENT/ LIQUID DYNAMICS/ LOW-MOMENTUM-TRANSFER

72-YA-01 YAMADA, K./ ISHIKAWA, K.
PHONON DISPERSION AND CONTRIBUTION TO THE HEAT CAPACITY IN LIQUID HE-4

PROGR. THEORET. PHYS., KYOTO, V.47, P.1455-P.1463 (1972)
HE ..THEORY/ PHONON DISPERSION/ LIQUID HELIUM

72-YA-02 YAMADA, Y.
QUASI SPIN-PHONON INTERACTIONS AND INELASTIC SCATTERING OF NEUTRONS RELATED WITH IT (IN JAPANESE)
JAERI-M-4841, PROC. 4TH CONF. ON INELASTIC NEUTRON SCATTERING, P.108-P.114 (1972)
THEORY-OF-SOLIDS ..SPIN-PHONON INTERACTION/ LATTICE INSTABILITY

73-AM-01 AMARAL, L.O./ VINHAS, L.A./ HERDADE, S.B.
NEUTRON TRANSMISSION STUDY OF THE ROTATIONAL FREEDOM OF METHYL GROUPS IN POLYDIMETHYLSILOXANE
IEA-320 (1973)
NEUTRON-SCATTERING-IN-SOLIDS/ POLYDIMETHYLSILOXANE ..EXPERIMENT/ SOLID/ T-O-F/ SIGMA (E)

73-AS-01 ASKAR, A.
DISPERSION RELATION AND WAVE SOLUTION FOR ANHARMONIC LATTICES AND KORTEWEG DE VRIES CONTINUA
PROC. ROY. SOC., LONDON, SER. A, V.334, P.83 (1973)
THEORY-OF-SOLIDS ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ ANHARMONICITY ..MONOATOMIC CHAIN/ KORTEWEG DE VRIES EQUATION

73-AX-01 AXE, J.D./ SHAPIRO, S.M./ SHIRANE, G.

NEUTRON SCATTERING STUDIES OF SOFT MODE DYNAMICS

BNL 18057 (1973)
NB3, SN/ SR, TI, O₃ ..EXPERIMENT/ PHASE TRANSITION/ SOFT MODE

73-AX-02 AXE, J.D./ SHIRANE, G.
INFLUENCE OF THE SUPERCONDUCTING ENERGY GAP ON PHONON LINEWIDTHS IN NB₃SN

PHYS. REV. LETT., V.30, P.214 (1973)
NB₃SN ..PHONON LINEWIDTHS

73-AX-03 AXE, J.D./ SHIRANE, G.
INELASTIC-NEUTRON-SCATTERING STUDY OF ACOUSTIC PHONON IN NB₃SN

PHYS. REV. B, V.8, P.1965-P.1977 (1973)
NB₃SN/ SUPERCONDUCTOR ..ACOUSTIC PHONON DISPERSION/ TEMPERATURE CHANGE/ CUBIC-TETAGONAL PHASE CHANGE/ SUPERCONDUCTING PHASE CHANGE/ ELECTRON-PHONON INTERACTION

73-BA-01 BARKER, M.I./ GASKELL, T.
DENSITY FLUCTUATIONS IN LIQUID ARGON
PHYS. LETT., A, V.43, P.81-P.82 (1973)
AR ..THEORY/ DYNAMIC STRUCTURE FACTOR

73-BA-02 BARKER, M.I./ GASKELL, T.
DYNAMIC STRUCTURE FACTOR OF LIQUID SODIUM, A GENERALIZED HYDRODYNAMIC APPROACH

J. PHYS., C, LONDON, V.6, P.3341-P.3348 (1973)
NA ..THEORY/ S(0,OMEGA)/LIQUID/ HYDRODYNAMIC APPROACH

73-BA-03 BASU, A.N./ SENGUPTA, S.
LATTICE DYNAMICS OF ALKALI HALIDES
PHYS. REV. B, V.8, P.2982-P.2990 (1973)
NA, CL/ NA, BR/ K, I/ K, CL/ K, BR ..THEORY/ DEFORMABLE SHELL MODEL/ PHONON DISPERSION/ FREQUENCY SPECTRA

73-BE-01 BEEBY, J.L.
NEUTRON SCATTERING FROM AQUEOUS SOLUTIONS, THE LONG-WAVELENGTH LIMIT

J. PHYS., C, LONDON, V.6, P.2262-P.2268 (1973)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ LONG-WAVELENGTH LIMIT/ SCATTERING FUNCTION

73-BE-02 BELL, H.G./ KOLLMAR, A./ ALEFELD, B./ SPRINGER, T.
INVESTIGATION OF COLLECTIVE EXCITATIONS IN LIQUID NEON BY MEANS OF NEUTRON SCATTERING AT SMALL SCATTERING VECTORS

PHYS. LETT., A, V.45, P.479 (1973)
NE/ NEUTRON-SCATTERING-IN-FLUIDS ..EXPERIMENT/ LIQUID/ NEUTRON SPECTRUM ..COHERENT SCATTERING

73-BO-01 BOETTGER, H.

ON THE THEORY OF PHONON-LIKE EXCITATIONS IN NONCRYSTALLINE SOLIDS
 PHYS. STATUS SOLIDI B, V.59, P.517 (1973)
 THEORY-OF-SOLIDS .,THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION .,DISORDERED LATTICE/ DYSON EQUATION/ GREEN'S FUNCTION

73-80-02 BONADEO, H./ TADDEI, G.
 CALCULATION OF DISPERSION RELATIONS AND FREQUENCY DISTRIBUTION OF CRYSTALLINE BENZENE
 J. CHEM. PHYS., V.58, P.979 (1973)
 BENZENE .,THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION / FREQUENCY DISTRIBUTION FUNCTION

73-80-03 BOSE, G./ GUPTA, H.C./ TRIPATHI, B.B.
 PHONON DISPERSION IN SCANDIUM
 PHYS. LETT., A, V.43, P.365-P.366 (1973)
 SC .,THEORY/ PHONON DISPERSION/ FIVE PARAMETER

73-80-04 BOSE, G./ TRIPATHI, B.B./ GUPTA, H.C.
 THE LATTICE DYNAMICS OF HEXAGONAL CLOSE PACKED METALS
 J. PHYS. SOC. JAP., V.34, P.1006-P.1013 (1973)
 BE/ MG/ ZN .,THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ SPECIFIC HEAT/ CENTRAL AND NONCENTRAL FORCE

73-80-05 BOYER, L.L./ HARDY, J.R.
 LATTICE DYNAMICS OF A RIGID-ION MODEL FOR GADOLINIUM MOLYBDATE
 PHYS. REV. B, V.8, P.2205-P.2213 (1973)
 GADOLINIUM MOLYBDATE/ PHASE-TRANSITION .,THEORY/ RIGID-ION MODEL/ PHONON DISPERSION/ FREQUENCY SPECTRUM

73-80-01 BREBNER, J.L./ JANDL, S./ POWELL, B.M.
 NEUTRON SCATTERING MEASUREMENTS OF THE INTERLAYER INTERACTION IN GA-SE
 SOLID STATE COMMUN., V.13, P.1525 (1973)
 GA/ SE .,EXPERIMENT/ LATTICE DYNAMICS/ DISPERSION RELATION/ INELASTIC NEUTRONSCATTERING

73-80-02 BRUCE, A.D./ COWLEY, R.A.
 LATTICE DYNAMICS OF STRONTIUM TITANATE. ANHARMONIC INTERACTIONS AND STRUCTURAL PHASE TRANSITIONS
 J. PHYS., C, LONDON, V.6, P.2422-P.2439 (1973)
 SR,TI,03/ PHASE-TRANSITION .,THEORY/ ANHARMONIC MODEL/ PHONON FREQUENCY, LINE WIDTH

73-80-01 BUEHER, W.
 CRYSTAL DYNAMICS OF CAESIUM FLUORIDE
 J. PHYS., C, LONDON, V.6, P.2931-P.2942 (1973)
 CS,F .,EXPERIMENT/ PHONON DISPERSION/ SEVEN PARAMETER SELLER MODEL FITTING/ PHONON SPECTRA/ HEAT CAPACITY/ DEBYE TEMP.

73-CA-01 CAVALHEIRO, R./ SHUKLA, M.M.
 THE LATTICE VIBRATIONS IN LEAD
 J. PHYS. SOC. JAP., V.34, P.1002-P.1005 (1973)
 PB .,THEORY/ PHONON DISPERSION/ DEBYE TEMP./ DE LAUNAY MODEL

73-CH-01 CHAMARD-BOIS, R./ ROSSAT-MIGNOD, J.
 THE DETERMINATION OF CRYSTAL FIELD LEVELS IN THE INTERMETALLIC COMPOUND HO₂RH BY INELASTIC NEUTRON SCATTERING
 SOLID STATE COMMUN., V.13, P.1549-P.1553 (1973)
 MAGNETIC-SCATTERING/ HO-RH .,EXPERIMENT/ T-O-F/ CRYSTAL FIELD-LEVEL

73-CH-02 CHIHARA, J.
 INTEGRAL EQUATIONS FOR NEUTRAL AND CHARGED QUANTUM FLUIDS INCLUDING EXTENSION OF THE PERCUS-YEVICK EQUATION
 PROGR. THEORET. PHYS., KYOTO, V.50, P.1156-P.1181 (1973)
 THEORY-OF-FLUIDS .,NEUTRAL AND CHARGED QUANTUM FLUIDS/ INTEGRAL EQUATION

73-CH-03 CHIHARA, J.
 SPACE-TIME CORRELATION FUNCTIONS IN QUANTAL AND CLASSICAL BINARY MIXTURES. I
 PROGR. THEORET. PHYS., KYOTO, V.50, P.794-P.806 (1973)
 THEORY-OF-FLUIDS .,QUANTAL BINARY MIXTURE/ DYNAMICAL STRUCTURE FACTOR/ QUASI-ELASTIC PEAK/ ZERO SOUND PEAK

73-CH-04 CHIHARA, J.
 INTEGRAL EQUATIONS FOR FLUIDS WITH LONG-RANGE AND SHORT-RANGE POTENTIALS
 PROGR. THEORET. PHYS., KYOTO, V.50, P.409-P.423 (1973)
 THEORY-OF-FLUIDS .,INTEGRAL EQUATION/ LONG-RANGE AND SHORT-RANGE POTENTIALS

73-CH-05 CHIHARA, J.
 NEW TYPES OF INTEGRAL EQUATIONS FOR OBTAINING THE RADIAL DISTRIBUTION FUNCTION OF FLUIDS
 PROGR. THEORET. PHYS., KYOTO, V.49, P.693-P.694 (1973)
 THEORY-OF-FLUIDS .,INTEGRAL EQUATION/ CHARGED PARTICLE SYSTEM

73-CH-06 CHOWDHURY, M.R./ ROSS, D.K.
 A NEUTRON SCATTERING STUDY OF THE VIBRATIONAL MODES OF HYDROGEN IN THE BETA-PHASES OF PD-H, PD-10AG-H AND PD-2 OAG-H
 SOLID STATE COMMUN., V.13, P.229-P.234 (1973)
 PD-H/ PD-AG-H .,EXPERIMENT/ HYDROGEN VIBRATION IN METAL

- 73-CO-01 COCHRAN, W.
THE DYNAMICS OF ATOMS IN CRYSTALS
THE STRUCTURES AND PROPERTIES OF SOLIDS, 3 (1973)
THEORY-OF-SOLIDS .,THEORY/ SOLID/ LATTICE DYNAMICS
- 73-CO-02 COMES, R./ LAMBERT, M./ ZELLER, H.R.
A LOW-TEMPERATURE PHASE TRANSITION IN THE ONE-DIMENSIONAL CONDUCTOR K₂PT.(C,N)₄BR_{0.30}X(H₂O)
PHYS. STATUS SOLIDI B, V.58, P.587-P.592 (1973)
KCP .,X-RAY DIFFUSE SCATTERING/ ONE-DIMENSIONAL CONDUCTOR/ PHASE TRANSITION
- 73-CO-03 COMES, R./ LAMBERT, M./ LAUNOIS, H./ ZELLER, H.R.
EVIDENCE FOR A PETERLS DISTORTION OR A KOHN ANOMALY IN ONE-DIMENSIONAL CONDUCTORS OF THE TYPE K₂PT.(C,N)₄BR_{0.30}X(H₂O)
PHYS. REV. B, V.8, P.571-P.575 (1973)
KCP .,EXPERIMENT/ X-RAY DIFFRACTION/ A LINEAR SUPERLATTICE DISTORTION
- 73-CO-04 COPLEY, J.R.D/ BROCKHOUSE, B.N.
CRYSTAL DYNAMICS OF RUBIDIUM, 1. MEASUREMENTS AND HARMONIC ANALYSIS
CAN. J. PHYS., V.51, P.657-P.675 (1973)
RB .,EXPERIMENT/ PHONON DISPERSION/ 12.85,120,205K/ HARMONIC ANALYSIS/ PHONON DENSITY
- 73-CO-05 COPLEY, J.R.D.
CRYSTAL DYNAMICS OF RUBIDIUM, 2. ANHARMONIC CALCULATION OF THE PHONON SELF-ENERGY AND THE HEAT CAPACITY
CAN. J. PHYS., V.51, P.2564-P.2586 (1973)
RB/ NEUTRON-SCATTERING-IN-SOLIDS .,ANHARMONICITY/ DISPERSION CURVE
- 73-CO-06 COWLEY, E.R.
A SIMPLE BOND CHARGE MODEL FOR THE PHONON DISPERSION RELATIONS IN TELLURIUM
CAN. J. PHYS., V.51, P.843 (1973)
TE .,THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION .,BOND CHARGE MODEL
- 73-CO-07 COWLEY, E.R./ PANT, A.K.
LATTICE DYNAMICS OF CALCITE
PHYS. REV. B, V.8, P.4795 (1973)
CA,C.O3 .,DISPERSION RELATION/ INELASTIC NEUTRON SCATTERING
- 73-CZ-01 CZACHOR, A.
SHELL MODEL OF LATTICE DYNAMICS FOR MONATOMIC SYSTEM WITH ISOTROPIC SHELL-CORE COUPLING
- J. PHYS., C, LONDON, V.6L, P.13 (1973)
THEORY-OF-SOLIDS .,THEORY/ LATTICE DYNAMICS .,SHELL MODEL
- 73-DA-01 DAWSON, P./ HARGREAVE, M.M./ WILKINSON, G.R.
THE DIELECTRIC AND LATTICE VIBRATIONAL SPECTRUM OF CUPROUS OXIDE
J. PHYS. CHEM. SOLIDS, V.34, P.2201-P.2208 (1973)
CU₂O .,I.R. AND RAMAN EXPERIMENT
- 73-DE-01 DENHAM, P.A./ MORSE, P.L.R./ WILKINSON, G.R.
THE PHONON DISPERSION CURVES, INFRARED AND RAMAN SPECTRA OF SR,CL₂
J. PHYS., C, LONDON, V.6, P.2066-P.2075 (1973)
SR,CL₂ .,INFRARED, RAMAN SPECTRA/ PHONON DISPERSION, FREQUENCY SPECTRA CALCULATION
- 73-DI-01 DIMIC, V./ OSREDKAR, M./ SLAK, J./ KANDUSAR, A.
STUDY OF NH₄ MOTION IN SOME ANTIFERROELECTRIC CRYSTALS BY INELASTIC SCATTERING OF COLD NEUTRONS
PHYS. STATUS SOLIDI B, V.59, P.471-P.479 (1973)
N,H₄H₂P.O₄/ N,H₄H₂AS.O₄/ (N,H₄)₂H₃I.O₆ .,EXPERIMENT/ ROTATING CRYSTAL SPECTROMETER/ TOF/ SIGMA (E) .,HINDERED ROTATION OF NH₄+ION/ FAR INFRARED SPECTRA/ MAGNETIC RESONANCE/293,153,123,113DK
- 73-DO-01 DOLLING, G./ PAWLEY, G.S./ POWELL, B.M.
INTERATOMIC FORCES IN HEXAMETHYLENETETRAMINE
PROC. ROY. SOC., LONDON, SER. A, V.333, P.363-P.384 (1973)
HEXAMETHYLENETETRAMINE .,THEORY/ PHONON DISPERSION/ AS MODEL TENSOR FORCE MODEL
- 73-DU-01 DUESBERY, M.S./ TAYLOR, R./ GLYDE, H.R.
ANHARMONIC LATTICE DYNAMICS IN K
PHYS. REV. B, V.4, P.1372-P.1378 (1973)
K .,ANHARMONICITY/ DISPERSION CURVE/ THEORY
- 73-ES-01 ESCHRIG, H./ FELDMANN, K./ HENNIG, K./ JOHN, W./ LOYEN, L.V.
PHONON DENSITY OF STATES AND COHERENT INELASTIC NEUTRON SCATTERING ON COMPLEX STRUCTURES
PHYS. STATUS SOLIDI B, V.58K, P.159-P.162 (1973)
MG,ZN₂ .,EXPERIMENT/ PHONON DENSITY/ COHERENT SCATTERER/ POWDER SAMPLE
- 73-FA-01 FARR, M.K.
THE LATTICE DYNAMICS OF GALLIUM ANTIMONIDE
IS-T-587 (1973)
GA,SB .,THESES/ LATTICE DYNAMICS/ DISPERSION/ PHONON SPECTRA/ DEBYE TEMP.

- 73-FI-01 FILIPPINI, G./ GRAMACCIOLI, C.M./ SIMONETTA, M./ SU
FFRITTI, G.B.
LATTICE-DYNAMICAL CALCULATIONS ON SOME RIGID ORGANIC MO
LECULES
J. CHEM. PHYS., V.59, P.5088 (1973)
NAPHTHALENE/ ANTHRACENE/ PHENANTHRACENE/ PYRENE/ ANNULEN
E ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
- 73-FO-01 FOLTER, C.
PHONON DISPERSION AND SYMMETRY OF SOLID-J2
Z. PHYS., V.258, P.263-P.276 (1973)
I/ B ..THEORY/ DISPERSION FUNCTION/ BORN VON KARMAN MOD
EL
- 73-FO-02 FOSTER, D.
A NEW SUM RULE FOR THE KINETIC THEORY OF CLASSICAL FLUI
DS
PHYS. LETT., A, V.46A, P.9-P.10 (1973)
THEORY-OF-FLUIDS ..CLASSICAL FLUID/ KINETIC THEORY/ PAI
R CORRELATION FUNCTION
- 73-FR-01 FRANCHETTI, S.
ON THE STRUCTURE OF LIQUID MERCURY
NUOVO CIM., B, V.18, P.247-P.257 (1973)
HG ..THEORY/ RADIAL DISTRIBUTION FUNCTION
- 73-FR-02 FRITSCH, G./ GEIPEL, F./ PRASETJO, A.
THE ELASTIC CONSTANTS OF SODIUM FROM 20 TO 95DC
J. PHYS. CHEM. SOLIDS, V.34, P.1961-P.1969 (1973)
NA ..EXPERIMENT/ ULTRASONIC PULSE ECHO/ ELASTIC CONSTAN
T
- 73-GE-01 GERAVALS, F.
ON THE PHONON SELF-ENERGY
SOLID STATE COMMUN., V.13, P.1211-P.1214 (1973)
THEORY-OF-SOLIDS ..QUARTZ
- 73-GI-01 GISSLER, W./ STUMP, N.
THEORY OF QUASIELASTIC NEUTRON SCATTERING BY HYDROGEN I
N METALS CONSIDERING FINITE JUMP TIMES
PHYSICA, V.65, P.109-P.117 (1973)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ DIFFUSION OF HYD
ROGEN IN METAL/ SCATTERING FUNCTION
- 73-GI-02 GISSLER, W./ JAY, B./ RUBIN, R./ VINHAS, L.A.
INTEGRATED QUASI-ELASTIC NEUTRON SCATTERING INTENSITY O
F HYDROGEN IN NIOBIUM
PHYS. LETT., A, V.43, P.279-P.281 (1973)
NB-H ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ INTEGRATED
INTENSITY/ ANGULAR DEPENDENCE
- 73-GR-01 GRAMACCIOLI, C.M./ SIMONETTA, M./ SUFFRITTI, G.B.
LATTICE DYNAMICS IN CRYSTALS OF RIGID HYDROCARBONS
CHEM. PHYS. LETT., V.20, P.23-P.28 (1973)
ANTHRACENE/ NAPHTHALENE/ BUTANOANNULENE ..THEORY/ AROMA
TIC HYDROCARBON/ VIBRATION FREQUENCY
- 73-GR-02 GRUNDKE, E.W./ HENDERSON, D./ MURPHY, R.D.
EVALUATION OF THE PERCUS-YEVICK THEORY FOR MIXTURES OF
SIMPLE LIQUIDS
CAN. J. PHYS., V.51, P.1216-P.1226 (1973)
THEORY-OF-FLUIDS ..PERCUS-YEVICK/ MIXTURE ..LENNARD-JON
ES
- 73-GU-01 GUNTON, D.J./ SAUNDERS, G.A.
THE SOFT ACOUSTIC PHONON MODE AND ITS RELATION TO THE M
ARTENSITIC TRANSFORMATION IN IN-TL ALLOYS
SOLID STATE COMMUN., V.12, P.569-P.572 (1973)
IN/ IN-TL ..THEORY/ PHONON DISPERSION/ MARTENSITIC PHAS
E CHANGE
- 73-HA-01 HAMA, J./ MIYAGI, H.
SPIN CORRELATION EFFECT ON THE SLOW NEUTRON SCATTERING
BY POLYATOMIC MOLECULES WITH PARTICULAR REFERENCE TO ME
THANE
PROGR. THEORET. PHYS., KYOTO, V.50, P.1142-P.1143
(1973)
METHANE ..THEORY/ NUCLEA SPIN CORRELATION EFFECT/ ZEMAC
H-GLAUBER APPROXIMATION
- 73-HA-02 HARLEY, R.T./ HAYES, W./ TWISLETON, J.F.
LOW-FREQUENCY RAMAN SPECTRA OF SINGLE-CRYSTAL TEXTURED
POLYETHYLENE
J. PHYS., C, LONDON, V.6L, P.167-P.170 (1973)
POLYETHYLENE ..EXPERIMENT/ RAMAN/ LOW-FREQUENCY PHONON/
4,2-373K
- 73-HE-01 HERDADE, S.B./ VINHAS, L.A./ RODRIGUES, C./ AMARAL
L.O.
NEUTRON CROSS SECTIONS OF POLYETHYLENE AND LIGHT WATER
IN THE ENERGY RANGE 8.2E04 TO 0.13 EV
IEA-310 (1973)
POLYETHYLENE/ H2O ..EXPERIMENT/ SOLID/ LIQUID/ T-O-F/
SIGMA (E)
- 73-HO-01 HOMMA, S./ NAGAI, K./ NAMAIZAWA, H.
GROUND-STATE ENERGY AND PHONON SPECTRA OF BCC SOLID HEL
IUM
PROGR. THEORET. PHYS., KYOTO, V.49, P.1779-P.1781
(1973)
HE ..THEORY/ PHONON VELOCITY AND DISPERSION/ BCC SOLID
HE
- 73-HO-02 HONG, H.K./ KOPELMAN, R.

COHERENT POTENTIAL THEORY FOR INTERACTING BANDS, PHONON
S AND EXCITONS IN SUBSTITUTIONALLY DISORDERED MOLECULAR
CRYSTALS

J. CHEM. PHYS., V.58, P.2557-P.2568 (1973)
THEORY-OF-SOLIDS ..COHERENT POTENTIAL APPROXIMATION/ DI
SORDERED MOLECULAR SOLIDS/ INTERACTING BAND

73-II-01 IIZUMI, M.,
NEUTRON SCATTERING STUDY OF THE ANHARMONIC LATTICE VIBR
ATIONS IN CALCIUM FLUORIDE
J. PHYS. SOC. JAP., V.35, P.204-P.212 (1973)
CA,F2 ..EXPERIMENT/ PHONON WIDTH/ TEMPERATURE EFFECT

73-II-02 IIZUMI, M./ GESI, K./ HARADA, J.,
DISPERSION RELATION OF THE NORMAL VIBRATIONS IN STRONTI
UM TITANATE
J. PHYS., C, LONDON, V.6, P.3021-P.3023 (1973)
SR,TI,03 ..PHONON DISPERSION

73-1K-01 IKEDA, H./ HIRAKAWA, K.,
CRITICAL MAGNETIC SCATTERING IN K₂MN₂F₄
J. PHYS. SOC. JAP., V.35, P.617-P.617 (1973)
K₂MN₂F₄/ MAGNETIC-SCATTERING ..EXPERIMENT/ CRITICAL SC
ATTERING

73-IS-01 ISHIKAWA, Y./ ENDOH, Y./ IKEDA, S.,
MAGNETIC CRITICAL SCATTERING FROM AN ITINERANT ANTIFERR
OMAGNET OF GAMMA FE_{0.5}MNO_{0.5} ALLOY 1, QUASI ELASTIC SCA
TTERING
J. PHYS. SOC. JAP., V.35, P.1616-P.1626 (1973)
FE-MN/ MAGNETIC-SCATTERING ..EXPERIMENT/ FE_{0.5}MNO_{0.5}/ C
RITICAL MAGNETIC SCATTERING

73-JA-01 JACKSON, H.W.,
PERTURBATIVE FORM OF S(K,) FOR LIQUIDS HE-4, BASIC CAL
CULATION AND RESULTS
PHYS. REV. A, V.8, P.1529-P.1535 (1973)
HE ..SUPERFLUID

73-KA-01 KACHHAVA, C.M.,
DIELECTRIC SCREENING AND PHONON DISPERSION IN AL
PHYSICA, V.65, P.63-P.72 (1973)
AL ..THEORY/ DISPERSION CURVE

73-KA-02 KACHHAVA, C.M.,
PHONON DISPERSION IN PB
J. PHYS., F, LONDON, V.3, P.24 (1973)
PB ..THEORY/ PHONON DISPERSION

73-KA-03 KACHHAVA, C.M.,
PHONON DISPERSION IN PB
J. PHYS., F, LONDON, V.3, P.24-P.29 (1973)

PB ..THEORY/ PHONON DISPERSION/ ASHCKROFT MODEL PSEUDOPO
TENTIAL

73-KE-01 KEBUKAWA, T./ YAMASAKI, S./ SUNAKAWA, S.,
MULTI-BRANCH STRUCTURE OF THE EXCITATION SPECTRA IN LIQ
UID HELIUM 2
PROGR. THEORET. PHYS., KYOTO, V.49, P.1802-P.1820
(1973)

HE ..THEORY/ LIQUID/ PHONON-ROTON DISPERSION

73-KE-02 KEBUKAWA, T.,
THE TEMPERATURE DEPENDENCE OF PHONON VELOCITY AND ROTO
MINIMUM IN LIQUID HE 2
PROGR. THEORET. PHYS., KYOTO, V.49, P.388-P.400 (1
973)

HE ..THEORY/ PHONON VELOCITY/ ROTO MINIMUM/ TEMPERATURE
EFFECT/ LIQUID

73-KE-03 KERR, W.C./ SINGWI, K.S.,
NEUTRON SCATTERING BY LIQUID NEON
PHYS. REV. A, V.7, P.1043-P.1054 (1973)
NE/ NEUTRON-SCATTERING-IN-FLUIDS ..QUANTUM EFFECT ..LAR
GE-0-REGION

73-KE-04 KESHARWANI, K.M./ AGRAWAL, B.K.,
PHONON FREQUENCIES AND WIDTHS IN DILUTE CU-AU ALLOYS
PHYS. REV. B, V.7, P.5153-P.5164 (1973)
CU-AU ..THEORY/ PHONON DISPERSION/ DILUTE ALLOY/ PHONON
WIDTH/ FORCE CONSTANT CHANGE

73-KH-01 KHENNIG, K./ SHARAPOV, E.I.,
THE STUDY OF NUCLEAR MAGNETISM IN VAN VLECK PARAMAGNETS
USING NEUTRON SCATTERING
BNL-TR-562 (1973)
MAGNETIC-SCATTERING ..THEORY/ NUCLEAR MAGNETISM

73-KI-01 KIM, K./ NELKIN, M.,
DYNAMIC STRUCTURE FACTOR OF A DISORDERED HARMONIC SOLID
PHYS. REV. B, V.7, P.2762-P.2771 (1973)
NEUTRON-SCATTERING-IN-SOLIDS ..DYNAMICAL STRUCTURE FACT
OR/ DISORDERED SOLID/ THEORY

73-KN-01 KNOLL, W./ STEEB, S.,
STRUCTURE OF MOLTEN COPPER-ANTIMONY ALLOYS BY COMBINATI
ON OF NEUTRON AND X-RAY DIFFRACTION
J. PHYS. CHEM. LIQUIDS, V.4, P.39-P.60 (1973)
CU-SB ..EXPERIMENT/ RADIAL DISTRIBUTION FUNCTION/ 21 AL
LOYS

73-KN-02 KNOLL, W./ STEEB, S.,
PARTIAL INTERFERENCE AND PAIR CORRELATION FUNCTIONS, TH
ERMOELECTRIC POWER, AND ELECTRICAL RESISTIVITY OF MOLTE

- N CU-SB ALLOYS
J. PHYS. CHEM. LIQUIDS, V.4, P.27-P.38 (1973)
CU-SB ., PARTIAL INTERFERENCE FUNCTION/ PAIR CORRELATION
FUNCTION
- 73-KU-01 KUNITOMI, N./ TSUNODA, Y./ HIRAI, Y.
PHONON MODES IN MASS-DEFECT DISORDERED ALLOY NI-PT
SOLID STATE COMMUN., V.13, P.495-P.498 (1973)
NI-PT ., EXPERIMENT/ PHONON DISPERSION/ EFFECT OF MASS-D
EFFECT
- 73-KU-02 KUSHWAHA, S.S.
LATTICE VIBRATIONS OF LITHIUM ON MODEL PSEUDOPOTENTIAL
PHYS. STATUS SOLIDI B, V.59, P.285 (1973)
LI ., THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION ., PS
EUDOPOTENTIAL
- 73-KU-03 KUSHWAHA, S.S.
LATTICE DYNAMICS OF ANISOTROPIC HCP METALS
PHYSICA, V.64, P.625-P.628 (1973)
ZN ., THEORY/ PHONON DISPERSION/ AXIALLY SYMMETRIC MODEL
/ ION-ELECTRON INTERACTION
- 73-KU-04 KUSHWAHA, S.S.
NONCENTRAL FORCE MODEL FOR H.C.P. METALS
CAN. J. PHYS., V.51, P.616-P.623 (1973)
MG/ BE/ TL ., THEORY/ PHONON DISPERSION/ SHORT-RANGE CLO
SED-SHELL AND IONIC INTERACTION
- 73-LA-01 LAROSE, A./ VANDEWAL, J.
BIBLIOGRAPHY OF PAPERS RELEVANT TO THE SCATTERING OF TH
ERMAL NEUTRONS (1963-1972)
MC-MASTER UNIVERSITY, HAMILTON, ONTARIO, CANADA (1
973)
REVIEW-ARTICLES ., STRUCTURE ANALYSIS/ MAGNETIC STRUCTUR
E/ PHONON/ MAGNON/ POLARIZED NEUTRON/ CRITICAL PHENOMEN
A/ FLUID/ MOLECULE/ MODERATION/ INSTRUMENTATION
- 73-LA-02 LARSSON, K.E.
ROTATIONAL MOTION OF MOLECULES AND NEUTRON SCATTERING
J. CHEM. PHYS., V.59, P.4612-P.4620 (1973)
NEUTRON-SCATTERING-IN-FLUIDS ., ROTATIONAL MOTION/ MOLEC
ULE
- 73-LE-01 LEFEBVRE, J.
LONGITUDINAL PHONONS OF TRANSLATION ALONG THE 4-AXIS ON
UREA
SOLID STATE COMMUN., V.13, P.1873-P.1875 (1973)
UREA ., PHONON DISPERSION/ X-RAY EXPERIMENT
- 73-LI-01 LITZMAN, O./ ROZSA, P.
LONG-RANGE FORCES IN THE DYNAMICS OF CRYSTALS WITH DEFE
CT
- PHYS. STATUS SOLIDI B, V.58, P.451 (1973)
THEORY-OF-SOLIDS ., THEORY/ LATTICE DYNAMICS ., POINT DEF
ECT/ GREEN'S FUNCTION/ LOCAL MODE
- 73-LO-01 LOEFFLER, U.
INVESTIGATION OF COLLECTIVE ATOMIC MOTIONS IN LIQUID GA
LLIUM BY INELASTIC NEUTRON SCATTERING
KFK-1875 (1973)
GALLIUM ., EXPERIMENT/ SCATTERING LAW/ LIQUID/ 305,1253K
- 73-LO-02 LOGAN, K.W./ DANNER, H.R./ GAULT, J.D./ KIM, H.
LOW-FREQUENCY MOLECULAR VIBRATIONS IN SOLID N-PARAFFINS
BY NEUTRON INELASTIC SCATTERING, N-PENTANE, N-HEXANE,
N-HEPTANE, AND N-OCTANE
J. CHEM. PHYS., V.59, P.2305-P.2308 (1973)
PENTANE/ HEXANE/ HEPTANE/ OCTANE ., EXPERIMENT/ INCOHERE
NT/ T-O-F SPECTRA/ PHONON DISPERSION/ N-PARAFFINS
- 73-LO-03 LOLY, P.D.
FREQUENCY SPECTRA ON THE SC AND BCC LATTICES
PHYS. REV. B, V.8, P.4405 (1973)
THEORY-OF-SOLIDS ., THEORY/ SOLID/ FREQUENCY SPECTRUM
- 73-LO-04 LOVESEY, S.W.
SINGLE-PARTICLE MOTION IN CLASSICAL MONATOMIC LIQUIDS
J. PHYS., C, LONDON, V.6, P.1856-P.1862 (1973)
THEORY-OF-FLUIDS/ AR ., GENERALIZED LANGEVIN EQUATION/ S
CATTERING FUNCTION
- 73-LY-01 LYNN, J.W./ SMITH, H.G./ NICKLOW, R.M.
LATTICE DYNAMICS OF GOLD
PHYS. REV. B, V.8, P.3493 (1973)
AU ., DISPERSION RELATION/ INELASTIC NEUTRON SCATTERING/
FREQUENCY DISTRIBUTION/ EXPERIMENT
- 73-MA-01 MACHIDA, M./ MURASE, C.
WAVE NUMBER DEPENDENCE OF THE RELAXATION TIME FOR THE L
ONGITUDINAL MODE IN SIMPLE LIQUID
PROGR. THEORET. PHYS., KYOTO, V.50, P.1-P.16 (1973)
THEORY-OF-FLUIDS/ AR ., SIMPLE LIQUID/ RELAXATION TIME F
OR LONGITUDINAL MODE
- 73-MA-02 MAZENKO, G.F.
FULLY RENORMALIZED KINETIC THEORY, II, VELOCITY AUTOCOR
RELATION
PHYS. REV. A, V.7, P.222-P.233 (1973)
THEORY-OF-FLUIDS ., THEORY/ FLUID/ VELOCITY AUTOCORRELAT
ION

- 73-MA-03 MAZENKO, G.F.,
FULLY RENORMALIZED KINETIC THEORY, I, SELF-DIFFUSION
PHYS. REV. A, V.7, P.209-P.222 (1973)
THEORY-OF-FLUIDS, .,THEORY/ FLUID/ DIFFUSION
- 73-ME-01 MEIER, P.F.
SOFT PHONONS AND THE CENTRAL MODE AT STRUCTURAL PHASE T
TRANSITIONS
SOLID STATE COMMUN., V.13, P.967 (1973)
NB3,SN/ SR,TI,03/ THEORY-OF-SOLIDS, .,THEORY/ ANHARMONIC
ITY, .,SINGULAR WIDTH GAMMA/ QUASI-PARTICLE INTERACTION/
NEAR PHASE TRANSITION
- 73-MI-01 MICHEL, K.H.
INCOHERENT NEUTRON SCATTERING AND MOLECULAR REORIENTATI
ONS IN CRYSTALS NEAR TC
J. CHEM. PHYS., V.58, P.1143 (1973)
N.H4,CL, .,THEORY/ INCOHERENT APPROXIMATION, .,XH4-TETRAH
EDRON/ REORIENTATION AROUND 2 AND 3 FOLD AXI6.
- 73-MI-02 MIKKE, K./ JANKOWSKA, J.
ANOMALIES IN THE PHONON DISPERSION RELATION IN CR-Fe AL
LOY BY NEUTRON SCATTERING
PHYS. STATUS SOLIDI B, V.55K, P.1-P.4 (1973)
CR-Fe, .,EXPERIMENT/ PHONON DISPERSION/ ALLOY
- 73-MI-03 MINKIEWICZ, V.J./ KITCHENS, T.A./ SHIRANE, G./ OSG
OOD, E.B.
LATTICE EXCITATIONS OF THE HE-4 QUANTUM SOLIDS
PHYS. REV. A, V.8, P.1513-P.1528 (1973)
HE, .,DISPERSION CURVE
- 73-MI-04 MISAWA, M./ FUKUSHIMA, Y./ SUZUKI, K./ TAKEUCHI, S.
HIGH MOMENTUM TRANSFER STRUCTURE FACOR OF LIQUID BROMIN
E BY T-O-F NEUTRON DIFFRACTION
PHYS. LETT., A, V.45, P.273 (1973)
BR/ NEUTRON-SCATTERING-IN-FLUIDS, .,EXPERIMENT/ LIQUID/
T-O-F
- 73-MI-05 MITRA, S.S./ SINGH, R.S.
CHANGE OF FORCE CONSTANT AROUND A POINT DEFECT IN A SOL
ID
SOLID STATE COMMUN., V.12, P.867 (1973)
LI,H/ NA,I/ LI,F/ LI,CL/ LI,BR/ K,F/ K,CL/ K,BR/ K,I/ R
B,I, .,THEORY/ LATTICE DYNAMICS/ FORCE CONSTANT, .,GREEN,
S FUNCTION/ POINT DEFECT/ LOCAL MODE/ KELLERMANN CONSTA
NT
- 73-MI-06 MITRA, S.K.
SELF MOTION IN CLASSICAL LIQUIDS
J. PHYS., C, LONDON, V.6, P.801-P.807 (1973)

THEORY-OF-FLUIDS/ NA, .,MEMORY FUNCTION/ SELF DIFFUSION
CONSTANT

73-NA-01 NAKAHARA, Y.
PHYSICAL PROPERTIES OF GRAPHITE AND ITS THERMAL NEUTRON
SCATTERING CHARACTERISTICS
JAERI-M-5245 (1973)
GRAPHITE/ REVIEW-ARTICLES, .,THEORY, SCATTERING LAW/ LAT
TICE DYNAMICS/ FREQUENCY DISTRIBUTION/ DISPERSION RELA
TION

73-NA-02 NAKAYAMA, T./ ODAJIMA, A.
APPLICABILITY OF A VALENCE FORCE FIELD MODEL TO THE LAT
TICE VIBRATIONS OF TRIGONAL SELENIUM
J. PHYS. SOC. JAP., V.34, P.732-P.736 (1973)
SE, .,THEORY/ PHONON DISPERSION/ VALENCE FORCE FIELD/ SI
X FORCE CONSTANTS

73-NE-01 NETO, N./ OEHLER, O./ HEXTER, R.M.
VIBRATIONAL SPECTRUM OF CRYSTALLINE IODOFORM
J. CHEM. PHYS., V.58, P.5661-P.5672 (1973)
ODOFORM, .,THEORY/ EXPERIMENT/ DISPERSION RELATION/ LAT
TICE VIBRATION, .,F,G-MATRIX METHOD/ INFRARED AND RAMAN
SPECTRA

73-NI-01 NIBLER, J.W./ COOK, T.H.
VIBRATIONAL SPECTRA OF SOLID METHYLZINC BOROHYDRIDE, CH3
ZN+...BH-4
J. CHEM. PHYS., V.58, P.1596-P.1602 (1973)
C.H3.ZN.B.H4, .,EXPERIMENT/ SOLID/ LATTICE VIBRATION, .,F
G-MATRIX METHOD/ INFRARED AND RAMAN SPECTROSCOPY

73-NI-02 NIELSEN, M.
PHONONS IN SOLID HYDROGEN AND DEUTERIUM STUDIED BY INEL
ASTIC COHERENT NEUTRON SCATTERING
PHYS. REV. B, V.7, P.1626-P.1635 (1973)
H/ D, .,EXPERIMENT/ PHONON DISPERSION/ PARA-H.ORTHO-D/ T
EMPERATURE,PRESSURE EFFECT

73-NI-03 NIIMURA, N./ FUJII, Y./ MOTEGI, H./ HOSHINO, S.
NEUTRON DIFFRACTION STUDY ON MOLECULAR LIBRATION IN SOL
ID D,CL
J. PHYS. SOC. JAP., V.35, P.842-P.847 (1973)
H,CL, .,EXPERIMENT/ D,CL/ MOLECULAR LIBRATION/ MEAN SOUA
RE ANGULAR DISPLACEMENT

73-NI-04 NILSSON, G./ ROLANDSON, S.
LATTICE DYNAMICS OF COPPER AT 80K
PHYS. REV. B, V.7, P.2393-P.2400 (1973)
CU, .,EXPERIMENT/ PHONON DISPERSION/ 80K/ MODEL FITTING/
PHONON DENSITY

- 73-NI-05 NISHIYAMA, T.
DISPERSION EQUATION AND LEVEL DENSITY OF ROTONS IN LIQUID HE 2
PROGR. THEORET. PHYS., KYOTO, V.50, P.726-P.736 (1973)
HE ..THEORY/ LIQUID HE/ ROTON DISPERSION AND LEVEL DENSITY
- 73-NU-01 NUSIMOVICI, M.A./ GORRE, G.
PHONONS IN CINNABAR
PHYS. REV. B, V.8, P.1648-P.1656 (1973)
HG,S ..THEORY/ PHONON DISPERSION/ VELOCITY OF SOUND
- 73-OL-01 OLIVEL, A.
COLD-NEUTRON INCOHERENT SCATTERING BY HOMOGENEOUSLY ORIENTED NEMATIC LIQUID CRYSTALS
ACTA CRYSTALLOGR., SECT. A, V.29, P.692-P.701 (1973)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ NEMATIC LIQUID CRYSTAL/ QUASI-ELASTIC PEAK
- 73-ON-01 ONO, M.
LATTICE DYNAMICS OF METALLIC LITHIUM
J. PHYS. SOC. JAP., V.34, P.26-P.35 (1973)
LI ..THEORY/ PHONON DISPERSION/ HARTREE-FOCK EQ./ HARRISON METHOD
- 73-OZ-01 OZORA, A./ ITO, M./ NIIMURA, N./ WATANABE, N.
NEUTRON INELASTIC SCATTERING SPECTRA AND PHASE TRANSITION OF 1,2-DICHLOROETHANE CRYSTAL
CHEM. PHYS. LETT., V.18, P.306-P.308 (1973)
DICHLOROETHANE ..EXPERIMENT/ FREQUENCY SPECTRUM/ PHASE TRANSITION
- 73-PA-01 PAGE, D.I./ SAUNDERSON, D.H./ WINDSOR, C.G.
NEUTRON SCATTERING FROM SUPERCOOLED GALLIUM
J. PHYS., C, LONDON, V.6, P.212-P.222 (1973)
GA ..STRUCTURE FACTOR/ LIQUIDS ..QUASI-ELASTIC PEAK
- 73-PA-02 PAL, S.
LATTICE DYNAMICAL PROPERTIES OF NICKEL
CAN. J. PHYS., V.51, P.1869-P.1873 (1973)
NI ..THEORY/ PHONON DENSITY/ SHARMA-JOSHI MODEL/ SPECIFIC HEAT/ DEBYE WALLER FACTOR
- 73-PA-03 PAL, S./ SINGH, R.B.
PHONON DISPERSION, FREQUENCY SPECTRUM AND SPECIFIC HEAT OF PALLADIUM
J. PHYS. SOC. JAP., V.35, P.1487-P.1491 (1973)
PD ..THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRUM/ SPECIFIC HEAT/ KREBS MODEL
- 73-PA-04 PALMER, B.J./ SAUNDERSON, D.H./ BATCHELDER, D.N.
PHONON FREQUENCIES IN XENON BY INELASTIC NEUTRON SCATTERING
J. PHYS., C, LONDON, V.6L, P.313-P.315 (1973)
XE ..DISPERSION CURVE ..(111)-DIRECTION
- 73-PA-05 PANDEY, B.P./ DAYAL, B.
LATTICE DYNAMICS OF SILICON AND DIAMOND
J. PHYS., C, LONDON, V.6, P.2943-P.2946 (1973)
SI/ GE ..THEORY/ PHONON DISPERSION/ CLARK-GAZIS-WALLIS TYPE ANGULAR FORCE MODEL/ FOUR PARAMETER MODEL
- 73-PA-06 PATHAK, K.N./ SINGWI, K.S./ CUBIOTTI, G./ TOSI, M.
P.
COLLECTIVE MOTIONS IN CLASSICAL LIQUIDS. 3. LIQUID SODIUM
NUOVO CIM., B, V.13, P.185-P.195 (1973)
NA ..THEORY/ LIQUID/ COLLECTIVE MOTION/ STRUCTURE FACTOR/ SCATTERING FUNCTION
- 73-PA-07 PATHAK, K.N./ BANSAL, R.
COLLECTIVE EXCITATIONS IN CLASSICAL LIQUIDS
J. PHYS., C, LONDON, V.6, P.1989 (1973)
THEORY-OF-FLUIDS ..THEORY/ LIQUIDS/ DYNAMICAL STRUCTURE FACTOR ..HUBBARD-BEEBY THEORY
- 73-PE-01 PETER, H./ SKALYO, J.JR./ GRIMM, H./ LUESCHER, E./ KORPIUN, P.
ELASTIC CONSTANTS OF SOLID KRYPTON AT T=77 K DETERMINED BY INELASTIC NEUTRON SCATTERING
J. PHYS. CHEM. SOLIDS, V.34, P.255 (1973)
KR ..SOLID/ EXPERIMENT/ ELASTIC CONSTANTS/ ..COLD NEUTRON
- 73-PI-01 PISERI, L./ POWELL, B.M./ DOLLING, G.
LATTICE DYNAMICS OF POLYTETRAFLUOROETHYLENE
J. CHEM. PHYS., V.58, P.158-P.171 (1973)
TEFLON ..EXPERIMENT/ CALCULATION/ PHONON DISPERSION
- 73-PL-01 PLIHAL, M.
LATTICE DYNAMICS OF CRYSTALS OF THE CALCITE STRUCTURE 2
DISPERSION CURVES AND PHONON DENSITIES
PHYS. STATUS SOLIDI B, V.56, P.495-P.506 (1973)
CA,C.O3 ..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ SHELL MODEL
- 73-PL-02 PLIHAL, M.
PHONON DISPERSION AND PHONON DENSITIES OF NA,N.O3
PHYS. STATUS SOLIDI B, V.58, P.315-P.319 (1973)
NA,N.O3 ..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ SPECIFIC HEAT

- 73-PO-01 POHL, R.O./ LOVE, W.F./ STEPHENS, R.B.
LATTICE VIBRATIONS IN NON-CRYSTALLINE SOLIDS
COO-3151-28, P.32 (1973)
THEORY-OF-SOLIDS .SPECIFIC HEAT/ NON-CRYSTALLINE
- 73-PO-02 POWLES, J.G.
THE STRUCTURE OF MOLECULAR LIQUIDS BY NEUTRON SCATTERING
G
ADVAN, PHYS., V.22, P.1-P.56 (1973)
REVIEW-ARTICLES .STRUCTURE/ MOLECULAR LIQUID/ EXPERIMENT/ THEORY
- 73-PR-01 PRASAD, B./ SRIVASTAVA, R.S.
MODEL PSEUDOPOTENTIAL AND LATTICE VIBRATIONS OF ALKALINE EARTH METALS
BA/ SR/ CA .THEORY/ SOLID / DISPERSION RELATION/ LATTICE DYNAMICS .PSEUDOPOTENTIAL
PHYS. STATUS SOLIDI B, V.57, P.743 (1973)
- 73-PR-02 PRASAD, B./ SRIVASTAVA, R.S.
MODEL PSEUDOPOTENTIAL AND LATTICE DYNAMICS OF LEAD
J. PHYS., F. LONDON, V.3, P.19-P.23 (1973)
PB .THEORY/ PHONON DISPERSION/ MODEL POTENTIAL CALCULATION
- 73-PR-03 PREVOT, B./ CARABATOS, C./ SCHWAB, C./ HENNION, B.
/ MOUSSA, F.
NORMAL MODES OF VIBRATIONS IN CU,BR
SOLID STATE COMMUN., V.13, P.1725-P.1727 (1973)
CU,BR .DISPERSION CURVE
- 73-RA-01 RAJPUT, J.S./ KUSHWAHA, S.S.
PHONON DISPERSION RELATIONS FOR BERYLLIUM AND MAGNESIUM
J. PHYS., F. LONDON, V.3, P.1531-P.1537 (1973)
BE/ MG .THEORY/ PHONON DISPERSION/ KREB MODEL
- 73-RA-02 RAO, R.R./ MENON, C.S.
LATTICE DYNAMICS, THIRD-ORDER ELASTIC CONSTANTS, AND THERMAL EXPANSION OF TITANIUM
PHYS. REV. B, V.7, P.644-P.650 (1973)
TI .THEORY/ PHONON DISPERSION/ SOE CONSTANT/ THERMAL EXPANSION/ KEATING-S APPROACH
- 73-RA-03 RAO, R.R./ MENON, C.S.
PHONON DISPERSION RELATIONS AND THERMAL EXPANSION OF BERYLLIUM
J. APPL. PHYS., V.44, P.3892-P.3896 (1973)
ER .THEORY/ PHONON DISPERSION/ KEATING METHOD/ THERMAL EXPANSION/ PHONON DENSITIES
- 73-RA-04 RAO, R.R./ MENON, C.S.
LATTICE DYNAMICS AND ELASTIC CONSTANTS OF SANDIUM
- SOLID STATE COMMUN., V.12, P.527-P.528 (1973)
SC .THEORY/ PHONON DISPERSION/ SECOND ORDER ELASTIC CONSTANT/ KEATING METHOD
- 73-RE-01 REESE, R.A./ SINHA, S.K.
PHONON SPECTRUM OF THORIUM
PHYS. REV. B, V.8, P.1332-P.1337 (1973)
THORIUM .EXPERIMENT/ PHONON DISPERSION/ FORCE CONSTANT ANALYSIS/ PHONON SPECTRA/ DEBYE TEMPERATURE
- 73-RE-02 REISSLAND, J.A.
THE PHYSICS OF PHONON
JOHN WILEY AND SONS LTD (1973)
REVIEW-ARTICLES .BOOK
- 73-RE-03 RENKER, B./ RIETSCHEL, H./ PINTSCHOVIVUS, L./ GLAESER, W./ BRUEESCH, P.
OBSERVATION OF GIANT KOHN ANOMALY IN THE ONE-DIMENSIONAL CONDUCTOR K₂PT₄(CN)₄BR_{0.3}3*(H₂O)
PHYS. REV. LETT., V.30, P.1144-P.1147 (1973)
KCP .EXPERIMENT/ LONGITUDINAL ACOUSTIC PHONON/ DISPERSION/ KOHN ANOMALY
- 73-RO-01 ROSS, D.K.
INELASTIC NEUTRON SCATTERING FROM POLYCRYSTALLINE GRAPHITE AT TEMPERATURES UP TO 1920DC
J. PHYS., C. LONDON, V.6, P.3525-P.3535 (1973)
GRAPHITE .EXPERIMENT/ T-O-F/ PHONON DISPERSION/ 20, 100 AND 1920DC
- 73-RO-02 ROWE, J.M./ LIVINGSTON, R.C./ RUSH, J.J.
NEUTRON QUASIELASTIC SCATTERING STUDY OF SH- REORIENTATION IN THE CUBIC PHASES OF CESIUM AND RUBIDIUM HYDROSULFIDE
J. CHEM. PHYS., V.58, P.5469-P.5473 (1973)
CS,S.H/ RB,S.H .EXPERIMENT/ QUASI-ELASTIC PEAK/ MOLECULAR ROTATIONS/ MEAN SQUARE DISPLACEMENT/ SIGMA (THETA.E) .JUMP REORIENTATION
- 73-RO-03 ROY, A.P./ DASANNACHARYA, B.A./ THAPER, C.L./ IYENGAR, P.K.
EXPERIMENTAL EVIDENCE OF BREAKDOWN OF SIMPLE PSEUDOPOTENTIAL THEORY FOR LATTICE DYNAMICS OF BERYLLIUM
PHYS. REV. LETT., V.30, P.906 (1973)
BE .EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION
- 73-RU-01 RUPPERSBERG, H.
A NEUTRON DIFFRACTION INVESTIGATION OF LIQUID LITHIUM-LEAD ALLOYS
PHYS. LETT., A, V.46, P.75 (1973)
LI-PB .EXPERIMENT/ LIQUID/ CORRELATION FUNCTION

- 73-RU-02 RUSH, J.J./ DE-GRAFF, L.A./ LIVINGSTON, R.C.
NEUTRON SCATTERING INVESTIGATION OF THE ROTATIONAL DYNAMICS AND PHASE TRANSITIONS IN SODIUM AND CESIUM HYDROSLFIDES
J. CHEM. PHYS., V.58, P.3439-P.3448 (1973)
NA,S.H./ CS,S.H. THEORY/ EXPERIMENT/ QUASI-ELASTIC PEAK / SIGMA (THETA.E) .SH-ION LIBRATION/ REORIENTATIONAL JUMP
- 73-SA-01 SAKAMOTO, M./ IIZUMI, M./ MASAKI, N./ MOTOHASHI, H./ MINAKAWA, N./
MEASUREMENTS OF LONGITUDINAL ACOUSTIC PHONONS IN POLYTETRAFLUOROETHYLENE
J. POLY. SCI., PART B, V.11, P.377-P.381 (1973)
POLYTETRAFLUOROETHYLENE .EXPERIMENT/ PHONON DISPERSION / PHASE TRANSITION
- 73-SA-02 SALZBERG, J.B./ SHUKLA, M.M.
DISPERSION OF PHONON WAVES IN SOLID KRYPTON
NUOVO CIM., B, V.17, P.166-P.172 (1973)
KR. THEORY/ PHONON DISPERSION/ PHONON SPECTRUM/ AXIAL SYMMETRIC MODEL
- 73-SA-03 SANGSTER, M.J.L.
INTRINIC POTENTIALS AND FORCE CONSTANT MODELS FOR ROCK SALT STRUCTURE CRYSTALS
J. PHYS. CHEM. SOLIDS, V.34, P.355-P.363 (1973)
MG,O/ NA,CL/ LI,F/ K.I. INTERIONIC FORCE/ PHONON DISPERSION/ DEFORMABLE SHELL MODEL
- 73-SA-04 SARMA, B.K./ TEWARI, S.P.
SCATTERING OF NEUTRONS FROM THE ZERO-POINT VIBRATIONS OF A LATTICE AT ABSOLUTE ZERO
PHYS. LETT., A, V.45, P.481 (1973)
NEUTRON-SCATTERING-IN-SOLIDS. THEORY/ SOLID/ SIGMA (E, E-PRIME,THETA)/ INCOHERENT APPROXIMATION
- 73-SC-01 SCHMID, C.S./ HOELZL, K.
EXACT PHONON GREEN FUNCTION FOR KIRKWOOD'S MODEL
J. PHYS., C, LONDON, V.6, P.2401-P.2421 (1973)
THEORY-OF-SOLIDS .LOCALIZED MODE
- 73-SC-02 SCHUSTER, H.G.
PHONON SPECTRAL FUNCTION OF A SUPERCONDUCTOR
SOLID STATE COMMUN., V.13, P.1559-P.1562 (1973)
NEUTRON-SCATTERING-IN-SOLIDS .SUPERCONDUCTOR
- 73-SE-01 SEARS, V.F.
INCOHERENT NEUTRON SCATTERING FOR LARGE MOMENTUM TRANSFER, II. QUANTUM EFFECTS AND APPLICATIONS
PHYS. REV. A, V.7, P.340-P.348 (1973)
- NEON/ RUBIDIUM/ HYDROGEN/ THEORY-OF-FLUIDS .THEORY/ FU
UID/ SCATTERING FUNCTION
- 73-SH-01 SHAPIRO, S.M./ AXE, J.D./ SHIRANE, G./ RISTE, T.
SOME FURTHER OBSERVATIONS OF SOFT PHONON LINE SHAPES IN K,MN,F3
BNL-18053 (1973)
K,MN,F3 .EXPERIMENT/ SOFT MODE DYNAMICS
- 73-SH-02 SHARAN, B./ KUMAR, A.
LATTICE DYNAMICAL STUDY OF INDIUM
PHYS. REV. B, V.7, P.1362-P.1367 (1973)
IN .THEORY/ PHONON DISPERSION/ DEBYE TEMP./ ELASTIC CONSTANT
- 73-SH-03 SHARAN, B./ KUMAR, A./ NEELAKANDAN, K.
LATTICE DYNAMICS OF LITHIUM
J. PHYS., F, LONDON, V.3, P.1308-P.1312 (1973)
LI .THEORY/ PHONON DISPERSION
- 73-SH-04 SHUKLA, M.M./ SALZBERG, J.B.
LATTICE DYNAMICS OF COPPER ON MODIFIED BHATIA'S MODEL
PHYS. LETT., A, V.43, P.429-P.430 (1973)
CU .THEORY/ PHONON DISPERSION/ BHATIA MODEL
- 73-SH-05 SHUKLA, M.M./ CAVALHEIRO, R.
EXTENDED DE LAUNAY'S MODEL FOR LATTICE DYNAMICS OF FACE-CENTERED-CUBIC METALS
NUOVO CIM., B, V.16, P.63-P.84 (1973)
CU/ AG/ AL/ NI/ PD .THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ FOURTH NEIGHBOURS FORCE
- 73-SH-06 SHUKLA, M.M./ SALZBERG, J.B.
DISPERSION OF PHONON WAVES IN SOLID ARGON
J. PHYS. SOC. JAP., V.35, P.996-P.999 (1973)
AR .THEORY/ PHONON DISPERSION/ FREQUENCY SPECTRA/ AXIAL SYMMETRIC MODEL
- 73-SH-07 SHUKLA, M.M./ CLOSS, H.
A MODEL FOR LATTICE DYNAMICS OF FCC METALS
J. PHYS., F, LONDON, V.3, P.1 (1973)
CU .THEORY/ PHONON DISPERSION
- 73-SH-08 SHUKLA, M.M./ CLOSS, H.
A MODEL FOR LATTICE DYNAMICS OF HEXAGONAL CLOSE PACKED METALS
SOLID STATE COMMUN., V.13, P.803 (1973)
MG .THEORY/ LATTICE DYNAMICS/ INTERATOMIC FORCE CONSTANT/ DISPERSION RELATION .ELECTRON,ION INTERACTION
- 73-SH-09 SHUKLA, M.M./ SALZBERG, J.B.
LATTICE DYNAMICS OF SODIUM ON MODIFIED BHATIA'S MODEL

- J. PHYS., F. LONDON, V.3L, P.99-P.101 (1973)
NA ..THEORY/ PHONON DISPERSION/ BHATIA MODEL
- 73-SH-10 SHUKLA, M.M./ CLOSS, H.
AN ANGULAR FORCE MODEL FOR LATTICE DYNAMICS OF FACE CEN
TERD CUBIC METALS
J. PHYS., F. LONDON, V.3L, P.83-P.85 (1973)
CU ..THEORY/ PHONON DISPERSION/ ANGULAR FORCE MODEL
- 73-SH-11 SHUKLA, M.M./ CLOSS, H.
A MODEL FOR LATTICE DYNAMICS OF FCC METALS
J. PHYS., F. LONDON, V.3L, P.1-P.4 (1973)
CU ..THEORY/ PHONON DISPERSION/ LEHMAN AND KREB MODEL
- 73-SI-01 SINGH, N./ PRAKASH, S.
PHONON FREQUENCIES AND COHESIVE ENERGIES OF COPPER, SIL
VER, AND GOLD
PHYS. REV. B, V.8, P.5532-P.5544 (1973)
CU/ AG/ AU ..THEORY/ PHONON DISPERSION
- 73-SK-01 SKOELD, K./ DAHLBORG, U.
REORIENTATION OF THE N,H+4 ION IN N,H4,CL IN PHASE 2
SOLID STATE COMMUN., V.13, P.543-P.546 (1973)
N,H4,CL ..EXPERIMENT/ NEUTRON DIFFRACTION/ TOF/ SIGMA (T
HETA,E) ..STEPWISE REORIENTATION OF N,H4 ION
- 73-SM-01 SMITH, J.A.S./ TEMME, F.P./ LUDMAN, C.J./ WADDINGT
ON, T.C.
NEUTRON INELASTIC SCATTERING STUDIES ON THE HYDROGEN DI
HALIDES
J. C. S. FARADAY TRANS. 2, V.10, P.1477-P.1485 (19
73)
NA,H,F2/ K,H,F2/ CS,H,CL2/ CS,H,BR ..EXPERIMENT/ MOLECU
LAR VIBRATION
- 73-SM-02 SMITH, J.A.S./ TEMME, F.P./ LUDMAN, C.J./ WADDINGT
ON, T.C.
NEUTRON INELASTIC SCATTERING STUDIES ON THE HYDROGEN DI
HALIDES
J. C. S. FARADAY TRANS. 2, V.69, P.1477-P.1485 (19
73)
NA,H,F2/ K,H,F2/ CS,H,CL2/ CS,H,BR2 ..EXPERIMENT/ FREQU
ENCY SPECTRA/ TOF SPECTRA
- 73-SO-01 SOKOLOFF, J.B./ LOVELUCK, J.M.
THEORY OF INELASTIC NEUTRON SCATTERING FROM ORIENTATION
ALLY DISORDERED MOLECULAR CRYSTALS, WITH PARTICULAR APP
LICATION TO N,D4,BR AND N,D4,CL
PHYS. REV., V.17, P.1644-P.1650 (1973)
N,H4,BR/ N,H4,CL ..THEORY/ ORDER-DISORDER TRANSITION/ S
IGMA (THETA,E) ..ORIENTATIONAL DISORDER
- 73-SO-02 SOMA, T.
STATIC AND DYNAMICAL ELASTIC CONSTANTS OF SIMPLE METALS
J. PHYS. SOC. JAP., V.36, P.1292-P.1300 (1973)
THEORY-OF-SOLIDS ..METAL/ ELASTIC CONSTANT/ STATIC AND
DYNAMICAL
- 73-SR-01 SRIVASTAVA, V./ JOSHI, S.K.
PHONON IN DISORDERED SI-GE ALLOYS
PHYS. REV. B, V.8, P.4671 (1973)
GE-SI ..SPECTRAL DENSITY FUNCTION/ RAMAN SPECTRA/ THEOR
Y
- 73-ST-01 STALLARD, J.M./ DAVIS-JR, C.M.
LIQUID-ALUMINUM STRUCTURE FACTOR BY NEUTRON DIFFRACTION
PHYS. REV. A, V.8, P.368-P.376 (1973)
AL ..EXPERIMENT/ STRUCTURE FACTOR/ LIQUID METAL/ 703.10
29 DC
- 73-SW-01 SWAROOP, A./ BOHRA, B.M./ TIWARI, L.M.
LATTICE DYNAMICS OF CALCIUM AND STRONTIUM
PHYSICA, V.66, P.403-P.408 (1973)
CA/ SR ..THEORY/ PHONON DISPERSION/ PHONON DENSITY/ DEB
YE TEMP./ SHARMA-JOSHI MODEL
- 73-TA-01 TADDEI, G./ BONADEO, H./ MARZOCCHI, M.P./ CALIFANO
S.
CALCULATION OF CRYSTAL VIBRATIONS OF BENZENE
J. CHEM. PHYS., V.58, P.966 (1973)
C6,H6 ..THEORY/ LATTICE DYNAMICS ..F AND G MATRIX METHO
D
- 73-TA-02 TALWAR, D.N./ AGRAWAL, B.K.
LATTICE DYNAMICS OF ZN-CD CHALCOGENIDES - A CRITICAL-PO
INT ANALYSIS
PHYS. REV. B, V.8, P.693-P.701 (1973)
ZN,TE/ CD,TE ..CALCULATION/ SECOND-NEIGHBOR-IONIC MODEL
- 73-TE-01 TEH, H.C./ BROCKHOUSE, B.N.
TEMPERATURE DEPENDENCE OF THE LATTICE VIBRATIONS IN N.D
4,CL
PHYS. REV. B, V.8, P.3928-P.3938 (1973)
N,H4,CL ..LATTICE DYNAMICS/ DISPERSION CURVE
- 73-TE-02 TEMME, F.P./ WADDINGTON, T.C.
LIBRATIONAL MOTION IN SODIUM AND LITHIUM ALUMINIUM HYDR
IDES, STUDIED BY INELASTIC NEUTRON SCATTERING
J. C. S. FARADAY TRANS. 2, V.6, P.783-P.790 (1973)
LI-AL-H/ NA-AL-H ..EXPERIMENT/ PHONON SPECTRA/ LI-AL-H4
/ NA-AL-H4
- 73-TH-01 THORPE, M.F.

EFFECT OF LOCAL ORDER ON PHONON DENSITY OF STATES

PHYS. REV. B, V.8, P.5352 (1973)
GE/ SI .,THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY DIS
TRIBUTION .,BORN MODEL

73-TO-01 TOSI, M.P./ MARCH, N.H.,
SMALL-ANGLE SCATTERING FROM LIQUID METALS AND ALLOYS AN
D ELECTRONIC CORRELATION FUNCTIONS
NUOVO CIM., B, V.15, P.308-P.319 (1973)
THEORY-OF-FLUIDS .,PARTIAL CORRELATION FUNCTION/ SMALL
Q REGION/ ELECTRONIC EFFECT

73-UP-01 UPADHYAYA, J.C./ VERMA, M.P.,
PHONON DISPERSION IN YTTRIUM AND TERBIUM
J. PHYS., F. LONDON, V.3, P.1672-P.1677 (1973)
Y/ TB .,THEORY/ PHONON DISPERSION/ SHARMA-JOSHI MODEL

73-UP-02 UPADHYAYA, J.C./ VERMA, M.P.,
DISPERSION RELATIONS IN SOME HEXAGONAL METALS
J. PHYS., F. LONDON, V.3, P.640-P.646 (1973)
BE/ MG/ HO/ TL .,THEORY/ PHONON DISPERSION/ MODIFIED SH
ARMA-JOSHI MODEL

73-VA-01 VAN-TRICHT, J.B./ DE-MUL, F.F.M./ WEIJERMANS, J.P.,
A COLD NEUTRON SCATTERING STUDY OF DICALCIM STRONTIUM P
RIONATE
CHEM. PHYS. LETT., V.22, P.476-P.479 (1973)
DICALCIMUM STRONTIUM PROPIONATE .,EXPERIMENT/ VIBRATION
SPECTRA/ PARA-ELECTRIC PHASE TRANSITION/ QUASI-ELASTIC
SCATTERING

73-VE-01 VERMA, M.P./ UPADHYAYA, J.C.,
THE USE OF CENTRAL PAIR POTENTIALS IN THE LATTICE DYNAM
ICS OF YTTRIUM
SOLID STATE COMMUN., V.13, P.779 (1973)
Y .,THEORY/ LATTICE DYNAMICS/ SOLID .,ELASTIC CONSTANT/
ELECTRON-ION INTERACTION/ PHONON DISPERSION CURVE

73-VE-02 VERMA, M.P./ AGARWAL, S.K.,
THREE-BODY-FORCE SHELL MODEL AND THE LATTICE DYNAMICS O
F MAGNESIUM OXIDE
PHYS. REV. B, V.8, P.4880 (1973)
MG.O .,LATTICE OYAMILS/ DISPERSION RELATION/ THEORY

73-VE-03 VETELINO, J.F./ NAMJOSHI, K.V./ MITRA, S.S.,
LATTICE DYNAMICS OF CS,CL, CS,BR, AND CS,I
PHYS. REV. B, V.7, P.4001-P.4004 (1973)
CS,CL/ CS,BR/ CS,I .,THEORY/ PHONON DISPERSION/ MODIFIE
D-RIGID-ION MODEL

73-VI-01 VISSCHER, W.M.,
SELF-DIFFUSION, THE GREEN-KUBO FORMULAS, AND THE LONG T

AIL OF THE VELOCITY-AUTOCORRELATION FUNCTION
PHYS. REV., V.7, P.1439-P.1441 (1973)
THEORY-OF-FLUIDS .,SELF-DIFFUSION/ VELOCITY-AUTOCORRELA
TION

73-WA-01 WARREN, J.L./ WORLTON, T.G.,
SYMMETRY PROPERTIES OF THE LATTICE DYNAMICS OF TWENTY T
HREE CRYSTALS
ANL-8053 (1973)
THEORY-OF-SOLIDS .,SYMMETRY PROPERTY/ COMPUTER ANALYSIS
/ 23 CRYSTALS

73-WE-01 WEBER, W.,
PHONON ANOMALIES IN STRONGLY COUPLED SUPERCONDUCTORS
PHYS. REV. B, V.8, P.5093 (1973)
TI,C/ ZR,C/ HF,C .,THEORY/ SOLID/ FREQUENCY DISTRIBUTIO
N/ LATTICE DYNAMICS .,SUPERCONDUCTOR/ STRONG COUPLIN TH
EORY

73-WE-02 WEBER, W.,
LATTICE DYNAMICS OF TRANSITION-METAL CARBIDES
PHYS. REV. B, V.8, P.5082 (1973)
TI,C/ ZR,C/ V,C/ NB,C/ TA,C/ U,C .,THEORY/ LATTICE DYNA
MICS/ SOLID/ DISPERSION RELATION/ FREQUENCY DISTRIBUTIO
N .,SHELL MODEL/ DOUBLE SHELL MODEL

73-WI-01 WILLIS, B.T.M.,
CHEMICAL APPLICATIONS OF THERMAL NEUTRON SCATTERING
HARWELL SERIES, OXFORD UNIVERSITY PRESS, ELY HOUSE
, LONDON W.1 (1973)
REVIEW-ARTICLES .,BOOK/ CHEMICAL APPLICATION/ THERMAL N
EUTRON SCATTERING

73-WI-02 WINFIELD, D.J./ EGELSTAFF, P.A.,
SHORT RANGE TRIPLET CORRELATIONS IN KRYPTON NEAR THE CR
ITICAL POINT
CAN. J. PHYS., V.51, P.1965-P.1970 (1973)
KR/ THEORY-OF-FLUIDS .,TRIPLET CORRELATION

73-WO-01 WOODS, A.D.B./ SVENSSON, E.C./ MARTEL, P.,
NEUTRON SCATTERING BY LIQUID HELIUM UNDER PRESSURE
PHYS. LETT., A, V.43, P.223-P.224 (1973)
HE .,SUPERFLUID/ PRESSURE EFFECT

73-WU-01 WU, C.K./ NICOL, M.,
LOW FREQUENCY MODES IN THE RAMAN SPECTRA OF POLYETHYLEN
E AND PARAFFINS, I. LATTICE VIBRATIONS AND THEIR PRESSU
RE DEPENDENCE
J. CHEM. PHYS., V.58, P.5150-P.5162 (1973)
POLYETHYLENE/ PARAFFINE .,EXPERIMENT/ RAMAN SPECTRA/ PR
ESSURE EFFECT/ LATTICE MODE

- 73-WU-02 WU, C.K./ NICOL, M.,
LOW FREQUENCY MODES IN THE RAMAN SPECTRA OF POLYETHYLENE
AND PARAFFINS. 1. LATTICE VIBRATIONS AND THEIR PRESSURE
DEPENDENCES
CONF-730342-1 (1973)
POLYETHYLENE ..EXPERIMENT/ RAMAN SPECTR./ LOW FREQUENCY
/ PRESSURE EFFECT
- 73-YA-01 YAMADA, Y./ FUJII, Y./ HOSHINO, S./ AXE, J.D./ SHI
RANE, G.
SOFT PHONON MODES IN CS.PB.CL3
BNL 18247 (1973)
CS.PB.CL3 ..EXPERIMENT/ PHASE TRANSITION/ SOFT MODE
- 73-ZE-01 ZELLER, H.R.,
ELECTRONIC PROPERTIES OF ONE-DIMENSIONAL SOLID STATE SY
STEMS
FESTKORPERPROBLEME, V.13, P.31-P.58 (1973)
REVIEW-ARTICLES/ KCP/ TTF-TCNQ...ONE-DIMENSIONAL CONDUCTOR/
KOHN-PETERLS INSTABILITY
- 74-AB-01 ABRAMO, M.C./ PARRINELLO, M./ TOSI, M.P.,
DYNAMIC STRUCTURE FACTORS AND NEUTRON SCATTERING IN MOL
TEN SALTS
J. PHYS., C, LONDON, V.7, P.4201 (1974)
NA.CL ..SCATTERING THEORY/ MOLTEN SALTS
- 74-AI-01 AILAWADI, N.K./ BANERJEE, P.K./ CHOUDRY, A.,
EFFECTIVE PAIR POTENTIALS FOR LIQUID NA AND LIQUID K
J. CHEM. PHYS., V.60, P.2571 (1974)
NA/ K ..EFFECTIVE PAIR POTENTIAL/ RADIAL DISTRIBUTION FUNCTION/
LIQUID
- 74-AL-01 ALLEN, G./ HIGGINS, J.S./ WRIGHT, C.J.,
SEGMENTAL DIFFUSION IN RUBBERS STUDIED BY NEUTRON QUASIELASTIC
INCOHERENT SCATTERING
J. C. S. FARADAY TRANS, 2, V.70, P.348-P.355 (1974)
POLYMETHYLPHENYLSILOXANE/ POLYPROPYLENE OXIDE/ POLYISOBUTYLENE/
POLYETHYLENEOXIDE ..EXPERIMENT/ QUASIELASTIC SCATTERING/
RUBBER STATE/ DOPPLER BROADENING/ DEUTERIUM SUBSTITUTION/
DIFFUSION COEFFICIENT AND TEMPERATURE DEPENDENCE
- 74-AL-02 ALLEN, G./ HIGGINS, J.S./ WRIGHT, C.J.,
SEGMENTAL DIFFUSION IN RUBBERS STUDIED BY NEUTRON QUASIELASTIC
INCOHERENT SCATTERING
J. C. S. FARADAY TRANS, 2, V.70, P.348-P.355 (1974)
RUBBER ..QUASIELASTIC/ SEGMENTAL DIFFUSION
- 74-AL-03 ALLEN, G./ GHOSH, R.E./ HEIDEMANN, A./ HIGGINS, J.
S./ HOWELLS, W.S.,
ON THE STRUCTURE OF THE QUASIELASTIC INCOHERENT NEUTRON SCATTERING
FROM POLY(DIMETHYL-SILOXANE)
CHEM. PHYS. LETT., V.27, P.308-P.311 (1974)
POLYDIMETHYLSILOXANE ..QUASIELASTIC SCATTERING
- 74-AL-04 ALLEN, G./ GHOSH, R.E./ HEIDEMANN, A./ HIGGINS, J.
S./ HOWELLS, W.S.,
ON THE STRUCTURE OF THE QUASIELASTIC INCOHERENT NEUTRON SCATTERING
FROM POLY(DIMETHYL-SILOXANE)
CHEM. PHYS. LETT., V.27, P.308-P.311 (1974)
POLYDIMETHYLSILOXANE ..EXPERIMENT/ QUASIELASTIC SCATTERING/
RING/ RUBBER STATE/ DOPPLER BROADENING
- 74-AL-05 ALMAIRAC, R./ BENOIT, C.,
LATTICE DYNAMICS OF MAGNESIUM FLUORIDE
J. PHYS., C, LONDON, V.7, P.2614-P.2629 (1974)
MG.F2 ..PHONON DISPERSION/ EXPERIMENT/ SHELL MODEL CALCULATION
- 74-AL-06 ALTSHULER, A./ VEKILOU, Y.K./ KADYSHEVICH, A.E./ RUSAKOV, A.P.,
LATTICE DYNAMICS OF A(Cl)-B(VI) COMPOUNDS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.16 (V.16),
P.2860-P.2865 (P.1852-P.1854) (1974 (1975))
THEORY-OF-SOLIDS/ ZN.S ..PHONON DISPERSION/ RIGID ION MODEL
- 74-AM-01 AMARAL, L.O./ FULFARO, R./ VINHAS, L.A.,
MOLECULAR DYNAMICS OF TERT-BUTANOL STUDIED BY NEUTRON TRANSMISSION
TEA-328 (1974)
BUTANOL ..EXPERIMENT/ TRANSMISSION/ MOLECULAR DYNAMICS
- 74-AN-01 ANDERSEN, H.C.,
CLUSTER EXPANSIONS FOR HYDROGEN BOUNDED FLUIDS, 2 DENSE LIQUIDS
J. CHEM. PHYS., V.61, P.4985 (1974)
THEORY-OF-FLUIDS ..PAIR CORRELATION FUNCTION FOR HYDROGEN BOUNDED LIQUIDS/
WATER
- 74-AX-01 AXE, J.D.,
INELASTIC COHERENT NEUTRON SCATTERING IN AMORPHOUS SOLIDS
BNL-19179 (1974)
NEUTRON-SCATTERING-IN-SOLIDS ..INELASTIC COHERENT SCATTERING/
PHONON/ AMORPHOUS SOLIDS
- 74-AX-02 AXE, J.D./ KEATING, D.T./ CARGIL, G.S./ ALBEN, R.,
INELASTIC NEUTRON SCATTERING FROM AMORPHOUS GERMANIUM
BNL-18726 (1974)
GE ..EXPERIMENT/ FREQUENCY SPECTRA/ AMORPHOUS MATERIAL

- 74-AX-03 AXE, J.D./ SHAPIRO, S.M./ SHIRANE, G.
NEUTRON SCATTERING STUDIES OF SOFT MODE DYNAMICS
AN HARMONIC LATTICES. STRUCTURAL TRANSITIONS AND ME-
LTING (ED. BY RISTE, T.). NOORDHOFF, LEIDEN, P.23-
P.37 (1974)
- NB3,SN/ SR, TI, O3/ K,MN, F3/ LA, AL, O3 ..EXPERIMENT/ SOFT
MODE/ CENTRAL PEAK PROBLEM
- 74-BA-01 BARKER, M.I./ GASKELL, T.
PROPAGATION OF DENSITY FLUCTUATIONS IN LIQUID METALS
J. PHYS., C, LONDON, V.7L, P.293-P.298 (1974)
NEUTRON-SCATTERING-IN-FLUIDS/ RB ..TRIPLE-PEAKS
- 74-BA-02 BARRON, T.H.K./ GIBBONS, T.G.
QUASIHARMONIC LATTICE DYNAMICS OF BRAVAIS LATTICES: III
THERMAL EXPANSION OF A RHOMBOHEDRAL LATTICE
J. PHYS., C, LONDON, V.7, P.3287 (1974)
THEORY-OF-SOLIDS ..THERMAL-EXPANSION ..QUASIHARMONIC-LA-
TTICE
- 74-BA-03 BARRON, T.H.K./ GIBBONS, T.G.
QUASIHARMONIC LATTICE DYNAMICS OF BRAVAIS LATTICES: I,
MECHANISMS IN CENTRAL FORCE MODELS
J. PHYS., C, LONDON, V.7, P.3260-P.3268 (1974)
THEORY-OF-SOLIDS ..DISPERSION-CURVES ..QUASIHARMONIC-LA-
TTICE/
- 74-BA-04 BARRON, Y.H.K./ GIBBONS, T.G.
QUASIHARMONIC LATTICE DYNAMICS OF BRAVAIS LATTICE: II,
RHOMBOHEDRAL LATTICE WITH SHORT-RANGE CENTRAL FORCES
J. PHYS., C, LONDON, V.7, P.3269-P.3286 (1974)
THEORY-OF-SOLIDS ..DISPERSION-CURVES ..QUASIHARMONIC-LA-
TTICE
- 74-BA-05 BATA, L./ VIZI, I./ KUELER, S.
INTERPRETATION OF THE QUASI-ELASTIC NEUTRON SCATTERING
ON PAA BY ROTATIONAL DIFFUSION MODELS
KFKI-74-75 (1974)
P-AZOXYANISOLE ..EXPERIMENT/ LIQUID CRYSTAL PHASE/ QUAS
I-ELASTIC SPECTRUM/ ROTATIONAL DIFFUSION MODEL
- 74-BE-01 BEDEAUX, D./ MAZUR, P.
BROWNIAN MOTION AND FLUCTUATING HYDRODYNAMICS
PHYSICA, V.76, P.247-P.258 (1974)
THEORY-OF-FLUIDS ..BROWNIAN-MOTION
- 74-BE-02 BERTONI, C.M./ BORTOLANI, V./ CALANDRA, C./ NIZZOL
I, F.
THIRD ORDER PERTURBATION THEORY AND LATTICE DYNAMICS OF
SIMPLE METALS
J. PHYS., F, LONDON, V.4, P.19-P.38 (1974)
LI/ NA/ AL/ PB/ ..THEORY/ PHONON DISPERSION/ THIRD ORDE

R PERTURBATION THEORY

- 74-BE-03 BETSUYAKU, H./ HAMAGUCHI, Y.
NEUTRON SCATTERING INVESTIGATION OF MAGNETIC EXCITATION
IN K,MN,F3
J. PHYS, SOC. JAP., V.37, P.975-P.982 (1974)
K,MN,F3/ MAGNETIC-SCATTERING ..EXPERIMENT/ MAGNETIC SCA-
TTERING FUNCTION/ 3,4TN
- 74-BI-01 BICKERMAN, A./ BIEM, W./ MERTENS, F.G.
INCOHERENT NEUTRON SCATTERING BY THE PHONON-VIBRATION S
YSTEM IN SOLID ORTHO-HYDROGEN
Z. PHYS., V.267, P.31-P.39 (1974)
HYDROGEN ..THEORY/ SOLID ORTHO-HYDROGEN/ PHONON DISPERS
ION AND SPECTRA/ SCATTERING FUNCTION
- 74-BI-02 BIRGENEAU, R.J./ KJEMS, J.K./ SHIRANE, G./ VAN-UIT
ERT, L.G.
COOPERATIVE JAHN-TELLER PHASE TRANSITION IN PR,AL,O3
PHYS. REV. B, V.10, P.2512-P.2534 (1974)
PR,AL,O3 ..JAHN-TELLER/ STRUCTURAL-PHASE-TRANSITION
- 74-BL-01 BLINC, R./ LUGOMER, S./ ZEKS, B.
SOFT-MODE DYNAMICS IN NEMATIC LIQUID CRYSTALS
PHYS. REV. A, V.9, P.2214 (1974)
THEORY-OF-FLUIDS ..NEMATIC LIQUID CRYSTAL
- 74-BO-01 BOETTGER, H.
VIBRATIONAL PROPERTIES OF NON-CRYSTALLINE SOLIDS
PHYS. STATUS SOLIDI B, V.62, P.9-P.42 (1974)
REVIEW-ARTICLES ..VIBRATIONAL PROPERTIES/ NON-CRYSTALLI
NE SOLIDS/ IR, RAMAN SPECTRA/ NEUTRON SCATTERING/ SPECI
FIC HEAT
- 74-BO-02 BORSTNIK, B./ AZMAN, A.
THE VIBRATIONAL SPECTRUM OF THE DISORDERED HYDROGEN BON
DED CHAIN
CHEM. PHYS. LETT., V.26, P.56-P.60 (1974)
THEORY-OF-SOLIDS ..FREQUENCY SPECTRA/ HYDROGEN BOND/ DI
SORDERED CHAIN
- 74-BR-01 BRENNAN, M./ HUTCHINSON, P./ SANGSTER, M.J.L./ SCH
OFIELD, P.
CALCULATION OF EFFECTIVE PAIR INTERACTION POTENTIAL
FOR LIQUID NEON FROM STRUCTURE FACTOR MEASUREMENTS
J. PHYS., C, LONDON, V.7L, P.411 (1974)
NEON ..PAIR-DISTRIBUTION FUNCTION
- 74-BR-02 BREUER, N.
DETERMINATION OF THE PHONON SPECTRUM FROM COHERENT NEUT
RON SCATTERING BY POLYCRYSTALS
Z. PHYS., V.271, P.289 (1974)

AL ..COHERENT NEUTRON SCATTERING/ POLYCRYSTAL

- 74-BR-03 BROOKS, J.S./ DONNELLY, R.J.
INFLUENCE OF PHONON DISPERSION ON THE VELOCITY OF SECOND SOUND IN HE-2
PHYS. REV. A, V.9, P.1444-P.1445 (1974)
THEORY-OF-FLUIDS/ HE ..SECOND SOUND
- 74-BU-01 BURKHARD, H./ GEICK, R./ KAESTNER, P./ UNKELBACH, K.H.
LATTICE VIBRATIONS AND FREE CARRIER DISPERSION IN Pb,Se
PHYS. STATUS SOLIDI, V.63, P.89 (1974)
Pb,Se ..EXPERIMENT ..KRAMERS-KRONIG ANALYSIS/ PHONON-PLASMON INTERACTION
- 74-BU-02 BUYERS, W.J.L./ SEARS, V.F./ LONNGI, P.A./ LONNGI, D.A.
NEUTRON SCATTERING DATA FOR LIQUID NEON
AEC-4910 (1974)
NE ..EXPERIMENT/ SC(0,OMEGA) COMPILATION
- 74-CA-01 CARLILE, C.J./ ROSS, D.K.
AN EXPERIMENTAL VERIFICATION OF CHUDLEY-ELLIOT MODEL FOR THE DIFFUSION OF HYDROGEN IN ALPHA-PHASE PD.H
SOLID STATE COMMUN., V.15, P.1923 (1974)
PD-H ..EXPERIMENT/ SOLID/ SCATTERING LAW ..CHUDLEY-ELLIOT MODEL/ JUMP-DIFFUSION MODEL
- 74-CA-02 CARNEIRO, K.C.
THE DYNAMICS OF LIQUID HYDROGEN AND LIQUID NITROGEN STUDIED BY INELASTIC NEUTRON SCATTERING
RISO REPORT NO.308 (1974)
H2/ N2 ..EXPERIMENT/ PHONON LIKE EXCITATION/ LIQUID DYNAMICS
- 74-CA-03 CARNEIRO, K./ NIELSEN, M.
NEUTRON SCATTERING IN SOLID AND LIQUID H2
ANHARMONIC LATTICES, STRUCTURAL TRANSITIONS AND MELTING (ED. BY RISTE, T.), NOORDHOFF, LEIDEN, P.349-P.362 (1974)
H2 ..EXPERIMENT/ PHONON DISPERSION/ LIQUID DYNAMICS
- 74-CA-04 CATALIOTTI, R.
PHONON SPECTRUM AND PHONON INTERACTIONS IN CORUNDUM
J. PHYS., C, LONDON, V.7, P.3467-P.3472 (1974)
CORUNDUM ..PHONON-SPECTRUM
- 74-CH-01 CHAUDLER, D.
TRANSLATIONAL AND ROTATIONAL DIFFUSION IN LIQUID II, OR TENTATIONAL SINGLE PARTICLE CORRELATION
J. CHEM. PHYS., V.60, P.3506 (1974)
THEORY-OF-FLUIDS ..DYNAMICS OF LIQUID

- 74-CH-02 CHAUDLER, D.
TRANSLATIONAL AND ROTATIONAL DIFFUSION IN LIQUIDS I, T
TRANSLATIONAL SINGLE-PARTICLE CORRELATION
J. CHEM. PHYS., V.60, P.3500 (1974)
THEORY-OF-FLUIDS ..DYNAMICS OF LIQUID
- 74-CH-03 CHESSE, N.J./ AXE, J.D.
LATTICE DYNAMICS OF ZINC PHONON STRUCTURE FACTORS
PHYS. REV. B, V.9, P.4060 (1974)
Zn ..THEORY/ EXPERIMENT/ BORN-VON KARMAN MODEL/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ CONSTANT-0 METHOD
- 74-CH-04 CHEVYCHELOV, A.D./ LIFSCHITS, I.L.
PHENOMENOLOGICAL FORCE MODEL FOR A LATTICE FROM EXPERIMENTAL PHONON SPECTRA APPROPRIATE TO LATTICE-DISTORTION BY POINT DEFECTS
PHYS. STATUS SOLIDI B, V.65, P.93 (1974)
THEORY-OF-SOLIDS ..POINT-DEFECTS/ LATTICE-DISTORTION/ VACANCY.
- 74-CH-05 CHUI, G.T.
PHONONS, SADDLE POINTS, AND RESONANCE IN Nb
PHYS. REV. B, V.9, P.3300 (1974)
Nb ..DISPERSION RELATION
- 74-CH-06 CHUNG, C.H./ YIP, S.
SOUND DISPERSION IN SIMPLE LIQUIDS
AR ..THEORY/ LIQUID ..LONGITUDINAL CURRENT CORRELATION FUNCTION
- 74-CO-01 COHEN, S.S./ KLEIN, M.L.
INTERATOMIC POTENTIALS AND PHONON SPECTRA OF DILUTE RARE-GAS MIXTURES
J. CHEM. PHYS., V.61, P.3210 (1974)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS/ FREQUENCY SPECTRUM ..IMPURITY/ METAL/ RARE-GAS
- 74-CO-02 COHEN, S.S.
PHONON SELF-ENERGY IN SOME SYMMETRY DIRECTIONS OF A DIAMETER FCC ALLOY
PHYS. REV. B, V.10, P.384 (1974)
Cu-Au ..THEORY/ FREQUENCY DISTRIBUTION ..COHERENT NEUTRON SCATTERING/ PHONON SELF-ENERGY AND SHIFT/ LATTICE GREEN FUNCTION/ IMPURITIES
- 74-CO-03 COPLEY, J.R.D./ ROWE, J.M.
SHORT-WAVELENGTH COLLECTIVE EXCITATIONS IN RUBIDIUM OBSERVED BY COHERENT NEUTRON SCATTERING
PHYS. REV. LETT., V.32, P.49-P.52 (1974)

RB/ NEUTRON-SCATTERING-IN-FLUIDS .,DISPERSION CURVE/ ZE
RO SOUND/ LIQUID

74-CO-04 COPLEY, J.R.D./ ROWE, J.M.
DENSITY FLUCTUATIONS IN LIQUID RUBIDIUM I. NEUTRON SCAT
TERING MEASUREMENTS
PHYS. REV. A, V.9, P.1656 (1974)

RB .,SCATTERIN LAW/ COHERENT SCATTEKING/ EXPERIMENT

74-CO-05 COWLEY, E.R.
A BORN-VON KARMAN FORCE CONSTANT MODEL FOR ALUMINUM
CAN, J. PHYS., V.52, P.1714-P.1715 (1974)
AL .,CALCULATION/ FREQUENCY SPECTRA/ BORN-VON KARMAN MO
DEL

74-CO-06 COWLEY, E.R./ SHUKLA, R.C.
COMPARISON OF THEORIES OF ANHARMONISITY APPLIED TO MODE
L OF COPPER

CU .,ANHARMONICITY/ THERMODYNAMIC QUANTITIES

74-CR-01 CRAN, G.C./ SANGSTER, M.J.L.
LATTICE DYNAMICS OF MANGANESE FLUORIDE
J. PHYS., C, LONDON, V.7, P.1937 (1974)
MN,F2 .,THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/
FREQUENCY DISTRIBUTION .,SHELL MODEL

74-CU-01 CURRAT, R./ COMES, R./ DORNER, B./ WIESENDANGER, E
INELASTIC NEUTRON SCATTERING IN ORTHORHOMBIC K.NB.O3
J. PHYS., C, LONDON, V.7, P.2521-P.2539 (1974)
K.NB.O3/ PHASE-TRANSITION .,EXPERIMENT/ PHONON DISPERSI
ON/ SOFT MODE

74-DA-01 DA-CUNHA-LIMA, I.C./ BRESCANSIN, L.M./ SHUKLA, M.M
LATTICE DYNAMICS OF ALKALI METALS
PHYSICA, V.72, P.179 (1974)
K/ LI/ RB .,PHONON DISPESION RELATION/ KREBS MODEL

74-DA-02 DASANNACHARYA, B.A./ IYENGAR, P.K./ NANDEDKAR, R.V
/ RAO, K.R./ ROY, A.P./
LATTICE DYNAMICS OF BERYLLIUM
PRAMANA, V.2, P.197-P.188 (1974)
BE .,EXPERIMENT/ PHONON DISPERSION/ SIX-NEIGHBOUR FORCE
MODEL

74-DE-01 DENLEY, D./ RICE, S.A.
A MODEL CALCULATION OF THE INTRAMOLECULAR VIBRATION SPE
CTRUM OF LIQUID WATER
J. AMER. CHEM. SOC., V.96, P.4369-P.4374 (1974)
H2.O .,THEORY/ LIQUID WATER/ FREQUENCY SPECTRA

74-DO-01 DORNER, B./ FELDMANN, K./ HENNIG, K./ URWANK, P./
WEISS, L.
PHONON DISPERSION CURVES IN MG,ZN2
PHYS. STATUS SOLIDI B, V.63K, P.135 (1974)
MG-ZN .,THEORY/ DISPERSION RELATION/ CONSTANT-0 METHOD/
MG-ZN2

74-DU-01 DUROCHER, D./ DARAIN, P.B.
PHONON DENSITY OF STATES AND THE VIBRONIC SPECTRA OF IM
PURITIES IN K2.PT.CL6-TYPE SINGLE CRYSTAL
J. CHEM. PHYS., V.61, P.1361-P.1368 (1974)
K2.RE.CL6 .,DENSITY-OF-STATES/ CALCULATION

74-EB-01 EBSJOE, I./ SCHOFIELD, P./ SKOELD, K./ WALLER, I.
DIFFUSION IN LIQUID MIXTURES OF ISOTOPES
J. PHYS., C, LONDON, V.7, P.3891 (1974)
THEORY-OF-FLUIDS .,THEORY/ LIQUID/ VELOCITY AUTO-CORRELA
TION FUNCTION .,PERTURBATION THEORY/ HYDRODYNAMICS

74-EG-01 EGELSTAFF, P.A./ GRAHAM, W.G./ HAHN, L./ SUZUKI, K
/ WINFIELD, D.J.
A ROTATING CRYSTAL TIME OF FLIGHT SPECTROMETER USING A
PULSED NEUTRON SOURCE
CAN, J. PHYS., V.52, P.2093-P.2107 (1974)
MISCELLANEOUS

74-ES-01 ESCHRIG, H./ VAN-LOYEN, L./ ZIESCHE, P.
ON THE DETERMINATION OF THE PHONON DENSITY OF STATES BY
MEANS OF COHERENT INELASTIC SCATTERING OF NEUTRONS ON
POLYCRYSTALLINE SAMPLES
PHYS. STATUS SOLIDI B, V.66, P.587 (1974)
MG .,PHONON DENSITY OF STATE

74-ET-01 ETCHEPARE, J./ MERIAN, M./ SMETANKINE, L.
VIBRATIONAL NORMAL MODES OF SI.O2, I. ALPHA AND BETA QU
ARTZ
J. CHEM. PHYS., V.60, P.1873-P.1876 (1974)
SI.O2 .,THEORY/ NORMAL MODE/ COMPARED TO OPTICAL DATA

74-FI-01 FISCHER, K.
LATTICE DYNAMICS AND ANHARMONIC EFFECTS IN AG.CL
PHYS. STATUS SOLIDI B, V.66, P.295 (1974)
AG.CL .,THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION REL
ATION/ ANHARMONICITY/ FREQUENCY SPECTRUM .,SHELL MODEL

74-FI-02 FIXMAN, M./ KOVAC, J.
DYNAMICS OF STIFF CHAINS. II. FREELY JOINTED CHAIN
J. CHEM. PHYS., V.61, P.4950 (1974)
THEORY-OF-FLUIDS .,THEORY/ MOLECULAR DYNAMICS

74-FI-03 FIXMAN, M./ KOVAC, J.

- DYNAMICS OF STIFF POLYMER CHAINS, I
J. CHEM. PHYS., V.61, P.4939 (1974)
THEORY-OF-FLUIDS .,THEORY/ MOLECULAR DYNAMICS
- 74-FR-01 FRANK, I.M.
ABSORPTION AND REFLECTION OF ULTRACOLD NEUTRON
BNL-TR-567 (1974)
SCATTERING-THEORIES .,ULTRACOLD NEUTRON
- 74-FU-01 FUJII, Y./ LURIE, N.A./ PYN, R./ SHIRANE, G.
INELASTIC NEUTRON SCATTERING FROM SOLID 36Ar
PHYS. REV. B, V.10, P.3647 (1974)
AR .,EXPERIMENT/ SOLID/ DISPERSION RELATION/ TRIPLE AXI
S NEUTRON SPECTROMETER/ FREQUENCY SPECTRUM
- 74-FU-02 FULFARO, R./ WALDER, V.S./ VINHAS, L.A./ AMARAL, L.
Q.
SLOW NEUTRON SCATTERING CROSS SECTION OF DEOXYRIBONUCLE
IC ACID, EX-THYMUS
IEA-342 (1974)
DNA .,EXPERIMENT/ TOTAL CROSS SECTION/ WATER IN DNA AND
DNA
- 74-FU-03 FUNKE, K./ KALUS, J./ LECHNER, R.
QUASIELASTIC AND INELASTIC SCATTERING OF COLD NEUTRONS
FROM SILVER IODIDE
SOLID STATE COMMUN., V.14, P.1021 (1974)
ZN .,THEORY/ BORN-VON KARMAN MODEL/ DISPERSION RELATION
/ FREQUENCY DISTRIBUTION/ EXPERIMENT/ CONSTANT-Q METHOD
.,TRIPLE-AXIS SPECTROMETER
- 74-GA-01 GAMBETTI, L./ MENZINGER, F./ SACCHETTI, F.
PHONONS IN THE EQUIATOMIC CO NI ALLOY
RT/FI-(74)48 (PHYS. LETT, 49A, 327-328,1974) (1974
)
CO-NI .,EXPERIMENT/ PHONON DISPERSION/ ALLOY/ FCC
- 74-GH-01 GHOSH, A./ BASU, A.N./ SENGUPTA, S.
LATTICE DYNAMICS OF THE NA.F CRYSTAL
PROC. ROY. SOC., LONDON, SER. A, V.340, P.199-P.21
1 (1974)
NA.F .,DISPERSION-CURVES/ DENSITY-OF-STATES/ THEORY
- 74-GL-01 GLAESER, W.
EXPERIMENTAL STUDIES OF THE ELECTRON-PHONON INTERACTION
IN ONE-DIMENSIONAL CONDUCTING SYSTEMS
FESTKOERPERPROBLEME, V.14, P.203-P.228 (1974)
REVIEW-ARTICLES/ KCP/ TTF-TCNQ .,ONE-DIMENSIONAL CONDUCTOR/
KOHN-PEIERLS INSTABILITY
- 74-GL-02 GLINKA, C.J./ MINKIEWICZ, V.J./ PASSELL, L.
SMALL-ANGLE NEUTRON SCATTERING FROM COBALT IN THE CRIT

- CAL REGION
BNL-19545 (1974)
MAGNETIC-SCATTERING .,SMALL ANGLE SCATTERING/ CRITICAL
SCATTERING/ MAGNON
- 74-GO-01 GOEL, C.M./ PANDEY, B.P./ DAYAL, B.
LATTICE DYNAMICS OF SOME TRANSITION METALS BY AN ELASTIC
FORCE MODEL
PHYS. STATUS SOLIDI B, V.66, P.759 (1974)
AG/ PD/ PT .,PHONON DISPERSION RELATION
- 74-GO-02 GOEL, G.M./ PANDAY, B.P./ DAYAL, B.
PHONON DISPERSION RELATIONS IN COPPER AND SILVER BY A MODIFIED
SHARMA-JOSHI MODEL
PHYS. STATUS SOLIDI B, V.63, P.625 (1974)
CU/ AG .,THEORY/ LATTICE DYNAMICS/ INTERATOMIC FORCE CONSTANT/
DISPERAION RELATION .,ELECTRON-ION INTERACTION
- 74-GR-01 GRAF, E.H./ MINKIEWICZ, V.J./ MOELLER, H.B./ PASSELL, L.
NEUTRON-SCATTERING STUDY OF COLLECTIVE EXCITATIONS IN SUPERFLUID
HELIUM
PHYS. REV. A, V.10, P.1748 (1974)
HE .,EXPERIMENT/ INELASTIC NEUTRON SCATTERING/ SOLIDS/ SCATTERING
LAW/ DISPERSION RELATION/ DEBYE MODEL
- 74-GR-02 GROUT, P.J./ LEECH, J.W.
THE LATTICE DYNAMICS OF CRYSTALLINE HYDROGEN CHLORIDE IN ITS
LOW-TEMPERATURE PHASE
J. PHYS., C, LONDON, V.7, P.3245-P.3259 (1974)
HCL .,DISPERSION-CURVES/ THEORY
- 74-GR-03 GRUNEWALD, G./ SHARNBERG, K.
LIFETIMES OF LONG WAVELENGTH LONGITUDINAL PHONONS IN IMPURE
METALS
Z. PHYS., V.268, P.197 (1974)
THEORY-OF-SOLIDS .,THEORY/ LIFE TIME/ .,ELECTRON-PHONON
INTERACTION/ IMPURITIES/ PHONON GREEN FUNCTION
- 74-GU-01 GUPTA, H.N.
PHONON DISPERSION RELATIONS AND TWO-PHONON RAMAN SPECTRA OF
CESIUM FLUORIDE
PHYS. STATUS SOLIDI B, V.61, P.681 (1974)
CS,F .,THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION .,THREE-BODY
FORCE SHELL MODEL
- 74-GU-02 GUSSONI, M./ ZERBI, G.
LATTICE DYNAMICS OF MIXED CRYSTALS HCL-DCL
J. CHEM. PHYS., V.60, P.4862 (1974)
HCL .,THEORY/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION .,F-G
MATRIX METHOD

- 74-HA-01 HAFNER, J./ SCHMUCK, P.
LATTICE DYNAMICS OF ALUMINUM AN INVESTIGATION OF EXCHANGE
E AND CORRELATION EFFECTS
PHYS. REV. B, V.9, P.4138 (1974)
AL .,THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ KOH
N EFFECT
- 74-HA-02 HALLMAN, E.D.
CRYSTAL DYNAMICS OF THE ALLOY CU₃AU
CAN. J. PHYS., V.52, P.2235 (1974)
CU-AU .,EXPERIMENT/ SOLID/ DISPERSION RELATION/ LATTICE
DYNAMICS/ BORN-VON KARMAN MODEL .,ALLOY
- 74-HA-03 HAMILTON, W.C./ LASSIER, B./ KAY, M.I.
THE PHONON SPECTRA OF TRIGONAL SELENIUM AT 77 AND 298K
J. PHYS. CHEM. SOLIDS, V.35, P.1089 (1974)
SE .,EXPERIMENT/ DISPERSION RELATION/ INTERATOMIC FORCE
CONSTANT .,THREE-AXIS-SPECTROMETER
- 74-HA-04 HARA, H./ HONDA, T.
MULTIPLE SCATTERING OF SLOW NEUTRONS BY STATISTICAL MED
IA
PROGR. THEORET. PHYS., KYOTO, V.52, P.68-P.83 (1974)
4)
SCATTERING-THEORIES .,SCATTERING FUNCTION/ CORRECTION O
F MULTIPLE SCATTERING
- 74-HA-05 HASEGAWA, M./ WATABE, M.
THEORY OF THERMODYNAMIC PROPERTIES OF LIQUID METALS
J. PHYS. SOC. JAP., V.36, P.1510-P.1515 (1974)
THEORY-OF-FLUIDS/ NA/ K .,LIQUID METAL/ ELECTRON THEORY
/ STRUCTURE FACTOR/ THERMAL EXPANSION
- 74-HE-01 HEER, H./ FURRER, A./ WALKER, E./ TREYVAUD, A./ PU
RWINS, H.G./
NEUTRON CRYSTAL FIELD SPECTROSCOPY AND SUSCEPTIBILITY I
N ER(C)-Y(1-C)-AL₂
J. PHYS., C, LONDON, V.72, P.1207 (1974)
ER-Y-AL/ MAGNETIC-SCATTERING .,INELASTIC NEUTRON SCATTE
RING/ SUSCEPTIBILITY
- 74-HE-02 HERVET, H./ VOLINO, F./ DIANOUX, A.J./ LECHNER, R.
E.
UNIAXIAL ROTATIONAL DIFFUSION IN THE SMECTIC B PHASE OF
TBBA OBSERVED BY QUASI-ELASTIC NEUTRON SCATTERING
J. PHYS., PARIS, V.35L, P.151-P.155 (1974)
TEREPHTHAL-BIS-P-BUTYLANILINE .,EXPERIMENT/ QUASI-ELAST
IC SCATTERING/ LIQUID CRYSTAL/ PARTIALLY DEUTERATED DER
IVATIVES/ ROTATIONAL JUMP DIFFUSION/ GYRATION RADIUS/ J
UMP FREQUENCY .,DEBYE-WALLER FACTOR
- 74-HE-03 HERVET, H./ VOLINO, F./ DIANOUX, A.J./ LECHNER, R.

- E.
UNIAXIAL ROTATIONAL DIFFUSION IN THE SMECTIC B PHASE OF
TBBA OBSERVED BY QUASI-ELASTIC NEUTRON SCATTERING
J. PHYS., PARIS, V.35L, P.151-P.155 (1974)
TBBA .,EXPERIMENT/ QUASI-ELASTIC/ ROTATIONAL DIFFUSION
- 74-HO-01 HOLAH, G.D./ WEBB, J.S./ MONTGOMERY, H.
LATTICE DYNAMICS OF AG,GA,S₂
J. PHYS., C, LONDON, V.7, P.3875 (1974)
AG,GA,S₂ .,EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSI
ON RELATION
- 74-HO-02 HOROVITZ, B./ WEGER, M.
PHONON DISPERSION AND INSTABILITY IN LINEAR-CHAIN CRYST
ALS
PHYS. REV. B, V.9, P.1246 (1974)
THEORY-OF-SOLIDS .,PHONON DISPERSION/ CHAIN CRYSTAL
- 74-HU-01 HUTCHINGS, M.T.
THE USE OF INELASTIC NEUTRON SCATTERING TO DETERMINE TH
E ELECTRONIC STATES OF INORGANIC MATERIALS
AERE-R-7909 (1974)
REVIEW-ARTICLES/ MAGNETIC-SCATTERING .,MAGNETIC INELAST
IC SCATTERING/ MAGNON/ EXCITONS/ INORGANIC COMPOUND
- 74-IA-01 IACHELLO, F./ RASETTI, M.
SEMI-PHENOMENOLOGICAL FITS TO THE PHONON DISPERSION CUR
VE IN LIQUID HE-2
PHYS. LETT., A, V.49, P.149-P.150 (1974)
HE .,THEORY/ PHONON DISPERSION
- 74-IK-01 IKEDA, N.
NEUTRON SCATTERING STUDY OF CRITICAL PHENOMENA IN RESTR
ICTED-DIMENSIONAL MAGNETS -UNIVERSALITY AND SCALING-
J. PHYS. SOC. JAP., V.37, P.660-P.666 (1974)
K₂CO₃/F₄/K₂CU₃F₄/K₂CU₃F₃/K₂MN₃F₄/MAGNETIC-SCATTER
ING .,EXPERIMENT/ CRITICAL SCATTERING
- 74-IN-01 INOUE, K./ KIYANAGI, Y.
SLOW NEUTRON SCATTERING FORM FACTOR FROM ONE-DIMENSIONA
L ROTOR
J. NUCL. SCI. TECHNOL., TOKYO, V.11, P.162-P.164 (1974)
N₂H₄CL/ N₂H₄BR/ N₂H₄I .,CALCULATION/ SCATTERING FORM
FACTOR/ ONE-DIMENSIONAL ROTOR
- 74-IO-01 IOSILEVSKII, X.
THE SPECTRAL DISTRIBUTION OF ACOUSTICAL PHONONS IN A PL
ATE
PHYS. STATUS SOLIDI B, V.64, P.431-P.439 (1974)
THEORY-OF-SOLIDS .,SPECTRAL DISTRIBUTION/ PLATE/ EFFECT
OF SURFACE

- 74-IS-01 ISHIKAWA, Y./ NODA, Y.
NEUTRON SPIN-WAVE SCATTERING FROM A HEUSLER ALLOY PD₂M
N₄SN
PD-MN-SN/ MAGNETIC-SCATTERING ..EXPERIMENT/ MAGNON DISP
ERSION
- 74-JA-01 JAIN, S.C./ JAIN, M.
A GENERAL LOCAL MODEL PSEUDOPOTENTIAL FOR SIMPLE METALS.
BINDING ENERGY AND COMPRESSIBILITY
PHYSICA, V.71, P.437-P.447 (1974)
THEORY-OF-SOLIDS ..THEORY/ PSEUDOPOTENTIAL FORM FACTOR/
SIMPLE METALS
- 74-JO-01 JOGI, S.
CRYSTAL DYNAMICS OF SOME CUBIC METALS ON AN ANGULAR FOR
CE MODEL
J, PHYS., F, LONDON, V.4, P.11-P.18 (1974)
RB/ CS/ PT ..THEORY/ PHONON DISPERSION/ ANGULAR FORCE M
ODEL
- 74-JO-02 JOHNSON, F.A.
A BOND CHARGE MODEL OF LATTICE DYNAMICS. I
PROC. ROY. SOC., LONDON, SER. A, V.339, P.73-P.83
(1974)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ BOND CHARGE MODEL
- 74-JO-03 JOHNSON, F.A./ MOORE, K.
A BOND CHARGE MODEL OF LATTICE DYNAMICS. II
PROC. ROY. SOC., LONDON, SER. A, V.339, P.85-P.96
(1974)
THEORY-OF-SOLIDS/ DIAMOND/ SI ..PHONON DISPERSION/ BOND
CHARGE MODEL
- 74-JO-04 JOHNSON, M.W.,
DFSCUS, A COMPUTER PROGRAM FOR THE CALCULATION OF MULTI
PLE SCATTERING EFFECTS IN INELASTIC NEUTRON SCATTERING
EXPERIMENT
AERE-R-7682 (1974)
COMPUTER-CODES ..MULTIPLE SCATTERING CORRECTION/ INELAS
TIC SCATTERING
- 74-JO-05 JORDAN, P.C.
THEORY OF SELF-DIFFUSION IN LIQUIDS
PHYS. REV. A, V.10, P.319 (1974)
AR/ THEORY-OF-FLUIDS ..THEORY/ LIQUID/ CORRELATION FUNC
TION ..DIFFUSION COEFFICIENT
- 74-KA-01 KAMITAKAHARA, W.A./ BROCKHOUSE, B.N.
VIBRATIONS OF A MIXED CRYSTAL. NEUTRON SCATTERING FROM
Ni55-PD45
- PHYS. REV. B, V.10, P.1200-P.1212 (1974)
Ni-PD ..EXPERIMENT/ PHONON DISPERSION/ WIDTH/ DISORDERE
D ALLOY/ FCC/ Ni55-PD.45
- 74-KA-02 KANNEY, L.B./ HORTON, G.K.
PHONON DISPERSION IN XE
SOLID STATE COMMUN., V.15, P.1307-P.1308 (1974)
XE ..DISPERSION-CURVES ..THEORY/ MIE-LENNARD-JONES-POTE
NTIAL
- 74-KA-03 KANZAKI, H./ SAKURAGI, S./ HOSHINO, S./ SHIRANE, G.
FUJII, Y.
NEUTRON SCATTERING OF PHONONS ASSOCIATED WITH INDIRECT
BAND-GAP TRANSITION IN AG₂BR
SOLID STATE COMMUN., V.15, P.1547-P.1550 (1974)
AG₂BR ..DISPERSION-CURVES ..(111)-DIRECTION
- 74-KA-04 KAPLAN, T./ MOSTOLLER, M.
LOCAL MODES IN AlO₂·CuO₂ AND (N₂H₄)O₂·K₂O₂·CL IN THE
COHERENT-POTENTIAL APPROXIMATION
PHYS. REV. B, V.9, P.353-P.359 (1974)
Cu-Al/ N₂H₄·CL·K₂O₂ ..CALCULATIONS/ COHERENT-POTENTIAL
APPROXIMATION/ PHONON DENSITY OF STATES
- 74-KA-05 KAUR, M./ KUSHWAHA, S.S.
ON PHENOMENOLOGICAL MODELS OF LATTICE DYNAMICS
SOLID STATE COMMUN., V.14, P.307-P.308 (1974)
SC ..THEORY/ PHONON DISPERSION
- 74-KH-01 KHANNA, S.N./ UPADHYAY, J.C./ JAIN, A.
LATTICE DYNAMICS OF GOLD
PHYS. STATUS SOLIDI B, V.69K, P.25 (1974)
Au ..DISPERSION-CURVES
- 74-KJ-01 KJEMES, J.K./ PASSELL, L./ TAUB, H.
NEUTRON SCATTERING FROM NITROGEN ADSORBED ON BASAL-PLAN
E-ORIENTED GRAPHITE
PHYS. REV. LETT., V.32, P.724-P.727 (1974)
N-GRAPHITE ..EXPERIMENT/ NEUTRON DIFFRACTION/ NITROGEN
ADSORBED
- 74-KO-01 KOESTER, L./ KNOPF, K./ WASCHKOWSKI, W.
THE SCATTERING OF SLOW NEUTRONS BY COBAL
T, PHYS., V.271, P.201 (1974)
CO ..SCATTERING AMPLITUDE
- 74-KO-02 KOHGI, M./ ISHIKAWA, Y./ HARADA, I./ MOTIZUKI, K.
SPIN WAVES IN MANGANESE MONOXIDE
J, PHYS. SOC. JAP., V.36, P.112-P.122 (1974)
MN₂O₃/ MAGNETIC-SCATTERING ..EXPERIMENT/ MAGNON DISPERSI
ON/ 4,2DK TO 117DK/ THEORY/ MAGNON DENSITY OF STATES

- 74-KR-01 KRESS, W.
CALCULATION OF PHONON DISPERSION CURVES AND MODE GRUNEL
SEN PARAMETER IN RB.I
PHYS. STATUS SOLIDI B, V.62, P.403-P.416 (1974)
RB.I .THEORY/ PHONON DISPERSION/ GRUNEISEN CONSTANT/
BREATHING SHELL MODEL
- 74-KU-01 KUENER, D.H.
LATTICE DYNAMICS IN TERMS OF LOCALIZED ORBITALS
PHYS. REV. B, V.9, P.1792 (1974)
THEORY-OF-SOLIDS .LATTICE DYNAMICS
- 74-KU-02 KURIHARA, Y./ KURODA, Y./ ISHIMURA, N.
THEORY OF QUANTUM CRYSTAL
PROGR. THEORET. PHYS., KYOTO, V.51, P.959-P.972 (1
974)
HE .THEORY/ SOLID HE/ BCC/ PHONON DISPERSION
- 74-LA-01 LANTELME, F./ TURQ, P./ QUENTREC, B./ LEWIS, J.W.E
APPLICATION OF THE MOLECULAR DYNAMICS METHOD TO A LIQUID
D SYSTEM WITH LONG RANGE FORCES (MOLTEN NA.CL)
MOL. PHYS., V.28, P.1537-P.1549 (1974)
NA.CL .THEORY/ FUSED SALT/ RADIAL DISTRIBUTION FUNCTION
N
- 74-LE-01 LEE, F.J./ LEE, D.K.
LONG-WAVELENGTH-PHONON SPECTRUM IN LIQUID HE-4
PHYS. REV. A, V.9, P.1408-P.1411 (1974)
THEORY-OF-FLUIDS/ HE .DISPERSION RELATION
- 74-LE-02 LERIBAU, H.R./ MILLER, L.F.
STRUCTURE OF THE LIQUID ALKALI METALS BY AN OPTIMIZED IT
ERATIVE SOLUTION OF THE PERCUS-YEVICK EQUATIONS
J. CHEM. PHYS., V.61, P.3327 (1974)
THEORY-OF-FLUIDS .THEORY/ LIQUID/ STRUCTURE FACTOR .P
ERCUS-YEVICK EQUATION
- 74-LI-01 LIVINGSTON, R.C.
NEUTRON QUASIELASTIC SCATTERING STUDY OF THE AMMONIUM I
ON REORIENTATIONS IN A SINGLE CRYSTAL OF N.H4.BR AT 373
DK
J. CHEM. PHYS., V.60, P.4541 (1974)
N.H4.BR .EXPERIMENT/ NEUTRON SPECTRUM/ SCATTERING LAW/
QUASI-ELASTIC PEAK .TORSIONAL VIBRATION PEAK/ DYNAMIC
ORIENTATIONAL DISORDER
- 74-LU-01 LURIE, N.A./ SHIRANE, G./ SKALYU, JR.
PHONON DISPERSION RELATIONS IN XENON AT 10K
PHYS. REV. B, V.9, P.5300 (1974)
XE .EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DISTRIB
UTION/ BORN-VON KNOEL .SPECIFIC HEAT/ TRIPLE-AXIS CRY
- STAL SPECTROMETER
- 74-LU-02 LUTY, T./ PAWLEY, G.S.
A SHELL MODEL FOR MOLECULAR CRYSTALS
PHYS. STATUS SOLIDI B, V.66, P.309 (1974)
THEORY-OF-SOLIDS .THEORY/ SOLID/ LATTICE DYNAMICS .SH
ELL MODEL
- 74-MA-01 MALM, W.C./ DANNER, H.R./ LURIE, N.A.
COLD NEUTRON SCATTERING FROM GASEOUS METHYL HALIDES
J. CHEM. PHYS., V.61, P.3863-P.3864 (1974)
C.H3.I/ C.H3.F/ C.H3.CL .TIME-FLIGHT-SPECTRA
- 74-MA-02 MANI, K.K./ RAMANI, R.
LATTICE DYNAMICS OF GRAPHITE
PHYS. STATUS SOLIDI B, V.61, P.659 (1974)
GRAPHITE .THEORY/ LATTICE DYNAMICS/ DISPERSION RELATIO
N .TENSOR FORCE MODEL
- 74-MA-03 MAURYA, J.R./ SRIVASTAVA, R.S.
PHONON DISPERSION RELATION FOR MAGNESIUM
PHYS. LETT., A, V.50, P.297 (1974)
MG .THEORY/ SOLID/ DISPERSION RELATION .TOYA.S THEORY
- 74-MI-01 MITSKEVICH, V.
MICROSCOPIC THEORY OF LATTICE DYNAMICS IN NONCONDUCTING
CRYSTALS
PHYS. STATUS SOLIDI B, V.61, P.675 (1974)
THEORY-OF-SOLIDS .THEORY/ LATTICE DYNAMICS .NON.CONDU
CTING CRYSTAL/ DENSITY MATRIX
- 74-MO-01 MOOK, H.A.
NEUTRON SCATTERING STUDY OF THE MOMENTUM DISTRIBUTION O
F 4-HE
PHYS. REV. LETT., V.32, P.1167 (1974)
HE .INELASTIC NEUTRON SCATTERING/ SCATTERING LAW
- 74-MO-02 MOSTOLLER, M./ KAPLAN, T./ WAKABAYASHI, N./ NICKLO
W, R.M.
LATTICE VIBRATIONS IN HCP YO.9.TBO.1 IN THE COHERENT-PO
TENTIAL APPROXIMATION
PHYS. REV. B, V.10, P.3144 (1974)
Y-TB .THEORY/ LATTICE DYNAMICS/ SOLID/ FREQUENCY SPECT
RUM .COHERENT POTENTIAL APPROXIMATION/ GREEN FUNCTION/
DISORDERED ALLOY
- 74-NA-01 NARBUTOWICZ, M.A./ STECKI, J.
ON THE GENERALIZATION OF A VINEYARD CONVOLUTION APPROXI
MATION FOR A CLASSICAL SYSTEM
PHYSICA, V.74, P.369-P.382 (1974)
THEORY-OF-FLUIDS .CORRELATION FUNCTION

- 74-NE-01 NELIN, G.
HARMONIC LATTICE DYNAMICS OF GERMANIUM
PHYS. REV. B, V.10, P.4331 (1974)
GE .THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATI
ON .DEFORMATION DIPOLE MODEL/ SHELL DIPOLE MODEL/ VALE
NCE-FORCE MODEL/ BROKEN BAND MODEL/ BOND CHARGE MODEL/
DIELECTRIC MODEL
- 74-NE-02 NELIN, G./ NILSSON, G.
PHONON ANHARMONICITY OF GERMANIUM IN THE TEMPERATURE RA
NGE 80-880K
PHYS. REV. B, V.10, P.612 (1974)
GE .EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DISTRIB
UTION/ CRYSTAL SPECTROMETER
- 74-NE-03 NELIN, G./ SKOELD, K.
DIFFUSION OF HYDROGEN IN THE BETA-PHASE OF PD-H STUDIED
BY SMALL ENERGY TRANSFER NEUTRON SCATTERING
AE-493 (1974)
PD-H .EXPERIMENT/ SOLID/ QUASI-ELASTIC NEUTRON SCATTER
ING .FULL WIDTH AT HALF MAXIMUM
- 74-NE-04 NELIN, G.
HARMONIC LATTICE DYNAMICS OF GERMANIUM
AE-492 (1974)
GE .THEORY/ SOLID/ LATTICE DYNAMICS/ HARMONIC APPROXIM
ATION/ DISPERSION RELATION .SHELL DIPOLE MODEL/ DIELEC
TRIC MODEL/ VALENCE FORCE MODEL/ BROKEN BAND MODEL/ BON
D CHARGE MODEL
- 74-NE-05 NELIN, G./ NILSSON, G.
PHONON ANHARMONICITY OF GERMANIUM IN THE TEMPERATURE RA
NGE 80-880 K
AE-491 (1974)
GE .EXPERIMENT/ SOLID/ ANHARMONICITY/ FREQUENCY DISTR
IBUTION/ DISPERSION RELATION .DOUBLE MONOCHROMATOR CRY
STAL SPECTROMETER
- 74-NE-06 NESTERENKO, B.A./ GORBACHEV, B.I./ ZRAZHEVSKII, V.
A./ IVANITSKII, P.G./ KROTENKO, V.T./
PHONON SPECTRUM OF THE SILICON LATTICE
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.16 (V
.16), P.3513-P.3515 (P.2284-P.2285) (1974 (1975))
SI .PHONON SPECTRUM/ EFFECT OF SURFACE/ EXPERIMENT
- 74-NE-07 NEWMAN, D.J.
THE DERIVATION OF FORCE CONSTANTS FROM PHONON FREQUENCI
ES
J. PHYS., C, LONDON, V.7, P.1443 (1974)
NA .THEORY/ FREQUENCY DISTRIBUTION .F-G MATRIX METHOD
- 74-NI-01 NIIMURA, N.
NEUTRON DIFFRACTION FROM NEMATIC LIQUID CRYSTAL
PHYS. LETT., A, V.48, P.375-P.376 (1974)
P-AZOXYANISOLE/ LIQUID-CRYSTAL .EXPERIMENT/ STRUCTURE
FACTOR
- 74-NI-02 NIIMURA, N.
THE LIQUID STRUCTURE OF BROMINE
PHYS. LETT., A, V.48, P.377-P.378 (1974)
BR .ANALYSIS/ LIQUID STRUCTURE FACTOR
- 74-NI-03 NIKLASSON, G./ SJOELANDER, A.
PHASE TRANSITIONS, ANHARMONIC SOLIDS AND LIQUIDS
ANHARMONIC LATTICES, STRUCTURAL TRANSITIONS AND ME
LTING (ED. BY RISTE, T.), NOORDHOFF, LEIDEN, P.1-P
.22 (1974)
NEUTRON-SCATTERING-IN-SOLIDS/ NEUTRON-SCATTERING-IN-FLU
IDS/ PHASE-TRANSITION .REVIEW/ LONG RELAXATION TIME IN
LIQUIDS/ MODE-MODE COUPLING IN SOLIDS
- 74-NO-01 NOVOTNY, V./ HOLDEN, T.M./ DOLLING, G.
NEUTRON SCATTERING FROM SMALL LEAD PARTICLES
CAN. J. PHYS., V.52, P.748 (1974)
PB .NEUTRON DIFFRACTION
- 74-OH-01 OHMI, T./ KAWAMOTO, H./ TSUNETO, T.
ROTON SPECTRUM IN SUPERFLUID MIXTURE OF HE-3 AND HE-4
PROGR. THEORET. PHYS., KYOTO, V.52, P.17-P.41 (197
4)
HE .THEORY/ ROTO SPECTRUM/ HE-3-AND HE-4 MIXTURE
- 74-OL-01 OLSSON, L.G./ LARSSON, K.E.
A COMPARATIVE STUDY OF THE MOTIONS OF METHANE MOLECULES
AND ARGON ATOMS IN LIQUID AND HIGH-PRESSURE GAS STATES
BY NEUTRON SCATTERING
PHYSICA, V.72, P.300 (1974)
C.H4/ AR .NEUTRON SCATTERING/ DIFFUSION CONSTANT
- 74-PA-01 PAINTER, R.D./ HARTMAN, W.M.
VIBRATIONAL SPECTRA OF BINARY DISORDERED LINEAR CHAINS
WITH SHORT-RANGE ORDER
PHYS. REV. B, V.10, P.2159-P.2171 (1974)
THEORY-OF-SOLIDS .VIBRATIONAL SOECTRA
- 74-PA-02 PAL, S./ SETHI, V.P.
PHONON DISPERSION CURVES, FREQUENCY SPECTRUM AND SPECIF
IC HEAT OF POTASSIUM
NUOVO CIM., B, V.21, P.109-P.116 (1974)
K .THEORY/ PHONON DISPERSION/ PHONON SPECTRUM/ SPECIFI
C HEAT
- 74-PA-03 PAL, S.

LATTICE-DYNAMICAL PROPERTIES OF CHROMIUM

- PHYS. REV. B, V.9, P.5144 (1974)
CR .THEORY/ LATTICE DYNAMICS/ FREQUENCY DISTRIBUTION/
DEBYE-WALLER FACTOR/ DISPERSION RELATION
- 74-PA-04 PANDEY, B.P.,
PHONON DISPERSION IN SI,C AND ZN,S POLYTYPES
PHYS. STATUS SOLIDI B, V.65, P.699 (1974)
SI,C/ ZN,S .THEORY/ LATTICE DYNAMICS/ DISPERSION RELAT
ION .,POLYTYP/ FORCE CONSTANT MODEL
- 74-PA-05 PANDEY, B.P.,
LATTICE DYNAMICS OF CU,CL
PHYS. LETT., A, V.50, P.215 (1974)
CU,CL .,THEORY/ SOLID/ .,RIGID ION MODEL
- 74-PA-06 PANDEY, B.P./ DAYAL, B.,
LATTICE DYNAMICS OF CU,BR AND CU,I BY A MODIFIED RIGID
ION MODEL
SOLID STATE COMMUN., V.15, P.1667-P.1669 (1974)
CU,BR/ CU,I .,DISPERSION-CURVES
- 74-PA-07 PARRINELLO, M./ TOSI, M.P./ MARCH, N.H.,
PARTIAL STRUCTURE FACTORS AND ATOMIC DYNAMICS IN CONFOR
MAL SOLUTIONS
PROC. ROY. SOC., LONDON, SER. A, V.341, P.91 (1974)
THEORY-OF-FLUIDS .,THEORY/ LIQUID/ DYNAMICAL STRUCTURE
FACTOR/ SCATTERING LAW .,BINARY LIQUID
- 74-PA-08 PARRINELLO, M./ TOSI, M.P./ MARCH, N.H.,
EXCITATIONS AND ATOMIC TRANSPORT IN CLASSICAL BINARY IS
OTOPIC FLUIDS
J. PHYS., C, LONDON, V.7, P.2577-P.2592 (1974)
NEUTRON-SCATTERING-IN-FLUIDS .,THEORY/ BINARY-MIXTURES/
ISOTOPIC-EFFECTS
- 74-PA-09 PAWLEY, G.S.,
PHONON SYMMETRIES DETERMINED FROM SPACE-GROUP DIAGRAMS
ACTA CRYSTALLOGR., SECT. A, V.30, P.585-P.596 (1974)
THEORY-OF-SOLIDS .,PHONON SYMMETRY/ SPACE GROUP
- 74-PA-10 PAWLEY, G.S./ MIKA, K.,
THE DYNAMICS OF MOLECULAR CRYSTALS UNDER PRESSURE
PHYS. STATUS SOLIDI B, V.66, P.679-P.686 (1974)
NAPHTHALENE/ ANTHRACENE/ SULPHUR .,THEORY/ PRESSURE EFF
ECT/ LATTICE DYNAMICS/ PHONON DISPERSION
- 74-PR-01 PRAKASH, J./ PATHAK, L.P./ HEMKAR, M.P.,
ANGULAR FORCES IN LATTICE DYNAMICS OF ALKALI METALS
J. PHYS. SOC. JAP., V.37, P.571-P.571 (1974)
- 74-PR-02 PRAKASH, J./ PATHAK, L.P./ HEMKAR, M.P.,
ANGULAR FORCES AND NORMAL VIBRATIONS IN ALKALI METALS
J. PHYS., F, LONDON, V.4, P.1107-P.1111 (1974)
LI/ K/ RB .,THEORY/ PHONON DISPERSION
- 74-PR-03 PRESS, W./ HUELLER, A.,
PHASE TRANSITIONS IN SOLID C,D4
ANHARMONIC LATTICES, STRUCTURAL TRANSITIONS AND ME
LTING (ED. BY RISTE, T.), NOORDHOFF, LEIDEN, P.185
-P.212 (1974)
C,H4 .,PHASE TRANSITION/ QUASIELASTIC SCATTERING
- 74-PY-01 PYNN, R./ AXE, J.D.,
A NEUTRON MEASUREMENT OF THE EFFECT OF A MAGNETIC FIELD
ON PHONON LIFETIMES IN NIOBIUM
J. PHYS., F, LONDON, V.4, P.1898-P.1907 (1974)
NB .,THEORY/ PHONON LIFETIME/ MAGNETIC FIELD EFFECT
- 74-PY-02 PYNN, R./ RISTE, T.,
NEUTRON SCATTERING BY A LIQUID CRYSTAL AT TEMPERATURES
CLOSE TO ITS MELTING POINT
ANHARMONIC LATTICES, STRUCTURAL TRANSITIONS AND ME
LTING (ED. BY RISTE, T.), NOORDHOFF, LEIDEN, P.365
-P.374 (1974)
PAA .,EXPERIMENT/ NEUTRON DIFFRACTION
- 74-RA-01 RAFIZADEH, H.A.,
AN ANALYTICAL-POTENTIAL APPROACH TO THE LATTICE DYNAMIC
S OF GRAPHITE
PHYSICA, V.74, P.135 (1974)
GRAPHITE .,THEORY/ BORN-VON KARMAN MODEL/ DISPERSION RE
LATION/ MEAN SQUARE DISPLACEMENT/ CENTRAL FORCE MODEL .
SPECIFIC HEAT/ COMBINING RULE IS APPLIED TO IDENTICAL
ATOMS AS A MIXTURE OF COVALENT AND VAN DER WAALS POTENT
IALS
- 74-RA-02 RAHMAN, A.,
PROPAGATION OF DENSITY FLUCTUATIONS IN LIQUID RUBIDIUM,
A MOLECULAR-DYNAMICS STUDY
PHYS. REV. LETT., V.32, P.52-P.54 (1974)
RB/ NEUTRON-SCATTERING-IN-FLUIDS .,DISPESION CURVE/ ZER
O SOUND
- 74-RA-03 RAHMAN, A.,
DENSITY FLUCTUATIONS IN LIQUID RUBIDIUM II. MOLECULAR-D
YNAMICS CALCULATIONS
PHYS. REV. A, V.9, P.1667 (1974)
RB .,MOLECULAR DYNAMIC CALCULATION/ LIQUID

- 74-RA-04 RAO, R.R./ MENON, C.S.
LATTICE DYNAMICS, THIRD ORDER ELASTIC CONSTANTS AND THE
RMAL EXPANSION OF CADOLINIUM
J. PHYS. CHEM. SOLIDS, V.35, P.425-P.432 (1974)
GADOLINIUM ., DISPERSION CURVE/ THEORY
- 74-RA-05 RAO, R.V.G./ MURTHY, A.K.
X-RAY STUDIES OF LIQUIDS: I. DIRECT CORRELATION FUNCTIO
N OF LIQUID METHANE
J. PHYS., C, LONDON, V.7, P.2249-P.2254 (1974)
METHANE ., EXPERIMENT/ X-RAY/ STRUCTURE FACTOR/ DIRECT C
ORRELATION FUNCTION
- 74-RA-06 RAO, P.V.S.
PHONON DISPERSION RELATIONS, EFFECTIVE INTERIONIC POTEN
TIAL AND LIQUID RESISTIVITY OF AL
J. PHYS. CHEM. SOLIDS, V.35, P.669-P.684 (1974)
AL ., THEORY/ NONLOCAL OPTIMIZED MODEL POTENTIAL/ PHONON
DISPERSION/ LIQUID RESISTIVITY
- 74-RA-07 RAO, M.
CLUSTER EXPANSION FOR THE COHERENT AND INCOHERENT DYNAM
IC STRUCTURE FACTOR IN SIMPLE CLASSICAL LIQUIDS
PHYS. REV. A, V.9, P.2220 (1974)
THEORY-OF-FLUIDS ., CLUSTER EXPANSION/ DYNAMIC STRUCTURE
FACTOR/ CLASSICAL LIQUIDS
- 74-RA-08 RASTOGI, A./ HAWRANEK, J.P./ LOWNDES, R.P.
LATTICE DYNAMICS AND ANHARMONIC SELF-ENERGIES FOR THE L
ITHIUM HALIDES
PHYS. REV. B, V.9, P.1938 (1974)
LI, BR/ LI, I/ LI, F/ LI, CL ., LATTICE DYNAMICS/ THEORY
- 74-RA-09 RATHMANN, O./ ALS-NIELSEN, J.
LONG-RANGE ORDER IN BETA-BRASS STUDIES BY NEUTRON DIFFR
ACTION
PHYS. REV. B, V.9, P.3921 (1974)
CU-ZN ., LONG-RANGE ORDER/ NEUTRON DIFFRACTION
- 74-RE-01 RENKER, B./ PINTSCHOVUS, L./ GLAESER, W./ RIETSCH
EL, H./ COMES, R./
NEUTRON-SCATTERING STUDY OF THE STRUCTURAL PHASE TRANSI
TION IN THE ONE-DIMENSIONAL CONDUCTOR K₂PT₂(C₄N₄)₄BR₆
3*3(D₂, O)
PHYS. REV. LETT., V.32, P.836-P.839 (1974)
KCP ., EXPERIMENT/ CRITICAL SCATTERING/ BELOW 220K
- 74-RE-02 REYNOLDS, P.A./ KJEMS, J.K./ WHITE, J.W.
LATTICE VIBRATIONS IN CHLOROBENZENES, EXPERIMENTAL DISP
ERSION CURVES FOR BETA-PARADICHLOROBENZENE BY NEUTRON S
CATTERING
J. CHEM. PHYS., V.60, P.824-P.834 (1974)
- DICHLOROBENZENE ., EXPERIMENT/ CALCULATION/ PHONON DISPE
RSION
- 74-R1-01 RISTE, T.
ANHARMONIC LATTICES, STRUCTURAL TRANSITIONS AND MELTING
NOORDHOFF, LEIDEN, NETHERLANDS (1974)
REVIEW-ARTICLES/ PHASE-TRANSITION ., CONFERENCE PROCEEDI
NG/ NATO ADVANCED STUDY INSTITUTE
- 74-RO-01 ROMANO, S./ MARGHERITIS, C.
MONTE-CARLO COMPUTATIONS FOR SOME SIMPLE MODELS ACCOUNT
ING FOR IONIC POLARIZATION IN POTASSIUM
PHYSICA, V.77, P.557 (1974)
K, CL ., IONIC POLARIZATION/ ALKALI HALIDE
- 74-RO-02 ROS, R.T./ SAUNDERSON, D.H.
LATTICE DYNAMICS OF LITHIUM NIOBATE
J. PHYS., C, LONDON, V.7L, P.99 (1974)
LI, NB, O₃ ., DISPERSION RELATION/ INECASTIC NEUTRON SCATT
ERING
- 74-RO-03 ROWE, J.M./ RUSH, J.J./ FLOTOW, H.E.
NEUTRON-QUASIELASTIC-SCATTERING STUDY OF HYDROGEN DIFFU
SION IN A SINGLE CRYSTAL OF TANTALUM
PHYS. REV. B, V.9, P.5039 (1974)
TA-H ., EXPERIMENT/ QUASI-ELASTIC PEAK/ TOF
- 74-RO-04 ROWE, J.M./ NICKLOW, R.M./ PRICE, D.L./ ZANIO, K.
LATTICE DYNAMICS OF CADMIUM TELLURIDE
PHYS. REV. B, V.10, P.671 (1974)
CD, TE ., EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DIST
RIBUTION ., 14PARAMETER SHELL MODEL
- 74-RO-05 ROWE, J.M./ RUSH, J.J./ SMITH, H.G./ MOSTOLLER, M.
/ FLOTOW, H.E.
LATTICE DYNAMICS OF A SINGLE CRYSTAL OF PD-D₀, 63
PHYS. REV. LETT., V.33, P.1297-P.1300 (1974)
PD-H ., EXPERIMENT/ PHONON DISPERSION/ 78.150.220.295K/
PD, D₀, 63
- 74-SA-01 SACCHETTI, F.
MAGNETIC FORM FACTOR DETERMINATION BY INELASTIC SCATTER
ING OF NEUTRONS AS COMPARED TO ELASTIC SCATTERING MEASU
RES
SOLID STATE COMMUN., V.15, P.963-P.964 (1974)
MAGNETIC-SCATTERING ., THEORY
- 74-SA-02 SAKAMOTO, M./ MASAKI, N./ MOTOHASHI, H./ DOI, K./
KURIYAMA, I./
NEUTRON SPECTROSCOPY ON POLYOXYMETHYLENE
JAERI-M-5933 (1974)
POLYOXYMETHYLENE ., EXPERIMENT/ ORIENTED CRYSTAL/ FREQUE

NCY SPECTRUM

- 74-SA-03 SAMUELSEN, E.J./ STEINSVOLL, O.
LOW-ENERGY PHONONS IN MAGNETITE
PHYS. STATUS SOLIDI B, V.61, P.615 (1974)
MAGNETITE ..EXPERIMENT/ INELASTIC NEUTRON SCATTERING/ D
ISPERSION RELATION ..SPINEL STRUCTURE/ TRIPLE AXIS SPEC
TROMETER/ NEAR THE VERWAY TRANSITION/ SOUND VELOCITY/ A
NHARMONICITY
- 74-SA-04 SANDLER, S.I./ DAS-GUPTA, A./ STEELE, W.A.
X-RAY AND NEUTRON DIFFRACTION FROM DIATOMIC LIQUIDS
J. CHEM. PHYS., V.61, P.1326-P.1337 (1974)
THEORY-OF-FLUIDS ..RADIAL-DISTRIBUTION-FUNCTION ..ANALY
SIS-OF-DATA
- 74-SC-01 SCHEERLINCK, D./ WEGENER, W./ HAUTECLER, S.
DISPERSION OF ACOUSTICAL MAGNONS AND PHONONS IN MN(1,7)
FE(1,3),04
SOLID STATE COMMUN., V.15, P.1529-P.1533 (1974)
MN,FE2,04 ..DISPERSION-CURVES
- 74-SC-02 SCHERM, R./ STIRLING, W.G./ WOODS, A.D.B./ COWLEY,
R.A./ COOMBS, G.J.
NEUTRON SCATTERING FROM LIQUID HE-3
J. PHYS., C, LONDON, V.7L, P.341-P.345 (1974)
HE ..HE-3/ S(0,W)
- 74-SC-03 SCHOFIELD, P.
TIME CORRELATIONS IN CLASSICAL STATISTICAL MECHANICS
J. PHYS., A, LONDON, V.7, P.246 (1974)
THEORY-OF-FLUIDS/ THEORY-OF-SOLIDS ..THEORY/ CORRELATIO
N FUNCTION
- 74-SC-04 SCHRODT, I.B./ DAVIS, H.T.
KINETIC THEORY OF DENSE FLUIDS
J. CHEM. PHYS., V.61, P.323 (1974)
AR ..THEORY/ LIQUID ..HARD AND SOFT PARTS SEPARATION OF
POTENTIAL/ THERMAL CONDUCTIVITY/ SELF DIFFUSION COEFFI
CIENT/ SHEAR VISCOSITY
- 74-SC-05 SCHWABL, F.
REVIEW OF METHODS FOR OBTAINING A CENTRAL MODE
ANHARMONIC LATTICES, STRUCTURAL TRANSITIONS AND ME
LING (ED, BY RISTE, T.), NOORDHOFF, LEIDEN, P.87-
P.112 (1974)
THEORY-OF-SOLIDS ..PHASE TRANSITION/ A.B.03 PERVOISKITE
STRUCTURE
- 74-SC-06 SCHWABL, F.
HYDRODYNAMICS NEAR PHASE TRANSITIONS OF SECOND ORDER
ANHARMONIC LATTICES, STRUCTURAL TRANSITIONS AND ME
- LING (ED, BY RISTE, T.), NOORDHOFF, LEIDEN, P.71-
P.86 (1974)
THEORY-OF-SOLIDS ..PHASE TRANSITIONS
- 74-SC-07 SCOTT, J.F.
SOFT-MODE SPECTROSCOPY EXPERIMENTAL STUDIES OF STRUCTUR
AL PHASE TRANSITIONS
REV. MOD. PHYS., V.46, P.83 (1974)
REVIEW-ARTICLES ..THEORY/ EXPERIMENT/ SOLID/ STRUCTURAL
PHASE TRANSITION/ NEUTRON SCATTERING/ INFRARED/ X-RAY
EXPERIMENT
- 74-SE-01 SEN, P.N./ HARTMANN, W.M.
COHERENT-POTENTIAL APPROXIMATION FOR THE LATTICE VIBRAT
IONS OF MIXED DIATOMIC SYSTEMS
PHYS. REV. B, V.9, P.367-P.380 (1974)
THEORY-OF-SOLIDS ..THEORY/ PHONON/ MASS-DISORDERED SYST
EM/ COHERENT-POTENTIAL/ ONE-DIMENSION/ DENSITY OF STATE
S
- 74-SH-01 SHAPIRO, S.M./ AXE, J.D.
NEUTRON-SCATTERING STUDIES OF SPIN WAVES IN RARE-EARTH
ORTHOFERRITES
PHYS. REV. B, V.10, P.2014-P.2021 (1974)
TM,FE,03/ ER,FE,03/ MAGNETIC-SCATTERING ..EXPERIMENT/ M
AGNON DISPERSION/ SOFT MODE
- 74-SH-02 SHAPIRO, S.M./ AXE, J.D./ SHIRANE, G.
NEUTRON SCATTERING STUDY OF THE STRUCTURAL PHASE TRANSI
TION IN NB,02
SOLID STATE COMMUN., V.15, P.377-P.381 (1974)
NB,02/ PHASE-TRANSITION ..CRITICAL SCATTERING DUE TO SO
FT MODE
- 74-SH-03 SHAPIRO, S.M./ AXE, J.D./ SHIRANE, G.
SOME FURTHER OBSERVATIONS OF SOFT PHONON LINE SHAPES IN
K,MN,F3
ANHARMONIC LATTICES, STRUCTURAL TRANSITIONS AND ME
LING (ED, BY RISTE, T.), NOORDHOFF, LEIDEN, P.135
-P.140 (1974)
K,MN,F3 ..EXPERIMENT/ PHONON LINE SHAPE/ PHASE TRANSITI
ON
- 74-SH-04 SHARMA, T.P.
LATTICE DYNAMICS OF MN,0
SOLID STATE COMMUN., V.15, P.1171-P.1173 (1974)
MN,0 ..DISPERSION-CURVES ..THEORY/ DEFORMATION-DIPOLE-M
ODEL
- 74-SH-05 SHIRANE, G.
NEUTRON SCATTERING STUDIES OF STRUCTURAL PHASE TRANSITI
ONS AT BROOKHAVEN

- REV. MOD. PHYS., V.46, P.437-P.449 (1974)
SR.TI.03/ K.MN.F3/ K.TA.03/ PHASE-TRANSITION ..REVIEW/
SOFT MODE/ PHASE CHANGE
- 74-SI-01 SIGH, N./ PRAKASH, S.
PHONON FREQUENCIES OF GOLD
PHYS. REV. B, V.10, P.2652-P.2653 (1974)
AU ..DISPERSION-CURVES
- 74-SI-02 SINGH, O.N./ KUSHWAHA, S.S.
LATTICE DYNAMICS OF COBALT
NUOVO CIM., B, V.21, P.354-P.362 (1974)
CO ..THEORY/ PHONON DISPERSION/ DEBYE TEMP.
- 74-SI-03 SINGH, R.K.
LATTICE DYNAMICS OF SOME LITHIUM SALTS
J. PHYS., C, LONDON, V.7, P.3473-P.3479 (1974)
LI.H/ LI.BR/ LI.I ..DISPERSION-CURVES/ DENSITY-OF-STATE
S
- 74-SI-04 SINHA, H.P./ UPADHYAYA, J.C.
A MODEL FOR LATTICE DYNAMICS OF HCP METALS
PHYS. LETT., A, V.50A, P.37-P.38 (1974)
YTTRIUM ..DISPERSION-CURVES/ CALCULATION
- 74-SK-01 SKALYO-JR., J./ ENDOH, Y./ SHIRANE, G.
INELASTIC NEUTRON SCATTERING FROM SOLID KRYPTON AT 10 K
PHYS. REV. B, V.9, P.1797 (1974)
KR ..PHONON DISPERSION CURVE/ FREQUENCY DISTRIBUTION/ IN
ELASTIC NEUTRON SCATTERING
- 74-SO-01 SOMA, T.
LATTICE VIBRATION SPECTRA IN ALPHA-SN
J. PHYS. SOC. JAP., V.36, P.1301-P.1303 (1974)
SN ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL
- 74-ST-01 STAMENKOVIC, S.
THEORY OF NEUTRON ELASTIC SCATTERING BY NEMATIC LIQUID
CRYSTALS
JINR-E4-7981 (1974)
NEUTRON-SCATTERING-IN-FLUIDS/ LIQUID-CRYSTAL ..THEORY/
SOLID/ SIGMA (THETA,E) ..LIQUID CRYSTAL
- 74-ST-02 STEINER, M./ DORNER, B./ VILLAIN, J.
INELASTIC NEUTRON INVESTIGATION OF THE ANISOTROPY OF THE
E SPIN WAVE LINEWIDTH IN THE ONE-DIMENSIONAL EASY-PLANE
FERROMAGNET CS.NI.F3
J. PHYS., C, LONDON, V.7, P.165 (1974)
CS.NI.F3/ MAGNETIC-SCATTERING ..CONSTANT-Q METHOD/ CORR
ELATION FUNCTION/ SPIN WAVE
- 74-ST-03 STILLINGER, F.H./ RAHMAN, A.
- MOLECULAR DYNAMICS STUDY OF LIQUID WATER UNDER HIGH COM
PRESSION
J. CHEM. PHYS., V.61, P.4973 (1974)
H2.O ..LIQUID/ PAIR CORRELATION FUNCTION/ MOLECULAR DYN
AMICS ..COMPUTER EXPERIMENT
- 74-TA-01 TANI, K.
THEORY OF NEUTRON SCATTERING FROM LATTICE VIBRATIONS. 2
.. APPLICATION OF A PHONON THEORY
J. PHYS. SOC. JAP., V.36, P.406-P.421 (1974)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ STRUCTURAL PHASE
TRANSITION/ MAGNETIC SYSTEM/ ANHARMONIC SYSTEM
- 74-TE-01 TEUCHERT, W.D./ GEICK, R.
SYMMETRY OF LATTICE VIBRATIONS IN SELENIUM AND TELLURIU
M
PHYS. STATUS SOLIDI B, V.61, P.123-P.136 (1974)
SE/ TE ..THEORY/ PHONON DISPERSION
- 74-TE-02 TEWARY, V.K.
LATTICE DYNAMICS OF A SOLID WITH A SCREW DISLOCATION
J. PHYS., C, LONDON, V.7, P.261 (1974)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS ..GR
EEN FUNCTION/ SKREW DISLOCATION
- 74-TH-01 THAPER, C.L./ DASANNACHARYA, B.A./ GOYAL, P.S.
DYNAMICS OF LIQUID AMMONIA FROM COLD NEUTRON SCATTERING
PRAMANA, V.2, P.148-P.157 (1974)
AMMONIA ..EXPERIMENT/ LIQUID/ ROTATIONAL CORRELATION FU
NCTION
- 74-TH-02 THOMA, K./ DORNER, B./ DUESING, G./ WEGENER, W.
LATTICE DYNAMICS OF ZN.O
SOLID STATE COMMUN., V.15, P.1111-P.1114 (1974)
ZN.O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTI
NG WITH 10 PARAMETERS
- 74-TR-01 TRIPATHI, R.S./ BEHERA, S.N.
PHONONS IN MIXED CRYSTALS . A SELF-CONSISTENT THEORY IN
CLUDING MASS AND FORCE-CONSTANT CHANGES
J. PHYS., C, LONDON, V.7, P.4470 (1974)
THEORY-OF-SOLIDS ..GREEN-FUNCTION
- 74-TS-01 TSANG, T./ MACLIN, A.P.
VELOCITY AUTOCORRELATION FUNCTIONS IN CLASSICAL FLUIDS
PHYSICA, V.77, P.361 (1974)
AR ..VELOCITY CORRELATION/ LIQUID
- 74-TS-02 TSUZUKI, T.
ON THE TEMPERATURE DEPENDENCE OF SUNAKAWA'S EXCITATION
SPECTRUM OF BOSE LIQUIDS
PROGR. THEORET. PHYS., KYOTO, V.51, P.1981-P.1983

- (1974)
HE, THEORY/ LIQUID HE/ ROTON DISPERSION/ TEMPERATURE EFFECT
- 74-UP-01 UPADHYAYA, K.S./ SINGH, R.K.
SHELL MODEL LATTICE DYNAMICS OF TRANSITION METAL OXIDES
J. PHYS. CHEM. SOLIDS, V.35, P.1175 (1974)
MN, O/ CO, O/ NI, O. THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS. THREE-BODY FORCE SHELL MODEL
- 74-VA-01 VAGELATORS, N./ WEHE, D./ KING, J.S.
PHONON DISPERSION AND PHONON DENSITIES OF STATES FOR ZN, S AND ZN, TE
J. CHEM. PHYS., V.60, P.3613 (1974)
ZN, S/ ZN, TE. PHONON DISPERSION/ FREQUENCY DISTRIBUTION/ INELASTIC NEUTRON SCATTERING
- 74-VE-01 VETELINO, J.F./ ROY, L.G./ MITRA, S.S.
LATTICE DYNAMICAL CALCULATION OF THE SECOND GRUENEISEN CONSTANT OF CS, BR
J. PHYS. CHEM. SOLIDS, V.35, P.47-P.52 (1974)
CS, BR. THEORY/ SECOND GRUENEISEN CONSTANT/ MODIFIED RIGID ION MODEL/ PRESSURE DEPENDENT LATTICE DYNAMICS
- 74-VO-01 VORDERWISCH, P./ HAUTECLER, S.
INELASTIC NEUTRON SCATTERING BY CERIUM HYDRIDES (3)
PHYS. STATUS SOLIDI B, V.66, P.595 (1974)
CERIUM HYDRIDE. CE-H1.98
- 74-VO-02 VORDERWISCH, P./ HAUTECLER, S.
INELASTIC NEUTRON SCATTERING BY CERIUM HYDRIDES
PHYS. STATUS SOLIDI B, V.64, P.495-P.501 (1974)
CE-H. EXPERIMENT/ PHONON SPECTRA
- 74-VO-03 VORDERWISCH, P./ HAUTECLER, S./ DECKERS, H.
INELASTIC NEUTRON SCATTERING BY CESIUM HYDRIDES, II.
PHYS. STATUS SOLIDI B, V.65, P.171-P.180 (1974)
CESIUM HYDRIDE. DENSITY-OF-STATES/ SPECIFIC-HEAT
- 74-WA-01 WAKABAYASHI, N./ NICKLOW, R.M.
SPIN-WAVE DISPERSION AND EXCHANGE INTERACTIONS IN Y0.90-TB0.10 AND Y0.90-HO0.10 ALLOYS
PHYS. REV. B, V.10, P.2049-P.2054 (1974)
Y-TB/ Y-HO/ MAGNETIC-SCATTERING. EXPERIMENT/ MAGNON DISPERSION/ ALLOY/ 4.2 DK
- 74-WA-02 WATTS, R.O.
MONTE CARLO STUDIES OF LIQUIDS WATER
MOL. PHYS., V.28, P.1069-P.1083 (1974)
LIGHT WATER/ THEORY-OF-FLUIDS. RADIAL-DISTRIBUTION-FUNCTION/ MONTE-CARLO
- 74-WE-01 WEARE, D./ ALBEN, R.
THE APPROACH TO THE INCOHERENT LIMIT IN HIGH-Q INELASTIC NEUTRON SCATTERING FROM AN AMORPHOUS TETRAHEDRALLY BONDDED SEMICONDUCTOR
J. PHYS., C, LONDON, V.7, P.189 (1974)
GE. THEORY/ NEUTRON SPECTRUM. AMORPHOUS SOLID
- 74-WE-02 WEGENER, W./ SCHEERING, D./ LEGRAND, E./ HAUTECLER, S.
INELASTIC NEUTRON SCATTERING STUDY OF ACOUSTICAL MAGNON S IN MNFE2O4
MN, FE2O4. EXPERIMENT/ TOF/ DISPERSION RELATION. SPIN WAVE SPECTRUM
- 74-YA-01 YAMADA, Y./ NODA, Y./ AXE, J.D./ SHIRANE, G.
DYNAMICAL CRITICAL PHENOMENA IN N.D4.BR
PHYS. REV. B, V.9, P.4429 (1974)
N.H4.BR. EXPERIMENT/ SIGMA(THETA, E)/ DISPERSION RELATION. STRUCTURAL PHASE TRANSITION/ SPIN-PHONON COUPLING
- 74-YE-01 YELON, W.B./ SCHERM, R.
ACOUSTIC PHONON SPECTRA OF FE, CL2
SOLID STATE COMMUN., V.15, P.391-P.394 (1974)
FE, CL2. EXPERIMENT/ PHONON DISPERSION
- 74-YE-02 YELON, W.B.
TRICRITICAL STUDIES OF N.D4, CL
ANHARMONIC LATTICES, STRUCTURAL TRANSITIONS AND MELTING (ED. BY RISTE, T.J., NOORDHOFF, LEIDEN, P.255 -P.274 (1974)
N.H4, CL. EXPERIMENT/ PHASE TRANSITION/ CRITICAL SCATTERING RING
- 74-ZA-01 ZACCAI, G./ HEWAT, A.W.
SOFT MODES AND THE STRUCTURE OF FERROELECTRIC TETRAGONAL KTN. 2. THE LATTICE DYNAMICS OF THE CUBIC PHASE
J. PHYS., C, LONDON, V.7, P.15-P.24 (1974)
K.NB.O3/ K.TA.O3. X-RAY AND NEUTRON DIFFRACTION/ DIFFUSE STREAK/ PHONON DISPERSION
- 74-ZY-01 NEUTRON SCATTERING LABORATORY, DIVISION OF PHYSICS, JAERI
PROCEEDING OF THE FIRST CONFERENCE ON APPLICATIONS OF NEUTRON SCATTERING (IN JAPANESE)
JAERI-M-5829 (1974)
REVIEW-ARTICLES/ SCATTERING-BY-DEFECTS. APPLICATION OF NEUTRON SCATTERING TO MATERIAL SCIENCE
- 75-AG-01 AGRANOVICH, V.M./ LALOV, I.I.
NEUTRON SCATTERING BY LASER PHOTONS IN CRYSTALS
PHYS. LETT., A, V.53, P.169-P.170 (1975)

NEUTRON-SCATTERING-IN-SOLIDS ..NEUTRON-PHOTON INTERACTION/ CRYSTAL LATTICE

- 75-AL-01 ALBEN, R./ WEARE, D./ SMITH-JR, J.E./ BRODSKY, M.
H.
VIBRATIONAL PROPERTIES OF AMORPHOUS SI AND GE
PHYS. REV. B, V.11, P.2271-P.2296 (1975)
SI/ GE ..EXPERIMENT/ RAMAN,IR SPECTRA/ PHONON SPECTRA/
NUMERICAL CALCULATION/ PREDICTION FOR NEUTRON SCATTERING
- 75-AL-02 ALTSHULER, A.M./ VEKILOV, Y.K./ IZOTOV, A.D.
LATTICE DYNAMICS OF COVALENT IONIC COMPOUNDS (2)
PHYS. STATUS SOLIDI B, V.70, P.347 (1975)
SI/ GA,AS/ ZN,S ..THEORY/ DISPERSION RELATION/ LATTICE
DYNAMICS ..PSEUDOPOTENTIAL METHOD
- 75-AM-01 AMARAL, L.O./ FULFARO, R./ VINHAS, L.A.
MOLECULAR DYNAMICS OF TERT-BUTANOL STUDIED BY NEUTRON TRANSMISSION
J. CHEM. PHYS., V.63, P.1312-P.1314 (1975)
BUTANOL ..EXPERIMENT/ TOTAL CROSS SECTION/ TEMPERATURE
EFFECT
- 75-AS-01 ASADA, H./ TOYA, T./ MOTOHASHI, H./ SAKAMOTO, M./
HAMAGUCHI, Y.
STUDY OF HYDROGEN ADSORBED ON PLATINUM BY NEUTRON INELASTIC SCATTERING SPECTROSCOPY
J. CHEM. PHYS., V.63, P.4078-P.4079 (1975)
H-PT ..INELASTIC NEUTRON SCATTERING EXPERIMENT/ HYDROGEN
N ADSORBED ON PLATINUM
- 75-AX-01 AXE, J.D./ KEATING, D.T./ MOSS, S.C.
ANOMALOUS INELASTIC NEUTRON SCATTERING IN BCC Zr-Nb ALLOYS
PHYS. REV. LETT., V.35, P.530 (1975)
Zr-Nb ..EXPERIMENT/ CRYSTAL SPECTROMETER/ DISPERSION RELATION ..1238DK
- 75-BA-01 BARKER, M.I./ GASKELL, T.
DAMPING OF COLLECTIVE MODE IN LIQUID METALS
J. PHYS., C, LONDON, V.8, P.89-P.100 (1975)
THEORY-OF-FLUIDS/ NA ..LIQUID METALS/ DAMPING OF COLLECTIVE
MODE/ LONG-RANGE OSCILLATORY INTERIONIC POTENTIAL
- 75-BA-02 BARKER, M.I./ GASKELL, T.
DAMPING OF COLLECTIVE MODES IN LIQUID METALS: II
J. PHYS., C, LONDON, V.8, P.3715 (1975)
THEORY-OF-SOLIDS/ HE ..THEORY/ LIQUID/ CURRENT CORRELATION
ON FUNCTION/ SCATTERING LAW
- 75-BA-03 BARTUNIK, H.D./ JACOB, V.

A MULTIDETECTOR CONSISTING OF ONE-DIMENSIONAL POSITION SENSITIVE GAS DETECTORS FOR PROTEIN CRYSTALLOGRAPHY INCLUDING ANOMALOUS DISPERSION
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.430-P.445 (1975)
INSTRUMENTS-AND-METHODS/ PROTEIN ..MULTI-DETECTOR SYSTEM/ ILL.GRENOBLE

75-BA-04 BARTUNIK, H.D./ FUESS, H.
STUDY OF PHASE DETERMINATION BY ANOMALOUS NEUTRON SCATTERING

RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.527-P.541 (1975)
CD,(C6,H8,N3,O2)2*(H2O) ..ANOMALOUS SCATTERING/ NEUTRON DIFFRACTION

75-BE-01 BENNET, C.H.
MASS TENSOR MOLECULAR DYNAMICS
V.19, P.267-P.279 (1975)
THEORY-OF-FLUIDS ..MOLECULAR DYNAMICS/ MASS TENSOR

75-BE-02 BERGMANS, H./ GROENINCKX, G.
STUDY OF THE LOW-FREQUENCY MOTIONS IN POLY(ETHYLENE TEREPHTHALATE) (PET) BY NEUTRON INELASTIC SCATTERING
J. POLY. SCI., POLY. PHYS., V.13, P.151-P.162 (1975)
POLY(ETHYLENE TEREPHTHALATE) ..EXPERIMENT/ PHONON SPECTRA / EFFECT OF CRYSTALLINITY

75-BE-03 BERNEY, C.V.
NEUTRON SCATTERING FROM FERMI RESONANT VIBRATIONAL MODES IN CARBON DIOXIDE
J. CHEM. PHYS., V.62, P.936 (1975)
C.O2 ..NEUTRON SCATTERING SPECTRUM

75-BE-04 BERNEY, C.V.
NEUTRON SCATTERING FROM FERMI-RESONANT VIBRATIONAL MODES IN CARBON DIOXIDE
J. CHEM. PHYS., V.62, P.936-P.937 (1975)
C.O2 ..CALCULATION/ SOLID

75-BE-05 BERTOLO, L.A./ SHUKLA, M.M.
MODIFIED BHATTIA'S MODEL FOR LATTICE DYNAMICS OF F.C.C. TRANSITION METALS
J. PHYS. SOC. JAP., V.38, P.1439-P.1444 (1975)
Ni/ Pd/ Pt ..THEORY/ PHONON DISPERSION/ MODIFIED BHATTIA MODEL

75-BE-06 BETSUYAKU, H.
NEUTRON SCATTERING FUNCTION IN A HEISENBERG PARAMAGNET
APPLICATION TO K,MN,F3
J. PHYS. SOC. JAP., V.38, P.21-P.31 (1975)

K,MN.F3/ MAGNETIC-SCATTERING ..THEORY/ SUM-RULE MOMENT METHOD/ SCATTERING FUNCTION

75-B1-01 BIALAS, H./ STOLZ, H.J.
LATTICE DYNAMICS OF SAPPHIRE (CORUNDUM). PART I. PHONON DISPERSION BY INELASTIC NEUTRON SCATTERING
Z. PHYS. B, V.21, P.319-P.324 (1975)
CORUNDUM ..EXPERIMENT/ PHONON DISPERSION/ SAPPHIRE

75-B1-02 BICHILE, G.K./ KULKARNI, R.G.
THE TEMPERATURE DEPENDENCE OF LATTICE PARAMETER, THERMAL EXPANSION, GRUENEISEN PARAMETER AND LATTICE VIBRATIONAL FREQUENCIES OF BARIUM NITRATE
J. PHYS., C, LONDON, V.8, P.3988 (1975)
BA.(N,03)2 ..EXPERIMENT/ SOLID/ LATTICE PARAMETER ..THERMAL EXPANSION

75-B1-03 BILIR, N./ PHILLIPS, W.A.
PHONON IN SiO₂, THE LOW-TEMPERATURE HEAT CAPACITY OF CRISTOBALITE
PHIL. MAG., V.32, P.113 (1975)

75-B1-04 BILZ, H./ BUCHANAN, M./ FISCHER, K./ HABERKORN, R.
OVERLAP POLARIZATION AND LATTICE DYNAMICS OF IONIC CRYSTALS
SOLID STATE COMMUN., V.16, P.1023-P.1026 (1975)
NA,1 ..THEORY/ OVERLAP POLARIZATION/ SHELL MODEL

75-B1-01 BLASCHKO, O./ ERNST, G./ QUITTNER, G./ KRESS, W./ LECHNER, R.E.
MODE GRUENEISEN PARAMETER DISPERSION RELATION OF Rb,1 DETERMINED BY NEUTRON SCATTERING
PHYS. REV. B, V.11, P.3960-P.3965 (1975)
RB,1 ..PHONON FREQUENCY/ PRESSURE EFFECT/ GRUENEISEN PARAMETER

75-B1-02 BLASCHKO, O./ ERNST, G./ QUITTNER, G.
PRESSURE INDUCED PHONON FREQUENCY SHIFTS IN K.BR MEASURED BY INELASTIC NEUTRON SCATTERING
J. PHYS. CHEM. SOLIDS, V.36, P.41-P.44 (1975)
K.BR ..EXPERIMENT/ PHONON FREQUENCY SHIFT/ PRESSURE EFFECT

75-B1-03 BLETRY, J./ SADOE, J.F.
DETERMINATION OF THE THREE PARTIAL INTERFERENCE FUNCTIONS OF AN AMORPHOUS COBALT-PHOSPHOR FERROMAGNET BY POLARIZED-NEUTRON SCATTERING
J. PHYS., F, LONDON, V.5L, P.110-P.117 (1975)
CO,P/ MAGNETIC-SCATTERING ..EXPERIMENT/ PAIR-CORRELATION FUNCTION

75-B1-04 BLOCK, R./ SCHOMMERS, W.
TRIPLET CORRELATIONS IN DISORDERED SYSTEMS: A STUDY FOR LIQUID RUBIDIUM
J. PHYS., C, LONDON, V.8, P.1997 (1975)

RB/ THEORY-OF-FLUIDS ..THEORY/ LIQUID/ MOLECULAR DYNAMICS/ CORRELATION FUNCTION ..TRIPLET CORRELATION FUNCTION

75-B0-01 BONILLA, I.R./ RUTT, H.N.
ANGULAR DISPERSION OF PHONONS IN BIAXIAL Na₂O₂
PHYS. STATUS SOLIDI B, V.69, P.393-P.398 (1975)
NA₂O₂ ..RAMAN SPECTRA/ ANGULAR DISPERSION/ INTERNAL PHONON

75-B0-02 BORCHERS, P.H./ ALFLEY, G.F./ SAUNDERSON, D.H./ WOODS, A.D.B.
PHONON DISPERSION CURVES IN INDIUM PHOSPHIDE
J. PHYS., C, LONDON, V.8, P.2022 (1975)
IN,P ..SOLID/ EXPERIMENT/ DISPERSION RELATION

75-BR-01 BRAETER, H./ PRIEZZHEV, V.B.
VIBRATIONAL SPECTRUM OF AN ISOTOPICALLY DISORDERED DIATOMIC CHAIN WITH LONG-RANGE ORDER IN THE COHERENT POTENTIAL APPROXIMATION
PHYS. STATUS SOLIDI B, V.72, P.353-P.358 (1975)
THEORY-OF-SOLIDS ..THEORY/ PHONON FREQUENCY SPECTRUM/ DIATOMIC CHAIN/ COHERENT POTENTIAL

75-BR-02 BROSTOW, W.
THERMAL NEUTRON SCATTERING BY LIQUID ARGON AND THE INTERMOLECULAR POTENTIAL
CHEM. PHYS. LETT., V.35, P.387-P.390 (1975)
AR ..THEORY/ INTERMOLECULAR POTENTIAL

75-BU-01 BUEHRER, W./ BRUEESCH, P.
PHONON DISPERSION AND BETA - ALPHA TRANSITION IN SILVER IODINE
SOLID STATE COMMUN., V.16, P.155 (1975)
AG,1 ..EXPERIMENT/ SOLID/ DISPERSION RELATION

75-BU-02 BUEHRER, W.
CRYSTAL DYNAMICS OF SILVER BROMIDE AT 80 AND 295K
PHYS. STATUS SOLIDI B, V.68, P.739-P.748 (1975)
AG,BR ..EXPERIMENT/ PHONON DISPERSION/ 80 AND 295K/ 12-PARAMETER MODEL FITTING/ FREQUENCY DISTRIBUTION

75-BU-03 BURAS, B.
TIME-OF-FLIGHT DIFFRACTOMETRY
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.307-P.346 (1975)
REVIEW-ARTICLES ..T-O-F NEUTRON DIFFRACTION

- 75-BU-04 BUYERS, W.L./SEARS, V.F./ LONNGI, P.A./ LONNGI, D.A.
COLLECTIVE AND SINGLE EXCITATIONS IN LIQUID NEON
PHYS. REV. A, V.11, P.697 (1975)
NEON .QUASI-ELASTIC PEAK/ SCATTERING LAW
- 75-CA-01 CARNEIRO, K./ MCTAGUE, J.P.
DYNAMICS OF LIQUID N₂ AT T=66.4K STUDIED BY NEUTRON INE
LASTIC SCATTERING
PHYS. REV. A, V.11, P.1744-P.1754 (1975)
N₂ .EXPERIMENT/ SCATTERING LAW/ LIQUID/ 66.4K
- 75-CA-02 CARPENTER, J.M./ PELIZZARI, C.A.
INELASTIC NEUTRON SCATTERING FROM AMORPHOUS SOLIDS. I.
CALCULATION OF THE SCATTERING LAW FOR MODEL STRUCTURES
PHYS. REV. B, V.12, P.2391-P.2396 (1975)
NEUTRON-SCATTERING-IN-SOLIDS .SCATTERING LAW/ AMORPHOU
S SOLID/ THEORY
- 75-CA-03 CARPENTER, J.M./ PELIZZARI, C.A.
INELASTIC NEUTRON SCATTERING FROM AMORPHOUS SOLIDS. II.
INTERPRETATION OF MEASUREMENTS
PHYS. REV. B, V.12, P.2397-P.2401 (1975)
NEUTRON-SCATTERING-IN-SOLIDS .SCATTERING LAW/ THEORY
- 75-CA-04 CARPENTER, J.M./ HUELLER, M.H./ BEYERLEIN, R.A./ W
ORLTON, T.G./ JORGENSEN, J.D./
NEUTRON DIFFRACTION MEASUREMENTS ON POWDER SAMPLES USIN
G THE ZING-P PULSED NEUTRON SOURCE AT ARGONNE
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.192-P.208 (1975)
INSTRUMENTS-AND-METHODS .TIME-OF-FLIGHT NEUTRON DIFFRA
CTION/ ARGONNE
- 75-CA-05 CAVALHEIRO, R./ SHUKLA, M.M.
DISPERSION OF PHONON WAVES IN PLATINUM AND THORIUM
NUOVO CIM., B, V.26, P.220-P.228 (1975)
PT/ TH .THEORY/ PHONON DISPERSION/ DE-LAUNAY MODEL
- 75-CA-06 CAVALHEIRO, R./ SHUKLA, M.M.
EXTENDED DE LAUNAY MODEL FOR THE LATTICE DYNAMICS OF H.
C,P, METALS
SC/ TB/ HO/ TL/ ZR .THEORY/ PHONON DISPERSION/ DE-LAUN
AY MODEL
- 75-CH-01 CHANG, S.S./ TOMPSON, C.W./ GUERMAN, E./ DUHLESTEI
N, L.D.
LATTICE DYNAMICS OF BA.O
J. PHYS. CHEM. SOLIDS, V.36, P.769-P.773 (1975)
BA.O .EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTI
- NG/ FREQUENCY SPECTRA/ DEBYE TEMPERATURE
- 75-CH-02 CHEN, J.Y./ VETELINO, J.F./ MITRA, S.S.
DENSITY OF PHONON STATES IN AMORPHOUS GERMANIUM AND SIL
ICON
SOLID STATE COMMUN., V.16, P.1313 (1975)
GE/ SI .THEORY/ SOLID/ FREQUENCY DISTRIBUTION .AMORPH
OUS SOLID/ RIGID ION MODEL
- 75-CH-03 CHERNYSHOV, A.A./ PARSHIN, P.P./ RUMYANTSEV, A.Y./
SADIKOV, I.P./ SEVEROV, M.N.
MEASUREMENT OF PHONON DISPERSION CURVES IN CADMIUM
USP. FIZ. NAUK (SOV. PHYS.-USP.), V.68 (V.41), P.3
47-P.354 (P.169-P.172) (1975)
CD .EXPERIMENT/ PHONON DISPERSION/ CD-110 ISOTOPE
- 75-CL-01 CLOSS, H./ SHUKLA, M.M.
THE LATTICE DYNAMICS OF NOBLE METALS
PHYSICA, B+C, V.79, P.26-P.34 (1975)
CU/ AG/ AU .THEORY/ PHONON DISPERSION/ SPECIFIC HEAT
- 75-CO-01 COMES, R./ RENKER, B./ PINTSCHOVUS, L./ CURRAT, R
./ GLAESER, W./
INELASTIC NEUTRON SCATTERING STUDY OF THE 2KF INSTABILI
TY IN K₂PT.(C.N)₄BR_{0.30}X(H₂O) (KCP)
PHYS. STATUS SOLIDI B, V.71, P.171-P.178 (1975)
KCP .EXPERIMENT/ LONGITUDINAL ACOUSTIC DISPERSION/ C-D
IRECTION/ ROOM TEMPERATURE, 60K
- 75-CO-02 COMES, R./ RENKER, B./ PINTSCHOVUS, L./ CURRAT, R
./ GLAESER, W./
INELASTIC NEUTRON SCATTERING STUDY OF THE 2KF INSTABILI
TY IN K₂PT.(C.N)₄BR_{0.30}X(D₂O) (KCP)
PHYS. STATUS SOLIDI B, V.71, P.171 (1975)
KCP .EXPERIMENT/ INELASTIC NEUTRON SCATTERING/ DISPERS
ION RELATION .KOHN ANOMALY
- 75-CO-03 COMES, R./ SHAPIRO, S.M./ SHIRANE, G./ GARITO, A.G
./ HEEGER, A.J.
NEUTRON-SCATTERING STUDY OF THE 38- AND 54-K PHASE TRAN
SITIONS IN DEUTERATED TETRATHIAFULVALENE-TETRACYANOQUINO
DIMETHANE
PHYS. REV. LETT., V.35, P.1518 (1975)
TTF-TCNQ .EXPERIMENT/ NEUTRON ELASTIC SCATTERING/ SOLI
D
- 75-CO-04 CONVERT, P.
NEW DETECTORS FOR POWDERS DIAGRAMS
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.238-P.249 (1975)
INSTRUMENTS-AND-METHODS .POSITION SENSITIVE DETECTOR/
ILL, GRENOBLE

- 75-CU-01 CUBIOTTI, G./ GIULIANO, E.S./ RUGGERI, R.
ION-ION POTENTIAL AND CORRELATION FUNCTION IN LIQUID NA
PHYS. STATUS SOLIDI B, V.72, P.347 (1975)
NA ..PAIR CORRELATION FUNCTION
- 75-DA-01 DACHS, H./ AXMANN, A.
HIGH RESOLUTION NEUTRON DIFFRACTOMETER FOR SINGLE CRYST
AL INVESTIGATION
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.508-P.526 (1975)
INSTRUMENTS-AND-METHODS ..NEUTRON DIFFRACTOMETER/ HIGH
RESOLUTION/ SMALL SAMPLE/ BERLIN
- 75-DA-02 DAVIDSON, P.L.
POSITION SENSITIVE SLOW NEUTRON DETECTORS USING CHANNEL
ELECTRON MULTIPLIERS
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.571-P.587 (1975)
INSTRUMENTS-AND-METHODS ..POSITION SENSITIVE DETECTOR
- 75-DE-01 DE-PATER, C.J./ VAN-DIJK, C./ NIEUWENHUYIS, G.J.
DIFFUSE NEUTRON SCATTERING OF PD-MN
J. PHYS., F. LONDON, V.5L, P.58 (1975)
PD-MN/ MAGNETIC-SCATTERING ..EXPERIMENT/ DIFFUSE SCATTE
RING/ GIANT MAGNETIC MOMENT
- 75-DE-02 DE-VRIES, G.F./ ADRIAN, H.W.W.
A KAPPA-PHI CONFIGURATION NEUTRON SINGLE CRYSTAL DIFFRA
CTOMETER
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.446-P.453 (1975)
INSTRUMENTS-AND-METHODS ..SINGLE CRYSTAL DIFFRACTOMETER
/ SOUTH AFRICA
- 75-DI-01 DIANOUX, A.J./ VOLINO, F./ HERVET, H.
INCOHERENT SCATTERING LAW FOR NEUTRON QUASI-ELASTIC SCA
TTERING IN LIQUID CRYSTALS
MOL. PHYS., V.30, P.1181-P.1194 (1975)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SIMPLE DIFFUSION
/ UNIAXIAL ROTATIONAL DIFFUSION/ ROTATIONAL JUMP/ RANDA
M WALK AMONG NEQUIDISTANT SITES
- 75-DI-02 DIANOUX, A.J./ VOLINO, F./ HERVET, H.
INCOHERENT SCATTERING LAW FOR NEUTRON QUASI-ELASTIC SCA
TTERING IN LIQUID CRYSTALS
MOL. PHYS., V.30, P.1181-P.1194 (1975)
NEUTRON-SCATTERING-IN-FLUIDS ..SCATTERING LAW/ LIQUID C
RYSTAL
- 75-DI-03 DIEHL, H.W./ BIEM, W.
PHONON- AND LIBRON-EXCITATION WITH ORTHO-PARA CONVERSI
ON
- NS BY NEUTRON SCATTERING ON SOLID HYDROGEN
Z. PHYS. B, V.20, P.137-P.146 (1975)
H2 ..THEORY/ SCATTERING CROSS SECTION/ ORTHO-PARA CONVE
RSION
- 75-DI-04 DIETRICH, O.W./ MACKENZIE, G.A./ PAWLEY, G.S.
THE STRUCTURAL PHASE TRANSITION IN SOLID DCN
J. PHYS., C, LONDON, V.8L, P.98-P.102 (1975)
H.C.N ..EXPERIMENT/ PHASE TRANSITION/ PHONON SOFTENING
- 75-DI-05 DIMIC, V./ OSREDKAR, M.
NEUTRON SCATTERING INVESTIGATION OF THE PHASE TRANSITIO
NS IN PB, CA2(CH3, CH2, COO)6
PHYS. STATUS SOLIDI A, V.30K, P.63 (1975)
DICALCIUM LEAD PROPIONATE ..EXPERIMENT/ SOLID/ LIQUID/
ROTATING CRYSTAL SPECTROMETER/ DEBYE-WALLER FACTOR/ MEA
N SQUARE DISPLACEMENT ..170DK-450DK
- 75-DO-01 DOOSE, C./ HANNING, H./ STOCKMEYER, R.
A LARGE NEUTRON TIME-OF-FLIGHT SPECTROMETER WITH AIR PA
D SUPPORTS
KERATECHNIK, V.12, P.540-P.545 (1975)
INSTRUMENTS-AND-METHODS ..AIR PAD SUPPORT SYSTEM/ TOF SY
STEM
- 75-DU-01 DUBLON, G./ SHAKED, H.
NEUTRON DIFFRACTION OF ALIGNED POWDER. SPIN ROTATION AN
D TRANSVERSE SUSCEPTIBILITY
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.149-P.155 (1975)
(HO-TB).FE2 ..NEUTRON DIFFRACTION
- 75-EA-01 EAGEN, C.F./ WERNER, S.A./ SAILLANT, R.B.
AMPLITUDE AND NATURE OF THE CHARGE-DENSITY-WAVE DISPLAC
EMENTS IN K2.PT.(C.N)4.BRO.3*3.2(D2,O) (KCP) AT LOW TEM
PERATURES
PHYS. REV. B, V.12, P.2036-P.2041 (1975)
KCP ..EXPERIMENT/ DIFFRACTION/ DEUTERATED KCP/ CHARGE-DE
NSITY-WAVE IN ELECTRON GAS
- 75-EG-01 EGARTER, T.P.
FREQUENCY SPECTRUM OF THE MIXED DIATOMIC CHAIN A(X)B(1-
X)C
SOLID STATE COMMUN., V.16, P.705-P.707 (1975)
THEORY-OF-SOLIDS ..EXACT FORMALISM/ PHONON FREQUENCY/ M
IXED CHAIN
- 75-EL-01 ELLIOTT, R.J./ KLEPPMANN, W.G.
NEUTRON SCATTERING BY ELECTRONS IN A MAGNETIC FIELD
J. PHYS., C, LONDON, V.8, P.2737 (1975)
NEUTRON-SCATTERING-IN-SOLIDS/ MAGNETIC-SCATTERING ..THE
ORY ..DIAMAGNETIC SCATTERING FROM CONDUCTION ELECTRON/

- WIGNER LATTICE IN STRONG MAGNETIC FIELD
- 75-EN-01 ENDOH, Y./ SHIRANE, G./ SKALYO-JR, J.
LATTICE DYNAMICS OF SOLID NEON AT 6.5 AND 23.7K
PHYS. REV. B, V.11, P.1681 (1975)
NE ..PHONON DISPERSION/ SOLID NE
- 75-FA-01 FARR, M.K./ TRAYLOR, J.G./ SINHA, S.K.
LATTICE DYNAMICS OF GA,SB
PHYS. REV. B, V.11, P.1587 (1975)
GA,SB ..LATTICE DYNAMICS/ COHERENT INELASTIC SCATTERING
- 75-FE-01 FELDMANN, K./ HENNIG, K./ MATZ, W./ MUELLER, M./ S
CHREIBER, J./
NEUTRON SCATTERING INVESTIGATIONS ON FE-MN-NI(BE) ALLOY
S
JINR-E14-9206 (1975)
FE-MN-NI ..EXPERIMENT/ BE IMPURITY/ LOCAL MODE/ MAGNON
MODE
- 75-FI-01 FIELEK, B.L.
THE PHONON DISPERSION CURVES OF COPPER
J. PHYS., F, LONDON, V.5, P.1451-P.1454 (1975)
CU ..THEORY/ PHONON DISPERSION/ SCREENED SHELL MODEL
- 75-FI-02 FIELEK, B.L.
LATTICE DYNAMICS OF NOBLE AND TRANSITION METALS
J. PHYS., F, LONDON, V.5, P.17-P.26 (1975)
CU/ NI ..THEORY/ PHONON DISPERSION/ METAL/ MODEL CALCUL
ATION
- 75-FI-03 FINKMAN, E./ TAUC, J./ KERSHAW, R./ WOLD, A.
LATTICE DYNAMICS OF TETRAHEDRALLY BONDED SEMICONDUCTORS
CONTAINING ORDERED VACANT SITES
PHYS. REV. B, V.11, P.3785-P.3794 (1975)
IN2,TE3/ GA2,SE3/ GA2,S3 ..INFRARED, RAMAN SPECTRA/ DEF
ECT STRUCTURE/ DISPERSION CURVES
- 75-FR-01 FRANCHETTI, S.
RADIAL DISTRIBUTION FUNCTIONS IN SOLID AND LIQUID ARGON
NUOVO CIM., B, V.26, P.507-P.521 (1975)
AR ..THEORY/ DISPERSION/ RADIAL DISTRIBUTION
- 75-FR-02 FREDRIKZE, H./ VAN-TRICHT, J.B.
RESOLUTION EFFECTS IN NEUTRON DIFFRACTION EXPERIMENTS O
N FLUIDS AND AMORPHOUS SYSTEMS
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.295-P.306 (1975)
INSTRUMENTS-AND-METHODS ..NEUTRON DIFFRACTION/ LIQUIDS/
AMORPHOUS SYSTEMS
- 75-FR-03 FREY, F./ PRANDL, W.
PRINCIPLES AND OPERATION OF A NEUTRON DIFFRACTOMETER US
ING A FOCUSING LAMELLAR TYPE OF MONOCHROMATOR
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.542-P.556 (1975)
INSTRUMENTS-AND-METHODS ..LAMELLAR MONOCHROMATOR
- 75-FU-01 FUESS, H./ FUNKE, K./ KALUS, J.
DIFFUSE NEUTRON SCATTERING FROM BETA- AND ALPHA-AG.I
PHYS. STATUS SOLIDI A, V.32, P.101-P.107 (1975)
AG.I ..EXPERIMENT/ NEUTRON DIFFUSE SCATTERING/ DISORDER
SCATTERING
- 75-FU-02 FUJII, Y./ SHIRANE, G./ YAMADA, Y.
STUDY OF THE 123-K PHASE TRANSITION OF MAGNETITE BY CRI
TICAL NEUTRON SCATTERING
PHYS. REV. B, V.11, P.2036-P.2041 (1975)
MAGNETITE/ PHASE-TRANSITION ..EXPERIMENT/ 123OK TRANSIT
ION/ CRITICAL SCATTERING/ VERWEY ORDERING
- 75-GA-01 GARG, P.K./ GUPTA, N.P.
LATTICE DYNAMICS OF MOLECULAR SOLIDS BY A PHENOMENOLOGI
CAL MODEL
ANN. PHYS., N.Y., V.91, P.375-P.385 (1975)
NE/ AR/ KR/ Xe ..LATTICE DYNAMICS/ ANHARMONICITY/ CENTR
AL FORCE MODEL/ DISPERSION RELATION
- 75-GO-01 GOEL, C.M./ PANDEY, B.P./ DAYAL, B.
PHONON DISPERSION IN SODIUM AND POTASSIUM
PHYS. STATUS SOLIDI B, V.69, P.589-P.593 (1975)
NA/ K ..THEORY/ PHONON DISPERSION/ METAL/ MODIFIED SHAR
MA-JOSHI MODEL
- 75-GO-02 GOPALARAO, R.V./ MURTHY, A.K.
STRUCTURE OF LIQUID NOBLE METALS
PHYS. LETT., A, V.51, P.3 (1975)
COPPER/ GOLD/ SILVER ..LIQUID NOBLE METAL ..STRUCTURE F
ACTOR
- 75-GR-01 GROUT, P.J./ LEECH, J.W./ ENGLISH, P.S.
THE SYMMETRY PROPERTIES OF THE NORMAL MODES OF VIBRATIO
N OF CRYSTALLINE CARBON DISULPHIDE AND CHLORINE
J. PHYS., C, LONDON, V.8, P.1620 (1975)
C.S2/ CL ..THEORY/ LATTICE DYNAMICS/ SOLID
- 75-GR-02 GROUT, P.J./ LEECH, J.W.
THE LATTICE DYNAMICS OF CRYSTALLINE DEUTERIUM CHLORIDE
(GROUP THEORETICAL ANALYSIS)
J. PHYS., C, LONDON, V.8, P.932-P.942 (1975)
H.CL ..THEORY/ GROUP THEORETICAL/ LATTICE DYNAMICS
- 75-GU-01 GUPTA, N.P./ GARG, P.K.

- PHONON DISPERSION AND OPERATIVE INTERACTION SYSTEM IN SOLID XENON
SOLID STATE COMMUN., V.16, P.607-P.610 (1975)
XENON THEORY/ PHONON DISPERSION/ QUASIHARMONIC CENTRAL FORCE RIGID-ATOM MODEL
- 75-GU-02 GUPTA, N.P./ GARG, P.K.
DISPERSION OF PHONONS IN MOLECULAR SOLIDS BY AN ANHARMONIC RIGID-ATOM-MODEL
ANN. PHYS., N.Y., V.95, P.281 (1975)
NEUTRON/ XENON/ THEORY/ DISPERSION RELATION/ SOLID/ ANHARMONICITY
- 75-GO-01 GOETZE, W./ LUECKE, M.
DYNAMICAL CURRENT CORRELATION FUNCTIONS OF SIMPLE CLASSICAL LIQUIDS FOR INTERMEDIATE WAVE NUMBERS
PHYS. REV. A, V.11, P.2173-P.2190 (1975)
THEORY-OF-FLUIDS/ AR/ CLASSICAL FLUID/ EXCITATION SPECTRUM
- 75-HA-01 HANSEN, J.P./ McDONALD, I.R.
STATISTICAL MECHANICS OF DENSE IONIZED MATTER. IV. DENSITY AND CHARGE FLUCTUATIONS IN A SIMPLE MOLTEN SALT
PHYS. REV. A, V.11, P.2111-P.2123 (1975)
THEORY-OF-FLUIDS/ MOLECULAR DYNAMICS/ MOLTEN SALT/ STRUCTURE FACTOR/ SCATTERING FUNCTION
- 75-HA-02 HARADA, J./ FUJII, Y./ HOSHINO, S.
PHONON DISPERSION IN SOLID D₂O
SOLID STATE COMMUN., V.16, P.1365 (1975)
H₂O/ EXPERIMENT/ SOLID/ DISPERSION RELATION/ BORN-VON KARMAN MODEL/ TRIPLE-AXIS-SPECTROMETER
- 75-HA-03 HAYTER, J.B.
NEW APPLICATIONS OF THE NEUTRON'S MAGNETISM
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.137-P.148 (1975)
INSTRUMENTS-AND-METHODS/ POLARIZATION ANALYSIS
- 75-HE-01 HEIDEMANN, A.
HYPERFINE INTERACTION IN AMORPHOUS FERROMAGNETIC COBALT-PHOSPHOROUS-ALLOYS MEASURED BY INELASTIC SCATTERING OF NEUTRON
Z. PHYS. B, V.20, P.385-P.389 (1975)
CO, P/ MAGNETIC-SCATTERING/ EXPERIMENT/ MAGNETIC HYPERFINE SPLITTING
- 75-HE-02 HEIDEMANN, A./ RICHTER, D./ BUSCHOW, K.H.J.
INVESTIGATION OF THE HYPERFINE FIELDS IN THE COMPOUNDS LA₂CO₃, LA₂CO₅, Y₂CO₅ AND TH₂CO₅ BY MEANS OF INELASTIC NEUTRON SCATTERING
Z. PHYS. B, V.22, P.367-P.372 (1975)

- LA₂CO₃/ LA₂CO₅/ Y₂CO₅/ TH₂CO₅/ MAGNETIC-SCATTERING/ EXPERIMENT/ HYPERFINE FIELD/ 10K
- 75-HE-03 HEIMENDAH, L.V./ THORPE, M.F.
PHONONS IN METALLIC GLASSES
J. PHYS., F, LONDON, V.5L, P.87-P.91 (1975)
THEORY-OF-SOLIDS/ PHONON SPECTRA/ METALLIC GLASSES
- 75-HE-04 HEINONEN, R./ HILSMAEKI, P./ PIIRTO, A./ POEYRY, H./ TIITTA, A.
A TIME-FOCUSING FOURIER CHOPPER TIME-OF-FLIGHT DIFFRACTOMETER FOR LARGE SCATTERING ANGLES
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.347-P.359 (1975)
INSTRUMENTS-AND-METHODS/ FOURIER CHOPPER/ FINLAND
- 75-HE-05 HENNION, M./ HENNION, B./ CASTETS, A./ TOCCHETTI, D.
STIFFNESS CONSTANT MEASUREMENT IN NI-Fe ALLOYS BY NEUTRON INELASTIC SCATTERING
SOLID STATE COMMUN., V.17, P.899-P.902 (1975)
NI-Fe/ MAGNETIC-SCATTERING/ STIFFNESS CONSTANT/ SPIN WAVE
- 75-HE-06 HEWAT, A.H./ BAILEY, I.
A HIGH RESOLUTION, HIGH EFFICIENCY NEUTRON POWDER DIFFRACTOMETER. TEST REFINEMENT OF AL₂O₃
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.250-P.260 (1975)
INSTRUMENT-AND-METHODS/ AL₂O₃/ GUIDE TUBE/ ILL, GRENoble
- 75-HO-01 HOHLWEIN, D.
FILM METHODS IN NEUTRON DIFFRACTION
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.410-P.429 (1975)
INSTRUMENTS-AND-METHODS/ NEUTRON FILM MEASUREMENT/ ILL, GRENoble
- 75-HO-02 HORIGUCHI, T./ MORITA, T.
NOTE ON THE LATTICE GREEN'S FUNCTION FOR THE SIMPLE CUBIC LATTICE
J. PHYS., C, LONDON, V.8L, P.232 (1975)
THEORY-OF-SOLIDS/ THEORY/ SOLID/ GREEN'S FUNCTION/ CUBIC LATTICE
- 75-HU-01 HULER, E./ ZUNGER, A.
LATTICE DYNAMICS OF SOLID ALPHA- AND GAMMA-N2 CRYSTALS AT VARIOUS PRESSURES
PHYS. REV. B, V.12, P.5878-P.5889 (1975)
N2/ DISPERSION/ PHONON DENSITY OF STATE/ ALPHA AND GAMMA CRYSTAL

- 75-HU-02 HUTCHINGS, M.T./ SCHERM, R./ SMITH, S.H./ SMITH, S.
R.P.
INELASTIC NEUTRON SCATTERING STUDIES OF THE JAHN-TELLER
PHASE TRANSITION IN BaV_2O_4
J. PHYS., C, LONDON, V. 8L, P. 393-P. 396 (1975)
75-V-04 J. INELASTIC NEUTRON SCATTERING/ JAHN-TELLER PHA
SE. TRANSITION
- 75-IB-01 IBEL, K./ STUHRMANN, H.B.
COMPRISON OF NEUTRON AND X-RAY SCATTERING OF DILUTE MYO
GLOBIN SOLUTIONS
J. MOL. BIOL., V. 93, P. 255-P. 265 (1975)
MYOGLOBIN . . SMALL-ANGLE SCATTERING/ STRUCTURE OF PROTEI
N
- 75-IB-02 IBEL, K.
NEUTRON SMALL ANGLE SCATTERING
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P. 14-P. 88 (1975)
REVIEW-ARTICLES/ INSTRUMENTS-AND-METHODS . . SMALL ANGLE
SCATTERING/ ILL. GRENoble
- 75-II-01 IIZUMI, M./ LYNN, L.W./ OHSAWA, A./ ITO, H.
SPIN-WAVE AND CRITICAL SCATTERING OF NEUTRONS FROM COBA
LT DISULFIDE
BNL-20600 (1975)
CO. S2/ MAGNETIC-SCATTERING . . EXPERIMENT/ MAGNON DISPERS
ION
- 75-IS-01 ISHIKAWA, Y./ KOHGI, M./ NODA, Y.
NEUTRON SCATTERING FROM ANTIFERROMAGNETIC $\text{GAMMA-Fe}_2\text{O}_3$
- NiO (0,15)- CrO (0,15) ALLOY (NON MAGNETIC STAINLESS STEEL)
J. PHYS. SOC. JAP., V. 39, P. 675-P. 683 (1975)
FE-NI-CR/ MAGNETIC-SCATTERING . . EXPERIMENT/ CANTED SPIN
STRUCTURE
- 75-IS-02 ISHIKAWA, Y./ WATANABE, N./ SEKINE, H./ TAJIMA, K.
/ TAKEI, K.
EPITHERMAL NEUTRON DIFFRACTION FROM GD COMPOUNDS
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P. 360-P. 375 (1975)
INSTRUMENTS-AND-METHODS . . EPITHERMAL NEUTRON DIFFRACTIO
N/ GD COMPOUNDS
- 75-JA-01 JAIN, S.K./ SRIVASTAVA, G.P.
PHONON DISPERSION CURVES FOR RUBIDIUM FLUORIDE
J. PHYS. SOC. JAP., V. 38, P. 1785-P. 1785 (1975)
RB.F . . THEORY/ PHONON DISPERSION
- 75-JH-01 JHON, M.S./ FORSTER, D.
A KINETIC THEORY OF CLASSICAL SIMPLE LIQUIDS
- PHYS. REV. A, V. 12, P. 254 (1975)
THEORY-OF-FLUIDS/ AR . . THEORY/ DYNAMICAL STRUCTURE FACT
OR
- 75-JI-01 JINDAL, V.K.
ELECTRON CORRELATION EFFECTS ON THE LATTICE DYNAMICS OF
SODIUM AND POTASSIUM
CAN. J. PHYS., V. 53, P. 1507 (1975)
NA/ K . . THEORY/ SOLID/ DISPERSION RELATION/ LATTICE DYN
AMICS . . OPW METHOD/ DIELECTRIC FUNCTION
- 75-JU-01 JUST, W./ SCHMATZ, W./ BAUER, G.
NEW SPECTROMETERS FOR DIFFUSE SCATTERING OF NEUTRONS
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P. 588-P. 597 (1975)
INSTRUMENTS-AND-METHODS . . DIFFUSE SCATTERING
- 75-KA-01 KAHN, R.
INELASTIC NEUTRON SCATTERING BY SOLID METHANE AT LOW TE
MPERATURE
PHYS. LETT., A, V. 54A, P. 285-P. 287 (1975)
C.H4 . . INELASTIC NEUTRON SCATTERING/ LOW TEMPERATURE/ E
XPERIMENT
- 75-KA-02 KAMITAKAHARA, W.A./ ROTTER, C.A.
PHASE TRANSITION IN RB_2CaF_3 II: NEUTRON SCATTERING
SOLID STATE COMMUN., V. 17, P. 1350 (1975)
 RB_2CaF_3 . . EXPERIMENT/ SOLID/ MONOCHROMETER/ DISPERSION
RELATION/ FREQUENCY DISTRIBUTION . . PHASE TRANSITION
- 75-KA-03 KANDA, K./ KADOTANI, K./ AIZAWA, O.
EFFECT OF TEMPERATURE ON TOTAL CROSS SECTION OF BERYLLI
UM FOR THERMAL NEUTRONS
J. NUCL. SCI. TECHNOL., TOKYO, V. 12, P. 601 (1975)
BE . . TOTAL CROSS SECTION/ EXPERIMENT
- 75-KA-04 KAPPUS, W.
LATTICE DYNAMICS OF SAPPHIRE (CORUNDUM)
Z. PHYS. B, V. 21, P. 325-P. 331 (1975)
AL2O3 . . LATTICE DYNAMICS/ RIGID ION/ THEORY
- 75-KA-05 KAPPUS, W.
LATTICE DYNAMICS OF SAPPHIRE (CORUNDUM). PART 2. CALCUL
ATIONS OF PHONON DISPERSION
Z. PHYS. B, V. 21, P. 325-P. 331 (1975)
CORUNDUM . . CALCULATION/ PHONON DISPERSION/ RIGID ION MO
DEL/ SAPPHIRE
- 75-KJ-01 KJEMS, J.K./ DOLLING, G.
CRYSTAL DYNAMICS OF NITROGEN. THE CUBIC ALPHA-PHASE
PHYS. REV. B, V. 11, P. 1639 (1975)
N . . INELASTIC NEUTRON SCATTERING

- 75-KJ-02 KJEMS, J.K./ ALS-NIELSEN, J./ FOGEDBY, H.
SPIN-WAVE DISPERSION IN CO₂CL₂(D₂O), A SYSTEM OF WEA
KLY COUPLED ISING CHAINS
PHYS. REV. B, V.14, P.5190-P.5197 (1975)
CO₂CL₂(H₂O)/ MAGNETIC-SCATTERING ..EXPERIMENT/ SPIN-
WAVE DISPERSION/ PSEUDO ONE DIMENSIONAL MAGNETIC MATERI
AL
- 75-KO-01 KOMURA, S./ LIPMANN, G./ SCHMATZ, W.
MAGNETIC SMALL ANGLE SCATTERING FROM AN FE-NI INVAR ALL
OY
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.89 (1975)
FE-NI ..EXPERIMENT/ SMALL ANGLE SCATT.
- 75-KO-02 KOZLOV, Z.A./ OSTANEVICH, Y.M./ CSER, L.
A REMARK ABOUT A SMALL ANGLE SCATTERING OF NEUTRONS BY
THE TIME-OF-FLIGHT METHOD
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.101-P.102 (1975)
INSTRUMENTS-AND-METHODS ..SMALL ANGLE SCATTERING
- 75-KU-01 KUMAR, S./ TOLPADI, S.
MODEL FOR LATTICE DYNAMICS IN METALS
SOLID STATE COMMUN., V.16, P.265 (1975)
COPPER/ SODIUM ..DISPERSION RELATION
- 75-KU-02 KUMAR, S./ TOLPADI, S.
MODEL FOR LATTICE DYNAMICS OF FCC METALS
PHYS. LETT., A, V.53, P.303-P.304 (1975)
CU ..MODEL CALCULATION/ PHONON DISPERSION
- 75-KU-03 KUNC, K./ BLAKANSKI, M./ NUSIMOVICI, M.A.
LATTICE DYNAMICS OF SEVERAL A(N)B(8-N) COMPOUNDS HAVING
THE ZINCBLLENDE STRUCTURE (3), TRENDS IN MODEL PARAMETE
RS
PHYS. STATUS SOLIDI B, V.72, P.249-P.254 (1975)
ZN,S/ ZN,SE ..THEORY/ PARAMETER OF DEFORMATION-DIPOL MO
DEL
- 75-KU-04 KUNC, K./ BALKANSKI, M./ NUSIMOVICI, M.A.
LATTICE DYNAMICS OF SEVERAL A(N)B(8-N) COMPOUNDS HAVING
THE ZINCBLLENDE STRUCTURE (2), NUMERICAL CALCULATION
PHYS. STATUS SOLIDI B, V.72, P.229 (1975)
ZN,S/ ZN,SE/ GA,P/ GA,AS/ IN,SB/ SI,C/ CU,I ..PH
ONON DISPERSION/ DENSITY OF PHONON STATE/ THEORY
- 75-KU-05 KUNC, K./ BALKANSKI, M./ NUSIMOVICI, M.A.
LATTICE DYNAMICS OF SEVERAL (A)N,(8-N) COMPOUNDS HAV
ING THE ZINC-BLENDE STRUCTURE, I, DEFORMABLE-BOND APPRO
XIMATION

- PHYS. STATUS SOLIDI B, V.71, P.341 (1975)
THEORY-OF-SOLIDS/ ZN,S/ SI,C/ AL,SB/ GA,AS/ IN,S
B/ ZN,SE/ ZN,TE/ CO,TE/ CU,I/ CU,BR/ CU,CL ..THEORY/ LA
TTICE DYNAMICS ..ZINC BLENDE STRUCTURE/ DEFORMABLE BOND
APPROXIMATION
- 75-LA-01 LABUSCH, R.
SCATTERING OF COLD NEUTRONS FROM AN IMPERFECT FLUX LINE
LATTICE
PHYS. STATUS SOLIDI B, V.69, P.539-P.544 (1975)
SCATTERING-THEORIES/ SUPERCONDUCTOR ..THEORY
- 75-LE-01 LEBECH, B./ NIELSEN, M.
INTENSITY AND RESOLUTION OF A GENERAL SCAN IN RECIPROCA
L SPACE
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.466-P.486 (1975)
INSTRUMENTS-AND-METHODS ..SCANNING IN RECIPROCAL SPACE
- 75-LE-02 LEFEBRE, J./ MORE, M./ FOURET, R./ HENNION, B./ CU
RRAT, R.
LATTICE VIBRATIONS IN DEUTERATED UREA
J. PHYS., C, LONDON, V.8, P.2011 (1975)
UREA ..EXPERIMENT/ SOLID/ COHERENT SCATTERING/ DISPERSI
ON RELATION/ DEUTERATED UREA
- 75-LI-01 LINDGARD, P.A./ BIRGENEAU, R.J./ ALS-NIELSEN, J./
GUGGENHEIM, H.J.
SPIN-WAVE DISPERSION AND SUBLATTICE MAGNETIZATION IN NI
..CL2
J. PHYS., C, LONDON, V.8, P.1059-P.1069 (1975)
NI,CL2/ MAGNETIC-SCATTERING ..EXPERIMENT/ MAGNON
- 75-LO-01 LOVESEY, S.W.
THE DYNAMIC PROPERTIES OF LIQUID HE3
J. PHYS., C, LONDON, V.8, P.1649 (1975)
HE ..THEORY/ LIQUID/ STRUCTURE FACTOR/ SCATTERING LAW/
CORRELATION FUNCTION ..ISOTHERMAL SUSCEPTIBILITY/ LENNA
RD-JONES POTENTIAL
- 75-LU-01 LUTY, T./ PAWLEY, G.S.
A SHELL MODEL FOR MOLECULAR CRYSTALS, ORTHORHOMBIL SULP
HUR
PHYS. STATUS SOLIDI B, V.69, P.551-P.555 (1975)
S ..THEORY/ PHONON DISPERSION/ SHELL MODEL
- 75-LY-01 LYNN, J.W./ IIZUMI, M./ SHIRANE, G./ WERNER, S.A./
SAILLANT, R.B.
NEUTRON-SCATTERING..STUDY OF THE ONE-DIMENSIONAL CONDUCT
OR K2,PT,(CN)4,BRO,3,(3.2)D20,(KCP)
PHYS. REV. B, V.12, P.1154 (1975)
KCP ..EXPERIMENT/ SOLID/ KOHN EFFECT/ DISPERSION RELATI

- ON .,TRIPLE AXIS TECHNIQUE/ ONE-DIMENSIONAL CONDUCTOR/
INTERCHAIN CORRELATION/ TEMPERATURE DEPENDENCE
- 75-MA-01 MALISZEWSKI, E./ SOSNOWSKI, J./ BEDNARSKI, S./ CZA
CHOR, A./ HOLAS, A.
LATTICE DYNAMICS OF PD(1-X)-FE(X) SYSTEM
J. PHYS., C, LONDON, V.5, P.1455-P.1465 (1975)
PD-FE .,EXPERIMENT/ PHONON DISPERSION
- 75-MA-02 MARTIN, J.W.
MANY-BODY FORCES IN METALS AND THE BRUGGER ELASTIC CON-
STANTS
J. PHYS., C, LONDON, V.8, P.2837-P.2858 (1975)
THEORY-OF-SOLIDS .,ELASTIC CONSTANT
- 75-MA-03 MARTIN, J.W.
MANY-BODY FORCES IN SOLIDS AND BRUGGER ELASTIC CONSTANT
S. II, INNER ELASTIC CONSTANT
J. PHYS., C, LONDON, V.8, P.2858-P.2868 (1975)
THEORY-OF-SOLIDS .,INNER ELASTIC CONSTANTS/ NONCENTROSY-
MMETRIC CRYSTALS
- 75-MA-04 MARTIN, J.W.
MANY-BODY FORCES IN SOLIDS, ELASTIC CONSTANTS OF DIAMON-
D-TYPE CRYSTALS
J. PHYS., C, LONDON, V.8, P.2869-P.2888 (1975)
THEORY-OF-SOLIDS .,ELASTIC CONSTANT/ DIAMOND STRUCTURE
- 75-MA-05 MAURYA, J.R./ SRIVASTAVA, R.S.
CRYSTAL DYNAMICS OF THE HEXAGONAL METALS
J. PHYS., F, LONDON, V.5, P.2256-P.2261 (1975)
BE/ MG/ ZN .,THEORY/ PHONON DISPERSION/ HCP METAL/ TOYA
THEORY
- 75-MC-01 MCKENZIE, D.R.
NEUTRON AND RAMAN STUDY OF THE LATTICE DYNAMICS OF DEUT-
ERATED THIOUREA
J. PHYS., C, LONDON, V.8, P.2003 (1975)
THIOUREA .,SOLID/ EXPERIMENT/ TRIPLE-AXIS-SPECTROMETER/
DISPERSION RELATION/ DEUTERATED THIOUREA
- 75-MC-02 MCKENZIE, D.R.
THE ANTIFEROELECTRIC TRANSITION IN THIOUREA STUDIED BY
THERMAL NEUTRON SCATTERING
J. PHYS., C, LONDON, V.8, P.1607 (1975)
THIOUREA .,EXPERIMENT/ TRIPLE-AXIS-SPECTROMETER/ SOLID/
DEUTERATED THIOUREA .,ANTIFEROELECTRIC TRANSITION/ ROTA-
TIONAL LATTICE MODE
- 75-MC-03 MCWHAN, D.B./ BIRGENEAU, R.J./ BONNER, W.A./ TAUB,
H./ AXE, J.D.
NEUTRON SCATTERING STUDY AT HIGH PRESSURE OF THE STRUCT

- URAL PHASE TRANSITION IN PARATELLURITE
J. PHYS., C, LONDON, V.8L, P.81-P.85 (1975)
TE, O2 .,PHONON DISPERSION/ PRESSURE EFFECT/ PHASE TRANS-
ITION
- 75-MC-04 MCWHAN, D.B./ SHAPIRO, S.M./ REMEIK, J.P./ SHIRAN
E, G.
NEUTRON-SCATTERING STUDIES ON BETA-ALUMINA
J. PHYS., C, LONDON, V.8L, P.487 (1975)
ALUMINA .,EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ ELASTIC
CONSTANT/ DISPERSION RELATION .,IMPURITY
- 75-ME-01 MEIER, P.F./ BECK, H./ BECK, R.
PHONON DISPERSION IN LIQUID HE II
PHYS. REV. B, V.12, P.3745 (1975)
HE .,THEORY/ LIQUID/ DISPERSION RELATION
- 75-ME-02 MEN, A.N./ LADYEHINSKII, P.B.
PHONON SPECTRUM OF ONE-DIMENSIONAL TRIATOMIC CRYSTALS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.17 (V
.17), P.3678-P.3680 (P.2391-P.2392) (1975 (1975))
THEORY-OF-SOLIDS .,PHONON SPECTRUM/ ONE-DIMENSIONAL/ TR-
IATOMIC
- 75-ME-03 MENZINGER, F./ SACCHETTI, F./ SPINELLI, M.C.
CONCENTRATION DEPENDENCE OF THE PHONON DISPERSION RELAT-
IONS IN SUBSTITUTIONAL FCC CO-NI ALLOY
PHYS. REV. B, V.12, P.2253-P.2259 (1975)
CO-NI .,DISPERSION RELATION/ CO-NI ALLOY/ TRIPLE-AXIS S-
PECTROSCOPY/ EXPERIMENT
- 75-MI-01 MILLER, A.P.
REAL AND VIRTUAL KOHN EFFECT IN PALLADIUM BY INELASTIC
NEUTRON SCATTERING
CAN. J. PHYS., V.53, P.2491-P.2501 (1975)
PD .,EXPERIMENT/ PHONON DISPERSION/ KOHN ANOMALY
- 75-MI-02 MIYAZAKI, Y./ ITO, M.
NEUTRON INELASTIC SCATTERING SPECTRA AND LATTICE VIBRA-
TIONS OF 9,10-ANTHRAQUINONE CRYSTAL
CHEM. PHYS. LETT., V.33, P.121-P.125 (1975)
ANTHRAQUINONE .,EXPERIMENT/ NEUTRON SCATTERING SPECTRA/
PHONON DENSITY CALCULATION
- 75-MO-01 MOELLER, H.B./ RISTE, T.
NEUTRON-SCATTERING STUDY OF TRANSITIONS TO CONVECTION A-
ND TURBULENCE IN NEMATIC PARA-AZOXYANISOLE
PHYS. REV. LETT., V.34, P.996-P.999 (1975)
P-AZOXYANISOLE .,EXPERIMENT/ NEMATIC LIQUID/ ONSET OF C-
ONVECTION AND TURBULENCE
- 75-MO-02 MOOK, H.A./ WAKABAYASHI, N./ PAN, D.

MAGNETIC EXCITATIONS IN THE AMORPHOUS FERROMAGNET CO₄P
PHYS. REV. LETT., V.34, P.1029-P.1033 (1975)
CO₄P/ MAGNETIC-SCATTERING ..EXPERIMENT/ MAGNON DISPERS
ION

75-MO-03 MORI, M./ YAMADA, Y./ SHIRANE, G.
SOFT PHONON MODE AT THE MARTENSITIC PHASE TRANSFORMATIO
N OF AU,CU,ZN2
SOLID STATE COMMUN., V.17, P.127-P.130 (1975)
AU-CU-ZN/ PHASE-TRANSITION ..EXPERIMENT/ SOFT MODE/ AU.
CU,ZN2

75-NA-01 NAND, S./ TRIPATHI, B.B.,
LATTICE DYNAMICS OF GOLD: A PSEUDOPOTENTIAL APPROACH
PHYS. LETT., A, V.53, P.229 (1975)
AU ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATI
ON ..PSEUDOPOTENTIAL

75-NA-02 NAND, S./ TRIPATHI, B.B./ GUPTA, H.C.
LATTICE DYNAMICS OF LITHIUM: A PSEUDOPOTENTIAL APPROACH
PHYS. LETT., A, V.54, P.217-P.218 (1975)
LI ..THEORY/ MODEL POTENTIAL APPROACH

75-NE-01 NELIN, G./ SKOELD, K.
DIFFUSION OF HYDROGEN IN THE BETA-PHASE OF PD.H STUDIED
BY SMALL ENERGY TRANSFER NEUTRON SCATTERING
J. PHYS. CHEM. SOLIDS, V.36, P.1175 (1975)
PD-H ..EXPERIMENT/ QUASI-ELASTIC PEAK/ MULTIPLE SCATTER
ING/ CRYSTAL SPECTROMETER ..PHASE TRANSITION/ DIFFUSION
OF H

75-NI-01 NICKLOW, R.M./ COLTMAN, R.R./ YOUNG-JR, F.W./ WOOD
R.F.,
NEUTRON-INELASTIC MEASUREMENTS OF PHONON PERTURBATIONS
BY DEFECTS IN IRRADIATED COPPER
PHYS. REV. LETT., V.35, P.1444 (1975)
CU/ SCATTERING-BY-DEFECTS ..EXPERIMENT/ SOLID/ FREQUENC
Y DISTRIBUTION/ NEUTRON INELASTIC SCATTERING/ TRIPLE AX
IS SPECTROMETER ..DEFECTS/ FRENKEL PAIR/ PHONON SHIFT

75-OH-01 OHASHI, K./ OHASHI, Y./ AWANO, M.,
PHONON FREQUENCY SHIFTS AND WIDTHS IN DILUTE ALLOYS
J. PHYS. SOC. JAP., V.38, P.842-P.847 (1975)
THEORY-OF-SOLIDS/ CU-AU ..DILUTE ALLOY/ PHONON SHIFT AN
D WIDTH

75-OL-01 OLSSON, L.G./ LARSSON, K.E.
MOLECULAR MOTIONS IN LIQUID ETHANE STUDIED BY COLD NEUT
RON SCATTERING
PHYSICA, A, V.80, P.203-P.216 (1975)
ETHANE ..EXPERIMENT/ ROTATIONAL-DIFFUSIVE MOTION

75-PA-01 PAL, S.,
LATTICE-DYNAMICAL CALCULATIONS FOR NICKEL,
NUOVO CIM., B, V.30, P.299-P.312 (1975)
NI ..THEORY/ PHONON DISPERSION/ SPECTRUM/ DE-LAUNAY MOD
EL

75-PE-01 PEITZEL, J.,
SYMMETRY AND LATTICE-DYNAMIC ASPECT OF STRUCTURAL PHASE
TRANSITIONS IN (C.H₃N.H₃)₂.MN.CL₄ AND RELATED COMPOUN
DS
J. PHYS. CHEM. SOLIDS, V.36, P.1005 (1975)
(C.H₃N.H₃)₂.MN.CL₄ ..THEORY/ SOLID/ LATTICE DYNAMICS .
PHASE TRANSITION

75-PO-01 POPLAVNOI, A.S./ TYUTEREV, V.G.,
LATTICE DYNAMICS OF ZN.SI.P₂ IN A MODEL OF RIGID IONS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.17 (V
.17), P.1055-P.1060 (P.672-P.675) (1975 (1975))
ZN.SI.P₂ ..THEORY/ PHONON DISPERSION/ RIGID ION MODEL

75-PO-02 POPLAVNOI, A.S./ TYUTEREV, V.G.,
DYNAMICS OF THE CRYSTAL LATTICE OF CHALCOPYRITE IN THE
HARD ION MODEL
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.17 (V
.17), P.313-P.316 (P.189-P.190) (1975 (1975))
CU.FE.S₂ ..CALCULATION/ PHONON SPECTRUM/ HARD ION MODEL

75-PO-03 POSTON, T./ BUDGER, A.B.,
A GEOMETRICAL APPROACH TO CALCULATING THE ENERGY AND FR
EQUENCY SPECTRA OF CRYSTALS
J. COMPUTATIONAL PHYSICS, V.19, P.1-P.28 (1975)
THEORY-OF-SOLIDS ..THEORY/ FREQUENCY SPECTRUM

75-PO-04 POWELL, B.M./ MARTEL, P.,
THE LATTICE DYNAMICS OF TELLURIUM
J. PHYS. CHEM. SOLIDS, V.36, P.1287-P.1298 (1975)
TE ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FRE
QUENCY DISTRIBUTION/ DEBYE TEMPERATURE/ INTERATOMIC FORC
E CONSTANT ..SPECIFIC HEAT

75-PO-05 POWLES, J.G.,
THE SLOW-NEUTRON SCATTERING LAW FOR LIQUID NITROGEN
J. PHYS., C, LONDON, V.8L, P.229-P.231 (1975)
N ..SCATTERING LAW/ LIQUID

75-PR-01 PRASK, H.J./ TREVINO, S.F./ KUSH, J.J.,
QUASIELASTIC NEUTRON SCATTERING STUDY OF AMMONIUM-ION R
EORIENTATIONS IN AMMONIUM PERCHLORATE
J. CHEM. PHYS., V.62, P.4156-P.4160 (1975)
AMMONIUM PERCHLORATE ..EXPERIMENT/ QUASIELASTIC/ 66-150
PK/ ROTATIONAL MOTION OF N.H₄ ION

- 75-PR-02 PRICE, D.L./ COPLEY, J.R.D.
DENSITY FLUCTUATIONS IN MOLTEN SALTS. I. INELASTIC NEUTRON SCATTERING FROM LIQUID Rb.BR
PHYS. REV. A, V.11, P.2124-P.2133 (1975)
RB.BR ..EXPERIMENT/ COMPUTER SIMULATION/ LIQUID/ 986DK
- 75-RE-01 REICHARDT, W./ WAGNER, V./ KRESS, W.
LATTICE DYNAMICS OF NI.O
J. PHYS., C, LONDON, V.8, P.3955 (1975)
NI.O ..EXPERIMENT/ SOLID/ DISPERSION RELATION/ NEUTRON INELASTIC SCATTERING/ TRIPLE AXIS SPECTROMETER/ LATTICE DYNAMICS ..SHELL MODEL/ PHONON SHIFT
- 75-RE-02 REISSLAND, J.A./ ESE, O.
THE LATTICE DYNAMICS OF METALS USING THE SHAW MODEL POTENTIAL
J. PHYS., F, LONDON, V.5, P.110-P.120 (1975)
AL/ NA/ MG/ IN/ TL ..THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ MODEL POTENTIAL CALCULATION
- 75-RI-01 RIEDER, K.H./ MIGONI, R.
LATTICE DYNAMICS OF STRONTIUM OXIDE
PHYS. REV. B, V.12, P.3374 (1975)
SR.O ..EXPERIMENT/ SOLID/ INELASTIC NEUTRON SCATTERING/ DISPERSION RELATION/ LATTICE DYNAMICS/ DEBYE TEMPERATURE ..SHELL MODEL
- 75-RO-01 ROSENGREN, A./ JOHANSSON, B.
LATTICE DYNAMICS OF RUBIDIUM
J. PHYS., F, LONDON, V.5, P.629-P.636 (1975)
RB ..THEORY/ PHONON DISPERSION AND SPECTRA/ PSEUDOPOTENTIAL CALCULATION
- 75-RO-02 ROULT, G./ BUEVOZ, J.L./ ALDEBERT, P.
A TIME OF FLIGHT SPECTROMETER FOR NEUTRON DIFFRACTION UNDER HIGH PRESSURE OR AT HIGH TEMPERATURE
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.376-P.379 (1975)
INSTRUMENTS-AND-METHODS ..HIGH PRESSURE, T-O-F DIFFRACTION/ GRENABLE
- 75-RO-03 ROWE, J.M./ RUSH, J.J./ VAGELATOS, N./ PRICE, D.L./ HINKS, D.G./
CRYSTAL DYNAMICS OF K.C.N AND NA.C.N IN THE DISORDERED CUBIC PHASE
J. CHEM. PHYS., V.62, P.4551-P.4554 (1975)
K.C.N/ NA.C.N ..EXPERIMENT/ PHONON DISPERSION
- 75-RO-04 ROWE, J.M./ VAGELATOS, N./ RUSH, J.J.
ACOUSTIC MODE OF THE PHONON DISPERSION RELATION OF NB.O X ALLOYS

- PHYS. REV. B, V.12, P.2959 (1975)
NB/ NB-H ..EXPERIMENT/SOLID/ DISPERSION RELATION ..ALLOY/ TRIPLE-AXIS-SPECTROMETER
- 75-SA-01 SACCHETTI, F./ SPINELLI, M.C.
PHONON CALCULATION IN NB-TA AND PD-PT ALLOYS IN THE COHERENT POTENTIAL APPROXIMATION
PHYS. STATUS SOLIDI B, V.72, P.653-P.659 (1975)
TA-NB / PD-PT ..PHONON DISPERSION/ THEORY/ COHERENT POTENTIAL
- 75-SA-02 SAHOO, D./ VENKATARAMAN, G.
LATTICE DYNAMICS OF A CRYSTAL WITH A MOLECULAR IMPURITY
RRC-5 (1975)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ MOLECULAR IMPURITY
- 75-SA-03 SAMUELSEN, E.J./ SEMMINGSEN, D.
THE PHASE TRANSITION OF TWO-DIMENSIONAL QUARIC ACID H₂SO₄ STUDIED BY NEUTRON SCATTERING
J. PHYS. CHEM. SOLIDS, V.38, P.1275-P.1283 (1975)
H₂SO₄ ..EXPERIMENT/ PHASE TRANSITION/ DIFFUSE SCATTERING
- 75-SC-01 SCHAEFER, O./ SEIFERT, R.
AN EXACTLY SOLVABLE MODEL FOR THE RESULTS OF SMALL-ANGLE SCATTERING OF NEUTRONS BY BLOCH WALLS IN BULK IRON SINGLE CRYSTALS
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.90-P.100 (1975)
INSTRUMENTS-AND-METHODS/ FE ..SMALL-ANGLE SCATTERING/ BLOCH WALL/ MAGNETIC SCATTERING
- 75-SC-02 SCHAEFER, O./ VORBRUGG, W.
POLARIZATION OF SLOW NEUTRONS BY CURVED GUIDE TUBES WITH MAGNETIZED MIRRORS AND THEIR APPLICATION TO NEUTRON SPECTROSCOPY
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.156-P.162 (1975)
INSTRUMENTS-AND-METHODS ..POLARIZED GUIDE TUBE
- 75-SC-03 SCHLENKER, M./ BARUCHEL, J.
NEUTRON DIFFRACTION TOPOGRAPHY, A NEW TECHNIQUE FOR THE INVESTIGATION OF CRYSTAL DEFECTS AND DOMAINS
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.487-P.507 (1975)
INSTRUMENTS-AND-METHODS ..NEUTRON TOPOGRAPHY
- 75-SC-04 SCHNEIDER, J.
EXPERIMENTAL TEST OF A METHOD ELIMINATING INELASTIC SCATTERING IN ELASTIC TIME-OF-FLIGHT DIFFRACTOMETRY
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,

- P.380-P.406 (1975)
INSTRUMENTS-AND-METHODS ..SEPARATION OF THERMAL DIFFUSE / MUENCHEN
- 75-SC-05 SCHOMMERS, W.
THE VELOCITY AUTOCORRELATION FUNCTION AND THE EFFECT OF THE LONG-RANGE INTERACTION IN LIQUID RUBIDIUM
SOLID STATE COMMUN., V.16, P.45 (1975)
RB ..THEORY/ LIQUID/ VELOCITY AUTOCORRELATION FUNCTION/ FREQUENCY DISTRIBUTION
- 75-SE-01 SEQUEIRA, A.
CHOICE OF SCANS AND OPTIMISATION OF INSTRUMENT PARAMETERS IN NEUTRON DIFFRACTION
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.454-P.465 (1975)
INSTRUMENTS-AND-METHODS ..BOMBAY, INDIA/ DIFFRACTOMETER OPERATION
- 75-SH-01 SHIBUYA, N./ KNORR, K.
NEUTRON SCATTERING INVESTIGATION OF THE TRICRITICAL POINT IN DY.P.04
SOLID STATE COMMUN., V.17, P.1305 (1975)
DY.P.04 ..EXPERIMENT/ SOLID ..TWO-AXIS DIFFRACTOMETER/ ISING/ ANTIFERROMAGNET/ TRICRITICAL POINT/FIRST ORDER TRANSITION/ SECOND ORDER TRANSITION/ PHASE TRANSITION
- 75-SH-02 SHIRANE, G./ CHIKAZUMI, S./ AKIMITSU, J./ CHIBA, K./ MATSUI, M./
NEUTRON SCATTERING FROM LOW-TEMPERATURE PHASE OF MAGNETITE
J. PHYS. SOC. JAP., V.39, P.949-P.957 (1975)
MAGNETITE/ MAGNETIC-SCATTERING ..EXPERIMENT/ CHARGE ORDERING
- 75-SI-01 SIEGEL, E.
FURTHER JUSTIFICATION FOR THE CONCEPT OF A PERCUS-YEVICK TEMPERATURE IN LIQUID METALS
PHYS. CHEM. LIQUIDS, V.4, P.205-P.209 (1975)
THEORY-OF-FLUIDS ..PERCUS-YEVICK TEMPERATURE
- 75-SI-02 SIEGEL, E.
SOUND VELOCITY IN LIQUID BINARY ALLOYS AS CALCULATED VIA A THE PERCUS-YEVICK LIQUID PHONON DISPERSION RELATION
PHYS. CHEM. LIQUIDS, V.4, P.211-P.215 (1975)
THEORY-OF-FLUIDS ..LIQUID VIRTUAL CRYSTAL/ LONG WAVELENGTH SOUND VELOCITY/ LIQUID BINARY ALLOYS
- 75-SI-03 SIEGEL, E.
VIRTUAL CRYSTAL MODEL OF MELTING AND THE STRUCTURE FACTOR OF LIQUID ALLOYS.
PHYS. CHEM. LIQUIDS, V.4, P.217-P.231 (1975)
- THEORY-OF-FLUIDS ..STRUCTURE FACTOR/ BINARY ALLOY LIQUID
D
- 75-SI-04 SIEGEL, E.
CALCULATION OF SOUND VELOCITIES OF LIQUID METALS AT THE IR MELTING POINT VIA THE PERCUS-YEVICK THEORY OF MELTING
G
PHYS. CHEM. LIQUIDS, V.4, P.233-P.240 (1975)
THEORY-OF-FLUIDS ..SOUND VELOCITY/ MELTING TEMPERATURE/ LIQUID METAL
- 75-SI-05 SIEGEL, E.
EQUIVALENCE OF THE PERCUS-YEVICK COLLECTIVE COORDINATE THEORY OF LIQUIDS WITH THE SELF-CONSISTENT FIELD THEORY OF MELTING
PHYS. CHEM. LIQUIDS, V.4, P.241-P.253 (1975)
THEORY-OF-FLUIDS ..MELTING/ STRUCTURE FACTOR/ DISPERSION RELATION
- 75-SI-06 SINCLAIR, R.N./ CLARKE, J.H./ DORE, J.C.
SINGLE-PARTICLE EXCITATIONS IN LIQUID NITROGEN
J. PHYS., C, LONDON, V.8L, P.41-P.42 (1975)
N ..EXPERIMENT/ LIQUID/ 77.4DK/ SINGLE PARTICLE EXCITATION
- 75-SI-07 SINGH, J./ PRAKASH, S.
PHONON DISPERSION IN SCANDIUM AND YTTRIUM
PHYS. LETT., A, V.53, P.164-P.166 (1975)
SC/ Y ..CALCULATION/ PHONON DISPERSION/ HCP METAL
- 75-SI-08 SINGH, R.K./ AGARWAL, M.K.
LATTICE DYNAMICS OF CSF BY EXTENDED THREE-BODY FORCE SHELL MODEL
SOLID STATE COMMUN., V.17, P.991-P.993 (1975)
CS,F ..PHONON DISPERSION RELATION/ SHELL MODEL/ THEORY
- 75-SI-09 SINGH, N./ SINGH, J./ PRAKASH, S.
LATTICE DYNAMICS OF NICKEL
PHYS. REV. B, V.12, P.5415-P.5422 (1975)
NI ..PHONON DISPERSION/ THEORY/ FERRO- AND PARAMAGNETIC PHASE
- 75-SI-10 SINGH, J./ SINGH, N./ PRAKASH, S.
PHONON FREQUENCIES OF PARAMAGNETIC CHROMIUM
PHYS. REV. B, V.12, P.3166 (1975)
CR ..THEORY/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS ..DIELECTRIC FUNCTION/ PSEUDOPOTENTIAL
- 75-SI-11 SINGH, S.P./ MAURYA, J.R./ KUSHWAHA, S.S.
A PHONON DISPERSION RELATIONS OF ANISOTROPIC H.C.P. CADMIUM
NUOVO CIM., B, V.30, P.402-P.408 (1975)

- CD ..THEORY/ PHONON DISPERSION/ AXIALLY SYMMETRIC MODEL
- 75-SI-12 SINHA, H.P./ UPADHYAYA, J.C.,
PHONON DISPERSION IN SOME HCP TRANSITION METALS
PHYSICA, B+C, V.79, P.359-P.369 (1975)
SC/ Y/ ZR ..THEORY/ PHONON DISPERSION/ KREB MODEL
- 75-SN-01 SNEH, S./ DAYAL, B.
LATTICE DYNAMICA STUDY OF NA.F AND RB.F BY THE SHELL MO
DEL
NA.F/ RB.F ..THEORY/ PHONON DISPERSION/ SIMPLE SHELL MO
DEL
- 75-SR-01 SRINIVASAN, R./ LAKSHMI, G./ RAMACHANDRAN, V.
VARIABLE-CHARGE SHELL MODEL FOR THE LATTICE DYNAMICS OF
THALLOUS BROMIDE
J. PHYS., C, LONDON, V.8, P.2889-P.2896 (1975)
TL, BR ..THEORY/ PHONON DISPERSION/ SHELL-MODEL
- 75-SR-02 SRINIVASAN, R./ LAKSHMI, G./ RAMACHANDRAN, V.
MODE GRUENEISEN PARAMETERS AND THERMAL EXPANSION OF THA
LLOUS BROMIDE
J. PHYS., C, LONDON, V.8, P.2897-P.2902 (1975)
TL, BR ..THEORY/ GRUENEISEN PARAMETER/ SHELL MODEL
- 75-SR-03 SRIVASTAVA, G.P.
CALCULATION OF BOUNDS ON THE EIGENVALUE SPECTRUM OF ANH
ARMONIC PHONON COLLISION OPERATOR
PHYS. LETT., A, V.54, P.222-P.224 (1975)
THEORY-OF-SOLIDS ..ANHARMONIC PHONON/ COLLISION OPERATO
R
- 75-ST-01 STAMENKOVIC, S.
THEORY OF SLOW NEUTRON SCATTERING ON PARAMETRICALLY EXC
ITED POLARIZATION WAVES IN HYDROGEN-BONDED FERROELECTRI
CS
PHYS. STATUS SOLIDI B, V.72, P.683 (1975)
NEUTRON-SCATTERING-IN-SOLIDS ..SLOW NEUTRON SCATTERING/
HYDROGEN BONDED FERROELECTRICS/ THEORY
- 75-ST-02 STASSIS, C./ DECKMAN, H.W.
MAGNETIC SCATTERING OF NEUTRONS
PHYS. REV. B, V.12, P.1885-P.1898 (1975)
MAGNETIC-SCATTERING ..MAGNETIC SCATTERING/ GENERAL THEO
RY
- 75-ST-03 STEICHELE, E./ ARNOLD, P.
RESULTS ON THE BACKSCATTERING TIME-OF-FLIGHT DIFFRACTIO
N METHOD
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
AR-GRAPHITE ..EXPERIMENT/ AR-FILM/ ADSORBED ON GRAPHITE
- P.177-P.191 (1975)
INSTRUMENTS-AND-METHODS ..TIME-OF-FLIGHT DIFFRACTION/ G
ARCHING, BRD
- 75-ST-04 STOCKMEYER, R./ CONRAD, H.M./ RENOUPREZ, A./ FOUIL
LOUX, P.
STUDY OF HYDROGEN CHEMISORBED ON RANEY-NICKEL BY NEUTRO
N INELASTIC SPECTROSCOPY
SURFACE SCI., V.49, P.549-P.566 (1975)
H-NI ..EXPERIMENT/ FREQUENCY SPECTRUM/ CHEMISORBED
- 75-ST-05 STRIEFLER, M.E./ BARSCH, G.R.
LATTICE DYNAMICS OF ALPHA-QUARTZ
PHYS. REV. B, V.12, P.4553-P.4566 (1975)
QUARTZ ..DISPERSION/ ELASTIC CONST./ DEBYE TEMP./ THEOR
Y/ MODELLED RIGID-ION MODEL
- 75-SU-01 SUMIN, V.V./ KUKHTO, O.L./ SOLOVEV, S.P.
INELASTIC SCATTERING OF NEUTRONS IN ORDERED Ti2.Zr.O(X)
ALLOYS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.17 (V
.17), P.1829-P.1831 (P.1198) (1975 (1975))
Ti-Zr-O ..ALLOY/ INELASTIC NEUTRON SPECTRA/ PHONON LEVE
L
- 75-SU-02 SUTHERLAND, C.J./ WROE, H.
A COLD NEUTRON BEAM BENDER USING MULTIPLE THIN PLASTIC
FILMS AS CURVED GUIDES
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN,
P.557-P.570 (1975)
INSTRUMENTS-AND-METHODS ..GUIDE TUBE/ COLD NEUTRON
- 75-SW-01 SWAMINATHAN, K./ TEWARI, S.P./ KOTHARI, L.S.
A MODEL FOR THE PHONON FREQUENCY DISTRIBUTION FUNCTION
FOR CRYSTALLINE POLYETHYLENE
PHYS. LETT., A, V.51, P.153-P.154 (1975)
POLYETHYLENE ..THEORY/ LATTICE DYNAMICS/ MODEL
- 75-TA-01 TAKAHASHI, H.
EXTENSION OF THE LYDDANE-SACKS-TELLER AND COCHRAN-COWLE
Y-KUROSAWA RELATIONSHIPS TO A COUPLED SYSTEM OF MANY MO
DES WITH DAMPING
PHYS. REV. B, V.11, P.1636 (1975)
THEORY-OF-SOLIDS ..COUPLED SYSTEM/ DAMPING
- 75-TA-02 TAUB, H./ PASSELL, L./ KJEMS, J.K./ CARNEIRO, K./
MLTAGUE, J.P./
NEUTRON-SCATTERING STUDIES OF THE STRUCTURE AND DYNAMIC
S OF AR-36 MONOLAYER FILM ADSORBED ON BASAL-PLANE-ORIE
NTED GRAPHITE
PHYS. REV. LETT., V.34, P.654-P.657 (1975)
AR-GRAPHITE ..EXPERIMENT/ AR-FILM/ ADSORBED ON GRAPHITE

/ 5DK

- 75-TA-03 TAUB, H./ PARENTE, C.B.R.
ANOMALOUS MAGNETIC CRITICAL BEHAVIOR OBSERVED IN NEUTRON SCATTERING FROM HO,SB AND DY,SB
SOLID STATE COMMUN., V.16, P.857-P.860 (1975)
MAGNETIC-SCATTERING/ HO,SB/ DY,SB ..EXPERIMENT/ CRITICAL SCATTERING
- 75-TE-01 TENTI, G./ DESAI, R.C.
KINETIC THEORY OF MOLECULAR GASES 1 MODELS OF THE LINEAR WALDMANN-SNIDER COLLISION OPERATOR
CAN, J. PHYS., V.53, P.1266 (1975)
THEORY-OF-FLUIDS ..THEORY ..MODEL COLLISION OPERATOR/ KINETIC EQUATION
- 75-TE-02 TENTI, G./ DESAI, R.C.
KINETIC THEORY OF MOLECULAR GASES 2 CALCULATION OF TIME DEPENDENT CORRELATION FUNCTIONS
CAN, J. PHYS., V.53, P.1279 (1975)
THEORY-OF-FLUIDS ..THEORY/ CORRELATION FUNCTION
- 75-TE-03 TEUCHERT, W.D./ GEICK, R./ LANDWEHR, G./ WENDEL, H./ WEBER, W.
LATTICE DYNAMICS OF TRIGONAL SELENIUM; 1. PHONON SPECTRA
J. PHYS., C. LONDON, V.8, P.3725 (1975)
SE ..EXPERIMENT/ SOLID/ DISPERSION RELATION/ LATTICE DYNAMICS ..SHELL MODEL
- 75-TE-04 TEWARI, S.P./ TEWARI, S.P.
THEORY OF COLLECTIVE MOTION OF LIQUIDS
J. PHYS., C. LONDON, V.8L, P.569 (1975)
THEORY-OF-FLUIDS/ AR ..THEORY/ LIQUID/ SCATTERING LAW/ CORRELATION FUNCTION ..HUBBARD AND BEEBY'S THEORY
- 75-TH-01 THOMAS, M.W.
NEUTRON INELASTIC SCATTERING FROM HEXAMETHYLENETETRAMINE-D12 AND ADAMANTANE-D16
CHEM. PHYS. LETT., V.32, P.271-P.273 (1975)
ADAMANTANE/ HEXAMETHYLENETETRAMINE ..EXPERIMENT/ FREQUENCY SPECTRA/ 200-800 CM-1
- 75-TI-01 TINDEMANS-VAN-EIJNDHOVEN, J.C.M./ KROESE, C.J.
LOCAL MODES IN THE THEORY OF LATTICE VIBRATIONS: DERIVATION AND APPLICATION
J. PHYS., C. LONDON, V.8, P.3963 (1975)
THEORY-OF-SOLIDS ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION ..LOCAL MODE/ JAHN-TELLER EFFECT
- 75-TI-02 TIWARI, M.D.
LATTICE DYNAMICS OF GOLD

- J. PHYS., F. LONDON, V.5L, P.184-P.186 (1975)
AU ..THEORY/ PHONON DISPERSION/ KREB MODEL
- 75-TK-01 TKACHENKO, I.M./ FISHER, I.Z.
HYDRODYNAMIC ASYMPTOTIC FORMS OF THREE-POINT SPACE-TIME CORRELATION FUNCTIONS OF FLUCTUATIONS OF CONSERVED QUANTITIES IN A SIMPLE LIQUID
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.69 (V.42), P.1092-P.1099 (P.556-P.559) (1975 (1976))
THEORY-OF-FLUIDS ..NONLINEAR THREE POINT SUSCEPTIBILITY / CLASSICAL LIQUID
- 75-UP-01 UPADHYAYA, J.C./ SINHA, H.P.
LATTICE DYNAMICS OF HCP METALS
J. PHYS. CHEM. SOLIDS, V.36, P.975 (1975)
BE/ MG/ Y/ HO ..THEORY/ EXPERIMENT/ DISPERSION RELATION ..BHATTIA MODEL
- 75-UP-02 UPADHYAYA, K.S./ SINGH, R.K.
THE LATTICE DYNAMICS OF ALKALINE EARTH OXIDES
J. PHYS. CHEM. SOLIDS, V.36, P.293-P.297 (1975)
CA/O/ SR/O ..THEORY/ LATTICE DYNAMICS/ THREE BODY FORCE SHELL MODEL/ PHONON DISPERSION/ DEBYE TEMPERATURE
- 75-UP-03 UPADHYAYA, J.C./ SHARMA, S.S./ KULSHRESTHA, O.P.
CRYSTAL EQUILIBRIUM AND PHONON DISPERSION IN SOME BCC TRANSITION METALS
PHYS. REV. B, V.12, P.2236-P.2242 (1975)
FE/ W/ MO/ V/ NB/ TA ..LATTICE DYNAMICS/ DISPERSION RELATION/ TRANSITION METAL/ THEORY
- 75-UP-04 UPADHYAYA, K.S./ SINGH, R.K.
THE LATTICE DYNAMICS OF ALKALINE EARTH OXIDES
J. PHYS. CHEM. SOLIDS, V.36, P.293-P.297 (1975)
CA/O/ SR/O ..THEORY/ LATTICE DYNAMICS/ THREE-BODY FORCE SHELL MODEL/ PHONON DISPERSION/ DEBYE TEMPERATURE
- 75-VA-01 VAGELATOS, N./ ROWE, J.M./ RUSH, J.J.
LATTICE DYNAMICS OF N.D4.1 IN THE NaCl PHASE(I) AT 296 K
PHYS. REV. B, V.12, P.4522 (1975)
N.H4.1 ..EXPERIMENT/ DISPERSION RELATION/ COHERENT INELASTIC NEUTRON SCATTERING/ LATTICE DYNAMICS/ TRIPLE-AXIS SPECTROMETER/ FREQUENCY DISTRIBUTION ..SHELL MODEL/ BREATHING SHELL MODEL
- 75-VA-02 VARDENY, Z./ GILAT, G./ PASTERNAK, A.
LATTICE DYNAMICS OF CU,CL
PHYS. REV. B, V.11, P.5175 (1975)
CU,CL ..SOLID/ THEORY/ DISPERSION RELATION/ LATTICE DYNAMICS ..BREATHING SHELL MODEL/ RIGID ION MODEL

- 75-VA-03 VARSHNEY, S.C./ VETELINO, J.F./ MITRA, S.S./ CHANG, I.F.
LATTICE DYNAMICS OF A MIXED DIATOMIC LATTICE
PHYS. REV. B, V.12, P.5912-P.5922 (1975)
ZN,(S-SE)/ GA,(P-AS) .,THEORY/ MIXED CRYSTAL/ PHONON DISPERSION/ STATE DENSITY
- 75-VE-01 VERMA, M.P./ GUPTA, B.R.K.
THREE-BODY-FORCE SHELL-MODEL STUDY OF PHONON DISPERSION IN THE TRANSITION-METAL CARBIDES TA,C AND HF,C
PHYS. REV. B, V.12, P.1314 (1975)
TA,C/ HF,C .,THEORY/ DISPERSION RELATION/ SOLID .,THREE-BODY-FORCE SHELL MODEL/ LONG-RANGE ION-ION INTERACTION / ANOMALOUS WIGGLES IN DISPERSION CURVE.
- 75-VO-01 VON-DER-OSTEN, W./ DORNER, B.
PHONON DISPERSION AG,BR AND EXCHANGE OF THE TRANSVERSE MODE EIGENVECTORS AT L
SOLID STATE COMMUN., V.16, P.431 (1975)
AG,BR .,DISPERSION REACTION
- 75-WA-01 WAKABAYASHI, N./ SMITH, H.G./ NICKLOW, R.M.
LATTICE DYNAMICS OF HEXAGONAL MO,S2 STUDIED BY NEUTRON SCATTERING
PHYS. REV. A, V.12, P.659-P.663 (1975)
MO,S2 .,EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING
- 75-WA-02 WASEDA, Y./ TAMAKI, S.
THE PARTIAL STRUCTURE FACTORS OF LIQUID NI-SI ALLOYS
PHIL. MAG., V.32, P.951 (1975)
NI-SI .,EXPERIMENT/ LIQUID/ STRUCTURE FACTOR .,ALLOY
- 75-WE-01 WEIS, J.J./ KLEIN, M.L.
THE DYNAMICAL STRUCTURE FACTOR $S(Q,W)$ OF SOLID ALPHA-N2
J. CHEM. PHYS., V.63, P.2869-P.2873 (1975)
N2 .,COMPUTER SIMULATION/ SCATTERING FUNCTION/ SOLIDN2
- 75-WE-02 WEIS, J.J./ KLEIN, M.L.
THE DYNAMICAL STRUCTURE FACTOR $S(Q,W)$ OF SOLID ALPHA N2
J. CHEM. PHYS., V.63, P.2869 (1975)
NITROGEN .,THEORY/ SIGMA(THETA,E)/ MOLECULAR DYNAMICS/ PHONON WIDTH AND LIFETIMES/ QUASI-ELASTIC PEAK/ SOLID .,ROTATIONAL DIFFUSION/ COMPUTER SIMULATION
- 75-WE-03 WENDEL, H./ WEBER, W./ TEUCHERT, W.D.
LATTICE DYNAMICS OF TRIGONAL SELENIUM; II, MODEL THEORY
ES
J. PHYS., C, LONDON, V.8, P.3737 (1975)
SE .,THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION .,SHELL MODEL
- 75-WE-04 WESTER, K./ COWLEY, E.R.
- CELL-CLUSTER EXPANSION FOR AN ANHARMONIC SOLID
PHYS. REV. B, V.11, P.4008-P.4016 (1975)
THEORY-OF-SOLIDS .,ANHARMONIC SOLID/ CELL-CLUSTER EXPANSION/ THERMODYNAMIC PROPERTIES
- 75-WI-01 WILLIAMS, W.G.
AREVIEW OF THE POLARIZATION ANALYSIS TECHNIQUE IN THERMAL NEUTRON SCATTERING
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.103-P.125 (1975)
REVIEW-ARTICLES .,POLARIZATION ANALYSIS
- 75-WI-02 WILLIAMS, W.G.
ERRORS AND CORRECTIONS IN THE SEPARATION OF SPIN-FLIP AND NON-SPIN-FLIP THERMAL NEUTRON SCATTERING USING THE POLARIZATION ANALYSIS TECHNIQUE
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.163-P.175 (1975)
INSTRUMENTS-AND-METHODS .,POLARIZATION ANALYSIS
- 75-WI-03 WINDSOR, C.G.
THE USE OF PROFILE ANALYSIS TECHNIQUES FOR REFINEMENT OF POWDER DATA FROM THE HARWELL LINAC
RCN-234, PROC. NEUTRON DIFFRACTION CONF., PETTEN, P.209-P.237 (1975)
INSTRUMENTS-AND-METHODS .,T-O-F DIFFRACTION/ PROFILE FITTING
- 75-WO-01 WOOD, R.F./ MOSTOLLER, M.
POSSIBILITY OF OBSERVING SELF-INTERSTITIALS IN CU AND AL BY NEUTRON SCATTERING
PHYS. REV. LETT., V.35, P.45 (1975)
SCATTERING-THEORIES .,THEORY/ SOLID/ GREEN,S FUNCTION/ COHERENT SCATTERING .,INTERSTITIALS
- 75-YE-01 YELON, W.B./ VETTIER, C.
NEUTRON SCATTERING STUDY OF THE MAGNETIC EXCITATIONS IN FE,BR2
J. PHYS., C, LONDON, V.8, P.2760 (1975)
FE,BR2 .,EXPERIMENT/ THEORY .,MAGNETIC SCATTERING/ SPIN WAVE SPECTRUM/ ANISOTROPY FIELD/ 2DK-9DK
- 75-YO-01 YOSHIDA, F./ TAKENO, S.
HIGH-FREQUENCY EXPANSION OF MEMORY FUNCTION IN CLASSICAL LIQUIDS
PROGR. THEORET. PHYS., KYOTO, V.53, P.293-P.304 (1975)
THEORY-OF-FLUIDS/ AR .,CLASSICAL SIMPLE LIQUID/ DYNAMIC AL STRUCTURE FACTOR/ DISPERSION CURVE OF ELEMENTARY EXCITATION
- 75-ZH-01 ZHERNOV, A.P./ KULAGINA, T.N.

- INFLUENCE OF INTERFERENCE BETWEEN NEUTRON SCATTERING BY A PHONON AND A QUASILocal MODE ON THE FORM OF THE COHERENT PEAK
FIZ, TVERD, TELA (SOV, PHYS.-SOLID STATE), V.17 (V.17), P.1459 (P.941) (1975) (1975))
SCATTERING-BY-DEFECTS .THEORY/ SOLID/ ANHARMONICITY/ I
NELASTIC COHERENT SCATTERING .IMPURITY/ PHONON SHIFT
- 75-ZH-02 ZHIDKOV, L.G./ TRETYAKOV, A.G.
SPECTRUM OF RENORMALIZED VIBRATIONAL PHONONS FOR LATTICES WITH NONCENTRAL INTERACTIONS
FIZ, TVERD, TELA (SOV, PHYS.-SOLID STATE), V.17 (V.17), P.2993-P.2999 (P.1987-P.1990) (1975) (1976))
THEORY-OF-SOLIDS .LATTICE DYNAMICS/ NON-CENTRAL FORCE/ THEORY
- 76-AB-01 ABRAGAM, A./ BACCHELLA, G.L./ GLAETTLI, H./ MALINO VSKI, A./ MERIEL, P.
POLARIZED NEUTRONS AND POLARIZED NUCLEAR TARGETS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.1103-P.1109 (1976)
INSTRUMENTS-AND-METHODS .POLARIZED NEUTRON/ POLARIZED TARGETS
- 76-AC-01 ACHAR, B.N.N./ BARSCH, G.R.
PHONON DENSITY OF STATES OF V3.SI
PHYS. LETT., A, V.59, P.65-P.66 (1976)
V3.SI
- 76-AC-02 ACHAR, B.N.N.
PHONON DISPERSION IN V3.SI
PHYS. STATUS SOLIDI B, V.76, P.133-P.143 (1976)
V3.SI .THEORY/ PHONON DISPERSION/ TWO BAND MODEL
- 76-AG-01 AGARWAL, S.K.
LATTICE DYNAMICS OF CESIUM FLUORIDE. A STUDY ON THE BASIS OF THE THREE-BODY-FORCE SHELL MODEL
PHYS. REV. B, V.13, P.1817 (1976)
CESIUM FLUORIDE .THEORY/ DISPERSION RELATION/ SOLID .THREE-BODY-FORCE SHELL MODEL
- 76-AH-01 AHMED, A.U./ AHMED, N./ ASLAM, J./ BUTT, N.M./ KHAN, G.H.
NEUTRON DIFFRACTION STUDIES OF THE UNIT CELL OF CELLULOSE II
J. POLY. SCI., POLY. LETT., V.14, P.561-P.564 (1976)
CELLULOSE .NEUTRON DIFFRACTION/ CELL DIMENSION
- 76-AI-01 AILAWADI, N.K./ MILLER, D.E./ NAGHIZADEH, J.
CALCULATION OF THE STRUCTURE FACTOR OF LIQUID METALS
PHYS. REV. LETT., V.36, P.1494 (1976)

NA/ RB .THEORY/ STRUCTURE FACTOR

- 76-AK-01 AKASU, Z./ GUROL, H.
QUASIELASTIC SCATTERING BY DILUTE POLYMER SOLUTIONS
J. POLY. SCI., POLY. PHYS., V.14, P.1-P.10 (1976)
NEUTRON-SCATTERING-IN-SOLIDS .THEORY/ SCATTERING LAW/ QUASIELASTIC
- 76-AL-01 AL'TSHULER, A.M./ VEKILOV, Y.K./ KACHERETS, T.I.
PHONON IN COVALENT CRYSTALS
FIZ, TVERD, TELA (SOV, PHYS.-SOLID STATE), V.18 (V.18), P.2195-P.2200 (P.1279-P.1282) (1976) (1976))
DIAMOND/ TIN/ GERMANIUM .THEORY/ PSEUDOPOTENTIAL METHOD/ PHONON DISPERSION
- 76-AL-02 ALBERTINI, G./ BOEUF, A./ LAGOMARSINO, S./ MAZZEDIAN, S./ MELONE, S.
NEUTRON PROPERTIES OF CURVED MONOCHROMATORS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.1151-P.1158 (1976)
INSTRUMENTS-AND-METHODS .CURVED MONOCHROMATOR
- 76-AL-03 ALEKSEEV, P.A./ SADIKOV, I.P./ MARKOVA, I.A./ SAVITSKII, E.M./ TEREKHOVA, V.F.
INELASTIC-NEUTRON-SCATTERING INVESTIGATION OF THE EFFECTS OF THE CRYSTAL FIELD IN CE.AL3 AND NB.AL3
FIZ, TVERD, TELA (SOV, PHYS.-SOLID STATE), V.18 (V.18), P.2509-P.2516 (P.1466-P.1470) (1976) (1976))
CE.AL3 .EXPERIMENT/ TOF/ THEORY/ SIGMATHETA.E) .MAGNETIC SCATTERING/ EFFECTIVE POINT CHARGE MODEL/ ANOMALOUS SPECIFIC HEAT
- 76-AL-04 ALLEN, D./ EPPERSON, J.E./ GEROLD, V./ KOSTORZ, G./ MESSOLORAS, S.
NEUTRON SMALL ANGLE SCATTERING STUDIES ON ALUMINIUM ALLOYS
CONF-760601-P1, P.103-P.108 (1976)
AL-ZN/ AL-MG-ZN/ AL-SI .NEUTRON SMALL ANGLE SCATTERING
- 76-AL-05 ALPERIN, H.A./ FLOTOW, H./ RUSH, J.J./ RHYNE, J.J.
DEUTERIUM-SITE OCCUPANCY IN THE ALPHA AND BETA PHASES OF Ti-D₂
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.517-P.521 (1976)
Ti-H .NEUTRON DIFFRACTION
- 76-AL-06 ALS-NIELSEN, J./ DIETRICH, O.W.
NEUTRON SCATTERING FROM THE HEISENBERG FERROMAGNETS EU, O AND EU.S. II. STATIC CRITICAL PROPERTIES
PHYS. REV. B, V.14, P.4908-P.4922 (1976)
EU, O/ EU.S. .EXPERIMENT/ MAGNETIC CRITICAL SCATTERING

- 76-AS-01 ASANO, H./ ABE, Y./ HIRABAYASHI, M.
A NEUTRON DIFFRACTION STUDY OF V₂H
J. PHYS. SOC. JAP., V.41, P.974-P.976 (1976)
V-H , NEUTRON DIFFRACTION/ V₂H
- 76-AS-02 ASLAM, J./ ROLANDSON, S./ BEG, M.M./ BUTT, N.M./ K
HAN, Q.H.
PHONONS IN THE MIXED CRYSTAL KO_{0.5}MO_{0.5}I
PHYS. STATUS SOLIDI B, V.77, P.693-P.700 (1976)
(K-RB).I , EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING
- 76-AX-01 AXE, J.D.
INCOMMENSURATE STRUCTURAL PHASE TRANSITIONS
BNL-21496 (1976)
REVIEW-ARTICLES , INCOMMENSURATE PHASE TRANSITION
- 76-AX-02 AXE, J.D.
INCOMMENSURATE STRUCTURAL PHASE TRANSFORMATIONS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.353-P.378 (1976)
REVIEW-ARTICLES/ PHASE-TRANSITION , KCP/ TCNQ/ THIUREA
/ K₂SE_{0.04}/ NA_{0.02}/ INCOMMENSURATE
- 76-BA-01 BADER, S.D./ SINHA, S.K./ SHELTON, R.N.
INELASTIC NEUTRON SCATTERING STUDIES OF THE PHONON SPEC
TRA OF CHEVREL-PHASE SUPERCONDUCTORS
CONF-760464-3 (1976)
SN, MO₆S₈/ PB, MO₆S₈/ MO₆S₈ , EXPERIMENT/ PHONON SPECT
RA/ MOLECULAR-CRYSTAL
- 76-BA-02 BADER, S.D./ KNAPP, G.S./ SINHA, K./ SCHWEISS, P./
RENKER, B.
PHONON SPECTRA OF CHEVREL-PHASE LEAD AND TIN MOLYBDENUM
SULFIDES, AMOLECULAR-CRYSTAL MODEL AND ITS IMPLICATION
S FOR SUPERCONDUCTIVITY
PHYS. REV. LETT., V.37, P.344-P.348 (1976)
LEAD MOLYBDENUM SULFIDE/ TIN MOLYBDENUM SULFIDE , HEAT
CAPACITY/ PHONON SPECTRA/ SUPERCONDUCTING/ ACOUSTIC-PHO
NON SOFTENING/ MOLECULAR CRYSTAL MODEL
- 76-BA-03 BARBARA, B./ BOUCHERLE, J.X./ ROSSIGNOL, M.F./ SCH
WEIZER, J.
OBSERVATION OF A REORIENTATION OF THE HOLMIUM MOMENTS I
N HO_{0.42} WITH POLARIZED NEUTRON DIFFRACTION
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.452-P.458 (1976)
HO_{0.42} , POLARIZED NEUTRON DIFFRACTION
- 76-BA-04 BARGOUTH, M.O./ WILL, G./ YELON, W.B./ MEYER, A.
NEUTRON CRYSTAL FIELD SPECTROSCOPY IN CUBIC ER_{0.43}
- J. PHYS., C, LONDON, V.9, P.1483-P.1489 (1976)
ER_{0.43}/ MAGNETIC-SCATTERING , EXPERIMENT/ CRYSTAL FIELD
LEVEL SCHEME AND PARAMETER/ 20.180K
- 76-BA-05 BARRON, T.H.K./ HUANG, C.C./ PASTERNAK, A.
INTERATOMIC FORCES AND LATTICE DYNAMICS OF ALPHA-QUARTZ
J. PHYS., C, LONDON, V.9, P.3925-P.3940 (1976)
QUARTZ , THEORY/ PHONON DISPERSION
- 76-BA-06 BATES, A.R./ CRICK, I.L.A./ DAVIES, R.O.
LATTICE VIBRATIONS IN HEXAMINE NICKEL HALIDES
J. PHYS., C, LONDON, V.9, P.3013-P.3036 (1976)
NI_{0.43}Cl_{0.57}/ NI_{0.43}Cl_{0.57} , THEORY/ PHONON DISPERSI
ON/ MULTIPOLE-MULTIPOLE FORCE CONSTANT
- 76-BA-07 BAUSPIESS, W./ BONSE, U./ RAUCH, H.
THE PERFECT CRYSTAL NEUTRON INTERFEROMETER, A TOOL FOR
NOVEL AND PRECISE MEASUREMENT
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1094-P.1102 (1976)
INSTRUMENTS-AND-METHODS , NEUTRON INTERFEROMETER
- 76-BE-01 BEG, M.M./ SHAPIRO, S.M.,
STUDY OF PHONON DISPERSION RELATIONS IN CUPROUS OXIDE B
Y INELASTIC NEUTRON SCATTERING
PHYS. REV. B, V.13, P.1728 (1976)
CU₂O , EXPERIMENT/ DISPERSION RELATION/ SOLID/ TRIPLE
AXIS SPECTROMETER
- 76-BE-02 BEG, M.M./ NIELSEN, M.,
TEMPERATURE DEPENDENCE OF LATTICE DYNAMICS OF LITHIUM 7
PHYS. REV. B, V.14, P.4266 (1976)
LI , EXPERIMENT/ SOLID/ LATTICE DYNAMICS/ DISPERSION RE
LATION/ COHERENT INELASTIC NEUTRON SCATTERING/ FREQUENC
Y DISTRIBUTION/ BORN-VON KARMAN MODEL
- 76-BE-03 BELLOMONTE, L.,
OVERLAP CHARGES AND LATTICE DYNAMICS OF SILVER CHLORIDE
SOLID STATE COMMUN., V.18, P.941-P.943 (1976)
AG₂CL₂ , THEORY/ LATTICE DYNAMICS/ OVERLAP CHARGE/ DISPE
RSION CURVE
- 76-BE-04 BENIN, D.,
DISPERSION RELATION FOR PHONON SECOND-SOUND WAVES IN SU
PERFLUID HELIUM
PHYS. REV. B, V.13, P.1105 (1976)
HE , THEORY/ PHONON WIDTH AND LIFETIME , SUPERFLUID STA
TE/ 0.25DK
- 76-BE-05 BENOIT, H./ DECKER, D./ DUPLESSIX, R./ PICOT, C./
REMPPE, P.,
CHARACTERIZATION OF POLYSTYRENE NETWORKS BY SMALL-ANGLE

NEUTRON SCATTERING

J. POLY. PHYS., POLY. SCI., V.14, P.2119-P.2128 (1976)

POLYSTYRENE ..EXP./ SMALL-ANGLE SCATT./ POLYMERIC NETWORKS

76-BE-06 BERNEY, C.V./ JOHNSON, D.H./ YIP, S./ CHEN, S.H.,
POTENTIAL-FUNCTION CALCULATIONS OF LATTICE VIBRATIONS IN
FORMIC ACID AND COMPARISON WITH NEUTRON-SCATTERING SPECTRUM
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.337-P.342 (1976)
FORMIC ACID ..THEORY/ PHONON STATE DENSITY

76-BE-07 BERTOLO, L.A./ SHUKLA, M.M.,
A CALCULATION OF DEBYE-WALLER FACTORS FOR F.C.C. METALS
PHYS. STATUS SOLIDI B, V.77, P.433-P.439 (1976)
THEORY-OF-SOLIDS ..DEBYE-WALLER FACTOR/ BHATTIA'S MODEL

76-BE-08 BEVAART, L./ FRIKKEE, E./ DE-JONGH, L.J.,
THE INFLUENCE OF ANISOTROPY ON THE D=2 AND D=3 MAGNETIC
ORDERING IN LAYER-TYPE ANTIFERROMAGNETS K₂Mn(1-X).FeX₂F₄,
STUDIED BY NEUTRON DIFFRACTION
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.697-P.705 (1976)
K₂(Mn-Fe)₂F₄ ..NEUTRON DIFFRACTION/ SPIN ANISOTROPY

76-BE-09 BILL, C.J./ JEX, H./ MUELLNER, M.,
LATTICE DYNAMICS OF KCN, NACN IN THE DISORDERED CUBIC LATTICE
PHYS. LETT., A, V.56, P.320 (1976)
K.C.N / NA.C.N ..DISPERSION RELATION/ SHELL MODEL/ ROTATIONAL EFFECT

76-BE-10 BLUM, L./ NARTEN, A. H.,
DYNAMIC CORRECTIONS FOR NEUTRON SCATTERING FROM MOLECULAR FLUIDS
J. CHEM. PHYS., V.64, P.2804 (1976)
NEUTRON-SCATTERING-IN-FLUIDS/ C.C.L.4 ..THEORY/ NEUTRON DIFFRACTION/ LIQUID/ SCATTERING FUNCTION

76-BE-11 BLUME, M.,
POLARIZATION DEPENDENCE OF MAGNETIC NEUTRON SCATTERING
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.807-P.810 (1976)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ MAGNETIC SCATTERING/ POLARIZATION DEPENDENCE

76-BE-12 BOBROVSKY, V.I./ GOSCHITSKII, B.N./ MIRMELSTEIN, A.V./ MIKHAILOV, Y.N.,
EFFECT OF THE SUPERCONDUCTING TRANSITION ON THE FREQUENCIES AND DAMPING OF TRANSVERSE ACOUSTIC PHONONS IN LEAD

CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.230-P.235 (1976)
PB ..EXPERIMENT/ PHONON DISPERSION/ 4.2,20.4,78.0 AND 300K

76-BO-02 BOHRA, A.K./ GUPTA, R.K.,
LATTICE DYNAMICS OF RARE-GAS SOLIDS BY KIHARA'S POTENTIAL
AL III, GREEN FUNCTION
PHYS. STATUS SOLIDI B, V.78, P.255 (1976)
THEORY-OF-SOLIDS/ AR/ KR/ Xe ..THEORY/ SOLID/ LATTICE DYNAMICS ..KIHARA POTENTIAL/ PHONON GREEN FUNCTION

76-BO-03 BOKHENKOV, E.L./ NATKANIEC, I./ SHEKA, E.F.,
NEUTRON SPECTROSCOPY OF NAPHTHALENE CRYSTAL INTERNAL PHONON MODES
PHYS. STATUS SOLIDI B, V.75, P.105 (1976)
NAPHTHALENE ..INCOHERENT NEUTRON SCATTERING/ EXPERIMENT

76-BO-04 BOLONIN, O.N.,
DISPERSION OF PHONONS IN NaCl AND KCl
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.18 (V.18), P.2426-P.2428 (P.1415-P.1416) (1976 (1976))
NaCl/ KCl ..THEORY/ PHONON DISPERSION

76-BO-05 BOYSER, H./ IHRINGER, J.I./ PRANDL, W./ YELLOR, W.,
X-RAY AND NEUTRON INVESTIGATIONS OF THE PHASE INSTABILITIES IN K₂SnCl₆
SOLID STATE COMMUN., V.20, P.1019 (1976)
K₂SnCl₆ ..NEUTRON DIFFRACTION

76-BR-01 BRESCANSIN, L.M./ PADIAL, N.T./ SHUKLA, M.M.,
THE LATTICE DYNAMICS OF SIX PROMINENT B.C.C. TRANSITION METALS
NUOVO C.I.M., B, V.34, P.103-P.112 (1976)
Fe/ Mo/ W/ Nb/ Ta/ Cr ..THEORY/ PHONON DISPERSION/ TRANSITION METAL/ MODEL CALCULATION

76-BR-02 BROWN, P.J./ CAPIOMONT, A./ CHENAVAS, P./ RADHAKRISHNA, P./ SCHWEIZER, J.,
POLARIZED NEUTRON STUDY OF THE NITROXIDE RADICAL IN THE DI-(2,6,6-TETRAMETHYL-4-PIPERIDINYL-1-OXYL) SUBERATE
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.650-P.656 (1976)
C₂₆H₄₆N₂O₆ ..POLARIZED NEUTRON DIFFRACTION

76-BR-03 BRUESCH, P./ BOSCH, M./ KAENZIG, W./ ZIEGLER, M./ BUEHRER, W.,
LATTICE DYNAMICS OF THE PHASES I, II, AND III OF SODIUM HYPEROXIDE Na₂O₂
PHYS. STATUS SOLIDI B, V.77, P.153-P.164 (1976)

NA, O₂ .. EXPERIMENT/ CALCULATION

76-BU-01 BUEHRER, W.
CRYSTAL STRUCTURE OF HIGH-TEMPERATURE, SUPERIONIC CONDUCTORS, SILVER IODIDE, CUPROUS IODIDE AND -BROMIDE
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.77-P.84 (1976)
AG, I/ CU, I/ CU, BR .. NEUTRON DIFF./ SUPERIONIC CONDUCTOR

76-BU-02 BUELDT, G./ SEELIG, A./ SEELIG, J./ ZACCAI, G.
NEUTRON SCATTERING FROM SPECIFICALLY DEUTERATED LIPID MEMBRANES
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.109-P.115 (1976)
DPPC .. NEUTRON DIFFRACTION/ LIPID MEMBRANES

76-BU-03 BUYERS, W.J.L./ SVENSSON, E.C./ HOLDEN, T.M.
NEUTRON SCATTERING FROM ISOLATED CLUSTERS OF MAGNETIC IONS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.771-P.777 (1976)
K.(MN-ZN)-F3 .. EXPERIMENT/ MAGNETIC CLUSTER

76-CA-01 CARELLI, P./ DE-SANTIS, A./ MODENA, I./ RICCI, F.P.
SELF-DIFFUSION IN SIMPLE DENSE FLUIDS
PHYS. REV. A, V.13, P.1131 (1976)
KR/ C.H₄ .. EXPERIMENT/ DIFFUSION PARAMETER .. LENARD-JONES FLUID/ HARD-SPHERE FLUID/220DK FOR KR, 194, 75DK FOR C H₄

76-CA-02 CARNEIRO, K.
NEUTRON SCATTERING AND THE ELECTRON-PHONON COUPLING IN ONE-DIMENSIONAL CONDUCTOR
PHYS. REV. LETT., V.37, P.1227-P.1230 (1976)
TTF-TCNQ .. THEORY/ DYNAMICAL STRUCTURE FACTOR

76-CA-03 CARNEIRO, K.
VELOCITY-AUTOCORRELATION FUNCTION IN LIQUIDS, DEDUCED FROM NEUTRON INCOHERENT SCATTERING RESULTS
PHYS. REV. A, V.14, P.517-P.520 (1976)
H₂/ AR/ NEUTRON-SCATTERING-IN-FLUIDS/ NA .. FREQUENCY-SP ECTRA

76-CA-04 CARNEIRO, K./ ELLENSON, W.D./ PASSEL, L./ MCTAGUE, J.P./ TAUB, H.
NEUTRON-SCATTERING STUDY OF THE STRUCTURE OF ADSORBED HELIUM MONOLAYERS AND OF THE EXCITATION SPECTRUM OF FEW-ATOMIC-LAYER SUPERFLUID FILMS
PHYS. REV. LETT., V.37, P.1695-P.1698 (1976)
HELIUM .. ADSORBED/ GRAPHITE/ MONOLAYER/ ELASTIC/ INELAS

TIC/ SUPERFLUID/ COLLECTIVE EXCITATION/ ROTON

76-CA-05 CARNEIRO, K./ SHIRANE, G./ WERNER, S.A./ KAISER, S.
LATTICE DYNAMICS OF K₂PT.(C,N)₄BR(CO₃)₃*3,2D₂O (KCP) STUDIED BY INELASTIC NEUTRON SCATTERING
PHYS. REV. B, V.13, P.4258-P.4273 (1976)
KCP .. EXPERIMENT/ PHONON DISPERSION/ ONE-DIMENSIONAL CONDUCTOR

76-CA-06 CASTRESANA, J.I./ MAZENKO, G.F./ YIP, S.
DENSITY FLUCTUATIONS IN A FLUID MIXTURE OF HARD SPHERES
PHYS. REV. A, V.14, P.1814-P.1824 (1976)
THEORY-OF-FLUIDS .. TIME-DEPENDENT PHASE-SPACE DENSITY CORRELATION FUNCTION/ FLUID MIXTURE/ GENERALIZED BOLTZMANN EQUATION

76-CA-07 CAVALHEIRO, R./ SHUKLA, M.M.
LATTICE DYNAMICS OF GOLD ON AN EXTENDED DE LAUNAY MODEL
PHYS. STATUS SOLIDI B, V.76, P.371-P.375 (1976)
AU .. THEORY/ PHONON DISPERSION/ DE LAUNAY MODEL

76-CA-08 CAVEIRO, K./ ECKERT, J./ SHIRANE, E./ WILLIAMS, J.M.
INELASTIC NEUTRON SCATTERING FROM THE QUASI-ONE-DIMENSIONAL CONDUCTOR
SOLID STATE COMMUN., V.20, P.333 (1976)
K₁,75,PT.(C,N)₄*1,5C .. DISPERSION RELATION/ EXPERIMENT

76-CH-01 CHADI, D.J./ MARTIN, R.M.
CALCULATION OF LATTICE DYNAMICAL PROPERTIES FROM ELECTRONIC ENERGIES: APPLICATION TO C, SI AND GE

C/ SI/ GE .. CALCULATION/ LATTICE DYNAMICAL PROPERTY/ ZONE BOUNDARY TRANSVERSE ACOUSTIC PHONON FREQUENCY

76-CH-02 CHANDRA, P.P./ DASANNACHARYA, B.A./ GOYAL, P.S./ IYENGAR, P.K./ RAO, K.R./
NEUTRON INELASTIC SCATTERING FROM MIXED SALTS ((N,H₄)X, K(1-X))₂S₂O₄
PHYS. LETT., A, V.57, P.463-P.464 (1976)
((N,H₄)-K)₂S₂O₄ .. EXPERIMENT/ MIXED SALTS/ FERROELECTRICITY

76-CH-03 CHANDRA, P.P./ DASANNACHARYA, B.A./ GOYAL, P.S./ IYENGAR, P.K./ RAO, K.R./
AMMONIUM ION DYNAMICS IN ((N,H₄)₂S₂O₄ AND ((N,H₄)(X), K(1-X))₂S₂O₄
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.288-P.294 (1976)
((N,H₄)₂S₂O₄ .. EXPERIMENT/ INELASTIC/ QUASIELASTIC/ ION

DYNAMICS

- 76-CH-04 CHESSE, N.J./ PRASK, H.J.,
QUASI-ELASTIC NEUTRON SCATTERING STUDY OF SINGLE CRYSTALS
OF AMMONIUM PERCHLORATE
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.295-P.302 (1976)
N.H4.CL.04 ..EXPERIMENT/ QUASIELASTIC/ ROTATIONAL MOTION
- 76-CH-05 CHIAKWELU, O./ GASKELL, T.,
INFLUENCE OF COLLECTIVE MODES IN LIQUID RUBIDIUM ON THE
VELOCITY AUTOCORRELATION FUNCTION
PHYS. LETT., A, V.58, P.96-P.98 (1976)
RB/ THEORY-OF-FLUIDS ..VELOCITY AUTOCORRELATION FUNCTION
N/ EFFECT ON FREQUENCY SPECTRUM
- 76-CH-06 CHILD, H.R.,
MAGNETIC SHORT RANGE ORDER IN CD
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.425-P.431 (1976)
CD ..QUASIELASTIC/ SHORT RANGE ORDER/ MAGNETIC
- 76-CH-07 CHODOS, S.L./ BLACK, A.M./ FLINT, C.D.,
VIBRONIC SPECTRA AND LATTICE DYNAMICS OF CS₂, MN, F₆ AND
I₂, A(12,M(IV).F₆, MN, F(-2)6
J. CHEM. PHYS., V.65, P.4816 (1976)
CS₂, MN, F₆/ K₂, SI, F₆/ R₈₂, SI, F₆/ CS₂, SI, F₆/ K₂, GE, F₆ ..EXPERIMENT/ THEORY/ DISPERSION RELATION/ SOLID/ LATTICE DYNAMICS ..LUMINESCENCE/ URAY-BRADLEY VALENCE FORCE FIELD/ COORDINATION COMPOUND
- 76-CL-01 CLARKE, J.H./ DORE, J.C./ WALFORD, G.,
NEUTRON DIFFRACTION STUDIES OF HEAVY WATER
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1022-P.1027 (1976)
D2, O ..EXPERIMENT/ LIQUID STRUCTURE
- 76-CL-02 CLARKE, J.H./ DORE, J.C./ WALFORD, G.,
NEUTRON DIFFRACTION STUDIES OF LIQUIDS AT HIGH MOMENTUM
TRANSFER
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.975-P.981 (1976)
C3, O2 ..EXPERIMENT/ LIQUID STRUCTURE
- 76-CL-03 CLARKE, J.H./ DORE, J.C./ STANTON, G.W.,
NEUTRON DIFFRACTION STUDIES OF TETRACHLORIDE LIQUIDS AND
LIQUID MIXTURES
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.955-P.961 (1976)
C, CL₄/ SI, CL₄/ TI, CL₄/ GE, CL₄/ SN, CL₄/ SI, CL₄-TI, CL₄/ S
N, CL₄-TI, CL₄ ..LIQUID STRUCTURE/ NEUTRON DIFFRACTION

- 76-CO-01 COLLINS, M.F./ OYEDELE, J.A.,
ORDER-DISORDER IN IRON COBALT ALLOYS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.418-P.424 (1976)
FE-CO ..EXPERIMENT/ NEUTRON DIFFRACTION/ LONG RANGE ORDER
PARAMETER
- 76-CO-02 COMES, R./ SHIRANE, G./ SHAPIRO, S.M./ GARITO, A.F.
..HEEGER, A.J.,
ELASTIC-NEUTRON-SCATTERING STUDY OF THE PHASE TRANSITIONS
IN TETRATHIAFULVALENE-TETRACYANOQUINODIMETHANE (TTF-TCNQ)
PHYS. REV. B, V.14, P.2376-P.2383 (1976)
TTF-TCNQ ..EXPERIMENT/ ELASTIC SCATTERING/ CRITICAL SCATTERING/ CRYSTAL MODULATION STRUCTURE/ PHASE TRANSITION
- 76-CO-03 CONRAD, H.M./ STILLER, H.H./ STOCKMEYER, R.,
DISPERSION OF COLLECTIVE EXCITATIONS IN A NEMATIC LIQUID
D CRYSTAL
PHYS. REV. LETT., V.36, P.264-P.267 (1976)
P-AZOXYANISOLE ..EXPERIMENT/ PHONON-LIKE EXCITATION/ DISPERSION
- 76-CO-04 CONRAD, H.M./ STILLER, H.H./ STOCKMEYER, R.,
DISPERSION OF COLLECTIVE EXCITATIONS IN A NEMATIC LIQUID
D CRYSTAL
PHYS. REV. LETT., V.36, P.264-P.267 (1976)
P-AZOXYANISOLE ..EXPERIMENT/ LIQUID CRYSTAL/ PHONON-LIKE
EXCITATION
- 76-CO-05 COOKE, J.F./ DAVIS, H.L.,
THEORETICAL CALCULATION OF THE EXCHANGE INTEGRAL FOR EUROPIUM
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.793-P.799 (1976)
EUROPIUM ..CALCULATION/ EXCHANGE INTEGRAL
- 76-CO-06 COOKE, J.F.,
MAGNETIC EXCITATIONS IN ITINERANT ELECTRON SYSTEMS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.723-P.742 (1976)
REVIEW-ARTICLES ..MAGNETIC EXCITATION/ SPIN WAVE
- 76-CO-07 COPLEY, J.R.D./ RAHMAN, A.,
DENSITY FLUCTUATIONS IN MOLTEN SALTS. 2. MOLECULAR DYNAMICS
STUDY OF LIQUID R₈BR
PHYS. REV. A, V.13, P.2276-P.2286 (1976)
R₈BR / NEUTRON-SCATTERING-IN-FLUIDS ..MOLECULAR DYNAMICS/
SCATTERING-FUNCTION/ PAIR-CORRELATION

- 76-CO-08 COTTON, J.P./ NIERLICH, M./ BOUE, F./ DAUD, M./ F
ARNOUX, B./
EXPERIMENTAL DETERMINATION OF THE TEMPERATURE-CONCENTRA
TION DIAGRA OF FLEXIBLE POLYMER SOLUTIONS BY NEUTRON SC
ATTERING
J. CHEM. PHYS., V.65, P.1101-P.1108 (1976)
POLYSTYRENE ..SMALL-ANGLE SCATTERING/ CORRELATION LENGHT
H/ RADIUS OF GYRATION/ SCREENING LENGTH/ SEMIDILUTE SOL
UTION
- 76-CO-09 COWLEY, E.R./ JACUCCI, G./ KLEIN, M.L./ MCDONALD,
J.R.
ANHARMONIC EFFECTS IN THE PHONON SPECTRA OF SODIUM CHLO
RIDE
PHYS. REV. B, V.14, P.1758-P.1769 (1976)
SODIUM CHLORIDE ..THEORY/ ANHARMONIC EFFECT/ MODEL CALC
ULATION/ DYNAMICAL STRUCTURE FACTOR/ PHONON FREQUENCY
- 76-CO-10 COWLEY, R.A./ AXE, J.D./ IIZUMI, M.
NEUTRON SCATTERING FROM THE FERROELECTRIC FLUCTUATIONS
AND DOMAIN WALLS OF LEAD GERMANATE
PHYS. REV. LETT., V.36, P.806 (1976)
P85,GE3,011/ PHASE-TRANSITION ..EXPERIMENT/ FERROELECTRI
CITY / SOLID/ QUASI-ELASTIC PEAK/ TRIPLE AXIS SPECTROME
TER ..PHASE TRANSITION
- 76-CO-11 COWLEY, R.A.
NEUTRON SCATTERING FROM QUANTUM LIQUIDS
BNL-21404 (1976)
HE ..EXPERIMENT/ HE-4,HE-3/ QUANTUM LIQUIDS
- 76-CO-12 COWLEY, R.A.
CRITICAL SCATTERING FROM STRUCTURAL PHASE TRANSITIONS A
SSOCIATED WITH A HOMOGENEOUS DEFORMATION OF THE CRYSTAL
BNL-21405 (1976)
K.H2,P.04 ..EXPERIMENT/ CRITICAL SCATTERING/ PHASE TRAN
SITION
- 76-CO-13 COWLEY, R.A.
NEUTRON SCATTERING FROM QUANTUM LIQUIDS
CONF-760601-P2, PROC, CONF, ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.935-P.953 (1976)
HE ..RECENT MEASUREMENTS/ QUANTUM LIQUID
- 76-CO-14 COWLEY, R.A.
CRITICAL SCATTERING FROM STRUCTURAL PHASE TRANSITIONS A
SSOCIATED WITH A HOMOGENEOUS DEFORMATION OF THE CRYSTAL
CONF-760601-P1, PROC, CONF, ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.412-P.417 (1976)
K.H2,P.04 ..THEORY/ PHASE TRANSITION/ CLASSICAL LANDAU
THEORY
- 76-CO-15 COX, D.E./ SLEIGHT, A.W.
STRUCTURAL STUDIES OF THE BA-PB(1-X).B(1-X).O3 SYSTEM
CONF-760601-P1, NEUTRON SCATTERING, VOL.1, P.45-P,
54 (1976)
BA,(PB-B1).O3 ..STRUCTURAL STUDIES
- 76-CO-16 COY, R.A./ TOMPSON, C.W./ GUERMAN, E.
PHONON DISPERSION IN NI,O
SOLID STATE COMMUN., V.18, P.845 (1976)
NI,O ..DISPERSION RELATION/ COHERENT INELASTIC NEUTRON
SCATTERING
- 76-CO-17 COY, R.A./ TOMPSON, C.W./ GUERMAN, E.
PHONON DISPERSION IN NI,O
CONF-760601-P1, PROC, CONF, ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.210-P.215 (1976)
NI,O ..EXPERIMENT/ PHONON DISPERSION/ THREE BODY FORCE
SHELL MODEL FITTING
- 76-DA-01 DAUD, M.
SMALL ANGLE NEUTRON SCATTERING BY POLYMER SOLUTIONS. TR
ICRITICAL EFFECTS
CONF-760601-P1, PROC, CONF, ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.466-P.472 (1976)
REVIEW-ARTICLES ..POLYMER SOLUTION/ SMALL ANGLE SCATTER
ING
- 76-DA-02 DASANNACHARYA, B.A./ KOLLAR, A./ SPRINGER, T.
NEUTRON RAYLEIGH AND BRILLOUIN SCATTERING IN NORMAL 4-H
E
PHYS. LETT., A, V.55A, P.337-P.339 (1976)
HE ..EXPERIMENT/ RAYLEIGH AND BRILLOUIN SCATTERING
- 76-DA-03 DAUBERT, J./ KNORR, K./ DULTZ, W./ JEX, H./ CURRAT
R.
LATTICE DYNAMICS OF K.C.N
J. PHYS., C, LONDON, V.9L, P.389-P.390 (1976)
K.C.N ..EXPERIMENT/ PHONON DISPERSION/ 215K
- 76-DA-04 DAUGHTON, W.J./ GUERMAN, E./ TOMPSON, C.W.
PHONON DISPERSION AND MODE SOFTENING IN P60.87-SN0.13,T
E
CONF-760601-P1, PROC, CONF, ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.145-P.151 (1976)
(PB-SN).TE ..EXPERIMENT/ PHONON DISPERSION
- 76-DA-05 DAVIDSON, J.B./ CASE, A.L.
APPLICATION OF THE FLY'S NEUTRON CAMERA, DIFFRACTION TO
POGRAPHY AND PHASE TRANSITION STUDIES
CONF-760601-P2, PROC, CONF, ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1124-P.1135 (1976)
INSTRUMENTS-AND-METHODS ..DIFFRACTION TOPOGRAPHY

- 76-DA-06 DAVIS, J.R./ HICKS, T.J.,
MAGNETIC DEFECT SCATTERING FROM GAMMA-MN-CU AND GAMMA M
N-PD
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.684-P.689 (1976)
MN-CU/ MN-PD .,MAGNETIC DEFECT SCATTERING
- 76-DA-07 DAY, R.S./ SUN, F./ CUTLER, P.H./ KING-III, W.F.,
ON THE USE OF PROPER ENERGY EIGENVALUES IN FIRST PRINCIPLES
PSEUDOPOTENTIAL CALCULATIONS OF PHONON SPECTRA
J. PHYS., F, LONDON, V.6L, P.137-P.140 (1976)
BE/ LI .,THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL METHOD
HOD
- 76-DE-01 DE-RAEDT, H./ MICHEL, K.H.,
ORIENTATIONAL DYNAMICS OF MOLECULAR CRYSTALS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.317-P.322 (1976)
C.H4 .,THEORY/ MOLECULAR DYNAMICS
- 76-DE-02 DENOVER, F./ LAMBERP, M./ COMES, R./ CURRAT, R.,
INELASTIC NEUTRON SCATTERING STUDY IN CUBIC NA.NB.O3
SOLID STATE COMMUN., V.18, P.441 (1976)
NA.NB.O3 .,EXPERIMENT/ SOLID/TRIPLE AXIS SPECTROMETER .,
PHASE TRANSITION/ 620-7100C
- 76-DI-01 DIETRICH, O.W./ ALS-NIELSEN, J./ PASSELL, L.,
NEUTRON SCATTERING FROM THE HEISENBERG FERROMAGNETS EU,
O AND EU.S. III, SPIN DYNAMICS OF EU.O
PHYS. REV. B, V.14, P.4923-P.4945 (1976)
EU.O .,EXPERIMENT/ THEORY/ MAGNETIC SCATTERING/ SPIN DYNAMICS
- 76-DI-02 DIXON, M./ SANGSTER, M.J.L.,
EFFECTS OF POLARIZATION ON SOME STATIC AND DYNAMIC PROPERTIES
OF MOLTEN NA.I
J. PHYS., C, LONDON, V.9, P.909 (1976)
NA.I .,THEORY/ MOLECULAR DYNAMICS/ DISPERSION RELATION/
DIFFUSION PARAMETER/ PAIR-DISTRIBUTION FUNCTION .,AUTOCORRELATION
FUNCTION
- 76-DO-01 DORNER, B./ GHOSH, R.E./ HARBEKE, G.,
PHONON DISPERSION IN THE LAYERED COMPOUND PB.I2
PHYS. STATUS SOLIDI B, V.73, P.655 (1976)
PB.I2 .,EXPERIMENT/ DISPERSION RELATION/ TRIPLE AXIS SPECTROMETER
- 76-DO-02 DORNER, B./ VON-DER-OSTEN, W./ BUHRER, W.,
LATTICE DYNAMICS OF AG-BR
J. PHYS. CHEM. SOLIDS, V.9, P.723 (1976)
AG.BR .,EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
- RIBUTION/ SOLID .,85DK
- 76-DO-03 DORNER, B./ STEINER, M.,
QUASI-ONE-DIMENSIONAL FEATURES IN THE PHONON DISPERSION
OF CS.NI.F3
J. PHYS., C, LONDON, V.9, P.13-P.20 (1976)
CS.NI.F3 .,EXPERIMENT/ PHONON DISPERSION
- 76-DU-01 DUFFY, J.W./ GROOME, L.J./ GUBBINS, K.E./ EGELSTAF
F, P.A.,
NEUTRON SCATTERING FROM DILUTE AND MODERATELY DENSE GASES
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.968-P.974 (1976)
THEORY-OF-FLUIDS/ KR .,DYNAMIC,STATIC STRUCTURE FACTOR
- 76-DU-02 DURAISWAMY, S./ HARIDASAN, T.M.,
MOMENTS OF THE PHONON SPECTRUM IN LITHIUM CHLORIDE
PHYS. STATUS SOLIDI B, V.75, P.53 (1976)
LI.CL .,FREQUENCY DISTRIBUTION/ THEORY/ MOMENT OF PHONON
SPECTRUM
- 76-DU-03 DUVAL, M./ DUPLESSIX, R./ PICOT, C./ DECKER, D./ R
EMPP, P./,
NEUTRON SMALL-ANGLE SCATTERING BY COPOLYMER SOLUTIONS
J. POLY. SCI., POLY, LETT., V.14, P.585-P.589 (1976)
- NEUTRON-SCATTERING-IN-FLUIDS .,THEORY/ SMALL-ANGLE/ COPOLYMER
SOLUTION
- 76-EB-01 EBNER, C./ MYLES, C.W.,
INCOHERENT NEUTRON SCATTERING FROM SOLID MIXTURES OF ORTHO
HYDROGEN AND PARAHYDROGEN
PHYS. REV. B, V.13, P.2636-P.2640 (1976)
HYDROGEN .,NEUTRON SCATTERING/ THEORY/ ORTHO-PARA HYDROGEN
MIXTURE/ SOLID
- 76-EC-01 ECKERT, J./ AXE, J.D./ DANIELS, W.B.,
LATTICE DYNAMICS OF NEON AT HIGH PRESSURE
BNL-21390 (1976)
NE .,EXPERIMENT/ PHONON DISPERSION/ 6KBAR/ 82K
- 76-EC-02 ECKERT, J./ DANIELS, W.B./ AXE, J.D.,
PHONON DISPERSION AND MODE GRUENEISEN PARAMETERS IN NEON
AT HIGH DENSITY
PHYS. REV. B, V.14, P.3649-P.3663 (1976)
NE .,EXPERIMENT/ PHONON DISPERSION/ 8DK/ PHONON SPECTRUM
- 76-EC-03 ECKERT, J./ AXE, J.D./ DANIELS, W.B.,
LATTICE DYNAMICS OF NEON AT HIGH PRESSURE
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,

V.1, GATLINBURG, P.187-P.193 (1976)
NE ..EXPERIMENT/ PHONON DISPERSION/ 82K,6KBAR/ BORN-VON
-KARMAN ANALYSIS

76-ED-01 EDELSTEIN, A.S./ MAJEWSKI, R./ SINHA, S.K./ BRUN,
T./ PELIZZARI, C.A./
INELASTIC NEUTRON SCATTERING MEASUREMENTS ON CE.AL3 AND
CE18-TH.2
CONF-760601-P2, PROC. CONF, ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.873-P.877 (1976)
CE.AL3/ CE-TH ..EXPERIMENT/ QUASIELASTIC

76-ED-02 EDER, O.J./ KUNSCH, B.,
THE STRUCTURE FACTOR OF LIQUID ALUMINUM BY NEUTRON DIFF
RACTION
CONF-760601-P2, PROC. CONF, ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1028-P.1034 (1976)
AL ..EXPERIMENT/ LIQUID STRUCTURE

76-EG-01 EGELSTAFF, P.A.,
DYNAMICS OF SIMPLE FLUIDS
CONF-760601-P2, PROC. CONF, ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.909-P.934 (1976)
REVIEW-ARTICLES ..LIQUID DYNAMICS/ SIMPLE FLUIDS/ NEUTR
ON SCATTERING

76-EL-01 ELLENSON, W.D./ COMES, R./ SHAPIRO, S.M./ SHIRANE,
G./ GARITO, A.F./
NEUTRON SCATTERING STUDY OF 49K PHASE TRANSITION IN TTF
-TCN0
SOLID STATE COMMUN., V.20, P.53 (1976)
TTF-TCN0 ..ELASTIC NEUTRON SCATTERING/ PHASE TRANSITION

76-EL-02 ELLENSON, W.D./ KJEMS, J.K.,
SOFT PHONON AND CENTRAL PEAK SCATTERING IN A MOLECULAR
CRYSTAL SYSTEM, C6,CL4,O2 (CHLORANIL)
CONF-760601-P1, PROC. CONF, ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.394-P.398 (1976)
CHLORANIL ..EXPERIMENT/ QUASIELASTIC SCATTERING

76-ER-01 EREMEEV, I.P./ SADIKOV, I.P./ CHERNYSHOV, A.A.,
DENSITY OF PHONON STATES IN GROUP II HEXAGONAL METALS
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.18 (V
.18), P.1632-P.1660 (P.960-P.964) (1976 (1976))
MG/ ZN/ CD ..EXPERIMENT/ SEPARATED ISOTOP CD-110,CD-111
/ PHONON SPECTRA

76-ES-01 ESCHRIG, H./ FELDMANN, K./ HENNIG, K./ MATZ, W./ P
AUFLER, P.,
PHONON SPECTRA OF THE LAVES PHASE INTERMETALLIC COMPOUN
D CA.MG2

JINR-E14-9855 (1976)
CA.MG2 ..EXPERIMENT/ CALCULATION/ PHONON SPECTRA

76-FA-01 FARNOUX, B.,
OBSERVATION OF A SPATIAL CROSS-OVER IN POLYMER SOLUTION
S BY SMALL ANGLE NEUTRON SCATTERING
CONF-760601-P1, PROC. CONF, ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.459-P.464 (1976)
POLYSTYRENE-CARBON DISULFIDE ..SMALL ANGLE SCATTERING

76-FA-02 FARR, M.K./ TREVINO, S.F.,
MODE GRUNEISEN PARAMETERS OF K,8R DETERMINED BY INELAST
IC NEUTRON SCATTERING
CONF-760601-P1, PROC. CONF, ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.237-P.242 (1976)
K,8R ..EXPERIMENT/ PHONON DISPERSION/ 18AR,6,4KBAR/ BRE
ATHING SHELL MODEL

76-FE-01 FERNANDEZ, T.F.,
DOUBLE COLLISION EFFECTS ON THE DETERMINATION OF THE CR
ITICAL INDEXETA BY NEUTRON SCATTERING
PHYS. LETT., A, V.57, P.115 (1976)
THEORY-OF-FLUIDS ..DOUBLE COLLISION EFFECTS/ THEORY

76-FR-01 FREEMAN, A.J.,
THEORETICAL DETERMINATIONS OF MAGNETIZATION DENSITIES A
ND NEUTRON MAGNETIC FORM FACTORS IN METALS
CONF-760601-P2, PROC. CONF, ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.592-P.615 (1976)
THEORY-OF-SOLIDS/ GD/ SC/ PD/ PT ..MAGNETIC FORM FACTOR
S/ METAL

76-FR-02 FREUND, A.,
PROGRESS IN NEUTRON MONOCHROMATOR DEVELOPMENT AT THE IN
STITUTE LAUE-LANGEVIN
CONF-760601-P2, PROC. CONF, ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1143-P.1150 (1976)
INSTRUMENTS-AND-METHODS ..MONOCHROMATOR/ ILL

76-FR-03 FRIKKEE, E./ MIKKE, K.,
INFLUENCE OF THE ORDER-DISORDER TRANSITION IN FE3-AL ON
THE LOW ENERGY SPIN WAVE
CONF-760601-P2, PROC. CONF, ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.832-P.839 (1976)
FE3,AL ..EXPERIMENT/ MAGNON DISPERSION

76-FU-01 FUKUDA, Y.,
DYNAMICS OF HONEYCOMB AND TRIANGULAR LATTICES CONTAININ
G POINT DEFECTS
J. PHYS. SOC. JAP., V.41, P.18-P.25 (1976)
THEORY-OF-SOLIDS ..LOCALIZED, RESONANCE PHONON MODE

- 76-FU-02 FULFARO, R./ VINHAS, L.A./ NETO, R.L.
LIQUID-SOLID TRANSITION IN CYCLOHEXANOL STUDIED BY NEUTRON TRANSMISSION
IEA-423 (1976)
CYCLOHEXANOL .. TOTAL CROSS SECTION
- 76-FU-03 FUNAHASHI, S./ KAZAMA, N.
SPIN-WAVE DISPERSION RELATIONS IN $Mn(2-x)Cr(x)Sb$
J. PHYS. SOC. JAP., V.41, P.811-P.816 (1976)
($Mn-Cu$) Sb .. EXPERIMENT/ MAGNON DISPERSION/ TEMPERATURE EFFECT
- 76-GE-01 GENZEL, L./ BAUHOFFER, W.
PHONONS IN MIXED CRYSTALS
Z. PHYS. B, V.25, P.13-P.18 (1976)
THEORY-OF-SOLIDS .. MIXED CRYSTAL/ PHONON DISPERSION/ A. B(1-X), C(X) TYPE
- 76-GE-02 GERSCH, H.A./ HOLM, W.A.
THERMAL-NEUTRON CRITICAL MULTIPLE SCATTERING VIA THE GLAUBER APPROXIMATION
PHYS. REV. B, V.14, P.1307-P.1313 (1976)
SCATTERING-THEORIES .. CRITICAL MULTIPLE SCATTERING/ GLAUBER APPROXIMATION
- 76-GE-03 GESZTI, T.
WAVES AND OSCILLATIONS IN THE ATOMIC DYNAMICS OF LIQUID METALS
J. PHYS., C, LONDON, V.9L, P.263-P.265 (1976)
SODIUM/ RUBIDIUM .. CALCULATION/ ATOMIC DYNAMICS/ LIQUID METAL/ OSCILLATION/ DISPERSION CURVE
- 76-GH-01 GHOSH, R.E./ HIGGINS, J.S.
QUASI-ELASTIC SCATTERING FROM DILUTE POLYMER SOLUTIONS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.323-P.329 (1976)
POLYTETRAHYDROFURANE-CARBON DISULFIDE/ POLYSTYRENE-CARBON DISULFIDE .. SCATTERING LAW/ EXPERIMENT/ CHAIN DYNAMIC S
- 76-GI-01 GIAQUINTA, P.V./ PARRINELLO, M./ TOSI, M.P./ MARCH, N.H.
FREQUENCY SPECTRA OF TRANSPORT PROPERTIES IN IONIC LIQUIDS, CONTRIBUTION OF CHARGE FLUCTUATION MODES
J. PHYS. CHEM. LIQUIDS, V.5, P.197-P.206 (1976)
THEORY-OF-FLUIDS .. FREQUENCY SPECTRA/ SHEAR VISCOSITY/ SELF-DIFFUSION/ THERMAL DIFFUSION/ CHARGE FLUCTUATION
- 76-GI-02 GIAQUINTA, P.V./ PARRINELLO, M./ TOSI, M.P.
HYDRODYNAMIC CORRELATION FUNCTIONS FOR MOLTEN SALTS
PHYS. CHEM. LIQUIDS, V.5, P.305-P.324 (1976)
THEORY-OF-FLUIDS .. CORRELATION FUNCTION/ MOLTEN SALT
- 76-GI-03 GILLAN, M./ LARSEN, B./ TOSI, M.P./ MARCH, N.H.
STRUCTURE OF CLASSICAL LIQUID OF CHARGED HARD SPHERES AND POINT IONS
J. PHYS., C, LONDON, V.9, P.889 (1976)
 $Cu, Cl/ Be, F_2/ H, F$.. THEORY/ LIQUID/ PAIR-DISTRIBUTION FUNCTION .. MEAN SPHERICAL MODEL/ MIXTURE/ THERMODYNAMICS
- 76-GL-01 GLASS, N.E.
THEORY OF THE LATTICE DYNAMICS OF MODEL CRYSTALS CONTAINING SCREW DISLOCATIONS
COO-3476-13 (1976)
THEORY-OF-SOLIDS .. LATTICE DYNAMICS/ SCREW DISLOCATION
- 76-GL-02 GLINKA, C.J./ ROWE, J.M./ RUSH, J.J./ RAHMAN, A./ SINHA, S.K./
INELASTIC NEUTRON SCATTERING LINESHAPES IN PD-D0.63
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.536-P.542 (1976)
PD-H .. EXPERIMENT/ PHONON DISPERSION/ PHONON WIDTH
- 76-GL-03 GLYDE, H.R./ KHANNA, F.C.
NEUTRON SCATTERING FROM LIQUID HELIUM-3
PHYS. REV. LETT., V.37, P.1692-P.1695 (1976)
HELIUM .. CALCULATION/ DYNAMICAL FORM FACTOR/ LIQUID HELIUM/ RANDOM PHASE APPROXIMATION/ ZERO SOUND MODE
- 76-GL-04 GLYDE, H.R./ KHANNA, F.C.
THE DYNAMICS OF LIQUID ^3He
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.989-P.995 (1976)
 He .. THEORY/ PARTICLE AND SPIN CORRELATION/ ^3He / EXPERIMENT
- 76-GO-01 GOETZE, W./ LUECKE, M.
SELF-CONSISTENT SECOND ORDER APPROXIMATION FOR THE LIQUID-HELIUM II EXCITATION SPECTRUM
PHYS. REV. B, V.13, P.3822 (1976)
 He .. DYNAMICAL STRUCTURE FACTOR/ LIQUID $He-2$
- 76-GO-02 GOETZE, W./ LUECKE, M.
DYNAMICAL STRUCTURE FACTOR $S(Q, \omega)$ OF LIQUID HELIUM II AT ZERO TEMPERATURE
PHYS. REV. B, V.13, P.3825 (1976)
 He .. DYNAMICAL STRUCTURE FACTOR/ LIQUID $He-2$
- 76-GO-03 GOETZE, W./ ZIPPELIUS, A.
INCOHERENT SCATTERING FUNCTION $S(Q, \omega)$ FOR CLASSICAL LIQUIDS
PHYS. REV. A, V.14, P.1842-P.1852 (1976)
THEORY-OF-FLUIDS/ AR/ RB .. SELF-CORRELATION FUNCTION/ C

CLASSICAL LIQUIDS

- 76-GO-04 GOHEL, V.B./ JANI, A.R.
A MODEL FOR THE LATTICE DYNAMICS OF CUBIC METALS
PHYSICA, B+C, V.82, P.333 (1976)
NA/ CU/ W. .DISPERSION RELATIONS/ CUBIC METAL/ THEORY
- 76-GO-05 GOLDMAN, V.V./ KLEIN, M.L.
SELF-CONSISTENT PHONON CALCULATION OF THE ELASTIC CONSTANTS OF THE BETA PHASE OF SOLID N₂
J. CHEM. PHYS., V.64, P.5121-P.5125 (1976)
N₂ .THEORY/ ELASTIC CONSTANT/ HCP N₂
- 76-GO-06 GOMPF, F./ PINTSCHOVUS, L./ REICHARDT, W./ SCHEERER, B.
INVESTIGATIONS ON THE LATTICE DYNAMICS OF THE CARBIDES AND NITRIDES OF NIOBIUM AND TITANIUM
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.129-P.135 (1976)
NB, C/ TI, C/ NB, N/ TI, N. .PHONON DISPERSION/ STATE DENSITY/ SHELL MODEL FITTING/ EXPERIMENT
- 76-GO-07 GOYAL, R.P./ SARKER, K.K./ GOYAL, S.C.
DISPERSION OF PHONONS IN TRANSITION METAL OXIDES (MN, O)
PHYS. STATUS SOLIDI B, V.75, P.101 (1976)
THEORY-OF-SOLIDS .DISPERSION RELATION/ SHELL MODEL/ TRANSITION METAL/ THEORY
- 76-GO-08 GOYAL, S.C./ GOYAL, A.K.
DISPERSION OF PHONONS IN METAL CARBIDES (U, C)
PHYS. STATUS SOLIDI B, V.77, P.639-P.643 (1976)
U, C. .THEORY/ PHONON DISPERSION/ THREE-BODY-FORCE SHELL MODEL
- 76-GU-01 GUPTA, M./ FREEMAN, A.J.
DIRECT CORRELATION OF OBSERVED PHONON ANOMALIES AND MAXIMA IN THE GENERALIZED SUSCEPTIBILITIES OF TRANSITION METAL CARBIDES
CONF-760604-5 (1976)
ZR, C/ HF, C/ NB, C/ TA, C. .THEORY/ PHONON DISPERSION/ PHONON SPECTRA/ APW ENERGY BAND CALCULATION
- 76-GU-02 GUPTA, B.R.K./ VERMA, M.P.
A THREE BODY SHELL MODEL STUDY OF PHONON DISPERSION IN ZR, C
J. PHYS. CHEM. SOLIDS, V.37, P.815-P.816 (1976)
ZR, C. .THEORY/ THREE BODY FORCE SHELL MODEL/ PHONON DISPERSION
- 76-GU-03 GUPTA, M./ FREEMAN, A.J.
GENERALIZED SUSCEPTIBILITIES AND ELECTRONICALLY DRIVEN PHONON ANOMALIES IN TRANSITION METAL CARBIDES
- CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.250-P.258 (1976)
NB, C/ TA, C/ ZR, C/ HF, C. .THEORY/ PHONON ANOMALY/ GENERALIZED SUSCEPTIBILITY
- 76-HA-01 HALL, B.O./ JAMES, H.M.
LATTICE DYNAMICS OF ALPHA CARBON MONOXIDE
PHYS. REV. B, V.13, P.3590 (1976)
C, O. .LATTICE DYNAMICS
- 76-HA-02 HALL, D.G./ FAULKNER, J.S.
SPECTRAL DENSITY FUNCTIONS FOR AMORPHOUS SOLIDS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.800-P.806 (1976)
THEORY-OF-SOLIDS .AMORPHOUS SOLID/ SPECTRAL DENSITY
- 76-HA-03 HANKE, W./ HAFNER, J./ BILZ, H.
PHONON ANOMALIES AND SUPERCONDUCTIVITY IN TRANSITION-METAL COMPOUNDS
PHYS. REV. LETT., V.37, P.1560-P.1564 (1976)
THEORY-OF-SOLIDS/ NB, C. .THEORY/ TRANSITION METAL COMPOUND/ PHONON DISPERSION
- 76-HA-04 HANSEN, J.P./ KLEIN, M.L.
DYNAMICAL STRUCTURE FACTOR S(Q, ω) OF RARE-GAS SOLIDS
PHYS. REV. B, V.13, P.878 (1976)
NEUTRON-SCATTERING-IN-SOLIDS .THEORY/ SOLID/ SIGMA(THE TA, E)/ MOLECULAR DYNAMICS
- 76-HA-05 HARADA, J./ SUZUKI, H./ HOSHINO, S.
NEUTRON SCATTERING STUDY OF LATTICE DYNAMICS IN CU, BR, II, ANHARMONIC EFFECT ON DEBYE-WALLER FACTOR
J. PHYS. SOC. JAP., V.41, P.1707-P.1715 (1976)
CU, BR. .NEUTRON DIFFRACTION/ ANHARMONIC EFFECT/ DEBYE-WALLER FACTOR
- 76-HA-06 HARADA, J./ SAKATA, M./ HOSHINO, S./ HIROTSU, S.
NEUTRON DIFFRACTION STUDY OF THE STRUCTURE IN CUBIC CS, PB, CL₃
J. PHYS. SOC. JAP., V.40, P.212-P.218 (1976)
CS, PB, CL₃ .NEUTRON DIFFRACTION/ STRUCTURE ANALYSIS
- 76-HA-07 HASEGAWA, M.
THIRD-ORDER PERTURBATION THEORY AND STRUCTURES OF LIQUID METALS, SODIUM AND POTASSIUM
J. PHYS., F. LONDON, V.6, P.649-P.675 (1976)
K/ NA. .THEORY/ LIQUID STRUCTURE/ THIRD ORDER PERTURBATION
- 76-HA-08 HAUS, J.W./ MEIJER, P.H.E.
DYNAMICS OF METASTABLE FLUID STATES IN THE LIQUID-SOLID

- TRANSITION
PHYS. REV. A, V.14, P.2285-P.2294 (1976)
NEUTRON-SCATTERING-IN-FLUIDS ., MEMORY-FUNCTION-METHOD/
THEORY
- 76-HA-09 HAYTER, J.B.,
RECENT DEVELOPMENTS IN POLARISED NEUTRONS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1074-P.1093 (1976)
INSTRUMENTS-AND-METHODS ., POLARIZED NEUTRON
- 76-HE-01 HEGER, G./ MULLER, D.,
HYDROGEN BONDING AND STRUCTURAL PHASE TRANSITIONS IN (C
, H3, N, H3)2, MN, CL4
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.439-P.444 (1976)
(C, H3, N, H3)2, MN, CL4 ., PHASE TRANSITION
- 76-HE-02 HEIDEMANN, A./ KOSUGE, K./ KACHI, S.,
INVESTIGATION OF THE HYPERFINE SPLITTING IN V3.05 AND V
4.07 BY INELASTIC NEUTRON SCATTERING
PHYS. STATUS SOLIDI A, V.35, P.481-P.485 (1976)
V3.05/ V4.07/ MAGNETIC-SCATTERING ., EXPERIMENT/ HYPERFI
NE SPLITTING/ ANTIFERROMAGNETIC PHASE/ 0-40K
- 76-HE-03 HELLNER, E./ HEGER, G./ MULLEN, D./ TREUTMANN, W.,
COMBINED X-RAY AND NEUTRON DIFFRACTION STUDIES OF THE I
NTERMETALLIC SYSTEM (CR1-X)-FE(X)) (1-DELTA), SB
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.71-P.76 (1976)
(CR-FE), SB ., NEUTRON DIFFRACTION/ CR, FE DISTRIBUTION
- 76-HE-04 HENNIG, K./ KAUN, L./ LIPPOLD, B./ MATZ, W.,
SOME EXPERIMENTS ON NEUTRON INELASTIC SCATTERING AT THE
PULSED REACTOR IRR-30
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.878-P.886 (1976)
PR, FE, O3/ PR, GA, O3/ PR, AL2/ PR3, AL ., EXPERIMENT/ CRYSTA
LLINE FIELD LEVEL
- 76-HE-05 HENNION, B./ HUTCHINGS, M.T./ LOWDE, R.D./ STRINGF
ELLOW, M.W./ TOCCHETTI, D.,
THE GENERALISED SUSCEPTIBILITY OF MN73-NI27
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.825-P.831 (1976)
MN-NI ., EXPERIMENT/ SUSCEPTIBILITY
- 76-HE-06 HERVET, H./ DIANOUX, A.J./ LECHNER, R.E./ VOLINO,
F.,
NEUTRON SCATTERING STUDY OF METHYL GROUP ROTATION IN SO
LID PARA-AZOXYANISOLE (PAA)
J. PHYS. PARIS, V.37, P.587-P.594 (1976)
- P-AZOXYANISOLE ., EXPERIMENT/ QUASIELASTIC/ UNIAXIAL ROT
ATIONAL JUMP
- 76-HI-01 HIGGINS, J.S.,
CONFORMATIONAL MOTIONS OF LONG CHAIN MOLECULES IN RUBBE
RS AND NETWORKS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.344-P.351 (1976)
POLYPROPYLENE OXIDE ., EXPERIMENT/ QUASIELASTIC SCATTERI
NG
- 76-HI-02 HILTON, P.A./ STIRLING, W.G./ SCHERM, R.,
EXCITATION SPECTRUM OF 3HE-4HE MIXTURE
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1003-P.1009 (1976)
HE ., EXPERIMENT/ EXCITATION SPECTRUM
- 76-HO-01 HONMA, K./ OKAZAKI, H./ TSUCHIYA, Y./ TAMAKI, S./
IIDA, K.,
NEUTRON DIFFRACTION ON LIQUID BINARY ALLOYS WITH MISCIB
ILITY GAPS
PHYS. LETT., A, V.58, P.29-P.30 (1976)
BI-ZN ., EXPERIMENT/ NEUTRON DIFFRACTION/ LIQUID/ 607-75
OC/ ZNO, 70-BIO, 30
- 76-HO-02 HOPPS, J.H.,
DIRECT VARIATIONAL APPROACH TO THE CALCULATION OF DYNAM
IC STRUCTURE FUNCTIONS
PHYS. REV. A, V.13, P.1226 (1976)
MISCELLANEOUS ., THEORY/ SCATTERIN LAW ., VARIATIONAL MET
HOD
- 76-HO-03 HOSHINO, S./ FUJII, Y./ HARADA, J./ AXE, J.D.,
NEUTRON SCATTERING STUDY OF LATTICE DYNAMICS IN CU, BR,
PARI I, PHONON DISPERSION RELATIONS
J. PHYS. SOC. JAP., V.41, P.963-P.973 (1976)
CU, BR ., EXPERIMENT/ PHONON DISPERSION/ 77K
- 76-HO-04 HOUMANN, J.G./ MOELLER, H.B.,
MAGNETIC EXCITATIONS IN RARE EARTH METALS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.743-P.770 (1976)
REVIEW-ARTICLES ., MAGNETIC EXCITATION/ REAE EARTH METAL
/ INELASTIC NEUTRON DATA
- 76-HS-01 HSU, Y.W.,
CALCULATION OF THE PHONON SPECTRA OF BETA-ALUMINA
PHYS. REV. B, V.14, P.5161-P.5164 (1976)
ALUMINA ., PHONON-SPECTRA/ DENSITY-OF-STATES/ THEORY ., 1
, 3M20, 11AL2, O3/ SUPERIONIC-CONDUCTOR
- 76-HU-01 HUTCHINGS, M.T./ FAIR, M.J./ DAY, P./ WALKER, P.J.,

NEUTRON SCATTERING MEASUREMENT OF SPIN-WAVE DISPERSION
IN Rb₂CrCl₄, A TWO-DIMENSIONAL EASY-PLANE FERROMAGNET
J. PHYS., C, LONDON, V.9L, P.55-P.60 (1976)
Rb₂CrCl₄ ..EXPERIMENT/ MAGNON DISPERSION/ FERROMAGNET
IC PHASE/ 4.5K

76-11-01 IIDA, K./ HONMA, K./ OKAZAKI, H./ TAMAKI, S.
NEUTRON DIFFRACTION OF LIQUID SB-ZN ALLOYS
J. PHYS. SOC. JAP., V.40, P.1347-P.1350 (1976)
SB-ZN ..NEUTRON DIFFRACTION/ LIQUID STRUCTURE

76-11-02 IIZUMI, M./ AXE, J.D./ SHIRANE, G./ SHIMAOKA, K.
INCOMMENSURATE LATTICE-INSTABILITY IN K₂SeO₄
BNL-21471 (1976)
K₂SeO₄ ..EXPERIMENT/ PHASE TRANSITION/ PHONON SOFTENING

76-11-03 IIZUMI, M./ AXE, J.D./ SHIRANE, G.
INCOMMENSURATE LATTICE-INSTABILITY IN K₂SeO₄
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.406-P.411 (1976)
K₂SeO₄ ..EXPERIMENT/ INCOMMENSURATE/ PHONON DISPERSION
/ SOFTENING

76-JA-01 JACOBE, J.
SURVEY OF DETECTION SYSTEMS AND ELECTRONICS FOR I.L.L.
EXPERIMENTS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1159-P.1168 (1976)
INSTRUMENTS-AND-METHODS ..DETECTOR/ ELECTRONICS

76-JA-02 JACROT, B.
THE STUDY OF BIOLOGICAL STRUCTURES BY NEUTRON SCATTERING
FROM SOLUTION
REP. PROGR. PHYS., V.39, P.911-P.953 (1976)
REVIEW-ARTICLES ..BIOLOGICAL STRUCTURE/ SOLUTION/ NEUTRON
ON SCATTERING

76-JA-03 JAMES, V.J./ OLLIS, J./ STEVENS, J.D./ MOORE, F.H.
NEUTRON DIFFRACTION STUDIES OF CARBOHYDRATE
CONF-760601-P1, NEUTRON SCATTERING, VOL.1, P.62-P.
70 (1976)
C13,H22,O6 ..NEUTRON DIFFRACTION/ STRUCTURE STUDIES

76-JA-04 JANDL, G./ BREBNER, J.L./ POWELL, B.M.
LATTICE DYNAMICS OF GA₂Se.
PHYS. REV. B, V.13, P.686 (1976)
GA₂Se ..EXPERIMENT/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/
BORN-VON KARMAN MODEL/ DEBYE TEMPERATURE ..SPECIFIC HEAT

76-JA-05 JANI, A.R./ GOHEL, V.B.

A MODEL FOR THE LATTICE DYNAMICS OF B.C.C. TRANSITION METALS

PHYS. LETT., A, V.55A, P.350-P.352 (1976)

CR ..THEORY/ PHONON DISPERSION/ TRANSITION METAL/ B.C.C.

76-JA-06 JANI, A.R./ GOHEL, V.B.
ON THE PHONON DISPERSION IN TUNGSTEN
J. PHYS., F, LONDON, V.6L, P.25-P.27 (1976)
W ..THEORY/ PHONON DISPERSION

76-JA-07 JANI, A.R./ JANI, J.M./ OTNES, K.
STOCHASTIC N₂H₃-ROTATION IN (N₂H₃)₆ (CL.04)2
PHYSICA, B+C, V.83, P.259-P.266 (1976)
(N₂H₃)₆ (CL.04)2 ..EXPERIMENT/ QUASIELASTIC SCATTERING/
JUMP AND UNIAXIAL ROTATIONAL DIFFUSION MODEL FITTING

76-JO-01 JORGENSEN, J.D./ WORLTON, T.G./ SRINIVASA, S.R./ CARTZ, L.
HIGH PRESSURE NEUTRON DIFFRACTION STUDY OF ALPHA-Si₃N₄
CONF-760601-P1, NEUTRON SCATTERING, VOL.1, P.55-P.
61 (1976)
Si₃N₄ ..NEUTRON DIFFRACTION/ HIGH PRESSURE

76-KA-01 KAHOL, P.K./ BANSAL, R./ PATHAK, K.N.
THEORY OF COLLECTIVE MOTION IN LIQUIDS
J. PHYS., C, LONDON, V.9L, P.259-P.262 (1976)
ARGON ..THEORY/ MOLECULAR DYNAMICS/ MODEL FITTING/ LIQUID

76-KA-02 KAHOL, P.K./ BANSAL, R./ PATHAK, K.N.
COLLECTIVE EXCITATIONS IN LIQUID RUBIDIUM
PHYS. REV. A, V.14, P.408-P.413 (1976)
Rb/ NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ MEMORY-FUNCTION-METHOD

76-KE-01 KEHR, K.W./ RICHTER, D.
INCOHERENT SCATTERING LAW FOR DIFFUSION IN CRYSTALS WITH
RANDOM IMPURITIES
SOLID STATE COMMUN., V.20, P.477 (1976)
THEORY-OF-SOLIDS ..INCOHERENT SCATTERING LAW/ AVERAGE-T
-MATRIX APPROX.

76-KJ-01 KJEMS, J.K./ PASSELL, L./ TAUB, H./ DASH, J.G./ NO
VACO, A.D.
NEUTRON SCATTERING STUDY OF NITROGEN ADSORBED ON BASAL-
PLANE-ORIENTED GRAPHITE
PHYS. REV. B, V.13, P.1446 (1976)
GRAPHITE ..EXPERIMENT/ NEUTRON SPECTRUM ..ADSORBED NITROGEN
FILM STUDY/ 10 TO 900K/ PHASE TRANSITION

- 76-KL-01 KLEIN, B.M./ BOYER, L.L./ PAPACONSTANTOPOULOS, D.A.
ON THE RELATIONSHIP BETWEEN THE PHONON ANOMALIES AND THE AB INITIO CALCULATED FERMION SURFACES OF TA₂C AND Nb₂C
SOLID STATE COMMUN., V.20, P.937-P.940 (1976)
TA₂C/ Nb₂C/ HF₂C ..APW MUFFIN-TIN CALCULATION/ FERMION SURFACE/ PHONON FREQUENCY
- 76-KL-02 KLEY, W./ DREXEL, W./ MURANI, A./ TOCCHETTI, D./ S
OSNOWSKA, J.
THE MOTIONS OF HYDROGEN IN ALPHA-PALLADIUM-HYDRIDE
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.558-P.567 (1976)
PD-H ..EXPERIMENT/ HYDROGEN MOTION
- 76-KO-01 KOESTER, L./ KNOPF, K./ WASCHOWSKI, W.
THE SCATTERING OF SLOW NEUTRONS BY PHOSPHORUS AND NITROGEN
Z. PHYS., A, V.277, P.77 (1976)
N ..COHERENT SCATTERING LENGTH/ EXPERIMENT
- 76-KO-02 KOETZLE, T.F./ BAU, R.
NEUTRON DIFFRACTION STUDIES OF TRANSITION METAL HYDRIDE COMPLEXES
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.507-P.516 (1976)
REVIEW-ARTICLE ..NEUTRON DIFFRACTION/ TRANSITION METAL HYDRIDE COMPLEXES
- 76-KO-03 KOHLI, M./ OTNES, K./ PYN, R./ RISTE, T.
INVESTIGATION OF NEMATIC ORDER BY COHERENT NEUTRON SCATTERING
Z. PHYS., B, V.24, P.147-P.152 (1976)
P-AZOXYANISOLE ..THEORY/ EXPERIMENT/ NEMATIC PHASE/ ORDER PARAMETER/ COHERENT CROSS SECTION
- 76-KO-04 KOLLMAR, A./ ALEFELD, B.
TUNNELSPLITTING AND ROTATIONAL POTENTIALS IN DIMETHYLACETYLENE AND TETRAMETHYLENE BY MICR-EV NEUTRON SPECTROSCOPY
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.330-P.336 (1976)
DIMETHYLACETYLENE/ TETRAMETHYLENE ..EXPERIMENT/ ROTATIONAL MOTION
- 76-KO-05 KORSUNSKY, V.I./ NABERUKHIN, Y.I.
MEANING OF THE CONCENTRATION INDEPENDENT PARTIAL INTERFERENCE FUNCTIONS OF LIQUID BINARY SYSTEMS
J. PHYS., CHEM., LIQUIDS, V.5, P.137-P.149 (1976)
THEORY-OF-FLUIDS ..ALLOY/ PARTIAL INTERFERENCE FUNCTION
- 76-KR-01 KRASNICKI, S.
NEUTRON INVESTIGATION OF MAGNONS IN THE CU₂-MN, AL HEUSLER ALLOY
PHYS. STATUS SOLIDI B, V.78, P.335-P.340 (1976)
CU₂-MN, AL ..EXPERIMENT/ MAGNON DISPERSION
- 76-KR-02 KRESS, W./ FREY, A./ DORNER, B./ KAISER, W.
LATTICE DYNAMICS OF Ge₂S₃
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.216-P.222 (1976)
Ge₂S₃ ..EXPERIMENT/ PHONON DISPERSION
- 76-KU-01 KUKHTO, O.L./ MIKHAILOV, V.I./ OZEROV, R.P./ SOLOV
YER, S.P.
INELASTIC NEUTRON SCATTERING SPECTRA OF CRYSTALLINE AND AMORPHOUS ARSENIC CHALCOGENIDES
FIZ. TVERD. TELA (SOV. PHYS. SOLID STATE), V.18 (V.18), P.1707-P.1712 (P.991-P.994) (1976 (1976))
AS₂S₃/ AS₂SE₃ ..EXPERIMENT/ PHONON FREQUENCY SPECTRA
- 76-KU-02 KUMARAVADIVEL, R./ EVANS, R.
THE ENTROPIES AND STRUCTURE FACTORS OF LIQUID SIMPLE METALS
J. PHYS., C, LONDON, V.9, P.3877-P.3903 (1976)
THEORY-OF-FLUIDS ..THEORY/ ENTROPIES/ STRUCTURE FACTORS / WEEKS-CHANDLER-ANDERSON THEORY
- 76-KU-03 KUNC, K./ BILZ, H.
OVERLAP SHELL MODEL AND BOND CHARGE MODEL IN LATTICE DYNAMICS OF CUBIC CRYSTALS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.195-P.201 (1976)
ZN, SE/ ZN, O/ GA, P/ GA, AS/ GA, SB ..CALCULATION/ SHELL MODEL/ PHONON DISPERSION
- 76-LA-01 LANDER, G.H./ REDDY, J.F.
POLARIZED-NEUTRON STUDIES OF 242PU, P AND 242PU, FE₂
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.623-P.629 (1976)
PU, P/ PU-Fe ..POLARIZED NEUTRON DIFFRACTION
- 76-LA-02 LAROSE, A./ BROCKHOUSE, B.N.
LATTICE VIBRATIONS IN TUNGSTEN AT 22DC STUDIED BY NEUTRON SCATTERING
CAN, J. PHYS., V.54, P.1819-P.1823 (1976)
TUNGSTEN ..EXPERIMENT/ PHONON DISPERSION/ 22C
- 76-LA-03 LAROSE, A./ BROCKHOUSE, B.N.
LATTICE VIBRATIONS IN COPPER AT ELEVATED TEMPERATURE STUDIED BY NEUTRON SCATTERING
CAN, J. PHYS., V.54, P.1990-P.2017 (1976)
CU ..EXPERIMENT/ PHONON DISPERSION/ 23-1063C/ TEMPERATURE

RE EFFECT

- 76-LE-01 LEADBETTER, A.J./ RICHARDSON, R.M./ DASANNACHARYA, B.A./ HOWELLS, W.S.
INCOHERENT NEUTRON QUASI-ELASTIC SCATTERING STUDIES OF THE ANISOTROPIC SELF-DIFFUSION IN NEMATIC AND SEMETIC A PHASES OF ETHYL-4-(4 ACETOXY BENZYLIDENE) AMINOCINNAMATE (EABAC)
CHEM. PHYS. LETT., V.39, P.501-P.504 (1976)
EABAC ..EXPERIMENT/ QUASI-ELASTIC
- 76-LE-02 LECHNER, R.E.
ROTATIONAL MOTION IN PLASTIC-CRYSTALLINE ADAMANTANE, RESULTS FROM HIGH RESOLUTION QUASIELASTIC NEUTRON SCATTERING
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.310-P.316 (1976)
ADAMANTANE ..EXPERIMENT/ QUASIELASTIC/ ROTATIONAL JUMP MODEL
- 76-LI-01 LIGENZA, S.
A STUDY OF SPIN INTERACTION IN A MANGANESE-SUBSTITUTED ZINC FERRITE BY NEUTRON SPECTROSCOPY
PHYS. STATUS SOLIDI B, V.78, P.301-P.310 (1976)
(ZN-MN).FE2.O4 ..EXPERIMENT/ MAGNETIC INTERACTION
- 76-LO-01 LOEWENHAUPT, M./ SCHEUER, H./ SCHMATZ, W.
INVESTIGATION OF SPIN DYNAMICS OF DILUTE MAGNETIC ALLOY S BY DIFFUSE NEUTRON SCATTERING
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.856-P.863 (1976)
CU-FE/ AU-FE ..EXPERIMENT/ MAGNETIC DIFFUSE SCATTERING
- 76-LO-02 LOIDL, A./ DAUBERT, J./ JEX, H.
ZERO-AND FIRST-SOUND DAMPING IN NA.F OBSERVED BY INELASTIC NEUTRON SCATTERING
PHYS. LETT., A, V.56, P.139 (1976)
NA.F ..EXPERIMENT/ TRIPLE-AXIS SPECTROMETER/ SOLID/ ANHARMONICITY ..295,500,600,700K
- 76-LO-03 LOIDL, A./ DAUBERT, J./ SCHEDLER, E.
PHONON DISPERSION IN NA.F IN THE REGION BETWEEN ZERO AND FIRST SOUND, MEASURED BY INELASTIC NEUTRON SCATTERING
J. PHYS., C, LONDON, V.9L, P.33-P.37 (1976)
NA.F ..EXPERIMENT/ PHONON DISPERSION/ FIRST SOUND REGION/ 295,500,600,700K
- 76-LO-04 LOVESEY, S.W./ SCHOFIELD, P.
INELASTIC COHERENT NEUTRON SCATTERING BY SMALL PARTICLES
J. PHYS., C, LONDON, V.9, P.2843-P.2856 (1976)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ SCATTERING BY SM

ALL PARTICLES/ SCATTERING FUNCTION/ SPHERICAL, FLUID PARTICLES

- 76-LO-05 LOVESEY, S.W./ LOVELUCK, J.M.
STATIC AND DYNAMIC RESPONSE FUNCTIONS FOR A CLASSICAL PARAMAGNET IN AN APPLIED FIELD
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.847-P.855 (1976)
THEORY-OF-SOLIDS ..RESPONSE FUNCTION/ CLASSICAL PARAMAGNET/ APPLIED FIELD
- 76-LY-01 LYNN, J.W./ SHIRANE, G./ BIRGENEAU, R.J./ CHEN, H.S.
NEUTRON SCATTERING STUDY OF SPIN WAVES IN AMORPHOUS FERROMAGNET (FeO_{0.3} NiO_{0.7}), P.16, B0.06, ALO.03
BNL-21391 (1976)
FE-NI-P-O-AL ..EXPERIMENT/ MAGNETIC SCATTERING/ MAGNON DISPERSION/ METALLIC GLASS
- 76-MA-01 MADHAVA, M.R./ SAUNDERS, G.A.
ACOUSTIC PHONON MODE SOFTENING IN IN-CD ALLOY SINGLE CRYSTALS
SOLID STATE COMMUN., V.19, P.791-P.794 (1976)
IN-CD/ IN-TL ..EXPERIMENT/ ELASTIC CONSTANT/ ACOUSTIC PHONON MODE
- 76-MA-02 MAHANTY, J./ RICHARDSON, D.D./ MARCH, N.H.
NEUTRON INELASTIC SCATTERING FROM COVERED SURFACES, HYDROGEN ON PLATINUM
J. PHYS., C, LONDON, V.9, P.3421-P.3436 (1976)
HYDROGEN-PLATINUM ..THEORY/ ADSORBED HYDROGEN ON A PLATINUM SURFACE/ VIBRATIONAL FREQUENCY/ MODEL CALCULATION
- 76-MA-03 MARGUERIE, G./ STUHRMANN, H.B.
A NEUTRON SMALL-ANGLE SCATTERING STUDY OF BOVINE FIBRINOGEN
J. MOL. BIOL., V.102, P.143-P.156 (1976)
FIBRINOGEN ..SMALL-ANGLE SCATTERING/ BOVINE FIBRINOGEN/ BANANA-SHAPED MODEL
- 76-MA-04 MARTIN, R.M./ LUCOVSKY, G./ HELLIWELL, K.
INTERMOLECULAR BONDING AND LATTICE DYNAMICS OF SE AND TE
PHYS. REV. B, V.13, P.1383 (1976)
SE/ TE ..THEORY/ DISPERSION RELATION/ BORN-VON KARMAN MODEL/ SOLID ..BALANCE-FORCE-FIELD MODEL
- 76-MA-05 MARTIN, D.G./ CAISLEY, J.
NEUTRON SMALL-ANGLE SCATTERING - A NON-DESTRUCTIVE TECHNIQUE FOR INFERRING THE COKE SOURCE OF NUCLEAR GRAPHITE
S
AERE-R-8400 (1976)

GRAPHITE .. SMALL ANGLE SCATTERING

- 76-MA-06 MATSUMOTO, T.
A METHOD FOR DETERMINATION OF THE POSITION OF HYDROGEN
IN A METAL
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.522-P.528 (1976)
ZR-H .. QUASIELASTIC SCATTERING

- 76-MA-07 MATSUSHITA, M.
ANOMALOUS TEMPERATURE DEPENDENCE OF THE FREQUENCY AND D
AMPING CONSTANT OF PHONON NEAR T-LAMDA IN AMMONIUM HALI
DES
J. CHEM. PHYS., V.65, P.23 (1976)
N.H4.CL/ N.H4.BR .. AMMONIUM HALIDE/ THEORY-IN-SOLIDS

- 76-ME-01 MEER, P.E.
VIBRATIONAL SPECTRA OF DISORDERED CHAINS AND THE STRUCT
URE OF AMORPHOUS SE AND TE
PHIL. MAG., V.34, P.767-P.774 (1976)
SE/ TE .. THEORY/ PHONON SPECTRA

- 76-ME-02 MEHRINGER, W.
A CORRELATION FUNCTION APPROACH TO THE HARD CORE SOLID
SOLID STATE COMMUN., V.18, P.1569-P.1571 (1976)
THEORY-OF-FLUIDS .. THEORY/ DYNAMICS OF ATOMIC MOTION/ O
NE-PARTICLE PROBABILITY DENSITY/ CORRELATION FUNCTION

- 76-ME-03 MENSNIKOV, A.Z./ SHESTAKOV, V.A./ SIDOROV, S.K.
CRITICAL SCATTERING OF NEUTRONS IN INVAR IRON-NICKEL AL
LOYS
ZH. EKSP. TEOR. FIZ. (SOV. PHYS.-JETP), V.70 (V.43
) , P.163-P.171 (1976 (1976))
NI-FE .. EXPERIMENT/ MAGNETIC SCATTERING/ CRITICAL/ SMALL
ANGLE

- 76-ME-04 MENSNIKOV, A.Z./ SIDOROV, S.K./ SHESTAKOV, V.A.
SMALL ANGLE SCATTERING OF NEUTRONS AND MAGNETIC STRUCTU
RE OF INVAR ALLOYS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.663-P.669 (1976)
NI-FE .. SMALL ANGLE SCATTERING/ MAGNETIC INHOMOGENEITY

- 76-ME-05 MENZINGER, F./ SACCHETTI, F.
ASPHERICITY OF SPIN DENSITY IN DISORDERED FERROMAGNETIC
ALLOYS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.677-P.683 (1976)
CU-NI .. NEUTRON DIFFRACTION/ SPIN DENSITY

- 76-ME-06 MEYER, J./ DOLLING, G./ KALUS, J./ VETTER, C./ PA
UREAU, J.

- PRESSURE DEPENDENCE OF PHONON FREQUENCIES IN POTASSIUM
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.243-P.249 (1976)
K .. EXPERIMENT/ PHONON DISPERSION/ 1BAR, 4.1KBAR/ MODE G
RUENEISEN CONST.

- 76-ME-07 MEZEI, F.
TEMPERATURE DEPENDENCE OF MAGNETIC MOMENT DISTRIBUTION
AROUND MN IMPURITIES IN IRON
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.670-P.676 (1976)
FE-MN .. POLARIZED NEUTRON/ DIFFUSE SCATTERING

- 76-MI-01 MIKKE, K./ JANKOWSKA, J.
ELEMENTARY EXCITATIONS IN SOME 3D METAL ALLOYS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.819-P.824 (1976)
NI-FE/ CO-NI/ NI-V/ NI-CR/ CR-AL .. EXPERIMENT/ SPIN WAV
E

- 76-MI-02 MILLER, J.F./ SATTERTHWAIT, C.B./ BRUN, T.O./ JOR
GENSEN, J.D./ SKOLD, K.
A NEUTRON SCATTERING STUDY OF THE VIBRATIONAL MODES OF
HYDROGEN IN THE SUPERCONDUCTING COMPOUND, TH4-H15
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.529-P.534 (1976)
TH-H .. EXPERIMENT/ PHONON STATE DENSITY

- 76-MI-03 MITRA, S.K./ GILLAN, M.J.
EXTRACTION OF THE POTENTIAL FROM LIQUID STRUCTURE DATA
J. PHYS., C, LONDON, V.9L, P.515-P.517 (1976)
THEORY-OF-FLUIDS .. INTERATOMIC POTENTIAL/ LIQUID STRUCT
URE

- 76-MI-04 MITRA, S.K./ HUTCHINSON, P./ SCHOFIELD, P.
A PAIR INTERACTION POTENTIAL FOR RUBIDIUM CALCULATED FR
OM THERMODYNAMIC AND NEUTRON DIFFRACTION DATA
PHIL. MAG., V.34, P.1087-P.1100 (1976)
RUBIDIUM .. THEORY/ PAIR POTENTIAL/ CALCULATED FROM EXPE
RIMENTAL DATA

- 76-MO-01 MOOK, H.A./ WATSON-JR, C.R.
NEUTRON INELASTIC SCATTERING STUDY OF TETRATHIAFULVALE
N E TETRACYANOQUINODIMETHANE
PHYS. REV. LETT., V.36, P.801 (1976)
TETRATHIAFULVALENE-TETRACYANOQUINODIMETHANE .. EXPERIMEN
T/ DISPERSION RELATION/ KOHN EFFECT

- 76-MO-02 MOON, R.M./ KOEHLER, W.C./ CABLE, J.W.
MAGNETIC FORM FACTOR OF 3D AND 4D PARAMAGNETIC METALS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.577-P.591 (1976)

REVIEW-ARTICLES/ CR/ V/ SC/ PD/ TI/ Y/ NB/ ..MAGNETIC FORM FACTOR

76-MO-03 MOSTOLLER, M./ KAPLAN, T.
LATTICE VIBRATIONS IN RB(1-C)-K(C) ALLOYS IN THE COHERENT POTENTIAL APPROXIMATION
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.202-P.209 (1976)
RB-K ..THEORY/ PHONON/ EFFECTS OF MASS AND FORCE CONSTANT DISORDER

76-MO-04 MOSTOLLER, M./ WOOD, R.F.
RESONANT MODES OF COMPLEX DEFECTS IN SOLIDS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.167-P.174 (1976)
THEORY-OF-SOLIDS ..RESONANT MODES/ COMPLEX DEFECTS

76-MO-05 MOUSSA, F./ VILLAIN, J.
SPIN-WAVE LINESHAPE IN TWO-DIMENSIONAL KI.CU.F4, NEUTRON EXPERIMENTS AND THEORY
J. PHYS., C, LONDON, V.9, P.4433-P.4451 (1976)
K2.CU.F4 ..EXPERIMENT/ THEORY/ MAGNETIC SCATTERING/ SPIN-WAVE

76-MU-01 MURANI, A.P./ ROTH, S./ RADHAKRISHNA, P./ RAINFORD, B.D./ COLES, B.R./
SMALL ANGLE CRITICAL NEUTRON SCATTERING AND THE ONSET OF FERROMAGNETISM IN AU-FE ALLOYS
J. PHYS., F, LONDON, V.6, P.425-P.432 (1976)
AU-FE ..SMALL ANGLE SCATT./ CRITICAL SCATT./ MAGNETIC SCATT.

76-MU-02 MURANI, A.P.
SMALL ANGLE NEUTRON SCATTERING STUDY OF A AU-15 AT-PERCENT FE ALLOY
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.657-P.662 (1976)
AU-FE ..SMALL ANGLE SCATTERING/ MAGNETIC CLUSTER

76-NA-01 NARTEN, A.H.
STRUCTURE OF LIQUIDS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.889-P.908 (1976)
REVIEW-ARTICLES ..STRUCTURE OF LIQUID/ MONATOMIC/ MOLECULAR FLUIDS

76-NI-01 NICKLOW, R.M./ KOON, N.C./ WILLIAMS, C.M./ MILSTEIN, J.B.
SPIN WAVES IN THE CUBIC FERRIMAGNET H00.88.TB0.12.FE2
PHYS. REV. LETT., V.36, P.532-P.535 (1976)
(HO-TB).FE2/ MAGNETIC-SCATTERING ..EXPERIMENT/ MAGNON DISPERSION/ RT.12K/ H00.88.TB0.12.FE2

76-NI-02 NICKLOW, R.M.
INVESTIGATIONS OF PHONON PERTURBATIONS BY DEFECTS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.117-P.128 (1976)
REVIEW-ARTICLES ..PHONON/ DEFECTS/ IRRADIATED CU/ CN IN KCL

76-NI-03 NIEDERMANN, H.P./ WAGNER, M.
ON THE QUANTUM MECHANICAL FOUNDATION OF CLASSICAL SHELL MODELS IN LATTICE DYNAMICS
PHYS. STATUS SOLIDI B, V.78, P.615-P.624 (1976)
THEORY-OF-SOLIDS ..LATTICE DYNAMICS/ SHELL MODEL/ QUANTUM MECHANICAL APPROXIMATION

76-NO-01 NODA, Y./ ISHIKAWA, Y.
SPIN DYNAMICS IN A HEUSLER ALLOY PD2.MN.SN
J. PHYS. SOC. JAP., V.40, P.699-P.705 (1976)
PD2.MN.SN ..EXPERIMENT/ MAGNON DISPERSION/ TEMPERATURE EFFECT/ PARAMAGNETIC SCATTERING

76-NO-02 NODA, Y./ ISHIKAWA, Y.
SPIN WAVES IN HEUSLER ALLOYS PD2.MN.SN AND NI2.MN.SN
J. PHYS. SOC. JAP., V.40, P.690-P.698 (1976)
NI2.MN.SN ..EXPERIMENT/ MAGNON DISPERSION

76-OH-01 OHSAWA, A./ YAMAGUCHI, Y./ WATANABE, H./ ITOH, H.
POLARIZED NEUTRON DIFFRACTION STUDY OF CO.S2. II COVALENT MAGNETIC MOMENT AROUND SULFUR ATOMS
J. PHYS. SOC. JAP., V.40, P.992-P.995 (1976)
CO.S2 ..POLARIZED NEUTRON DIFFRACTION

76-OH-02 OHSAWA, A./ YAMAGUCHI, Y./ WATANABE, H./ ITOH, H.
POLARIZED NEUTRON DIFFRACTION STUDY OF CO.S2. I MAGNETIC MOMENT DISTRIBUTION OF CO.S2
J. PHYS. SOC. JAP., V.40, P.986-P.991 (1976)
CO.S2 ..NEUTRON DIFF./ POLARIZED NEUTRON

76-OL-01 OLI, B.A./ ANIMALU, A.O.E.
LATTICE DYNAMICS OF TRANSITION METALS IN THE RESONANCE MODE
PHYS. REV. B, V.13, P.2398-P.2410 (1976)
THEORY-OF-SOLIDS/ V ..THEORY/ PHONON DISPERSION

76-PA-01 PAL, S.
LATTICE VIBRATIONS AND DEBYE TEMPERATURES OF PALLADIUM
NUOVO C.I.M., B, V.35, P.215-P.223 (1976)
PD ..THEORY/ PHONON DISPERSION/ SPECTRUM

76-PA-02 PANDEY, A.N./ UPADHYAYA, K.S.
LATTICE DYNAMICS OF BA.O
PHYS. STATUS SOLIDI B, V.78, P.399 (1976)

- BA.O ..THEORY/ SOLID/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION ..THREE-BODY FORCE SHELL MODEL
- 76-PA-03 PAPASTAIKOU, C./ ROCOFYLLOU, E.
PHONON RESISTIVITY IN AL-AU ALLOYS
SOLID STATE COMMUN., V.18, P.1161-P.1164 (1976)
- AL-AU ..EXPERIMENT/ ELECTRICAL RESISTIVITY/ PHONON RESISTIVITY/ MATTHIESEN RULE
- 76-PA-04 PARANJPE, S.K./ BEGUN, R.J.
A NEUTRON DIFFRACTION STUDY OF COBALT-DOPED YB.FE.O₃
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.643-P.649 (1976)
- YB.FE.O₃ ..NEUTRON DIFFRACTION/ MAGNETIC FORM FACTOR
- 76-PA-05 PARRINELLO, M./ MARCH, N.H.
THERMODYNAMICS OF WIGNER CRYSTALLIZATION
J. PHYS., C, LONDON, V.9L, P.147 (1976)
- MISCELLANEOUS ..THEORY/ LIQUID/ SOLID ..THERMODYNAMICS/ MELTING
- 76-PA-06 PASSELL, L./ DIETRICH, O.W./ ALS-NIELSEN, J.
NEUTRON SCATTERING FROM THE HEISENBERG FERROMAGNETS EU.O AND EU.S. I. THE EXCHANGE INTERACTIONS
PHYS. REV. B, V.14, P.4897-P.4907 (1976)
- EU.O/ EU.S. ..EXPERIMENT/ MAGNON DISPERSION
- 76-PA-07 PASTERNAK, A.
LATTICE DYNAMICS FE.CL2
J. PHYS., C, LONDON, V.9, P.2987-P.2995 (1976)
- FE.CL2 ..THEORY/ PHONON DISPERSION/ STATIC-DISPLACED-SHELL MODEL
- 76-PE-01 PERDEW, J.P./ VOSKO, S.H.
PHONON FREQUENCIES OF LITHIUM FROM A LOCAL EFFECTIVE POTENTIAL
J. PHYS., F, LONDON, V.6, P.1421-P.1431 (1976)
- LI ..THEORY/ PHONON DISPERSION/ LOCAL EFFECTIVE POTENTIAL
- 76-PE-02 PETERLIN-NEUMAIER, T./ SPRINGER, T.
INVESTIGATION OF RELAXATION PROCESSES IN LINEAR POLYETHYLENE IN THE 10(-9) SEC REGION BY MEANS OF HIGH RESOLUTION NEUTRON SPECTROSCOPY
J. POLY. SCI., POLY. PHYS., V.14, P.1351-P.1359 (1976)
- POLYETHYLENE ..EXP./ QUASI-ELASTIC/ DIFFUSION MOTION
- 76-PE-03 PETERLIN-NEUMAIER, T./ SPRINGER, T.
INVESTIGATION OF RELAXATION PROCESSES IN LINEAR POLYETHYLENE IN THE 10(-9) SEC REGION BY MEANS OF HIGH RESOLUTION NEUTRON SPECTROSCOPY
J. POLY. SCI., POLY. PHYS., V.14, P.1351-P.1359 (1976)
- ION NEUTRON SPECTROSCOPY
J. POLY. SCI., POLY. PHYS., V.14, P.1351-P.1359 (1976)
- POCYETHYLENE ..EXPERIMENT/ QUASIELASTIC/ DIFFUSION
- 76-PE-04 PETERSON, S.W./ REIS-JR, A.H.
STRUCTURES OF ONE DIMENSIONAL COMPOUNDS
CONF-760601-P1, NEUTRON SCATTERING, VOL.1, P.17-P.34 (1976)
- REVIEW-ARTICLES ..PARTIALLY OXIDIZED PT CHAIN/ ONE DIMENSIONAL COMPOUND
- 76-PI-01 PINTSCHOVUS, L./ RENKER, B./ COMES, R.
INVESTIGATION OF THE DYNAMICAL STRUCTURE FACTOR OF K₂P₂T₂(C,N)₄B₅O₃.3*3.2D₂O (KCP)
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.432-P.438 (1976)
- KCP ..EXPERIMENT/ DYNAMICAL STRUCTURE FACTOR/ 60-3000K
- 76-PL-01 PLUMELLE, P./ VANDEVYVER, M.
LATTICE DYNAMICS OF ZN.TE AND CD.TE
PHYS. STATUS SOLIDI B, V.73, P.271-P.281 (1976)
- ZN.TE/ CD.TE ..THEORY/ PHONON DISPERSION/ PHONON STATE DENSITY/ SHELL MODEL
- 76-PO-01 POSTOL, T.A./ CHEN, S.H./ SKOELD, K.
OBSERVATION OF ENHANCED SELF DIFFUSION IN HIGH DENSITY GASEOUS HYDROGEN BY INCOHERENT NEUTRON SCATTERING
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.962-P.967 (1976)
- H ..GASEOUS HYDROGEN/ QUASIELASTIC/ SELF-DIFFUSION
- 76-PR-01 PRESS, W./ ECKERT, J./ COX, D.E./ ROTTERT, C./ KAMI TAKAHARA, W.
NEUTRON-DIFFRACTION MEASUREMENTS ON THE P-T PHASE DIAGRAM OF AMMONIUM BROMIDE
PHYS. REV. B, V.14, P.1983-P.1988 (1976)
- N.H4.BR ..EXPERIMENT/ P-T PHASE DIAGRAM
- 76-RA-01 RAHMAN, A./ SKOELD, K./ PELIZZARI, C./ SINHA, S.K./ FLOTOW, H.
PHONON SPECTRA OF NONSTOICHIOMETRIC PALLADIUM HYDRIDES
PHYS. REV. B, V.14, P.3630-P.3634 (1976)
- PD-H ..EXPERIMENT/ CALCULATION/ PHONON SPECTRA
- 76-RA-02 RAKHECHA, V.C./ RAO, K.R./ SATYA-MURTHY, N.S.
SPIN WAVE DISPERSION IN LI_{0.13}FE₂87.04
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, P.779-P.782 (1976)
- (FE-LI)_{0.04} ..EXPERIMENT/ MAGNON DISPERSION
- 76-RA-03 RAKHECHA, V.C./ CHAKRAVARTHY, R./ SATYA-MURTHY, N.

- S,
REDUCED A-SITE MOMENT IN Fe_3O_4
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.690-P.696 (1976)
 Fe_3O_4 .POLARIZED NEUTRON DIFFRACTION
- 76-RA-04 RAKHECHA, V.C./ CHAKRAVARTHY, R./ SATYA-MURTY, N.S
MAGNETIC MOMENT DISTRIBUTION IN Cu_2MnAl
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.638-P.642 (1976)
 Cu-Mn-Al .POLARIZED NEUTRON DIFFRACTION/ MAGNETIC STRUCTURE FACTOR
- 76-RE-01 REICHARDT, W./ RIEDER, K.H.
LATTICE DYNAMICS OF ALPHA-ARSENIC
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.181-P.186 (1976)
ARSENIC .EXPERIMENT/ PHONON DISPERSION/ BORN-VON-KARMA
FITTING
- 76-RE-02 REITER, G./ TZOAR, N.
CRITICAL FLUCTUATIONS IN THE WEAKLY ANHARMONIC CRYSTAL
MODEL OF A STRUCTURAL PHASE TRANSITION
PHYS. REV. B, V.14, P.208-P.218 (1976)
THEORY-OF-SOLIDS .SOFT-OPTICAL-MODE/ CENTRAL-PEAK
- 76-RH-01 RHYNE, J.J./ KOON, N.C./ MILSTEIN, J.B./ ALPERIN,
H.A.
SPIN WAVES IN FERRIMAGNETIC ErFe_2
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.783-P.788 (1976)
 ErFe_2 .EXPERIMENT/ MAGNON DISPERSION
- 76-RI-01 RICHTER, D./ KEHR, K.W./ SPRINGER, T.
THE INVESTIGATION OF HYDROGEN DIFFUSION IN Nb WITH INTERSTITIAL TRAPS BY QUASIELASTIC NEUTRON SCATTERING
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.568-P.574 (1976)
H-N-Nb .QUASIELASTIC SCATTERING/ HYDROGEN DIFFUSION
- 76-RI-02 RISTE, T.
LIQUID CRYSTALS AND NEUTRON SCATTERING
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.379-P.392 (1976)
REVIEW-ARTICLES/ LIQUID-CRYSTAL/ PAA .NEMATIC LIQUID CRYSTAL/ NEUTRON SCATTERING/ PAA
- 76-RO-01 ROOS, T./ KIND, K./ PETZELT, T.
TRANSITIONS AND LATTICE DYNAMICS IN $\text{Ag}_2\text{H}_3\text{I}_2\text{O}_6$ AND $\text{H}_4\text{I}_2\text{H}_3\text{I}_2\text{O}_6$
Z, PHYS. B, V.24, P.99 (1976)
- $\text{Ag}_2\text{H}_3\text{I}_2\text{O}_6$ (N,H₄)₂H₃I₂O₆ .LATTICE DYNAMICS/ PHASE
TRANSITION/ THEORY
- 76-RO-02 ROWE, J.M.
NEUTRON SCATTERING STUDIES OF THE DIFFUSION OF HYDROGEN
IN METALS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.491-P.506 (1976)
REVIEW-ARTICLES .HYDROGEN IN METALS/ DIFFUSION/ PHONON
DISPERSION/ STRUCTURE
- 76-RU-01 RUSH, J.J./ ROWE, J.M./ GLINKA, C.J./ VAGELATOS, N.
/ FLOTOW, H.E.
COHERENT NEUTRON SCATTERING STUDY OF THE VIBRATIONS OF
INTERSTITIAL DEUTERIUM IN $\alpha\text{-VDO}_7$
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.543-P.549 (1976)
V-H .EXPERIMENT/ PHONON DISPERSION
- 76-SA-01 SACCHETTI, F./ SELONI, A.
NEUTRON SCATTERING BY POLARITONS: MECHANICAL EXCITATION
OF THE POLARITON
PHYS. REV. B, V.13, P.2286 (1976)
NEUTRON-SCATTERING-IN-SOLIDS/ MG.O .THEORY/ SOLID/ FREQUENCY DISTRIBUTION
- 76-SA-02 SADO, A./ PEPE, G.
THE LATTICE DYNAMICS OF SrCl_2
J. PHYS. CHEM. SOLIDS, V.37, P.197 (1976)
 SrCl_2 .EXPERIMENT/ DISPERSION RELATION/ SOLID/ TRIPLE
AXIS SPECTROMETER/ INELASTIC NEUTRON SCATTERING/ FREQUENCY DISTRIBUTION
- 76-SA-03 SAKALSKI, K.
ISOTROPY SHIFT'S ANALYSIS OF THE NORMAL FREQUENCIES OF
CRYSTAL LATTICE
PHYS. LETT., A, V.57, P.173 (1976)
THEORY-OF-SOLIDS .LATTICE DYNAMICS/ ISOTROPY SHIFT
- 76-SC-01 SCHLENKER, M./ BARUCHEL, J.
NEUTRON DIFFRACTION TOPOGRAPHY, RECENT RESULTS IN THE INVESTIGATION OF DOMAINS AND CRYSTAL DEFECTS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1136-P.1142 (1976)
INSTRUMENTS-AND-METHODS .DIFFRACTION TOPOGRAPHY
- 76-SC-02 SCHMATZ, W.
NEUTRON SMALL-ANGLE SCATTERING. EXPERIMENTAL TECHNIQUES
AND APPLICATIONS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.1037-P.1059 (1976)
INSTRUMENT-AND-METHODS .SMALL ANGLE SCATTERING

- 76-SC-03 SCHNEIDER, E./ SCHWEISS, P./ REICHARDT, W.
TEMPERATURE DEPENDENCE OF THE PHONON DENSITY OF STATES
FOR SOME A15 COMPOUNDS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.223-P.229 (1976)
V3.S1/ V3.GE/ V3.GA/ NB3.SN/ NB3.AL ..EXPERIMENT/ PHONO
N STATE DENSITY
- 76-SC-04 SCHULZ, H./ HUEFNER, S.
ANHARMONICITY IN THE TO OPTICAL PHONON OF ZN
SOLID STATE COMMUN., V.20, P.827-P.830 (1976)
ZN ..EXPERIMENT/ RAMAN SCATTERING/ TO OPTICAL PHONON
- 76-SC-05 SCHELTEN, J./ KROEGER, D.M.
DISTRIBUTION OF TRANSPORT CURRENTS IN TYPE-II SUPERCOND
UCTORS INVESTIGATED BY NEUTRON SMALL ANGLE SCATTERING
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.473-P.480 (1976)
NB-TA ..SMALL ANGLE SCATTERING/ TRANSPORT CURRENT
- 76-SE-01 SEARS, V.F.
SLOW-NEUTRON INELASTIC SCATTERING IN ABSORBING MEDIA W
TH APPLICATION TO LIQUID 3-HE
J. PHYS., C. LONDON, V.9, P.409-P.418 (1976)
NEUTRON-SCATTERING-IN-FLUIDS/ HE ..THEORY/ SCATTERING S
IGMA/ ABSORBING MEDIA
- 76-SE-02 SEARS, V.F.
SECONDARY EXTINCTION IN NEUTRON DIFFRACTION
CONF-760601-P1, NEUTRON SCATTERING, VOL.1, P.36-P.
39 (1976)
SCATTERING-THEORY ..SECONDARY EXTINCTION
- 76-SH-01 SHAMIR, N./ MELAMUD, M./ SHAKED, H.
A STUDY OF CRYSTAL-FIELD SPLIT LEVELS OF PR(3+) IN PR.F
3 BY INELASTIC NEUTRON SCATTERING
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.864-P.872 (1976)
PR.F3 ..EXPERIMENT/ CRYSTAL-ELECTRIC-FIELD SPLIT
- 76-SH-02 SHAPIRO, S.M./ COWLEY, R.A./ COX, D.E./ EIBSCHUTZ,
M./ GUGGENHEIM, H.J.
STRUCTURAL AND MAGNETIC TRANSITIONS IN BA,MN.F4
BNL-21475 (1976)
BA,MN.F4 ..EXPERIMENT/ PHASE TRANSITION/ MAGNON DISPERS
ION
- 76-SH-03 SHAPIRO, S.M.
NEUTRON SCATTERING STUDIES OF SOLID ELECTROLYTES
BNL-21367 (1976)
BA.F2/ PB.F2/ AG.1 ..EXPERIMENT/ STRUCTURE ANALYSIS/ PH

ONON DISPERSION/ DIFFUSIVE MOTION

- 76-SH-04 SHAPIRO, S.M./ IIZUMI, M./ SHIRANE, G.
NEUTRON SCATTERING STUDY OF THE DIFFUSIVE CRITICAL SCAT
TERING ASSOCIATED WITH THE VERWEY TRANSITION IN MAGNETI
TE (FE3.O4)
PHYS. REV. B, V.14, P.200-P.207 (1976)
MAGNETITE ..1-D CORRELATION/ 3-D INTERCHAIN-INTERACTION
- 76-SH-05 SHAPIRO, S.M./ COWLEY, R.A./ COX, D.E.
STRUCTURAL AND MAGNETIC TRANSITIONS IN BA,MN.F4
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.399-P.405 (1976)
BA,MN.F4 ..EXPERIMENT/ PHASE TRANSITION/ MAGNON DISPERS
ION
- 76-SH-06 SHARMA, T.P.
TWO PHONON DENSITY OF STATES OF MN.O
SOLID STATE COMMUN., V.20, P.1137 (1976)
MN.O ..LATTICE DYNAMICS/ DEFORMATION DIPOLE MODEL
- 76-SH-07 SHARMA, Y.P./ DANNER, H.R./ KIM, H.
LOW FREQUENCY MOLECULAR VIBRATIONS IN 1-BROMOPENTANE AN
D 1,5-DIBROMOPENTANE BY NEUTRON INELASTIC SCATTERING
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.982-P.988 (1976)
BROMOPENTANE ..EXPERIMENT/ TOF SPECTRA
- 76-SH-08 SHIRANE, G./ SHAPIRO, S.M./ COMES, R./ GARITO, A.F
./ HEEGER, A.J.
PHONON DISPERSION AND KOHN ANOMALY IN TETRATHIAFULVALEN
E-TETRACYANOQUINODIMETHANE (TTF-TCNQ)
PHYS. REV. B, V.14, P.2325-P.2334 (1976)
TTF-TCNQ ..EXPERIMENT/ PHONON DISPERSION/ ONE-DIMENSION
AL CONDUCTOR/ DEUTERATED SAMPLE/ 60-300K/ KOHN ANOMALY
- 76-SH-09 SHIRANE, G./ BIRGENEAU, R.J.
NEUTRON SCATTERING STUDIES OF LOW DIMENSIONAL MAGNETIC
SYSTEMS
BNL-21760 (1976)
K2.CO.F4/ K2.NI.F4/ RB2.MNO.5.NIO.5.F4/ RB2.MNO.5.MGO.5
.F4/ TMNC ..EXPERIMENT/ MAGNETIC SCATTERING/ SPIN WAVE
DISPERSION
- 76-SH-10 SHULL, C.G.
PHYSICS WITH EARLY NEUTRONS
CONF-760601-P1, NEUTRON SCATTERING, VOL.1, P.1-P.1
5 (1976)
REVIEW-ARTICLE ..EARLY DEVELOPMENT/ NEUTRON SCATTERING/
OAK RIDGE

- 76-SI-01 SILVERA, I.F./ NIELSEN, M.
INELASTIC NEUTRON SCATTERING AND SEPARATION COEFFICIENT
OF ABSORBED HYDROGEN, MOLECULAR ALIGNMENT AND ENERGY L
EVEL
PHYS. REV. LETT., V.37, P.1275-P.1278 (1976)
H2-ALUMINA ..EXPERIMENT/ ADSORBED H2/ ROTATIONAL STATE
- 76-SI-02 SINGH, R.K./ SINGH, K.P.
LATTICE DYNAMICS OF AG,BR AT 295K
PHYS. STATUS SOLIDI B, V.78, P.677-P.680 (1976)
AG,BR ..THEORY/ THREE-BODY-FORCE SHELL MODEL/ PHONON DI
SPERSION
- 76-SI-03 SINGH, V.P./ KHAROO, H.L./ KUMAR, M./ HEMKAR, M.P.
NONCENTRAL FORCES AND LATTICE VIBRATION IN TRANSITION M
ETALS, II, ALPHA IRON, CHROMIUM AND TUNGSTEN,
NUOVO CIM., B, V.32, P.40-P.48 (1976)
FE/ CR/ W ..THEORY/ PHONON DISPERSION/ MODEL CALCULATIO
N
- 76-SI-04 SINHA, S.K./ BADAR, S.D./ KNAPP, G.S./ OSTROWSKI,
G.E./ SHELTON, R.N.
PHONON SPECTRA OF CHEVEL-PHASE MOLYBDENUM CHALCOGENIDE
SUPERCONDUCTORS
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.136-P.144 (1976)
SN,MO6.S8/ PB,MO6.S8/ MO,SE8 ..EXPERIMENT/ PHONON SPECT
RA
- 76-SI-05 SIROTA, N.N./ BULAT, I.A.
PHONON SPECTRUM OF ALPHA-FE DEDUCED FROM COLD-NEUTRON M
EASUREMENTS
FIZ, TVERD, TELA (SOV. PHYS.-SOLID STATE), V.18 (V
.18), P.981-P.984 (P.561-P.563) (1976) (1976)
FE ..EXPERIMENT/ PHONON SPECTRUM
- 76-SK-01 SKOELD, K./ PELIZZARI, C.A./ KLEB, R./ OSTROWSKI,
G.E.
NEUTRON SCATTERING STUDY OF ELEMENTARY EXCITATIONS IN L
IQUID HELIUM-3
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.996-P.1002 (1976)
HE ..EXPERIMENT/ SCATTERING FUNCTION/ 0.015K
- 76-SK-02 SKOLD, K./ PELIZZARI, C.A./ KLEB, R./ OSTROWSKI, G
E,
NEUTRON SCATTERING STUDY OF ELEMENTARY EXCITATIONS IN L
IQUID HELIUM-3
PHYS. REV. LETT., V.37, P.842-P.845 (1976)
HE ..EXPERIMENT/ 0.015K/ HE-3/ SPIN FLUCTUATION SCATTER
ING/ ZERO SOUND MODE
- 76-SO-01 SQUIRES, G.L.
THE SCATTERING OF THERMAL NEUTRONS BY CRYSTALS
CONTEMP. PHYS., V.17, P.411-P.441 (1976)
REVIEW-ARTICLES ..THERMAL NEUTRON SCATTERING/ SOLIDS/ C
RYSTAL
- 76-SR-01 SRIVASTAVA, P.L./ MITRA, N.R./ SINGH, R.N./ MISHRA
N.
PHONON FREQUENCIES OF CALSIUM AND METALIC HYDROGEN
PHYS. LETT., A, V.56, P.267 (1976)
CS/ NA/ K ..THORY OF SOLIDS/ FREQUENCIES VS. ATOMIC NUM
BER/ THEORY
- 76-ST-01 STEDMAN, R./ AMILIUS, Z./ PAULI, R./ SUNDIN, O.
PHONON SPECTRUM OF BERYLLIUM AT 80K
J. PHYS., F, LONDON, V.6, P.157-P.166 (1976)
BE ..EXPERIMENT/ PHONON DISPERSION/ NINE SYMMETRY LINE/
80K
- 76-ST-02 STEFFEN, B.
PARACRYSTALLINE MICRODOMAINS IN MONATOMIC LIQUIDS I, RA
DIAL DENSITY FUNCTIONS OF LIQUID LEAD AT 350, 450 AND 5
50 DEGREE C
PHYS. REV. B, V.13, P.3227 (1976)
PB ..RADIAL DENSITY FUNCTION/ X-RAY SCATTERING
- 76-ST-03 STEFFEN, B./ HASEMANN, R.
PARACRYSTALLINE MICRODOMAINS IN MONATOMIC LIQUIDS, II.
THREE-DIMENSIONAL STRUCTURE OF MICRODOMAINS IN LIQUID L
EAD
PHYS. REV. B, V.13, P.3232 (1976)
PB ..LIQUID STRUCTURE
- 76-ST-04 STEINER, M.
THE DYNAMICS OF THE ONEDIMENSIONAL FERROMAGNETIC CHAIN
SYSTEM CA,NI,F3
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.811-P.817 (1976)
CS,NI,F3 ..EXPERIMENT/ SPIN WAVE
- 76-ST-05 STEINSVOLL, O./ MUSTOE, F./ CORLISS, L.M./ HASTING
S, J.M.
CRITICAL SCATTERING IN MAGNETITE
PHYS. REV. B, V.14, P.4190-P.4198 (1976)
FE3,O4 ..EXPERIMENT/ MAGNETIC SCATTERING/ CRITICAL SCAT
TERING/ MAGNON
- 76-ST-06 STIRLING, W.G./ SCHERM, R./ HILTON, P.A./ COWLEY,
R.A.
NEUTRON INELASTIC SCATTERING FROM LIQUID HELIUM THREE
J. PHYS., C, LONDON, V.9, P.1643 (1976)
HE ..NEUTRON INELASTIC SPECTRUM/ TIME OF FLIGHT METHOD/

CONTINUED FRACTION METHOD

- 76-ST-07 STIRLING, W.G./ CURRAT, R.
EXPERIMENTAL VERIFICATION OF THE PHONON DISPERSION CURVES OF STRONTIUM TITANATE
J. PHYS., C, LONDON, V.9, P.519-P.522 (1976)
SR, TI.03 .EXPERIMENT/ PHONON DISPERSION
- 76-ST-08 STOCKMYER, R.
DETERMINATION OF MOBILITY OF HYDROCARBON MOLECULES ON SURFACE OF CATALYST BY NEUTRON SCATTERING
BERICHTE DER BUNSEN-GESELLSCHAFT FÜR PHYSIKALISCHE CHEMIE, V.80, P.625-P.629 (1976)
NEUTRON-SCATTERING-IN-SOLIDS .THEORY/ DIFFUSION/ ADSORBED HYDROCARBON
- 76-ST-09 STOCKMEYER, R./ STORTNIK, H.J./ CONRAD, H.M.
DIFFUSIVE MOTIONS OF MOLECULES ON CATALYTIC SURFACES
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.303-P.309 (1976)
H-AL2.03 .THEORY/ QUASIELASTIC LINE BROADENING/ ADSORBED HYDROGEN
- 76-ST-10 STROBEL, K./ GEICK, R.
LATTICE DYNAMICS IN PEROVSKITE-TYPE LAYER STRUCTURES: 2, RIGID-ION MODEL CALCULATIONS FOR K₂MN₂F₄ AND Rb₂MN₂CL₄
J. PHYS., C, LONDON, V.9, P.4223-P.4236 (1976)
K₂MN₂F₄/ Rb₂MN₂CL₄ .RIGID-ION MODEL/ CALCULATION/ LATTICE DYNAMICS/ SHORT-RANGE FORCE CONSTANT/ ELASTIC CONSTANT
- 76-ST-11 STUHRMANN, H.B./ FUESS, H.
A NEUTRON SMALL-ANGLE SCATTERING STUDY OF HEN EGG-WHITE LYSOZYME
ACTA CRYSTALLOGR., SECT. A, V.32A, P.67-P.74 (1976)
LYSOZYME .SMALL ANGLE SCATTERING/ HEN EGG-WHITE LYSOZYME IN SOLUTION
- 76-SU-01 SUN, F./ DAY, R./ CUTLER, P.H./ KING-III, W.F.
ON A MORE EXACT TREATMENT OF THE CONDUCTION ELECTRON POTENTIAL IN FIRST PRINCIPLES CALCULATIONS OF LATTICE DYNAMICS OF METALS
J. PHYS., F, LONDON, V.6L, P.1-P.6 (1976)
LI/ BE .THEORY/ PHONON DISPERSION/ EFFECT OF CONDUCTION ELECTRON
- 76-SV-01 SVENSSON, E.C./ MARTELL, P./ SEARS, V.F./ WOODS, A.D.B.
NEUTRON SCATTERING STUDIES OF THE DYNAMIC STRUCTURE OF LIQUID 4-HE

CAN, J. PHYS., V.54, P.2178-P.2192 (1976)
HE .EXPERIMENT/ SCATTERING FUNCTION

76-SV-02 SVENSSON, E.C./ STIRLING, W.G./ WOODS, A.D.B./ MARTELL, P.
LOW-MOMENTUM-TRANSFER NEUTRON SCATTERING FROM LIQUID 4-HE AT T=4.2K AND P=2.5 MPa
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.1017-P.1021 (1976)
HE .EXPERIMENT/ DISPERSION/ LOW Q PART

76-SY-01 SYKES, J.
THE STRUCTURE OF TIME-DEPENDENT CORRELATION FUNCTIONS FOR CLASSICAL LIQUIDS
J. PHYS., A, LONDON, V.9, P.1771-P.1788 (1976)
THEORY-OF-FLUIDS .CORRELATION FUNCTION/ KINETIC EQUATION/ CLASSICAL LIQUIDS

76-TA-01 TAJIMA, K./ ISHIKAWA, Y./ ENDOH, Y./ NODA, Y.
SPIN DYNAMICS IN ITINERANT ANTIFERROMAGNETIC GAMMA-Fe-Mn ALLOYS
J. PHYS. SOC. JAP., V.41, P.1195-P.1203 (1976)
Fe-Mn .EXPERIMENT/ MAGNON DISPERSION

76-TA-02 TASSET, F./ CHRISTEN, D.K./ SPOONER, S./ MOOK, H.A.
SMALL-ANGLE, DOUBLE SILICON CRYSTAL, NEUTRON DIFFRACTION STUDIES OF THE FLUXOID LATTICE IN SUPERCONDUCTING Ni₂B
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.481-P.488 (1976)
Ni₂B .SMALL ANGLE SCATTERING/ FLUXOID LINE LATTICES

76-TA-03 TAUT, M./ ESCHRIG, H.
ELECTRON AND PHONON SPECTRA OF CALCIUM
PHYS. STATUS SOLIDI B, V.73, P.151 (1976)
Ca .THEORY/ SOLID/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION/ DEBYE TEMPERATURE .PSEUDO-POTENTIAL/

76-TE-01 TEWARI, S.P./ TEWARI, S.P.
ZERO FREQUENCY DYNAMICAL STRUCTURE FACTOR OF LIQUIDS
PHYS. LETT., A, V.56, P.99 (1976)
AR/ NEUTRON-SCATTERING-IN-FLUIDS .THEORY/ LIQUID .85. 2DK

76-TH-01 THOMAS, N.W.
NEUTRON DIFFRACTION EVIDENCE FOR ANION-SUBLATTICE DISORDERING IN ALKALI EARTH FLUORIDES AT HIGH TEMPERATURES
CHEM. PHYS. LETT., V.40, P.111-P.115 (1976)
BaF₂/ SrF₂ .NEUTRON DIFFRACTION/ TEMPERATURE EFFECT

76-TH-02 THOREL, P./ CROSET, B./ MARTI, C./ COULOMB, J.P.

TWO-DIMENSIONAL STRUCTURE OF MONO AND BILAYER OF KRIPTO
N ABSORBED ON GRAPHITE
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.85-P.91 (1976)
KR-GRAPHITE ..NEUTRON DIFFRACTION/ ABSORBED KR/ GRAPHIT
E

76-TH-03 THORPE, M.F.
NEUTRON SCATTERING FROM MAGNETIC POLYMERS
PHYS. REV. B, V.13, P.2186 (1976)
MAGNETIC-SCATTERING ..THEORY/ SCATTERING LAW ..AMORPHOU
S MAGNETIC POLYMER/ SPIN WAVE/ SUSCEPTIBILITY/ MAGNETIC
SCATTERING

76-TR-01 TREVINO, S.F./ FARR, M.K./ GIGUERE, P.A./ ARNAU, J
L.
THE LATTICE DYNAMICS OF THE DEUTERIUM PEROXIDE CRYSTAL
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.152-P.159 (1976)
D2,O2 ..EXPERIMENT/ PHONON DISPERSION

76-UT-01 UTSURO, M.
A SIMPLE NEUTRON SCATTERING STUDY OF PROTON MOTION IN M
ETHYL COMPOUNDS
J. PHYS. C, LONDON, V.9L, P.1171 (1976)
XYLENE/ MESITYLEN ..EXPERIMENT/ TOF/ SIGMA(E)/ MOLECULA
ROTATION ..100K/ ELECTRON LIINA/ EFFECTIVE MASS/ KINET
IC ENERGY/ TORSIONAL OSCILLATION

76-VA-01 VANDERVALE, H.J.L.
ANISOTROPY OF THE LATTICE VIBRATIONS OF 2H-PB.12
SOLID STATE COMMUN., V.20, P.815 (1976)
PB.12 ..STATIC DIELECTRIC CONSTANT

76-VA-02 VANDERHAEGHEN, J./ WEGENER, W./ HAUTECLER, S./ LEG
RAND, E./ VAN-GERVEN, L.
REORIENTATIONS OF CYCLIC ETHER MOLECULES IN CLATHRATE D
EUTERATES
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.281-P.287 (1976)
ETHYLENE OXIDE-CLATHRATE/ TETRAHYDROFURAN-CLATHRATE ..E
XPERIMENT/ QUASIELASTIC SCATTERING/ GUEST MOLECULE MOTI
ON

76-VA-03 VARMA, C.M.
DYNAMICS OF ANHARMONIC LATTICES: SOLITONS AND THE CENTR
AL-PEAK PROBLEM IN ONE-DIMENSION
PHYS. REV. B, V.14, P.244 (1976)
THEORY-OF-SOLIDS ..SOLITON ..CENTRAL-PEAK/ DISLOCATION

76-VA-04 VASILKEVICH, A.A./ GORBACHEV, B.I./ ZOTEEV, O.E./
IVANITSKII, P.G./ KROTENKO, V.T.//

PHONON SPECTRUM OF YTTRIUM ALUMINIUM GARNET
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.18 (V
.18), P.3195-P.3199 (P.1867-P.1869) (1976 (1976))
V3,AL5,O12 ..YTTRIUM ALUMINIUM GARNET/ INELASTIC NEUTRO
N SCATTERING/ FREQUENCY DSTRIBUTION/ EXPERIMENT/

76-VR-01 VRIJEN, J./ VAN-DIJK, C./ RADELAAR, S.
CLUSTERING IN 65CU(0,435)-62NI(0,565) AND ITS TEMPERATU
RE DEPENDENCE
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.92-P.101 (1976)
CU-NI ..NEUTRON DIFFUSE SCATTERING/ CLUSTERING IN CU-NI
ALLOY

76-WA-01 WAGNER, V./ REICHARDT, W./ KRESS, W.
LATTICE DYNAMICS OF MN,O
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING,
V.1, GATLINBURG, P.175-P.180 (1976)
MN,O ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITTI
NG

76-WA-02 WAKABAYASHI, N./ FURRER, A.
LATTICE DYNAMICS OF ND,SB
PHYS. REV. B, V.13, P.4343-P.4347 (1976)
ND,SB ..PHONON-DISPERSION-CURVES/ DENSITY-OF-STATES ..S
CREENED-COULOMB-FORCE-MODEL

76-WA-03 WAKABAYASHI, N./ NICKLOW, R.M.
SPIN WAVE DISPERSION IN TB-Y ALLOYS
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING,
V.2, GATLINBURG, P.789-P.792 (1976)
TB-Y ..EXPERIMENT/ SPIN WAVE DISPERSION

76-WA-04 WASEDA, Y./ SUZUKI, K.
PAIR POTENTIALS AND PROPERTIES OF SIMPLE LIQUIDS FROM T
HE PAIR CORRELATION FUNCTION
J. PHYS. CHEM. LIQUIDS, V.5, P.93-P.102 (1976)
NE/ AR/ KR/ Xe ..LIQUID/ PAIR POTENTIAL/ BORN-GREEN EQU
ATION

76-WE-01 WEIS, J.J./ LEVESQUE, D.
MOLECULAR-DYNAMICS STUDY OF THE DYNAMICAL STRUCTURE FAC
TOR OF LIQUID N2
PHYS. REV. A, V.13, P.450-P.457 (1976)
N2 ..THEORY/ DYNAMICAL STRUCTURE FACTOR/ MOLECULAR DYNA
MICS

76-WE-02 WENDEL, H.
LATTICE DYNAMICS AND BONDING PROPERTIES OF TRIGONAL TEL
LURIUM
J. PHYS., C, LONDON, V.9, P.445-P.451 (1976)
TE ..THEORY/ PHONON DISPERSION/ VALENCE FORCE FIELD MOD

EL

- 76-WE-03 WERNER, S.A./ COLELLA, R./ OVERHAUSER, A.W./ EAGEN, C.F.
NEUTRON INTERFEROMETRY
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.1060-P.1073 (1976)
INSTRUMENTS-AND-METHODS ..NEUTRON INTERFEROMETRY/ MISSEDURE
- 76-WO-01 WOOD, R.F./ MOSTOLLER, M.
NEUTRON SCATTERING FROM INTERSTITIALS IN AG.CL AND AG.BR AT HIGH TEMPERATURES
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.160-P.166 (1976)
AG.CL/ AG.BR ..THEORY/ PHONON/ EFFECTS OF INTERSTITIAL ATOMS
- 76-WO-02 WOODS, A.D.B./ SVENSSON, E.C./ MARTEL, P.
THE DYNAMIC STRUCTURE FACTOR OF NONSUPERFLUID LIQUID 4HE
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.1010-P.1016 (1976)
HE ..EXPERIMENT/ SCATTERING LAW/ DISPERSION
- 76-YA-01 YAMADA, R./ WATANABE, N./ SATO, K./ ASANO, H./ HIRABAYASHI, M.
LOCALIZED MODES IN TANTALUM HYDRIDES STUDIED BY NEUTRON INELASTIC SCATTERING
J. PHYS. SOC. JAP., V.41, P.85-P.90 (1976)
TA-H ..EXPERIMENT/ LOCALIZED PHONON/ MODE
- 76-YO-01 YOSHIDA, F.
HIGH FREQUENCY EXPANSION OF MEMORY FUNCTION IN CLASSICAL SIMPLE LIQUIDS, 3 -LIQUID METALS-
NA/ RB/ PB/ THEORY-OF-FLUIDS ..DYNAMICAL STRUCTURE FACTOR/ COLLECTIVE MODE
- 76-ZE-01 ZEYEN, C.M.E./ MEISTER, H.
SPATIAL DISTRIBUTION OF THE PARA- AND FERROELECTRIC PHASE DURING THE FIRST-ORDER PHASE TRANSITION IN DKDP
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.445-P.451 (1976)
K.H2.P.04 ..EXPERIMENT/ PHASE TRANSITION
- 76-ZE-02 ZEYHER, R.
MICROSCOPIC CALCULATION OF THE PHONON DISPERSION IN LI₂O
CONF-760601-P1, PROC. CONF. ON NEUTRON SCATTERING, V.1, GATLINBURG, P.550-P.557 (1976)
LI-H ..THEORY/ PHONON DISPERSION

- 76-ZI-01 ZIEBECK, K.R.A./ HOUMANN, J.G.
MAGNON-PHONON-HYBRIDISATION IN FE.CL2
CONF-760601-P2, PROC. CONF. ON NEUTRON SCATTERING, V.2, GATLINBURG, P.840-P.846 (1976)
FE.CL2 ..EXPERIMENT/ PHONON-MAGNON DISPERSION
- 77-AG-01 AGARWAL, S.K.
LATTICE DYNAMICS OF SR.O
J. PHYS. CHEM. SOLIDS, V.38, P.199-P.200 (1977)
SR.O ..THEORY/ PHONON DISPERSION/ THREE BODY FORCE SHEL L MODEL
- 77-AK-01 AKCASU, A.Z./ HIGGINS, J.S.
QUASIELASTIC SCATTERING OF NEUTRONS FROM FREELY JOINTED POLYMER CHAINS IN DILUTE SOLUTIONS
J. POLY. SCI., V.15, P.1745-P.1756 (1977)
POLYTETRAHYDROFURAN ..THEORY/ SCATTERING LAW/ QUASIELASTIC
- 77-AK-02 AKCASU, A.Z./ HIGGINS, J.S.
QUASIELASTIC SCATTERING OF NEUTRONS FROM FREELY JOINTED POLYMER CHAINS IN DILUTE SOLUTIONS
J. POLY. SCI., V.15, P.1745-P.1756 (1977)
POLYTETRAHYDROFURAN/ POLYSTYRENE ..CALCULATION/ SCATTERING LAW/ DILUTE SOLUTION
- 77-AL-01 ALBEN, R./ BURNS, G.
LATTICE DYNAMICS OF THE SUPERIONIC CONDUCTOR AG.I
PHYS. REV. B, V.16, P.3746-P.3752 (1977)
SILVER IODIDE/ COPPER IODIDE ..EXPERIMENT/ HARMONIC LATTICE-DYNAMICS/ DENSITY OF STATES/ INFRARED CONDUCTIVITY / RAMAN SCATTERING/ CALCULATION
- 77-AR-01 ARAI, T./ HIRABAYASHI, M.
DIFFUSE SCATTERING DUE TO OUT-OF-STEP CONFIGURATIONS OF OXYGEN ATOMS IN A Ti.O(0.42) CRYSTAL
J. PHYS. SOC. JAP., V.42, P.1965-P.1972 (1977)
Ti.O ..DIFFUSE SCATTERING/ Ti.O(0.42)
- 77-AX-01 AXE, J.D./ SHIRANE, G./ MIZOGUCHI, T./ YAMAUCHI, K.
NEUTRON SCATTERING STUDY OF SPIN WAVES IN THE AMORPHOUS METALLIC FERROMAGNET (FE93-MO7)80.B10.P10
PHYS. REV. B, V.15, P.2763-P.2770 (1977)
(FE-MO).B.P ..EXPERIMENT/ MAGNETIC SCATTERING/ MAGNON/ AMORPHOUS FERROMAGNET
- 77-AX-02 AXE, J.D./ HEIDEMANN, A./ HOWELLS, W.S./ MOSS, S.C./ PYNN, R.
DIFFUSE NEUTRON SCATTERING FROM AN OMEGA-PHASE ZR-NB AL

- LOY SOLID STATE COMMUN., V.24, P.743-P.745 (1977)
ZR-NB .DIFFUSE SCATTERING/ QUESIELASTIC
- 77-BA-01 BANAL, R./ PATHEK, K.N.
SUM RULES AND ATOMIC CORRELATIONS IN CLASSICAL LIQUIDS,
4 THE COHERENT AND INCOHERENT SCATTERING FUNCTIONS
PHYS. REV. A, V.15, P.253 (1977)
THEORY-OF-FLUIDS .GENERALIZED LANGEVIN EQUATION/ DYNAM
ICAL STRUCTURE FACTOR
- 77-BA-02 BANSAL, R./ AILAWADI, N.K.
DENSITY FLUCTUATIONS IN CLASSICAL LIQUIDS. SELF-CONSIST
ENT-FIELD METHOD
PHYS. REV. A, V.16, P.1228-P.1236 (1977)
THEORY-OF-FLUIDS/ RB .COHERENT SCATTERING FUNCTION
- 77-BA-03 BANSAL, B./ PATHEK, K.N.
SUM RULES AND ATOMIC CORRELATIONS IN CLASSICAL LIQUIDS,
3 NUMERICAL ESTIMATE AND AN APPLICATION
PHYS. REV. A, V.15, P.2519 (1977)
THEORY-OF-FLUIDS .CURRENT CORRELATION FUNCTION
- 77-BA-04 BANSAL, R./ NAGHIZADEH, J.
ON THE COHERENT SCATTERING LAW IN LIQUID METALS
J. PHYS., C, LONDON, V.10, P.4901-P.4907 (1977)
NEUTRON-SCATTERING-IN-FLUIDS/ THEORY-OF-FLUIDS/ RUBIDIU
M .COHERENT SCATTERING FUNCTION/ LIQUID METAL
- 77-BE-01 BEAR, S.
STRUCTURAL CORRELATIONS AND THE 'STRUCTURAL DIFFUSION'
MODEL FOR LIQUIDS
PHYSICA A, V.87A, P.569-P.583 (1977)
THEORY-OF-FLUIDS .STRUCTURAL CORRELATION/ MOLECULAR PA
IR CORRELATION
- 77-BE-02 BECHTLE, D.W./ SCOTT, J.F.
ANOMALOUS ACOUSTIC PHONON DISPERSION IN NONCOMMENSURATE
BA, MN-F4
J. PHYS., C, LONDON, V.10L, P.209 (1977)
BA, MN, F4 .EXPERIMENT .PHASON BRANCH/ SOUND VELOCITY A
NOMALLY/ BRILLOUIN TECHNIQUE
- 77-BE-01 BOKHENKOV, E.L./ SHEKA, E.F./ DORNER, B./ NATKANIE
C, I.
DISPERSION OF LOW FREQUENCY PHONONS IN THE DEUTERATED N
APHTHALENE CRYSTAL
SOLID STATE COMMUN., V.23, P.89-P.93 (1977)
C10.H8 .EXPERIMENT/ INELASTIC NEUTRON SCATTERING/ DISP
ERSION CURVE
- 77-BO-02 BOLONIN, O.N.
DISPERSION OF PHONONS IN NA, BR AND K. I
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.19 (V
.19), P.1861-P.1863 (P.1088-P.1089) (1977 (1977))
NA, BR/ K. I/ NA, CL/ K. CL .DISPERSION RELATION/ EXPERIME
NT/ ELASTIC CONSTANT
- 77-BO-03 BONING, K./ BAUER, G.S./ FENZEL, H.J./ SCHERM, R./
KAISER, W.
INELASTIC NEUTRON SCATTERING MEASUREMENTS OF PHONON DIS
PERSION CURVES IN REACTOR-IRRADIATED ALUMINUM AT 4.6K
PHYS. REV. LETT., V.38, P.852 (1977)
AL .EXPERIMENT/ CONSTANT- ω METHOD .FRENKEL DEFECT/ SH
IFT OF TRANSVERSE PHONON FREQUENCY/ 4.60K
- 77-BO-04 BOYD, R.J.
THE RADIAL DENSITY FUNCTION FOR THE NEUTRAL ATOMS FROM
HELIUM TO XEON
CAN. J. PHYS., V.55, P.452 (1977)
THEORY-OF-FLUIDS .THEORY .HARTREE-FOCK APPROXIMATION/
RADIAL DISTRIBUTION
- 77-BR-01 BREBNER, J.L./ JANDL, S./ POWELL, B.M.
ACOUSTIC PHONONS IN SN, SE2
NUOVO CIM., B, V.38, P.263-P.270 (1977)
SN, SE2 .EXPERIMENT/ PHONON DISPERSION/ LAYERED STRUCTURE
- 77-BR-02 BROCKHOUSE, B.N./ SHIRANE, G.
TEMPERATURE DEPENDENCE OF PHONONS IN PYROLITIC GRAPHITE
BNL-23182 (1977)
GRAPHITE .EXPERIMENT/ PHONON DISPERSION/ TEMPERATURE E
FFECT/ 1200DC
- 77-BR-03 BROUDE, V.L./ KROO, N./ PEPEY, G./ ROSTA, L.
NEUTRON SCATTERING BY COLLECTIVE EXCITATIONS IN P-AZOXY
ANISOLE
KFKI-1977-25 (1977)
PAA .EXPERIMENT/ PHONON-LIKE EXCITATION/ LIQUID CRYSTA
L
- 77-BR-04 BRUESCH, P./ BUEHER, W./ PERKINS, R.S.
FAR-INFRARED AND INCOHERENT NEUTRON SCATTERING EXPERIME
NTS OF THE SOLID ELECTROLYTE (C5.H5.N.H).AG5.16
J. PHYS., C, LONDON, V.10, P.4023-P.4031 (1977)
C5.H5.N.H.AG5.16 .EXPERIMENT/ FREQUENCY SPECTRA
- 77-CA-01 CABLE, J.W.
NEUTRON STUDY OF LOCAL-ENVIRONMENT EFFECTS IN FERROMAGNE
TIC NI-RH ALLOYS
PHYS. REV. B, V.15, P.3477-P.3484 (1977)
NI-RH .EXPERIMENT/ MAGNETIC DIFFUSE SCATTERING/ MAGNET
IC MOMENT DISTRIBUTION

- 77-CA-02 CABLE, J.W./ DAVID, L./ PARRA, R.
NEUTRON STUDY OF LOCAL ENVIRONMENT EFFECTS AND MAGNETIC
CLUSTERING IN FeO, 7-AL₂O₃
PHYS. REV. B, V.16, P.1132-P.1137 (1977)
FE-AL ..EXPERIMENT/ MAGNETIC DIFFUSE SCATTERING
- 77-CA-03 CARRARA, P./ REDOULES, J.P.
THE DISPERSION ACOUSTIC PHONONS IN CO₂CL₂
SOLID STATE COMMUN., V.21, P.929-P.931 (1977)
CO₂CL₂ ..EXPERIMENT/ DISPERSION RELATION ..3-AXIS SPECT
ROMETER
- 77-CA-04 CASTRESANA, J.I./ MAZENKO, G.F./ YIP, S.
THERMAL FLUCTUATIONS IN GAS MIXTURES
ANN. PHYS., N.Y., V.103, P.1 (1977)
THEORY-OF-FLUIDS ..GAS/ THEORY/ CORRELATION FUNCTION ..
BINARY MIXTURE/ THERMAL FLUCTUATION/ MEMORY FUNCTION
- 77-CH-01 CHANDRASEKHAR, H.R./ BHATTACHARYA, G.B./ MIGNONIE,
R.M./ BILZ, H.
PHONON SPECTRA AND LATTICE DYNAMICS OF LITHIUM NITRIDE
SOLID STATE COMMUN., V.22, P.681 (1977)
Li₃N ..PHONON SPECTRA/ RIGID SHELL MODEL
- 77-CH-02 CHEN, S.H./ POSTOL, T.A./ SKOELD, K.
STUDY OF SELF-DIFFUSION IN DENSE HYDROGEN GAS BY QUASIE
LASTIC INCOHERENT NEUTRON SCATTERING
PHYS. REV. A, V.16, P.2112-P.2119 (1977)
HYDROGEN ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ DENSE
GAS/ SELF-DIFFUSION COEFFICIENT/ DENSITY AND TEMPERATUR
E DEPENDENCE
- 77-CH-03 CHEN, F.P./ PRASAD, P.N.
INTERMOLECULAR VIBRATIONS OF A CRYSTALLINE MOLECULAR CO
MPLEX
J. CHEM. PHYS., V.66, P.4341 (1977)
C10.H8 ..RAMAN PHONON SPECTRA
- 77-CL-01 CROSS, H./ SHUKLA, M.M.
LATTICE DYNAMICS OF NICKEL, PLATINUM AND PALLADIUM
NUOVO CIM., B, V.42, P.213-P.225 (1977)
NI/ PT/ PD ..THEORY/ PHONON DISPERSION/ DEBYE-WALLER FA
CTOR
- 77-CY-01 CYWINSKI, R./ BOOTH, J.G./ RAINFOLD, B.D.
SMALL-ANGLE NEUTRON SCATTERING FROM SUPERPARAMAGNETIC A
SSEMBLIES INBINARY CO-GA ALLOYS
J. PHYS., F, LONDON, V.7, P.2567-P.2581 (1977)
CO-GA ..SMALL-ANGLE SCATT./ SUPERPARAMAGNETIC BEHAVIOUR
- 77-DA-01 DAVIS, J.R.

- NEUTRON POLARISATION ANALYSIS OF SCATTERING FROM ANTIFE
ROMAGNETIC GAMMA MN-CU AND GAMMA MN-PD
J. PHYS., F, LONDON, V.7, P.2153-P.2161 (1977)
MN-CU/ MN-PD ..POLARIZATION ANALYSIS/ ANTIFERRMAGNETIC
DEFECTS SCATTERING
- 77-DA-02 DAY, R.S./ SUN, F./ CUTLER, P.H./ KING-III, W.F.
COMPARISON OF STATISTICAL AND LINDGREN CONDUCTION-CORE
EXCHANGE APPROXIMATIONS IN A PRIORI PSEUDOPOTENTIAL CAL
CULATIONS FOR THE LATTICE DYNAMICS OF METALS
J. PHYS., F, LONDON, V.7L, P.169-P.174 (1977)
LI/ NA/ K ..THEORY/ PHONON DISPERSION
- 77-DE-01 DEMENDY, Z.
ON THE CLASSES OF INTEGRAL EQUATIONS NONDERIVABLE BY GR
APH THEORY MEANS: AN IMPROVED MOLECULAR THEORY FOR CLAS
SICAL LIQUIDS IN EQUILIBRIUM
PHYSICA, A, V.86A, P.587 (1977)
MISCELLANEOUS ..THEORY/ LIQUID/ STATISTICAL MECHANICS .
..NEW DYNAMIC HIERARCHY
- 77-DE-02 DEMICHELIS, F./ GIORDANA, A./ TARTAGLIA, A.
MOLECULAR DYNAMICS IN H₂O AND D₂O ANALYSIS BY INELAST
IC SCATTERING OF 10 A NEUTRONS
NUOVO CIM., B, V.37, P.185-P.197 (1977)
H₂O ..EXPERIMENT/ DIFFUSIVE MOTION
- 77-DI-01 DIXON, M./ SANGSTER, M.J.L.
MOLTEN RUBIDIUM CHLORIDE, A MOLECULAR DYNAMICS STUDY
PHIL. MAG., V.35, P.1049 (1977)
R8,CL ..MOLTEN R,CL/ MOLECULAR DYNAMICS/ RIGID ION-POLA
RIZABLE MODEL
- 77-DO-01 DOLLING, G./ MEYER, J.
A SEARCH FOR ANOMALOUS PHONONS IN POTASSIUM
J. PHYS., F, LONDON, V.7, P.775-P.779 (1977)
K ..EXPERIMENT/ PHONON DISPERSION/ 4.3K
- 77-DO-02 DONNELLY, R.J./ ROBERTS, P.H.
NEED FOR MORE PRECISE THERMODYNAMIC AND NEUTRON SATTERRI
NG DATA ON LIQUID HELIUM
J. PHYS., C, LONDON, V.10, P.683 (1977)
HE ..EXPERIMENT .., ROTON ENERGY / HE(II)/ BELOW 1DK
- 77-DU-01 DUNMORE, P.V.
LIBRATIONAL MOTION IN THE ALPHA PHASE OF SOLID NITROGEN
..I.BASIC THEORY AND RESULTS
CAN. J. PHYS., V.55, P.554 (1977)
NITROGEN ..THEORY/ SOLID ..LIBRATIONAL MOTION/ MEAN FIE
LD MODEL/ SECOND QUANTIZATION/ INTERMOLECULAR POTENTIAL

- 77-EC-01 ECKERT, J./ THOMLINSON, W./ SHIRANE, G.
LATTICE DYNAMICS OF FCC HELIUM AT HIGH PRESSURE
PHYS. REV. B, V.16, P.1057-P.1067 (1977)
HE ..EXPERIMENT/ PHONON DISPERSION/ 38K, 4.9KBAR/ PHONON
SPECTRUM
- 77-ED-01 EDER, O.J.
THE VELOCITY AUTOCORRELATION FUNCTION AND THE DIFFUSION
COEFFICIENT FOR A DILUTE HARD SPHERE GAS
J. CHEM. PHYS., V.66, P.3866 (1977)
THEORY-OF-FLUIDS ..VELOCITY AUTOCORRELATION FUNCTION/ DI
FFUSION COEFFICIENT/ HARD SPHERE GAS
- 77-EL-01 ELLENSON, W.D./ SHAPIRO, S.M./ SHIRANE, G.
ELASTIC NEUTRON-SCATTERING STUDY OF THE THREE LOW-TEMPERATURE
TRANSITIONS IN TETRATHIAFULVALENIUM-TETRACYANOQUINOIMETHANIDE
PHYS. REV. B, V.16, P.3244-P.3251 (1977)
TTF-TCNQ ..EXPERIMENT/ PHASE TRANSITION
- 77-EL-02 ELLENSON, W.D./ SEMMINGS, D./ FISCHER, J.E.
NEUTRON SCATTERING STUDIES OF ALKALI METAL-GRAPHITE INTERCALATION
COMPOUND
BNL-23230 (1977)
CS, RB ..EXPERIMENT/ PHONON DISPERSION
- 77-EN-01 ENDOH, Y./ NODA, Y./ ISHIKAWA, Y.
INFLUENCE OF MAGNETOELASTIC EFFECTS ON LATTICE VIBRATIONS
IN THE FERROMAGNETIC INVAR ALLOY Fe_{0.65}Ni_{0.35}
SOLID STATE COMMUN., V.23, P.951-P.953 (1977)
NI-Fe ..EXPERIMENT/ PHONON DISPERSION/ MAGNETO-ELASTIC
EFFECT
- 77-ES-01 ESHRIG, H./ FELDMANN, K./ HENNIG, K./ MATZ, W./ PA
UFLER, P.
PHONON SPECTRA OF THE LAVES PHASE INTERMETALLIC COMPOUNDS
CA₂Mg₂
PHYS. STATUS SOLIDI B, V.79, P.283-P.288 (1977)
CA₂Mg₂ ..THEORY/ PSEUDOPOTENTIAL MODEL/ PHONON DISPERSION/
ON/ DENSITY OF STATES
- 77-FU-01 FUJII, Y./ HOSHINO, S./ SAKURAGI, S./ KANZAKI, H.
NEUTRON SCATTERING STUDY OF THE LATTICE DYNAMICS OF AgBr
AT 4.4K
PHYS. REV. B, V.15, P.358-P.368 (1977)
Ag, BR ..PHONON-DISPERSION-CURVE/ DENSITY-OF-STATES ..4, 4K
- 77-GA-01 GAIROLA, R.P./ SEMWAL, B.S.
INELASTIC SCATTERING CROSS SECTION OF NEUTRONS IN DISPLACED
FERROELECTRICS
J. PHYS. SOC. JAP., V.42, P.608-P.615 (1977)
- NEUTRON-SCATTERING-IN-SOLIDS ..DISPLACED FERROELECTRIC
S/ LATTICE DYNAMICS
- 77-GA-02 GARIOLA, R.P./ SEMWAL, B.S.
INELASTIC SCATTERING CROSS SECTION OF NEUTRONS IN DISPLACED
FERROELECTRICS. II
J. PHYS. SOC. JAP., V.42, P.975-P.981 (1977)
NEUTRON-SCATTERING-IN-SOLIDS ..DISPLACED FERROELECTRIC
S/ WELL ABOVE CURIE TEMP.
- 77-GA-03 GASKELL, T./ CHIAKWELE, O.
COUPLING OF SINGLE PARTICLE AND COLLECTIVE MODES IN A ONE-
COMPONENT PLASMA
J. PHYS., C, LONDON, V.10, P.2021-P.2032 (1977)
ARGON/ RUBIDIUM ..THEORY/ FREQUENCY SPECTRUM/ MEMORY FUNCTION
- 77-GE-01 GEICK, R./ STROBEL, K.
SYMMETRY OF THE LATTICE VIBRATIONS IN PEROVSKITE-TYPE LAYER
STRUCTURES
J. PHYS., C, LONDON, V.10, P.4221-P.4239 (1977)
(C,H₃N,H₃)₂MnCl₄/ (C,H₃N,H₃)₂CD₂CL₄/ (C,H₃N,H₃)₂CU₂CL₄ ..SYMMETRY OF LATTICE VIBRATION/ GROUP THEORETICAL
METHOD/ PEROVSKITE STRUCTURE
- 77-GI-01 GIGNOUX, D./ GIVORD, F./ SCHWEIZER, J.
POLARISED NEUTRON STUDY OF HO₂CO₂
J. PHYS., F, LONDON, V.7, P.1823-P.1834 (1977)
HO₂CO₂ ..NEUTRON DIFFRACTION/ POLARISED NEUTRON
- 77-GL-01 GLANDT, E.D./ FITTS, D.
PERCUS-YEVICK EQUATION OF STATE FOR THE TWO-DIMENSIONAL
LENNARD-JONES FLUID
J. CHEM. PHYS., V.66, P.4503 (1977)
THEORY-OF-FLUIDS ..RADIAL DISTRIBUTION FUNCTION/ PERCUS-
YEVICK THEORY
- 77-GL-02 GLASS, N.E./ BOFFI, S./ BILELLO, J.C.
INELASTIC NEUTRON SCATTERING FROM SCREW DISLOCATIONS
J. PHYS., C, LONDON, V.10, P.2307-P.2319 (1977)
COPPER ..CALCULATION/ PHONON DISPERSION CURVE/ SCREW DISLOCA-
TION/ SIMPLE CUBIC LATTICE MODEL/ NEUTRON SCATTERING/
FORCE CONSTANT
- 77-GL-03 GLINKA, C.J./ PROWE, J.M./ RUSH, J.J./ LIBOWITZ, G.
G./ MACLAND, A.
THE LATTICE VIBRATIONS OF CE₂O₂12
SOLID STATE COMMUN., V.22, P.541 (1977)
CE-H ..PHONON DISPERSION RELATION/ COHERENT NEUTRON SCATTERING
- 77-GL-04 GLINKA, C.J./ MINKIEWICZ, V.J./ PASSELL, L.

- SMALL-ANGLE CRITICAL NEUTRON SCATTERING FROM COBALT
PHYS. REV. B, V.16, P.4084-P.4103 (1977)
CO .EXPERIMENT/ SMALL ANGLE SCATTERING/INELASTIC/ MAGNON
- 77-GL-05 GLYDE, H.R./ HAINSEN, J.P./ KLEIN, M.L.
ANHARMONIC LATTICE DYNAMICS OF SOLID
PHYS. REV. B, V.16, P.3476 (1977)
K .MOLECULAR DYNAMICS COMPUTATION/ DYNAMICAL STRUCTURE
FACTOR/ ANHARMONIC LATTICE DYNAMICS
- 77-GM-01 GMAL, B./ HEIDEMANN, A./ STEYERL, A.
DETERMINATION OF THE HYPERFINE SPLITTING OF PROTONS IN
URANIUM HYDRIDE BY INELASTIC NEUTRON SCATTERING
PHYS. LETT. A, V.60A, P.471 (1977)
U-H .EXPERIMENT .MAGNETIC SCATTERING/ 200DK
- 77-GO-01 GODAR, M.
PHONON IN DISORDERED SYSTEMS WITH STRONG SHORT-RANGE OR
DER II THE EFFECT OF OFFDIAGONAL RANDOMNESS
J. PHYS. C, LONDON, V.10, P.1121 (1977)
THEORY-OF-SOLIDS .CELLULAR DISORDERED SYSTEM/ CLUSTER
THORY
- 77-GO-02 GOEL, C.M./ SHARMA, T.P./ DAYAL, B.
LATTICE DYNAMICS OF N.D4.I AND N.H4.I CRYSTALS
J. PHYS. CHEM, SOLIDS, V.38, P.1285-P.1288 (1977)
N.H4.I .THEORY/ PHONON DISPERSION/ PHONON DENSITY OF S
TATES
- 77-GO-03 GOEL, L.M./ DAYAL, B.
LATTICE DYNAMICS OF RUBIDIUM HALIDE CRYSTALS
PHYS. STATUS SOLIDI B, V.8, P.403 (1977)
RB.F/ RB.CL/ RB.BR/ RB.I .PHONON DISPERSION CURVE/ THR
EE-BODY FORCE SHELL MODEL
- 77-GO-04 GOLUB, R./ PENDLEBURY, J.M.
THE INTERACTION OF ULTRA-COLD NEUTRONS(UCN) WITH LIQUID
HELIUM AND A SUPERHERMAL UCN SOURCE
PHYS. LETT. A, V.62, P.337-P.339 (1977)
HE .THEORY/ ULTRA-COLD NEUTRON
- 77-GO-05 GOODINGS, D.A.
LIBRATIONAL MOTION IN THE ALPHA PHASE OF SOLID NITROGEN
. 2.NEUTRON SCATTERING.
CAN. J. PHYS., V.55, P.573 (1977)
NITROGEN .THEORY/ SOLID/ SIGMA(THETA,E) .ONE-LIBRON I
NELASTIC STRUCTURE FACTOR/ COHERENT SCATTERING
- 77-GO-06 GOULD, H.
MICROSCOPIC THEORY OF SELF-DIFFUSION IN A CLASSICAL ONE
-COMPONENT PLASMA

- PHYS. REV. A, V.15, P.1274 (1977)
MISCELLANEOUS .THEORY/ CORRELATION FUNCTION .ONE-COMP
ONENT CLASSICAL PLASMA/ MEMORY FUNCTION
- 77-GO-07 GOYAL, R.P./ GOYAL, S.C.
DISPERSION OF PHONONS IN TRANSITION METAL OXIDES (CO.O
AND NI.O)
PHYS. STATUS SOLIDI B, V.79K, P.115 (1977)
CO.O/ NI.O .THEORY/ FREQUENCY SPECTRUM
- 77-GO-08 GOYAL, A.K./ GOYAL, S.C.
DISPERSION OF PHONONS IN NB.C
PHYS. STATUS SOLIDI B, V.81, P.63 (1977)
NB.C .PHONON DISPERSION CURVES/ PSEUDOPOTENTIAL MODEL/
MODIFIED SHELL MODEL
- 77-GU-01 GURUL, H.
THE COHERENT SCATTERING LAW FOR DILUTE POLYMER SOLUTION
. TOW COMPONENT' DESCRIPTION
J. POLY. SCI., POLY. PHYS., V.15, P.255-P.261 (1977)
NEUTRON-SCATTERING-IN-SOLIDS .THEORY/ SCATTERING LAW/
POLYMER SOLUTION
- 77-HA-01 HANSEN, J.P./ KLEIN, M.L.
DYNAMICAL STRUCTURE FACTOR S(Q,OMEGA) OF SOLID POTASSIU
M
SOLID STATE COMMUN., V.20, P.771 (1977)
K .BCC K/ DAGAN-RASOLT TAYLOR PSEUDOPOTENTIAL
- 77-HA-02 HARDY, R.J./ KARO, A.M.
LATTICE-DYNAMICAL CALCULATION OF THE THERMODYNAMIC PROP
ERTIES OF Na.Cl.K.Cl AND RB.Cl
J. PHYS. CHEM, SOLIDS, V.38, P.335 (1977)
Na.Cl/ K.Cl/ RB.Cl .THEORY/ LATTICE DYNAMICS/ CENTRAL-
FORCE MODELS .THERMAL EXPANSION/ HEAT CAPACITY/ GRUENE
ISEN RATIO/ ANHARMONICITY
- 77-HA-03 HAXTON, M.B.
THE PHONON SPECTRA OF BETA-CU, I (2)
PHYS. STATUS SOLIDI B, V.83, P.529 (1977)
CU, I .PHONON SPECTRA/ DISPERSION CURVE/ SECOND NEIGHBO
R IONIC MODEL
- 77-HE-01 HENNION, M./ HENNION, B./ KAJZAR, F.
SINGLE CRYSTAL NEUTRON INELASTIC SCATTERING MEASUREMENT
OF STIFFNESS CONSTANT IN DISORDERED F.C.C. NI-MN ALLOY
S
SOLID STATE COMMUN., V.21, P.231-P.234 (1977)
NI-MN .EXPERIMENT/ MAGNON/ MAGNETIC SCATTERING
- 77-HJ-01 HIGGINS, J.S./ ALLEN, G./ GHOSH, R.E./ HOWELLS, W.

- S., FARNOUX, B.
OBSERVATION OF QUASI-ELASTIC BROADENING IN NEUTRON SCATTERING FROM POLYMER SOLUTIONS
CHEM. PHYS. LETT., V.49, P.197-P.202 (1977)
POLYTETRAHYDROFURAN/ POLYSTYRENE ..QUASI-ELASTIC/ CHAIN DYNAMICS/ POLYMER IN C.S2
- 77-HO-01 HOLDEN, T.M./ STIRLING, W.G.
INELASTIC SCATTERING OF POLARIZED NEUTRONS BY FERROMAGNETIC PD3.FE
J. PHYS., F. LONDON, V.7, P.1901-P.1909 (1977)
PD3.FE ..EXP./ POLARIZED NEUTRON/ INELASTIC SCATTERING
- 77-HU-01 HUELLER, A.
COHERENT NEUTRON SCATTERING FROM THE ROTATIONAL STATES OF PROTONATED SAMPLE
SOLID STATE COMMUN., V.23, P.765-P.768 (1977)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ FOUR PROTON GROUP (C.H4, N.H4)/ LIBRATIONAL STATE
- 77-HU-02 HUTCHINGS, M.T./ WINDSOR, C.G.
INELASTIC NEUTRON SCATTERING MEASUREMENT OF THE TEMPERATURE DEPENDENCE OF EXCITATION LINEWIDTHS IN A ONE-DIMENSIONAL ANTIFERROMAGNET
J. PHYS., C. LONDON, V.10, P.313-P.322 (1977)
TMMC ..EXPERIMENT/ SPIN-WAVE/ MAGNETIC SCATTERING
- 77-IW-01 IWATA, Y.
NEUTRON DIFFRACTION STUDY OF THE STRUCTURE OF PARAELECTRIC PHASE OF PB5.GE3.O11
J. PHYS. SOL. JAP., V.43, P.961-P.967 (1977)
PB5.GE3.O11 ..NEUTRON DIFFRACTION/ 200C
- 77-JA-01 JACUCCI, G./ KLEIN, M.L.
ANHARMONIC LATTICE DYNAMICS OF SOLID AL
PHYS. REV. B, V.16, P.1322-P.1324 (1977)
AL ..COMPUTER SIMULATION/ SCATTERING FUNCTION
- 77-JA-02 JANAK, J.F.
A LIMITATION ON THE PSEUDOPOTENTIAL METHOD
SOLID STATE COMMUN., V.20, P.151 (1977)
BE ..SELF-CONSISTENT KKR ENERGY BAND CALCULATION
- 77-JA-03 JANDERWAL, J.J.
SUBLATTICE AND INTERATOMIC FORCE CONSTANTS FROM PHONON MEASUREMENTS
J. PHYS., C. LONDON, V.10, P.525 (1977)
CU ..SOLID/ THEORY/ LATTICE DYNAMICS ..SUBLATTICE FORCE CONSTANTS
- 77-JA-04 JANIK, J.A./ JANIK, J.M./ OTNES, K./ KRAWCZYK, J./ ROSCISZEWSKI, K.

- QUASIELASTIC NEUTRON SCATTERING STUDY OF FAST REORIENTATIONS IN NEMATIC P-AZOXYANISOLE
PHYSICA, B+C, V.92, P.351-P.359 (1977)
P-AZOXYANISOLE ..EXPERIMENT/ QUASIELASTIC/ ROTATIONAL DIFFUSION
- 77-JA-05 JANIK, J.A./ JANIK, J.M./ OTNES, K.
INCOHERENT NEUTRON SCATTERING FORM-FACTOR STUDY OF N.H3-REORIENTATIONS IN (NI,N.H3)6.(CL.O4)2 CRYSTALS
PHYSICA, B+C, V.90B, P.275-P.276 (1977)
(NI,N.H3)6.(CL.O4)2 ..INCOHERENT SCATTERING/ N.H3-REORIENTATION MOTION
- 77-JO-01 JOFFRIN, C./ LAMBERT, M./ PEPEY, G.
INELASTIC NEUTRON SCATTERING STUDY OF THE FERROELASTIC PHASE TRANSITIONS OF LEAD PHOSPHATE (P.O4)2.PB3
SOLID STATE COMMUN., V.21, P.853-P.856 (1977)
PB3.(P.O4)2 ..EXPERIMENT/ QUASI-ELASTIC PEAK/ DISPERSION RELATION ..(P.O4)2.PB3/ 3-AXIS SPECTROMETER
- 77-JO-02 JOHNSON, C.H.J./ WILKINS, S.W.
CALCULATIONS OF ANHARMONIC AND NON-HARMONIC VIBRATIONAL PROPERTIES OF A CLASSICAL SOLID USING A CLUSTER-BETHE MODEL
J. PHYS., C. LONDON, V.10, P.955 (1977)
THEORY-OF-SOLIDS ..THEORY/ SOLID ..NUMERICAL CALCULATION/ ANHARMONIC AND NON-HARMONIC VIBRATIONAL PROPERTIES/ LENARD-JONES POTENTIAL
- 77-KA-01 KAHOL, P.K./ CHATURVEDI, D.K./ PATHAK, K.N.
DYNAMICAL CURRENT CORRELATIONS IN SIMPLE LIQUIDS
PHYSICA, A, V.87A, P.192 (1977)
THEORY-OF-FLUIDS ..LIQUID/ MOLECULAR DYNAMICS ..LONGITUDINAL AND TRANSVERSAL CURRENT CORRELATION
- 77-KA-02 KAHOL, P.K./ CHATURVEDI, D.K./ PATHAK, K.N.
DYNAMICAL STRUCTURE FACTORS IN BINARY LIQUIDS, 1, MOLTE N.B.BR
J. PHYS., C. LONDON, V.10, P.4181-P.4190 (1977)
R.B.BR ..THEORY/ MOLECULAR DYNAMICS/ DYNAMICAL STRUCTURE FACTOR
- 77-KA-03 KANNEY, L.B./ GILLIS, N.S./ RAICH, J.C.
LATTICE DYNAMICS AND PHASE TRANSITION IN SODIUM AZIDE
J. CHEM. PHYS., V.67, P.81-P.85 (1977)
SODIUM AZIDE ..CALCULATION/ ZONE CENTER FREQUENCY/ DISPERSION CURVE/ FREQUENCY DISTRIBUTION/ RAMAN DATA
- 77-KE-01 KELBER, J./ SHIRANE, G./ EVANS, B.J./ WESTRUM-JR, E.F.
NEUTRON SCATTERING STUDY OF THE PHASE TRANSITIONS IN A DOPED POLYCRYSTALLINE FE3.O4:ZNO.005.FE2.995.O4

- SOLID STATE COMMUN., V.21, P.351-P.354 (1977)
FE3.04 .EXPERIMENT/ NEUTRON ELASTIC SCATTERING/ RESISTIVITY MEASUREMENT/ HEAT-CAPACITY ANOMALY
- 77-KL-01 KLEIN, M.L./ WEIS, J.J.
THE DYNAMICAL STRUCTURE FACTOR $S(Q, \omega)$ OF SOLID BETA-N2
J. CHEM. PHYS., V.67, P.217-P.224 (1977)
N .CALCULATION/ DYNAMICAL STRUCTURE FACTOR/ HEXAGONAL/ PERIOAIC BOUNDARY CONDITION
- 77-KU-01 KULSHRESTHA, O.P./ UPADHYAYA, J.C.
PHONON DISPERSION IN PLATINUM
J. PHYS. CHEM. SOLIDS, V.38, P.213-P.214 (1977)
PT .THEORY/ PHONON DISPERSION/ TRANSITION METAL MODEL POTENTIAL
- 77-KU-02 KUMAR, J.
LATTICE DYNAMICS OF THORIUM
SOLID STATE COMMUN., V.21, P.945-P.947 (1977)
THORIUM .THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION .PSEUDOPOTENTIAL
- 77-KU-03 KUTNER, R./ SOSNOWSKA, I.
THERMAL NEUTRON SCATTERING FROM A HYDROGEN-METAL SYSTEM IN TERMS OF A GENERAL MULTI-SUBLATTICE JUMP DIFFUSION MODEL- 2
J. PHYS. CHEM. SOLIDS, V.38, P.747-P.750 (1977)
NB-H .THEORY/ HYDROGEN DIFFUSION/ QUASIELASTIC SCATTERING
- 77-KU-04 KUTNER, R./ SOSNOWSKA, I.
THERMAL NEUTRON SCATTERING FROM A HYDROGEN-METAL SYSTEM IN TERMS OF A GENERAL MULTI-SUBLATTICE JUMP DIFFUSION MODEL- 1
J. PHYS. CHEM. SOLIDS, V.38, P.741-P.746 (1977)
NEUTRON-SCATTERING-IN-SOLIDS .H-METAL SYSTEM/ THEORY/ JUMP DIFFUSION
- 77-LA-01 LAPLAZE, D.
LATTICE DYNAMICS OF LITHIUM HYDRIDE AND LITHIUM DEUTERIDE, EFFECT OF LONG-RANGE THREE-BODY FORCES
J. PHYS., C, LONDON, V.10, P.3499-P.3520 (1977)
LI,H .THEORY/ PHONON DISPERSION
- 77-LA-02 LAUGHLIN, R.B./ OANNPOULOS, J.D.
PHONONS IN AMORPHOUS SILICA
PHYS. REV. B, V.16, P.2942-P.2952 (1977)
SI.02 .THEORY/ LATTICE VIBRATION/ AMORPHOUS SILICA/ PHONON DENSITY/ CLUSTER-BETHE-LATTICE METHOD

- 77-LE-01 LEE, L.
CORRELATION FUNCTIONS OF CLASSICAL FLUIDS, 5 THE PERTURBATION THEORY FOR SELF SPHERES
J. CHEM. PHYS., V.66, P.4367 (1977)
THEORY-OF-FLUIDS .CORRELATION FUNCTION/ SOFT SPHERE SYSTEM
- 77-LE-02 LEIKHAUF, R./ BOETTGER, H.
DISPERSION RELATION OF PHONON-LIKE EXCITATIONS IN A SIMPLE MODEL OF A NONCRYSTALLINE SOLID
PHYS. STATUS SOLIDI B, V.84, P.575-P.580 (1977)
THEORY-OF-SOLIDS .DISORDERED SYSTEM/ PHONON-LIKE EXCITATION
- 77-LE-03 LEWIS, J.W.E./ LOVESEY, S.W.
SHORT-WAVELENGTH COLLECTIVE DENSITY EXCITATIONS IN MONATOMIC LIQUIDS
J. PHYS., C, LONDON, V.10, P.3221-P.3234 (1977)
THEORY-OF-FLUIDS .STRUCTURE FACTOR/ COLLECTIVE DENSITY EXCITATION
- 77-LI-01 LIVET, F./ RADHAKRISHNA, P.
DIFFUSE SCATTERING OF POLARIZED NEUTRONS FROM A NI 2-PECENT TI ALLOY
J. PHYS. CHEM. SOLIDS, V.38, P.275-P.277 (1977)
TI-NI .EXPERIMENT/ MAGNETIC DIFFUSE/ POLARIZED NEUTRON
- 77-LU-01 LUSHINGTON, K.J./ MORRISON, J.A.
NEUTRON SCATTERING AND PROTON SPIN CONVERSION IN SOLID C.H4
CAN. J. PHYS., V.55, P.1580-P.1588 (1977)
C.H4 .EXPERIMENT/ TOTAL CROSS SECTION/ EFFECT OF SPIN CONVERSION
- 77-LV-01 LYNN, J.W./ HELLER, P./ LURIE, N.A.
NEUTRON-DIFFRACTION STUDY OF THE STAGGERED MAGNETIZATION OF CU-CL2*2(H2O)
PHYS. REV. B, V.16, P.5032-P.5039 (1977)
CU,CL2*2(H2O) .NEUTRON DIFFRACTION/ MAGNETIC STRUCTURE
- 77-MA-01 MAANSSON, T/ OLSSON, L.G./ LARSSON, K.E.
THE MOLECULAR MOTION IN CRYSTALLINE, PLASTIC, AND LIQUID NEOPENTANE STUDIED BY COLD NEUTRON SCATTERING EXPERIMENT
J. CHEM. PHYS., V.66, P.5817-P.5822 (1977)
NEOPENTANE .EXPERIMENT/ LIQUID/ SOLID/ ROTATIONAL MOTION/ QUASIELASTIC
- 77-MA-02 MACKENZIE, G.A./ PAWLEY, G.S./ DIETRICH, O.W.
PHONON MEASUREMENTS AND MODEL CALCULATIONS FOR NAPHTHAL

- ENE-D8
J. PHYS., C, LONDON, V.10, P.3723-P.3736 (1977)
NAPHTHALENE ..EXPERIMENT/ PHONON DISPERSION/ MODEL FITTING
- 77-MA-03 MALISZEWSKI, E./ BEDNARSKI, S./ CZACHOR, A./ SOSNOWSKI, J.
PHONON DISPERSION RELATIONS FOR AN EXCHANGE-ENHANCED PD 0.95-PB0.05
PHYS. REV. B, V.16, P.770-P.776 (1977)
PD-PB ..PHONON-DISPERSION-RELATION/ 296K/ EXPERIMENT
- 77-MA-04 MANSSON, T./ LARSSON, K.E.
THE MOLECULAR MOTION IN SOLID PHASES OF T-BUTHYL CHLORIDE BY COLD NEUTRON SCATTERING
J. CHEM. PHYS., V.67, P.4996-P.5005 (1977)
BUTYL CHLORIDE ..EXPERIMENT/ QUASI-ELASTIC SCATTERING/ THEORETICAL CALCULATION/ PLASTIC CRYSTAL/ ROTATIONAL DIFFUSION/ TWO STEP ROTATIONAL DIFFUSION
- 77-MA-05 MAURYA, J.R./ SRIVASTAVA, B.B.
CRYSTAL DYNAMICS OF HCP ANISOTROPIC METAL
PHYS. LETT., A, V.60A, P.445 (1977)
CD ..THEORY/ DISPERSION RELATION ..MODIFIED TOYA'S THEORY
- 77-MC-01 McDONALD, I.R./ VIELLEFOSSE, P./ HANSEN, J.P.
TIME-DEPENDENT DENSITY FLUCTUATIONS IN STRONGLY COUPLED IONIC MIXTURE
PHYS. REV. LETT., V.39, P.271-P.274 (1977)
THEORY-OF-FLUIDS ..HYDRODYNAMIC CALCULATION/ MOLECULAR-DYNAMIC CALCULATION/ IONIC MIXTURE/ H⁺-HE⁺⁺
- 77-MI-01 MIKKE, K./ JANKOWSKA, J./ OSETEK, Z./ MODRZEJEWSKI, A.
INFLUENCE OF ATOMIC ORDERING ON THE SPIN WAVES IN NiCO₇₅-FeCO₂₅ ALLOY
J. PHYS., F, LONDON, V.7L, P.211-P.214 (1977)
Ni-Fe ..EXP./ MAGNON DISPERSION/ EFFECT OF ORDERING
- 77-MI-02 MINGA, M.R./ PATHAK, K.H.
PHONON NUMBER DENSITY IN AN ANHARMONIC CRYSTAL
PHYS. REV. B, V.15, P.4130 (1977)
THEORY-OF-SOLIDS ..ANHARMONIC EFFECT/ PHONON NUMBER DENSITY/ NE
- 77-MI-03 MITRA, S.K.
THE DEBYE-WALLER FACTOR FOR NICKEL BY MOLECULAR DYNAMIC SIMULATION
PHIL. MAG., V.36, P.245-P.253 (1977)
Ni ..CALCULATION/ MOLECULAR DYNAMIC SIMULATION/ DEBYE-WALLER FACTOR
- 77-MO-01 MONCTON, D.E./ AXE, J.D./ DISALVO, F.J.
NEUTRON SCATTERING STUDY OF THE CHARGE-DENSITY WAVE TRANSITIONS IN 2H-TaSe₂ AND 2H-NbSe₂
PHYS. REV. B, V.16, P.801-P.819 (1977)
TaSe₂/ NbSe₂ ..CHARGE-DENSITY-WAVE
- 77-MO-02 MONCTON, D.E./ DI-SALVO, F.J./ AXE, J.D.
STUDIES OF THE LATTICE DYNAMICS AND PHASE TRANSITIONS IN 1T-TaSe₂ AND 2H-TaSe₂
BNL-23279 (1977)
TaSe₂ ..EXPERIMENT/ PHONON DISPERSION/ LAYERED SEMIMETAL
- 77-MO-03 MOSTOLLER, M./ THEODORE, K.
LATTICE VIBRATIONS IN RbCl-CrK(C) ALLOYS. SHORTCOMINGS OF SINGLE-SITE COHERENT POTENTIAL APPROXIMATION
PHYS. REV. B, V.16, P.2350-P.2361 (1977)
Rb-K ..THEORY/ COHERENT-POTENTIAL-APPROXIMATION/ COHERENT INELASTIC CROSS SECTION
- 77-MU-01 MUNAKATA, T./ IGARASHI, A.
DYNAMICAL CORRELATION FUNCTIONS OF CLASSICAL LIQUIDS. I
PROGR. THEORET. PHYS., KYOTO, V.58, P.1345-P.1356 (1977)
NEUTRON-SCATTERING-IN-FLUIDS ..THEORY/ INCOHERENT SCATTERING FUNCTION
- 77-MU-02 MURPHY, R.D.
RADIAL DISTRIBUTION FUNCTION OF LIQUID POTASSIUM
PHYS. REV. A, V.15, P.1188 (1977)
K ..THEORY/ LIQUID ..MONTE CARLO METHOD/ 338,408DK
- 77-NA-01 NAND, S./ TRIPATHI, B.B.
LATTICE DYNAMICS OF NOBLE METALS USING A PSEUDOPOTENTIAL APPROACH
NOUVO CIM., B, V.41, P.7-P.12 (1977)
Cu/ Ag ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL
- 77-NA-02 NARA, S./ OGAWA, T./ MATSUBARA, T.
A LATTICE MODEL OF LIQUID METAL
PROGR. THEORET. PHYS., KYOTO, V.57, P.1474 (1977)
THEORY-OF-FLUIDS ..LIQUID METAL/LATTICE GAS MODEL/ HUBBERD MODEL/
- 77-NI-01 NICHOLSON, A.P.P./ BACON, D.J.
A NEW FORCE-CONSTANT MODEL FOR GRAPHITE
J. PHYS., C, LONDON, V.10, P.2295-P.2306 (1977)
GRAPHITE ..FORCE CONSTANT MODEL/ ELASTIC CONSTANT/ PHONON DISPERSION CURVE
- 77-NI-02 NIZAMETDINOVA, M.A./ GUSEINOV, D.A./ SHTEINSHRAIBE

R. V.Y.
VIBRATIONAL SPECTRUM OF THALLIUM SELENIDE
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.19 (V
.19), P.2011-P.2014 (P.1177-P.1178) (1977 (1977))
TL2,SE ..VIBRATIONAL SPECTRUM/ KRAMERS-KRONIG ANALYSIS/
PERMITTIVITY/ RIGID-ION MODEL

77-OP-01 OPIE, A./ GRINDLAY, T.
THE SMALL WAVENUMBER BEHAVIOR OF THE PHONON FREQUENCY
PROGR. THEORET. PHYS., KYOTO, V.10, P.1609 (1977)
THEORY-OF-SOLIDS

77-PA-01 PARETTE, G./ RAO, L.M.
SMALL ANGLE DIFFUSE NEUTRON SCATTERING: MEASUREMENTS ON
V2O3 IN THE TEMPERATURE RANGE 400-600 K
SOLID STATE COMMUN., V.23, P.179-P.183 (1977)
V2O3 ..EXPERIMENT/ NEUTRON SMALL-ANGLE SCATTERING/ MAG
NETIC MOMENT DENSITY/ MOTT TRANSITION

77-PA-02 PARIKH, P./ HAY, D.R.
CRYSTALLOGRAPHIC ASPECTS OF ELASTIC DISPERSION IN BODY-
CENTERED CUBIC TRANSITION METALS
PHYS. STATUS SOLIDI B, V.79, P.299-P.305 (1977)
V/ NB/ TA/ CR/ MO/ W/ FE ..THEORY/ PHONON DISPERSION/ E
LASTIC CONSTANTS

77-PA-03 PAWLEY, G.S./ LEECH, J.W.
A LATTICE DYNAMICAL SHELL MODEL FOR CRYSTALS WITH MOLEC
ULES HAVING FIXED MULTIPOLE MOMENTS
J. PHYS., C, LONDON, V.10, P.2527-P.2546 (1977)
THEORY-OF-SOLIDS ..THEORY/ DYNAMICAL SHELL MODEL/ MOLEC
ULAR CRYSTAL

77-PI-01 PIERREFFU, A./ STEIGMEIER, E.F./ DORNER, B.
INELASTIC NEUTRON SCATTERING IN SB.SI NEAR THE FERROELE
CTRIC PHASE TRANSFORMATION
PHYS. STATUS SOLIDI B, V.80, P.167 (1977)
SB.S.I ..EXPERIMENT/ CONSTANT- θ METHOD DISPERSION RELAT
ION

77-PI-02 PIERRE, J./ SCHMITT, D./ MORIN, P./ HENNION, B.
SPIN WAVES IN HO,ZN
J. PHYS., F, LONDON, V.7, P.1965-P.1971 (1977)
HO,ZN ..EXP./ MAGNON DISPERSION/ 4,2K

77-PL-01 PLAKIDA, N.M./ SIKLOS, T.
LATTICE DYNAMICS AND STABILITY OF ANHARMONIC CRYSTALS
KFKI-1977-24 (1977)
THEORY-OF-SOLIDS ..ANHARMONICITY/ LATTICE DYNAMICS/ PHA
SE TRANSITION

77-PO-01 POWELL, B.M./ MARTELL, P./ WOODS, A.D.B.

PHONON PROPERTIES OF NIOBIUM, MOLYBDENUM, AND THEIR ALL
OYS

CAN, J. PHYS., V.25, P.1601-P.1612 (1977)
NB/ MO/ NB-MO ..CALCULATION/ MODEL FITTING/ PHONON DENS
ITY/ DEBYE TEMPERATURE

77-PR-01 PRAGER, N./ PRESS, W./ ALEFELD, B./ HEULLER, A.
ROTATIONAL STATES OF THE NH₄⁺ ION IN (N,H₄)₂SN.Cl₆ BY
INELASTIC NEUTRON SCATTERING
J. CHEM. PHYS., V.67, P.5126-P.5132 (1977)
AMMONIUM CHLOROSTANNATE ..EXPERIMENT/ TUNNEL SPLITTING/
LIBRATIONAL STATES/ QUASI-ELASTIC SCATTERING/ ACTIVATI
ON ENERGY

77-PR-02 PRASAD, B./ SRIVASTAVA, R.S.
LATTICE DYNAMICS AND THERMAL PROPERTIES OF SIMPLE METAL
S BASED ON MODEL PSEUDOPOTENTIAL CALCULATIONS
PHYS. STATUS SOLIDI B, V.10, P.379 (1977)
RB/ CS ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION

77-PR-03 PREVOT, B./ HENNION, B./ DORNER, B.
PHONON SPECTRUM OF CU.Cl AT 4,2K AND ITS TEMPERATURE DE
PENDENCE
J. PHYS., C, LONDON, V.10, P.3999-P.4011 (1977)
CU.Cl ..EXPERIMENT/ PHONON DISPERSION/ SHELL MODEL FITT
ING/ PHONON DENSITY

77-QU-01 QUIRKE, N./ SOPER, A.K.
NEUTRON SCATTERING FROM NI.Cl₂/D₂O - A HARD-SPHERE APP
ROACH
J. PHYS., C, LONDON, V.10, P.1803 (1977)
NI.Cl₂ ..NICKEL-NICKEL PARTIAL STRUCTURE FACTOR/ HARD S
PHERE POTENTIAL/ SOLUTION IN D₂O

77-RA-01 RADHAKRISHNAN, N.K./ BISWAS, A.B.
NEUTRON DIFFRACTION STUDY OF THE SPINEL OXIDE CU,MN₂O₄
PHYS. STATUS SOLIDI A, V.44, P.45-P.49 (1977)
CU,MN₂O₄ ..NEUTRON DIFFRACTION/ OXYGEN PARAMETER

77-RA-02 RADHAKRISHNAN, P./ BROWN, J./ KAJEAB, F.
POLARISED NEUTRON STUDY OF THE CONCENTRATION DEPENDENCE
OF MAGNETIC MOMENT DISTRIBUTION IN IRON-VANADIUM ALLOYS
J. PHYS., F, LONDON, V.7, P.2583-P.2591 (1977)
FE-V ..POLARISED NEUTRON DIFFRACTION

77-RA-03 RAI, R.C./ HEMKAR, M.P.
A SIMPLE PHENOMENOLOGICAL MODEL FOR THE LATTICE DYNAMIC
S OF B.C.C METALS
PHYS. STATUS SOLIDI B, V.79, P.289-P.298 (1977)
LI/ NA/ K/ RB/ THEORY-OF-SOLIDS ..PHONON DISPERSION/ AL
KALI METAL

- 77-RA-04 RAND, S.C./ RAO, B.S./ ENRIGHT, G.D./ STOICHEFF, B.
P.
DIFFERING VALUES OF THE ELASTIC CONSTANTS OF XENON DETERMINED BY BRILLOUIN AND NEUTRON SCATTERING
PHYS. REV. B, V.15, P.2352 (1977)
KR/ AR/ NE .EXPERIMENT .LIGHT SCATTERING/ ELASTIC CONSTANTS/ COMPARISON WITH NEUTRON SCATTERING RESULTS
- 77-RA-05 RAO, R.R./ RAMANAND, A.
LATTICE DYNAMICS, THIRD ORDER ELASTIC CONSTANTS AND THE THERMAL EXPANSION OF RHENIUM
J. PHYS. CHEM. SOLIDS, V.38, P.831-P.835 (1977)
RHENIUM .THEORY/ PHONON DISPERSION/ PHONON SPECTRA
- 77-RE-01 RENOUPREZ, A./ FOUILLOUX, P./ STOCKMEYER, R./ CONRAD, H.M./ GOELTZ, G.
DIFFUSION OF CHEMISORBED HYDROGEN ON A NICKEL CATALYST
BERICHTE DER BUNSEN-GESELLSCHAFT FÜR PHYSIKALISCHE CHEMIE, V.81, P.429-P.432 (1977)
H-NI .EXPERIMENT/ DIFFUSION/ QUASIELASTIC
- 77-RE-02 RENOUPREZ, A.J./ FOUILLOUX, P./ COUDURIER, G./ TOCCHETTI, D./ STOCKMEYER, R.
DIFFERENT SPECIES OF HYDROGEN CHEMISORBED ON RANEY NICKEL STUDIED BY NEUTRON INELASTIC SPECTROSCOPY
J. C. S. FARADAY TRANS. 1, V.73, P.1 (1977)
H-NI .EXPERIMENT/ VIBRATION LEVEL
- 77-RJ-01 RICHTER, D./ ALEFELD, B./ HEIDEMANN, A./ WAKABAYASHI, N.
INVESTIGATION OF THE ANOMALOUS TEMPERATURE DEPENDENCE OF THE SELF-DIFFUSION CONSTANT OF HYDROGEN IN NIOBIUM BY QUASIELASTIC NEUTRON SCATTERING
J. PHYS., F. LONDON, V.7, P.569-P.574 (1977)
NB-H .QUASIELASTIC/ DIFFUSION/ 165 TO 300K
- 77-RJ-02 RINAUDO, M./ DOMARD, A.
INTERCHAIN CORRELATION OBSERVED IN NEUTRON-SCATTERING EXPERIMENTS ON POLYALPHA-L-GLUTAMIC ACID SOLUTIONS
J. POLY. SCI., POLY. LETT. V.15, P.411-P.415 (1977)
POLYGLUTAMIC ACID .EXP./ SMALL-ANGLE/ INTERCHAIN CORRELATION
- 77-RU-01 RUMYANTSEV, A.Y./ ZEMLYANOV, M.G./ PARSHIN, P.P./ CHERNOPOLEKOV, N.A./ USOV, O.A./
LATTICE DYNAMICS OF V₃Si
FIZ. TVERD. TELA (SOV. PHYS.-SOLID STATE), V.19 (V.19), P.1715-P.1719 (P.1001-P.1003) (1977 (1977))
V₃Si .PHONON DISPERSION RELATION/ EXPERIMENT/ BORN-VON KARMAN MODEL/ TWO-BAND MODEL
- 77-SA-01 SALVI, P.R./ RIGHINI, R./ SCETTINO, V.
LATTICE DYNAMICS AND PHONON SIDEBANDS OF VIBRATIONAL EXCITONS IN CARBONYL SULPHIDE CRYSTAL
J. PHYS., C, LONDON, V.10, P.11-P.21 (1977)
CARBONYL SULPHIDE .EXPERIMENT/ DISPERSION CURVE/ PHONON DENSITY OF STATES
- 77-SC-01 SCHECKENHOFER, H./ STEYERL, A.
DIFFRACTION AND MIRROR REFLECTION OF ULTRACOLD NEUTRONS
PHYS. REV. LETT., V.39, P.1310-P.1312 (1977)
ULTRACOLD NEUTRON .DIFFRACTION/ GRATING/ SURFACE REFLECTION
- 77-SC-02 SCHELLEN, J.
SMALL ANGLE NEUTRON SCATTERING FROM TYPE II SUPERCONDUCTORS AND POLYMERS
JUL-1385 (1977)
REVIEW-ARTICLES/ NEUTRON-SCATTERING-IN-SOLIDS .SMALL ANGLE SCATTERING/ DIFFRACTION FROM FLUX LINE/ POLYMER CONFIGURATION
- 77-SC-03 SCHLAACK, M./ COUZI, M./ LASSEGUES, J.C./ DREXEL, W.
INELASTIC NEUTRON SCATTERING STUDY OF THE LOW FREQUENCY VIBRATIONS IN (C₆H₅)₃N.H₂CL
CHEM. PHYS. LETT., V.45, P.111-P.114 (1977)
(C₆H₅)₃N.H₂CL .EXPERIMENT/ VIBRATIONAL LEVEL
- 77-SC-04 SCHOMMERS, W.
LIQUID ARGON: THE INFLUENCE OF THREE-BODY INTERACTIONS ON ATOMIC CORRELATIONS
PHYS. REV. A, V.16, P.327-P.333 (1977)
AR . . . 2-DIMENSION/ PAIR-CORRELATION
- 77-SC-05 SCHWAB, D.
NEUTRON SMALL ANGLE SCATTERING IN AL-ZN ALLOYS ABOVE CRITICAL POINT
JUL-1379 (1977)
AL-ZN .EXPERIMENT/ SMALL ANGLE SCATTERING
- 77-SE-01 SEMMINGSEN, D./ ELLENSON, W.D.
NEUTRON-SCATTERING STUDY OF THE FERROELECTRIC PHASE TRANSITION IN CS₂D₂P₂O₄
PHYS. REV. LETT., V.38, P.1299 (1977)
CS₂H₂P₂O₄ .QUASI-ELASTIC DIFFUSE SCATTERING/ PHASE TRANSITION
- 77-SH-01 SHAMIR, N./ MELAMUD, M./ SHAKED, H./ SHTRIKMAN, S.
INELASTIC NEUTRON SCATTERING SPECTROSCOPY OF R₃ LEVELS IN R₂CR₂O₃ (R=PR, ND, TB, HO, ER, TM, YB) AT 4.2K
PHYSICA, B+C, V.90, P.217-P.222 (1977)
PR₂CR₂O₃/ ND₂CR₂O₃/ TB₂CR₂O₃/ HO₂CR₂O₃/ ER₂CR₂O₃ .EXPERIMENT

RIMENT/ MAGNETIC SCATTERING / R.CR.03 TYPE

- 77-SH-02 SHAPIRO, S.M./ MOSS, S.C.
LATTICE DYNAMICS OF FACE-CENTERED-CUBIC COO.92.FEO.08
PHYS. REV. B, V.15, P.2726 (1977)
- CO-FE .DISPERSION CURVE/ EXPERIMENT/ FCC-HCP TRANSITION
- 77-SH-03 SHARMA, R.P./ UPADHYAYA, J.C.
THREE-BODY FORCES IN THE LATTICE DYNAMICS OF SOME HCP METALS
J. PHYS. CHEM. SOLIDS, V.38, P.601-P.608 (1977)
- BE/ TB/ HO .THEORY/ PHONON DISPERSION/ FORCE CONSTANT MODEL
- 77-SI-01 SINGH, J./ SINGH, R./ PRAKASH, S.
PHONON DISPERSION IN HCP METALS
PHYSICA, B+C, V.90B, P.223-P.236 (1977)
- ZN/ ZR/ TL/ TB/ HO .THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL APPROACH
- 77-SI-02 SINGH, J./ PRAKASH, S.
DIELECTRIC SCREENING AND LATTICE DYNAMICS OF H.C.P. TRANSITION METALS, SCANDIUM AND YTTRIUM
NUOVO CIM., B, V.37, P.131-P.154 (1977)
- SC/ Y .THEORY/ PHONON DISPERSION/ H.C.P. METAL
- 77-SI-03 SINGH, T.N./ ROY, B.N.
LATTICE DYNAMICS OF BETA-SI.C
NUOVO CIM., B, V.41, P.198-P.204 (1977)
- SI.C .THEORY/ PHONON DISPERSION/ SIX-PARAMETER RIGID ION MODEL
- 77-SI-04 SINHA, H.P./ UPADHYAYA, J.C.
LATTICE DYNAMICS OF ZINC AND CADMIUM
J. PHYS. CHEM. SOLIDS, V.38, P.41-P.44 (1977)
- ZN/ CD .THEORY/ PHONON DISPERSION
- 77-SI-05 SINHA, S.K./ KLINE, G.R./ STASSIS, C./ CHESSER, N.
NEUTRON SCATTERING STUDY OF THE SPIN DYNAMICS AND SPIN-WAVE FORM FACTOR OF CHROMIUM
PHYS. REV. B, V.15, P.1415-P.1421 (1977)
- CR .EXPERIMENT/ MAGNETIC SCATTERING/ SPIN DYNAMICS
- 77-SK-01 SKOELD, K./ PELIZZARI, C.A.
NEUTRON INELASTIC SCATTERING FROM LIQUID HELIUM-3
CONF-770122-1 (1977)
- HE .EXPERIMENT/ ZERO-SOUND MODE/ SPIN-FLUCTUATION
- 77-SO-01 SOPER, A.K./ NIELSEN, G.W./ ENDERLEY, J.E./ HOWE, R.A.
A NEUTRON DIFFRACTION STUDY OF HYDRATION EFFECTS IN AQU

EQU SOLUTIONS

- NI₂CL₂/ NA₂CL .NEUTRON DIFFRACTION EXPERIMENT/ HYDRATION NUMBER
- 77-SP-01 SPELLS, S.J./ SHEPHERD, I.W./ WRIGHT, C.J.
RAMAN, INFRARED AND NEUTRON STUDIES OF LOW FREQUENCY VIBRATIONS IN SOME SUBSTITUTED POLYSTYRENES
POLYMER, V.18, P.905 (1977)
- POLYSTYRENE .EXPERIMENT/ FREQUENCY SPECTRUM
- 77-SP-02 SPLETTSTOSSER, B.
SIMPLE SHELL MODEL FOR PHONON DISPERSION OF NONSTOICHIOMETRIC NIOBIUM CARBIDE
Z. PHYS. B, V.26, P.151-P.160 (1977)
- NB.C .THEORY/ SOLID/ DISPERSION RELATION .SHELL MODEL / ONE-PHONON CROSS SECTION/ VIRTUAL CRYSTAL APPROX./ SINGLE T MATRIX APPROX./ LINE SHAPE
- 77-SR-01 SRIVASTAVA, S.K.
PSEUDOPOTENTIAL IN METALS AND ALLOYS
J. PHYS. CHEM. SOLIDS, V.38, P.451 (1977)
- NA/ K/ HG/ BI/ NA-K .THEORY/ INTERATOMIC FORCE CONSTANT/ KNIGHT SHIFT/ FREQUENCY SPECTRUM .PSEUDOPOTENTIAL/ ION-ION INTERACTION
- 77-ST-01 STIRLING, W.G./ PRESS, W./ STILLER, H.H.
PHONON AND LIBRATIONAL EXCITATIONS IN SOLID C.D4-I AND C.D4-II
J. PHYS., C, LONDON, V.10, P.3959-P.3969 (1977)
- C.H4 .EXPERIMENT/ PHONON DISPERSION
- 77-ST-02 STUMP, N./ MAGERL, A./ ALEFELD, G./ SCHEDLER, E.
CONCENTRATION DEPENDENCE OF ACOUSTIC PHONONS OF NB.D(X) ALLOYS
J. PHYS., F, LONDON, V.7L, P.1-P.5 (1977)
- NB-H/ (NB-MO)-H .EXPERIMENT/ PHONON DISPERSION
- 77-SW-01 SWAMY, K.N./ KAHOL, P.K./ CHATURVEDI, D.K./ PATHAK, K.N.
DYNAMICAL STRUCTURE FACTORS IN BINARY LIQUIDS, 2. LIQUID NA-K ALLOY
J. PHYS., C, LONDON, V.10, P.4191-P.4195 (1977)
- NA-K .THEORY/ DYNAMICAL STRUCTURE FACTOR
- 77-TA-01 TAJIMA, K./ ISHIKAWA, Y./ WEBSTER, P.J./ STRINGFELLOW, M.W./ TOCCHETTI, D.
SPIN WAVES IN A HEUSLER ALLOY CU₂MN.AL
J. PHYS. SOL. JAP., V.43, P.483-P.489 (1977)
- CU₂MN.AL .EXPERIMENT/ MAGNON DISPERSION/ TEMPERATURE EFFECT

- 77-TA-02 TAUB, H./ CARNEIRO, K./ KJEMS, J.K./ PASSELL, L./ MC-TAGUE, J.P.
NEUTRON SCATTERING STUDY OF AR-36 MONOLAYER FILMS ADSORBED ON GRAPHITE
PHYS. REV. B, V.16, P.4551 (1977)
AR ..EXPERIMENT/ DISPERSION RELATION/ CONSTANT-0 METHOD ..ADSORBED ARGON FILM IN GRAPHITE
- 77-TE-01 TEMME, F.P.
NEUTRON SCATTERING FROM LIQUID CRYSTAL MESOPHASES. FORM OF THE ELASTIC INCOHERENT STRUCTURE FACTOR FOR 'MONOCRYSTAL' ALIGNED NEMATOGEN WITH SPECIFIC ϕ TO N ORIENTATION
CHEM. PHYS. LETT., V.48, P.518-P.523 (1977)
NEUTRON-SCATTERING-IN-SOLIDS ..THEORY/ CRYSTAL MESOPHASE
- 77-TO-01 TOEPLER, J./ ALEFELD, B./ HEIDMANN, A.
STUDY OF THE CENTRAL PEAK OF SR,TI,03 BY NEUTRON SPECTROSCOPY WITH HIGH ENERGY RESOLUTION
J. PHYS., C, LONDON, V.10, P.635-P.643 (1977)
SR,TI,03 ..EXPERIMENT/ SOLID/ QUASI-ELASTIC PEAK ..ANTI-FERRODISTORTIVE PHASE TRANSITION/ BACKSCATTERING SPECTROMETER
- 77-UL-01 ULLMAN, R./ SUMMERFIELD, G.C./ KING, J.S.
INVESTIGATION OF HETEROGENEITIES IN SOLID POLYETHYLENE BY SMALL ANGLE NEUTRON SCATTERING
J. POLY. SCI., V.15, P.1641-P.1646 (1977)
POLYETHYLENE ..SMALL ANGLE SCATTERING/ HETEROGENEITY
- 77-UP-01 UPADHYAYA, J.C./ ANIMALU, A.O.E.
MICROSCOPIC THEORY OF THE LATTICE DYNAMICS OF HCP RARE-EARTH METALS
TB/ HO ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION/ FREQUENCY DISTRIBUTION
PHYS. REV. B, V.15, P.1867 (1977)
- 77-UT-01 UTSURO, M.
SLOW NEUTRON SCATTERING AND INTERMOLECULAR EXCITATIONS IN LIQUID HYDROGEN
Z. PHYS. B, V.27, P.111-P.116 (1977)
H2 ..CALCULATION/ SIMPLE DYNAMIC MODEL/ CROSS SECTION/ ENERGY SPECTRUM
- 77-VA-01 VAN-DEK-VALK, H.J.L./ HAAS, C.
ANISOTROPY OF LATTICE VIBRATIONS OF LAYERED COMPOUNDS
PHYS. STATUS SOLIDI B, V.10, P.321 (1977)
PB,12/ CD,12/ SN,S2/ SN,SE2 ..THEORY/ SOLID/ LATTICE DYNAMICS ..POLARISABLE ION MODEL
- 77-VA-02 VANDERWAL, J.J.
INTERATOMIC FORCE CONSTANTS FROM LATTICE VIBRATIONS OF CRYSTALS
SOLID STATE COMMUN., V.21, P.401-P.404 (1977)
GE/ CU ..CALCULATION/ ATOMIC FORCE-CONSTANT
- 77-VA-03 VARMA, C.M./ WEBER, W.
PHONON DISPERSION IN TRANSITION METALS
PHYS. REV. LETT., V.39, P.1094-P.1098 (1977)
THEORY-OF-SOLIDS/ NB/ NB-MO/ MO ..LATTICE DYNAMICS/ PHONON DISPERSION/ 4D BCC METAL
- 77-VE-01 VESTNER, H./ WALDMANN, L.
GENERALIZED HYDRODYNAMICS OF THERMAL TRANSPARATION, THERMAL FORCE AND FRICTION FORCE
PHYSICA, V.86A, P.303-P.336 (1977)
NITROGEN/ ARGON ..GAS/ HYDRODYNAMICS ..FRICTIONAL AND THERMAL FORCES ON A SPHERICAL PARTICLE
- 77-VR-01 VRATI, S.C./ GUPTA, D.K./ RANI, N./ GUPTA, H.C.
PHONON DISPERSION IN THORIUM, A PSEUDOPOTENTIAL APPROACH
PHYS. LETT., A, V.64A, P.333-P.334 (1977)
THORIUM ..THEORY/ PHONON DISPERSION/ PSEUDOPOTENTIAL
- 77-WA-01 WAKABAYASHI, N.
CHARGE FLUCTUATION MODEL OF LATTICE VIBRATIONS
SOLID STATE COMMUN., V.23, P.737-P.740 (1977)
THEORY-OF-SOLIDS/ NB/ MO ..PHONON DISPERSION/ TRANSITION IN METAL/ CHARGE FLUCTUATION
- 77-WA-02 WAKABAYASHI, N.
LATTICE DYNAMICS OF LAYERED STRUCTURES
NOUVO CIM., B, V.38, P.256-P.262 (1977)
MO,S2/ GRAPHITE/ NB,S2/ PB,12 ..THEORY/ PHONON DISPERSION/ LAYERED STRUCTURES
- 77-WE-01 WEBER, M./ STEEB, S./ KNOLL, W.
MAGNETIC NEUTRON SCATTERING AT SMALL MOMENTUM TRANSFER CAUSED BY SPIN FLUCTUATIONS IN MOLTEN IRON
PHYS. LETT., A, V.61, P.78-P.80 (1977)
FE ..EXPERIMENT/ MAGNETIC SCATTERING
- 77-WE-02 WEILACHER, K.H./ ROTH-SEEFRIED, H./ BROSS, H.
LATTICE DYNAMICS OF LITHIUM
PHYS. STATUS SOLIDI B, V.80, P.137 (1977)
LITHIUM ..THEORY/ LATTICE DYNAMICS/ DISPERSION RELATION
- 77-WE-03 WEILACHER, K.H./ BROSS, H.
PHONON SPECTRUM OF METALLIC LITHIUM FROM FIRST-PRINCIPLES BANDSTRUCTURE
J. PHYS., F, LONDON, V.7, P.2253-P.2270 (1977)

LI .,THEORY/ PHONON DISPERSION

- 77-WE-04 WEINSTEIN, B.A.
PHONON DISPERSION OF ZINC CHALCOGENIDES UNDER EXTREME P
RESSURE AND THE METALLIC TRANSFORMATION
SOLID STATE COMMUN., V.24, P.595-P.598 (1977)
ZN,TE/ZN,SE/ZN,S/ SI/ GA,P .,RAMAN SPECTRA/ METALLIC
PHASE TRANSITION/ PHONON DISPERSION RELATION/ GRUENEISE
N PARAMETER/ PRESSURE EFFECT 150KBAR/ THEORY
- 77-WE-05 WENDEL, H.
ON THE PHONON SPECTRA OF POLYSULPHURNITRIDE. (SN)X
J. PHYS., C, LONDON, V.10L, P.1-P.5 (1977)
SULFUR NITRIDE .,VALENCE FORCE MODEL/ PHONON SPECTRA/ E
XPERIMENT/ SOUND VELOCITY/ RAMAN STUDY
- 77-WO-01 WOLF, D.
QUASIELASTIC NEUTRON SCATTERING AND CORRELATED SELF-DIF
FUSION IN CRYSTALS
SOLID STATE COMMUN., V.23, P.853-P.858 (1977)
NEUTRON-SCATTERING-IN-SOLIDS .,THEORY/ DIFFUSION
- 77-WO-02 WOODS, A.D.B./ HILTON, P.A./ SCHERM, R./ STIRLING,
W.G.
A NEW DETERMINATION OF THE ROTON ENERGY IN SUPERFLUID L
IQUID HELIUM
J. PHYS., C, LONDON, V.10L, P.45-P.49 (1977)
HELIUM .,DISPERSION CURVE/ NEUTRON INELASTIC SCATTERING
/ LIQUID HELIUM/ EXPERIMENT/ SCATTERED-NEUTRON DISTRIBU
TION
- 77-WO-03 WOODS, A.D.B./ SEARS, V.F.
THE ATOMIC KINETIC ENERGY IN LIQUID 4HE
J. PHYS., C, LONDON, V.10L, P.341-P.346 (1977)
HELIUM .,NEUTRON-SCATTERING EXPERIMENT/ AVERAGE KINETIC
ENERGY/ LIQUID HELIUM/ FREQUENCY MOMENT
- 77-YO-01 YOON, D.Y./ FLORY, P.J.
SMALL-ANGLE NEUTRON SCATTERING BY SEMICRYSTALLINE POLYE
THYLENE
POLYMER, V.18, P.309 (1977)
POLYETHYLENE .,SMALL ANGLE SCATTERING
- 77-YO-02 YOSHIDA, F./ TAKENO, S.
A SELF-CONSISTENT THEORY OF MEMORY FUNCTION IN CLASSICA
L SIMPLE LIQUIDS. I. INCOHERENT SCATTERING LAW SK.OMEG
A)
PROGR. THEORET. PHYS., KYOTO, V.58, P.15-P.27 (197
7)
THEORY-OF-FLUIDS/ NEUTRON-SCATTERING-IN-FLUIDS/ AR .,IN
COHERENT SCATTERING FUNCTION/ CLASSICAL LIQUID

- 77-YO-03 YOSHIDA, F.
A SELF-CONSISTENT THEORY OF MEMORY FUNCTION IN CLASSILA
L SIMPLE LIQUIDS. 2
PROGR. THEORET. PHYS., KYOTO, V.58, P.1331-P.1344
(1977)
THEORY-OF-FLUIDS .,DYNAMICAL STRUCTURE FACTOR/ CURRENT-
CURRENT CORRELATION FUNCTION
- 77-YO-04 YOSHIZAWA, H./ HIRAKAWA, K.
A NEUTRON SCATTERING STUDY OF THE ANHARMONICITY OF LATT
ICE VIBRATIONS AND ITS RELATION TO THE MELTING NA,F
J. PHYS. SOC. JAP., V.43, P.793-P.801 (1977)
NA,F .,EXPERIMENT/ PHONON DISPERSION/ MELTING TEMPERTUR
E
- 77-ZD-01 ZDETSIS, A.D.
ON THE LATTICE DYNAMICS OF GREY TIN
J. PHYS. CHEM. SOLIDS, V.38, P.1113-P.1116 (1977)
SN .,THEORY/ BORN-VON KARMAN MODEL/ PHONON DISPERSION/
PHONON SPECTRA/ GREY TIN
- 77-ZI-01 ZIEBECK, K.R.A./ DORNER, B./ STIRLING, W.G./ SCHOE
LLHORN, R.
KOHANOMY IN THE IT2 PHASE OF TA.S2
J. PHYS., F, LONDON, V.7, P.1139-P.1143 (1977)
TA.S2 .,EXP./ PHONON DISPERSION/ KOHN ANOMALY
- 78-CA-01 CARNEIRO, K./ SHIRANE, G./ WERNER, S.A./ KAISER, S
LATTICE DYNAMICS OF K2.PT.(C.N)4.BRO.3*3.2D2.O (KCP) ST
UDIED BY INELASTIC NEUTRON SCATTERING
PHYS. REV. B, V.13, P.4258-P.4273 (1978)
KCP .,EXPERIMENT/ PHONON DISPERSION/ 2KF ANOMALY
- 78-TO-01 TOMIMITSU, H./ KAMADA, K./ DOI, K.
NEUTRON DIFFRACTION TOPOGRAPHIC OBSERVATION OF LAYER-SU
BSTRUCTURE IN A CU-5 PER CENT GE SINGLE CRYSTAL
PHIL. MAG., V.38, P.483-P.486 (1978)
CU-GE .,NEUTRON DIFFRACTION/ TOPOGRAPHY