

JAERI 5011
Vol. 5

JAERI 5011
Vol. 5

Technical Publications
by JAERI Staff

from January 1969
to December 1970

June 1971

Japan Atomic Energy Research Institute

JAERI Reports and the Availability

Technical reports etc. are issued irregularly by JAERI. As to those in the past, these are collectively given in yearly "A list of the JAERI Reports." Then, those currently issued are presented in semimonthly "Kenkyu Seika Yoshishu" (current JAERI technical reports) with the summaries etc. of individual reports.

Requests for the JAERI reports in any of those lists should be addressed to: Division of Technical Information, Japan Atomic Energy Research Institute, Tokai-mura, Ibaraki-ken, Japan.

Technical Publications by JAERI Staff from January 1969 to December 1970

[Summary] Technical Publications by JAERI Staff from January 1968 to December 1970

Approximately 950 journal articles, papers at meetings, reports and books are given, which have been published by personnel of JAERI from January 1969 to December 1970. The contents for each entry include the title, language in which it is written, author(s), and journal name or origin. A list of the patents, originating at JAERI, including both Japanese and other patents, is also given.

June 1971

Division of Technical Information
Japan Atomic Energy Research Institute

〔要 旨〕 日本原子力研究所研究成果発表リスト（1969年1月～1970年12月）

1969年1月から1970年12月までの間に、日本原子力研究所の所員によって発表された研究成果のうち、雑誌論文・会議の報文・レポート・単行本約950件について、その標題・国語・筆者・所在を示した。また、研究所で発生した国内・国外の特許一覧表を付した。

1971年6月

日本原子力研究所
技術情報部

Preface

Japan Atomic Energy Research Institute was established in 1956. During the years, the Institute has functioned as the center of nuclear research and development in Japan. The results of research and development thus produced have been reported and published through various media, including meetings. The present volume is intended to introduce such literature originally written in Japanese, and some in foreign languages, to scientists and engineers in various countries outside Japan. The volume is in nine major fields of research, each field listing journal articles, papers at meetings, reports and books in this order. Patents are gathered at the end of the volume.

June 1971

Division of Technical Information
Japan Atomic Energy Research Institute

Contents

Introduction

Reactor Engineering

Journal Articles.....	1
Papers at Meetings.....	2
Reports.....	3

Technology of Reactor Fuels and Structural Materials

Journal Articles.....	9
Papers at Meetings.....	11
Reports.....	11

General Physics

Journal Articles.....	16
Papers at Meetings.....	20
Reports.....	21
Books.....	23

Chemistry

Journal Articles.....	24
Papers at Meetings.....	31
Reports.....	31

Reactor Physics

Journal Articles.....	33
Papers at Meetings.....	35
Reports.....	35
Books.....	39

Radioisotopes and Radiation Applications

Journal Articles.....	40
Papers at Meetings.....	42
Reports.....	45

Health Physics

Journal Articles.....	48
Papers at Meetings.....	49
Reports.....	50

Engineering in General

Journal Articles.....	54
Papers at Meetings.....	55
Reports.....	55

Other Fields

Journal Articles.....	56
Reports.....	56

Patents.....	58
--------------	----

List of Journals.....	67
-----------------------	----

Reactor Engineering

Journal Articles

- 68-J-102 Theoretical analysis of fuel rod vibration induced by parallel coolant flow [J]
 Namatame K., *J. Atomic Energy Soc. Japan*, 11 (No. 7), 398~405 (1969)
- 68-J-694 Review of nuclear instrumentation for fast reactors [J]
 Kawaguchi C., *J. Atomic Energy Soc., Japan*, 11 (No. 10), 618~625 (1969)
- 69-J-189 A study of uncertainty and hot spot factor for thermal design on reactor core [J]
 Miyamoto Y., *J. Atomic Energy Soc. Japan*, 12 (No. 4), 179~186 (1970)
- 69-J-190 A study of hot spot factor for cylindrical core [J]
 Miyamoto Y., *J. Atomic Energy Soc. Japan*, 12 (No. 5), 254~258 (1970)
- 68-J-962 Study on expansion joint-bellows [J]
 Tachibana F.*, *et al.*, *J. Japan High Pressure Inst.*, 7 (No. 1), 1518~1525 (1969)
- 69-J-003 Post operation inspection on JPDR pressure vessel by ultrasonic testing [J]
 Takada M., Futamura Y., *J. Non-destructive Inspection, Japan*, 18 (No. 11) 523~528 (1969)
- 68-J-470 A method of temperature control in capsule irradiation (Vacuum control method) [E]
 Hayashi T., Kudoh M., *J. Nucl. Sci. Technol. (Tokyo)*, 6 (No. 7), 390~401 (1969)
- 67-J-753 Radiochemical determination of fission rate in JRR-4 [E]
 Morozumi M., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, 6 (No. 10), 551~556 (1969)
- 69-J-034 Transient temperature response of an annular flow with step change in heat generating rod [Short note] [E]
 Namatame K., *J. Nucl. Sci. Technol. (Tokyo)*, 6 (No. 10), 591~600 (1969)
- 69-J-193 A method of in-pile calorimetry (Gas dumping method) [Short note] [E]
 Hayashi T., Kudoh M., *J. Nucl. Sci. Technol. (Tokyo)*, 7 (No. 1), 51~53 (1970)
- 69-J-090 A method of temperature control in capsule irradiation (Vacuum control method · 2) [E]
 Hayashi T., Kudoh M., *J. Nucl. Sci. Technol. (Tokyo)*, 7 (No. 2), 72~81 (1970)
- 69-J-036 Buckling correction for the experimental power distribution in a finite system [E]
 Kobayashi I., *J. Nucl. Sci. Technol. (Tokyo)*, 7 (No. 3), 145~152 (1970)
- 69-J-207 Effect of gas entrainment on thermal-hydraulic performance of sodium cooled reactor core [E]
 Hori M., Friedland A. J.*, *J. Nucl. Sci. Technol. (Tokyo)*, 7 (No. 5), 256~263 (1970)
- 69-J-180 Electronic collimation by the use of fast coincidence technique in proportional counters
 (Gas recoil neutron spectrometer B-1) [E]
 Mizuho M., Yamanaka T.*, *J. Nucl. Sci. Technol. (Tokyo)* 7 (No. 6), 285~290 (1970)
- 69-J-192 Electronic collimation in proportional counter by rise time discrimination [E]
 Mizuho M., Mizoguchi T., *J. Nucl. Sci. Technol. (Tokyo)*, 7 (No. 7), 335~340 (1970)

- 69-J-382 Optimal reactor strategy for minimizing natural uranium consumption · 1
(System model and computational aspects) [E]
Shinohara Y., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 12), 615~622 (1970)
- 69-J-362 Gas recoil fast neutron spectrometer [E]
Mizuho M., *Nucl. Instrum. Methods*, **75** (No. 1), 85~92 (1969)
- 68-J-928 Analysis of neutron focussing by conical tubes and its possible applications [E]
Shimooka T., *Nucl. Sci. Engng.*, **37** (No. 3), 343~357 (1969)
- 68-J-609 Recent progress of semiconductor gamma-ray detectors (Charge collection of Ge(Li) detectors) [J]
Sakai E., *Oyo Buturi (Tokyo)*, **38** (No. 1), 2~18 (1969)
- 69-J-092 New pulse height to clock pulse converter and its application to neutron dosimetry [E]
Furuta Y., *et al.*, *Rev. Sci. Instrum.*, **41** (No. 1), 11~15 (1970)
- 68-J-590 Operating experience on light water power reactors [J]
Suguri S., *Thermal Power (Japan)*, **20** (No. 1) 71~81 (1969)
- 69-J-107 The alpha-gamma cell of Japan Atomic Energy Research Institute [E]
Yoshida H., *et al.*, *Trans. Am. Nucl. Soc.*, **12** (No. 2), 849 (1969)
- 69-J-046 Analysis of 2nd burnout [J]
Torikai K., Akiyama M.*, *Trans. Japan Soc. Mech. Engrs.*, **35**, 2273~2277 (1969)

Papers at Meetings

- 68-P-151 Future direction of computer control of power reactors in Japan [E]
Hara M., *et al.*, Application of On-line Computers to Nuclear Reactor, Sandefjord 1968, 79~103
- 68-P-152 Optimal xenon control and the related problems [E]
Shinohara Y., Application of On-line Computers to Nuclear Reactor, Sandefjord 1968, 221~238
- 68-P-183 Computer control of research reactors and operating experience in Japan [E]
Takumi K.*, *et al.*, Application of On-line Computers to Nuclear Reactor, Sandefjord 1968, 567~595
- 68-P-273 Transfer function measurements by rod oscillator tests and dynamic analysis at JPDR [E]
Hoshi T., Proc. of Japan-United States Seminar on Nuclear Reactor Noise Analysis, Tokyo 1968, 337~350
- 70-P-295 Hydraulic performance in rod bundles of fast reactor fuels-pressure drop,
vibration and mixing coefficient [E]
Okamoto Y., *et al.*, "Sodium-Cooled Fast Reactor Engineering", IAEA-SM-130/5, 175~186 (1970)

Reports

- 68-R-251 Safety consideration in setting the design criteria on the JAERI's design studies [E]
Nozawa M., *et al.*, ANL-7520 Part II, p. 67~76 (1968)
- 68-R-245 Reference concepts of the JAERI's large fast reactor design studies [E]
Nozawa M., *et al.*, ANL-7520 Part II, p. 77~85 (1968)
- 68-R-247 Special engineering problems involved in the JAERI's design studies [E]
Nozawa M., *et al.*, ANL-7520 Part II, p. 86~89 (1968)
- 68-R-248 Reasons for choice of major mechanical designs in the JAERI's design studies [E]
Nozawa M., *et al.*, ANL-7520 Part II, p. 90~98 (1968)
- 68-R-249 Parametric studies leading to the nuclear characteristics of the JAERI's design studies [E]
Nozawa M., *et al.*, ANL-7520 Part II, p. 99~109 (1968)
- 68-R-250 Parametric study on the plant parameters of prototype fast reactor [E]
Nozawa M., *et al.*, ANL-7520 Part II, p. 110~120 (1968)
- 68-R-246 Testings of feasibility of ball bearings in liquid sodium environments [E]
Nozawa M., *et al.*, ANL-7520 Part II, p. 121~129 (1968)
- 69-R-001 A study of the fuel cladding failure in JRR-2 [E]
Takayanagi H., JAERI 1175, 28 p. (1969)
- 70-R-002 JAERI's conceptual design of the Japan fast experimental reactor · Part 1 [E]
Office of Power Reactor Project, JAERI 1177, 183 p. (1970)
- 70-R-003 JAERI's conceptual design of the Japan experimental fast reactor · Part 2 [E]
Office of Power Reactor Project, JAERI 1177 B, 273 p. (1970)
- 69-R-004 Research and development of fuel assembly for Japan experimental fast reactor (FOX-program) [J]
Office of Power Reactor Project, JAERI 1182, 72 p. (1969)
- 70-R-005 A study of destructive energy released at fast breeder maximum hypothetical accident [E]
Ishikawa M., *et al.*, JAERI 1188, 20 p. (1970)
- 69-R-006 Influence of reflector for heavy water moderated thermal reactors [J]
Shindo R., *et al.*, JAERI-memo 3364, 75 p. (1969)
- 69-R-007 Critical experiment for the corner rod effect of JPDR-II [J]
Matsuura S., *et al.*, JAERI-memo 3396, 77 p. (1969)
- 69-R-008 Vibration of the cruciform control rod follower · 1 (JPDR-II mock-up test) [J]
Kinoshita T., *et al.*, JAERI-memo 3397, 116 p. (1969)
- 69-R-009 JPDR quarterly report · 17 [J]
Div. JPDR Operation, JAERI-memo 3410, 71 p. (1969)

- 69-R-010 The development work and tests for JPDR instrumented fuel assembly (IFA #3) [J]
Mochizuki K., *et al.*, JAERI-memo 3431, 138 p. (1969)
- 69-R-011 Commentary of nuclear accidents in nuclear installations [J]
Onishi T., JAERI-memo 3442, 41 p. (1969)
- 69-R-012 Manual of JRR-4 incore pipe (T & S pipes) [J]
Ichiyanagi K., *et al.*, JAERI-memo 3459, 38 p. (1969)
- 69-R-013 JPDR-II project progress report · 12 (Part 1) [J]
JPDR-II Project, JAERI-memo 3484, 18 p. (1969)
- 69-R-014 JPDR-II Project progress report · 12 (Part 2) [J]
JPDR-II Project, JAERI-memo 3485, 198 p. (1969)
- 69-R-015 Variations in neutronic characteristics of a large fast converter along with burnup [J]
Nozawa M., *et al.*, JAERI-memo 3505, 40 p. (1969)
- 69-R-016 Report on the nuclear safety experimental program · 1 [J]
NSRR Working Group, JAERI-memo 3508, 30 p. (1969)
- 69-R-017 Turbine generator [J]
Div. JPDR Operation, JAERI-memo 3509, 109 p. (1969)
- 69-R-018 JFER control rod mock-up experiment on FCA III-1 [J]
Hirakawa N., *et al.*, JAERI-memo 3516, 18 p. (1969)
- 69-R-019 Stability analysis on the plant of FBR including control systems : SSK-II [J]
Ezaki M., JAERI-memo 3537, 48 p. (1969)
- 69-R-020 Gamma-ray discriminating system for a proton-recoil counter [J]
Obu M., *et al.*, JAERI-memo 3561, 39 p. (1969)
- 69-R-021 Characteristics of the proton recoil proportional counter GD-A for neutron and gamma-ray [J]
Ichimori T., *et al.*, JAERI-memo 3580, 44 p. (1969)
- 69-R-022 Neutron characteristics of a large fast converter · 4 [J]
Nozawa M., *et al.*, JAERI-memo 3590, 28 p. (1969)
- 69-R-023 A digital program for uranium-oxide fuel, water cooled reactor kinetic analysis [J]
Ishikawa M., *et al.*, JAERI-memo 3592, 122 p. (1969)
- 69-R-024 Summaries reported in the 2nd conference on JPDR-II project [J]
JPDR-II Project, JAERI-memo 3593, 74 p. (1969)
- 69-R-025 Chemical analysis procedures for JMTR [J]
Tone H., *et al.*, JAERI-memo 3599, 115 p. (1969)
- 69-R-026 Design calculation of test-fuel-assembly of JRR-3 [J]
Suetake M., *et al.*, JAERI-memo 3606, 41 p. (1969)

- 69-R-027 Vibration of fuel rods in the TLG-1-50 in-pile gas loop [J]
Yokoo H., *et al.*, JAERI-memo 3616, 46 p. (1969)
- 69-R-028 Development of the gas cooled reactors [J]
Muto Y., JAERI-memo 3620, 54 p. (1969)
- 69-R-029 Design of JPDR-II emergency ventilation system [J]
Futamura Y., *et al.*, JAERI-memo 3665, 44 p. (1969)
- 69-R-030 Operating experience in JRR-2 (Repair procedures of lower plug and support ring) [J]
JRR-2 Operation Sec., JAERI-memo 3646, 69 p. (1969)
- 69-R-031 Studies on radioactive iodine behavior released in MCA and HA of JPDR-II and filter for radioactive iodine [J]
Futamura Y., *et al.*, JAERI-memo 3647, 41 p. (1969)
- 69-R-032 Bibliography on the uses of research reactors [J]
Research Reactor Utilization Sec., JAERI-memo 3664, 41 p. (1969)
- 69-R-033 Thermal and hydraulic characteristic calculation in the JPDR core by the "JP-Hydro" code coupled with the measured results [J]
Ikeda H., *et al.*, JAERI-memo 3667, 22 p. (1969)
- 69-R-034 Studies of fission product release in TLG-1 in-pile gas loop · 1 (Irradiation test of leaky fuel) [J]
Kitahara T., *et al.*, JAERI-memo 3670, 48 p. (1969)
- 69-R-035 Studies of fission product release in TLG-1 in-pile gas loop · 2 (Measurements with Ge (Li) detector) [J]
Kitahara T., *et al.*, JAERI-memo 3671, 67 p. (1969)
- 69-R-036 Operation manual for JRR-3 · 1 (The reactor) [J]
JRR-3 Operation Sec., *et al.*, JAERI-memo 3689, 71 p. (1969)
- 69-R-037 Operation manual for JRR-3 · 2 (The auxiliary facilities) [J]
Utilities and Maintenance Sec. II, JAERI-memo 3690, 73 p. (1969)
- 69-R-038 Operation manual for JRR-4 · 1 (The reactor) [J]
JRR-4 Operation Sec., *et al.*, JAERI-memo 3715, 22 p. (1969)
- 69-R-039 Operation manual of JRR-2 · 1 (The reactor) [J]
JRR-2 Operation Sec., *et al.*, JAERI-memo 3716, 56 p. (1969)
- 69-R-040 Lattice and core performances of heavywater moderated power reactors with full burnup [J]
Yasukawa S., JAERI-memo 3724, 318 p. (1969)
- 69-R-041 Vibration of reactor structure · 2 (Vibration induced by fluid in cross flow · 1) [J]
Ikushima T., JAERI-memo 3727, 26 p. (1969)
- 69-R-042 Operation manual for JRR-4 · 2 (The auxiliary facilities) [J]
Utilities and Maintenance Sec. II, JAERI-memo 3730, 34 p. (1969)

- 69-R-043 A survey of large fast reactor design studies [J]
Matsumura S.*, JAERI-memo 3737, 29 p. (1969)
- 69-R-044 Improvement on the reactor instrumentation of the JRR-2, JRR-3 and JRR-4 [J]
Electronics Workshop Sec., JAERI-memo 3753, 178 p. (1969)
- 69-R-045 Operation manual of JRR-2 · 3 (Irradiation facilities) [J]
Research Reactor Utilization Sec., JAERI-memo 3761, 29 p. (1969)
- 69-R-046 Operation manual of JRR-2 · 2 (The auxiliary facilities) [J]
Utilities and Maintenance Sec. II, JAERI-memo 3762, 77 p. (1969)
- 69-R-047 Light water reactor safety analysis code abstract · 1 [J]
Nuclear Code Comm., JAERI-memo 3788, 278 p. (1969)
- 69-R-048 A review on the safety of liquid-cooled nuclear reactors · 1 [J]
(1. An outline of the reactor accidents, and the associated problems)
Akiyama M.*, *et al.*, JAERI-memo 3801, 18 p. (1969)
- 69-R-049 A review on the safety of liquid-cooled nuclear reactors · 1 (2. Experiments with the BORAX) [J]
Akiyama M.*, *et al.*, JAERI-memo 3802, 74 p. (1969)
- 69-R-050 A review on the safety of liquid-cooled nuclear reactors · 1 (3. Experiments with the SPERT) [J]
Akiyama M.*, *et al.*, JAERI-memo 3803, 170 p. (1969)
- 69-R-051 A review on the safety of liquid-cooled nuclear reactors · 1 [J]
(4. Experiments with other reactors than the BORAX and SPERT)
Akiyama M.*, *et al.*, JAERI-memo 3804, 58 p. (1969)
- 69-R-052 A review on the safety of liquid-cooled nuclear reactors · 1 [J]
(5. Experiments with the out-of-pile test facilities)
Akiyama M.*, *et al.*, JAERI-memo 3805, 57 p. (1969)
- 69-R-053 Thermal and structural design study of the helium-gas-cooled reactor core [J]
Muto Y., JAERI-memo 3806, 67 p. (1969)
- 69-R-054 Zero power reactor physics tests of the Japan Power Demonstration Reactor (JPDR) for
regular maintenance in 1969 [J]
Shimooka T., *et al.*, JAERI-memo 3819, 64 p. (1969)
- 69-R-055 Report on the nuclear safety experimental program · 2 [J]
NSRR Working Group, JAERI-memo 3826, 51 p. (1969)
- 70-R-056 Computer program for calculating temperature distribution in a fuel assembly : FATEC-2 [J]
Miyamoto Y., JAERI-memo 3844, 38 p. (1970)
- 69-R-057 Experiments at exposed core of JPDR [J]
Div. JPDR Operation, JAERI-memo 3869, 155 p. (1970)
- 69-R-058 On the effect of pressure to steam flow transfer function on the stability
and dynamics of boiling water reactors [J]
Matsubara K., *et al.*, JAERI-memo 3873, 35 p. (1970)

- 70-R-059 Thermal stresses in annular disks [E]
Miyazono S., *et al.*, JAERI-memo 3911, 12 p. (1970)
- 70-R-060 The developments of boron type in-core neutron monitors for JPDR [J]
Yokota M., *et al.*, JAERI-memo 3913, 45 p. (1970)
- 70-R-061 Studies of fission product release in TLG-1 in-pile gas loop · 3
(Measurement of short-lived gaseous fission products) [J]
Kitahara T., *et al.*, JAERI-memo 3936, 38 p. (1970)
- 70-R-062 Report on the nuclear safety experimental program · 3 [J]
NSRR Working Group, JAERI-memo 3957, 76 p. (1970)
- 70-R-063 Summary of research activities for reactivity accident and nuclear safety research reactor program [J]
Committee of Nucl. Safety Research Reactor Program, JAERI-memo 4031, 40 p. (1970)
- 70-R-064 Reference design of the Japan experimental high temperature gas-cooled reactor [J]
Nozawa M., *et al.*, JAERI-memo 4034, 140 p. (1970)
- 70-R-065 Data acquisition system for ROSA blow down experiments [J]
Namatame K., *et al.*, JAERI-memo 4041, 76 p. (1970)
- 70-R-066 Summary of technical reports on the 2nd MITI design permit of JPDR-II [J]
JPDR Plant Const. Sec. 1, JAERI-memo 4048, 129 p. (1970)
- 70-R-067 Summary of the JRR-2 in-core irradiation facility and irradiation experiences [J]
Miyasaka Y., *et al.*, JAERI-memo 4052, 70 p. (1970)
- 70-R-068 The calibration technique and the neutron exposure characteristics of
the JPDR in-core monitor system [J]
Kawasaki M., *et al.*, JAERI-memo 4114, 32 p. (1970)
- 70-R-069 Analysis of JMTR flux variation during operation [J]
Tanaka T., *et al.*, JAERI-memo 4130, 53 p. (1970)
- 70-R-070 Characteristic measurements of JRR-2 · 3 [J]
JRR-2 Operation Sec., JAERI-memo 4141, 307 p. (1970)
- 70-R-071 Proceedings of JAERI fuel failure detection symposium [J]
Sakai E., *et al.*, JAERI-memo 4157, 107 p. (1970)
- 70-R-072 Summary of technical reports on the 1st MITI design permit of JPDR-II [J]
JPDR Plant Const. Sec. 1, JAERI-memo 4173, 94 p. (1970)
- 70-R-073 Summary of technical reports on the 3rd MITI design permit of JPDR-II [J]
JPDR Plant Const. Sec. 1, JAERI-memo 4174, 90 p. (1970)
- 70-R-074 Core temperature analyses for loss-of-coolant accidents of light water reactor
(by the computer code NURLOC-1.0) [J]
Mitake S., *et al.*, JAERI-memo 4194, 126 p. (1970)

- | | | |
|----------|---|---|
| 70-R-075 | Detection of failed fuel at JRR-4
Morozumi M., <i>et al.</i> , | [J]
JAERI-memo 4196, 31 p. (1970) |
| 70-R-076 | Development of reactor enclosure high voltage power cable penetration
Futamura Y., <i>et al.</i> , | [J]
JAERI-memo 4197, 149 p. (1970) |
| 70-R-077 | Report on the nuclear safety experimental program · 4
NSRR Working Group, | [J]
JAERI-memo 4229, 101 p. (1970) |
| 70-R-078 | Survey list of accident, hazard and abnormality in nuclear facilities
Nuclear Safety Engineering Lab., <i>et al.</i> , | [J]
JAERI-memo 4240, 60 p. (1970) |
| 70-R-079 | Performance test of graphite heater element
Fujimura T., <i>et al.</i> , | [J]
JAERI-memo 4250, 17 p. (1970) |

Technology of Reactor Fuels and Structural Materials

Journal Articles

- 69-J-399 The theory of isotope separation, especially regarding a relation between the multiplication of elementary process and the kinetics of column operation [E]
Shimokawa J., *Isotopenpraxis*, **6** (No. 4), 121~130 (1970)
- 69-J-400 Separation of uranium isotopes by chemical exchange [E]
Shimokawa J., Kobayashi T., *Isotopenpraxis*, **6** (No. 5), 170~176 (1970)
- 67-J-129 Gamma-ray leakage through a slit in concrete shield [J]
Miyasaka S., *et al.*, *J. Atomic Energy Soc. Japan*, **11** (No. 1), 2~8 (1969)
- 69-J-039 Gamma-ray leakage through a junction between lead concrete walls [J]
Miyasaka S., Kanemori Y., *J. Atomic Energy Soc. Japan*, **11** (No. 3), 144~149 (1969)
- 69-J-018 Corrosion of reactor materials under irradiation [Review] [J]
Nomura S., *J. Atomic Energy Soc. Japan*, **11** (No. 6), 353~361 (1969)
- 69-J-174 Burnup determination of JRR-3 irradiated fuels by destructive methods [J]
Aochi T., *et al.*, *J. Atomic Energy Soc. Japan*, **12** (No. 1), 7~12 (1970)
- 69-J-354 Development of a measuring method for circumferential mechanical properties of cladding tube [J]
Nagasaki R., *et al.*, *J. Atomic Energy Soc. Japan*, **12** (No. 11), 642~648 (1970)
- 68-J-907 Neutron irradiation test on reactor pressure vessel steel (A302B steel) weldment [J]
Fujimura T., *et al.*, *J. Japan Welding Soc.*, **38** (No. 6), 608~614 (1969)
- 69-J-230 On the fatigue strength of the in-pile tube of OWL-1 in JMTR [J]
Fujimura T., *et al.*, *J. Japan Welding Soc.*, **39** (No. 34), 43~48 (1970)
- 68-J-984 The inspection technique by electric resistance probe method on JPDR nuclear reactor vessel [J]
Fujimura T., Yamaguti T.*, *J. Non-destructive Inspection, Japan*, **18** (No. 7), 298~306 (1969)
- 68-J-145 The escape behavior of non-gaseous fission products recoiled into graphite [E]
Iwamoto K., Oishi J.*, *J. Nucl. Materials*, **29** (No. 3), 285~301 (1969)
- 69-J-093 The variation of lattice parameter with carbon content of non-stoichiometric uranium dicarbide [E]
Tagawa H., *J. Nucl. Materials*, **34** (No. 1), 116~118 (1970)
- 69-J-201 Air oxidation of UO₂ pellet at 800 and 900°C [E]
Iwasaki M., Ishikawa N., *J. Nucl. Materials*, **36** (No. 1), 116~119 (1970)
- 69-J-105 In-pile release of fission gas from UO₂-graphite mixture induced by β -decay of precursor [E]
Kamemoto Y., *et al.*, *J. Nucl. Materials*, **36** (No. 2), 153~160 (1970)
- 70-J-015 The phase reaction in the UC-W system [E]
Ugajin M., Takahashi I., *J. Nucl. Materials*, **37** (No. 3), 303~310 (1970)

- 67-J-606 Void migration in sodium chloride crystal under a temperature gradient [E]
Taketani K., Ichikawa M., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 2), 55~62 (1969)
- 68-J-538 Electrical properties of uranium carbonitride [Short note] [E]
Omichi T., Kikuchi T., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 2), 101~102 (1969)
- 68-J-937 Porosity dependence of elastic modulus of uranium nitride [Short note] [E]
Honda T., Kikuchi T., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 4), 221 (1969)
- 68-J-696 Desorption of barium from graphite [Short note] [E]
Iwamoto K., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 4), 222 (1969)
- 68-J-719 The chemical state of fission tellurium released from irradiated UO₂ and UO₂-graphite mixture [E]
Shiba K., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 6), 333~337 (1969)
- 69-J-022 Xe release from UO₂ upon oxidation [Short note] [E]
Ikawa K., Taketani K., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 6) 346~347 (1969)
- 69-J-142 Grain growth and neutron irradiation effect in Al-Li alloys [Short note] [E]
Shiraishi K., Fukaya K., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 11), 663~664 (1969)
- 69-J-224 Growth mechanism of voids in fast reactor irradiated austenitic stainless steel [Short note] [E]
Shiraishi K., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 2), 111~112 (1970)
- 69-J-334 Magnetic susceptibility of uranium carbonitride [Short note] [E]
Omichi T., Nasu S., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 5), 268~270 (1970)
- 69-J-281 Chlorination-volatilization processing of irradiated uranium dioxide · 1
(Sorption-desorption of uranium chlorides with barium chloride bed) [E]
Hirano K., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 11), 553~558 (1970)
- 69-J-282 Chlorination-volatilization processing of irradiated uranium dioxide · 2
(Sorption-desorption of fission product chlorides with barium chloride bed) [E]
Hirano K., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 12), 601~609 (1970)
- 69-J-398 Studies on the detection of low temperature embrittlement in brittle materials
by means of hardness measurements [J]
Oku T., *et al.*, *J. Soc. Materials Sci., Japan*, **19**, 729~736 (1970)
- 68-J-182 Experimental studies on gamma-ray dose rates from a ⁶⁰Co cylindrical source with shell-shaped shields [E]
Kanemori Y., Furuta Y., *Nucl. Sci. Engng.*, **36** (No. 2), 238~245 (1969)
- 68-J-523 Solidification of synthetic purex-type waste solution by pot calcination [J]
Iwamoto K., *Radioisotopes (Tokyo)*, **18** (No. 1), 16~18 (1969)
- 69-J-318 On the formation of organic iodine by reactions of iodine released from irradiated fuel with
several gaseous materials [E]
Iwamoto K., Kikuchi T., *Radioisotopes (Tokyo)*, **19** (No. 10), 439~445 (1970)
- 68-J-668 Post operation inspection on JPDR pressure vessel by ultrasonic method [J]
Futamura Y., *Thermal Power (Japan)*, **20** (No. 3), 54~68 (1969)

- 69-J-209 Study on ultrasonic inspection method of reactor pressure vessel forced circulation nozzle with the nozzle mock-up [J]
Futamura Y., *et al.*, *Thermal Power (Japan)*, **20** (No. 12), 1239~1247 (1969)
- 69-J-349 Precipitation hardening of aluminum-2.2 w/o lithium alloy after neutron irradiation [E]
Shiraishi K., *Trans. Japan Inst. Metals*, **11** (No. 6), 381~384 (1970)
- 69-J-200 Neutron irradiated hardening in aluminum-magnesium alloys [E]
Shiraishi K., *Trans. Japan Inst. Metals*, **11** (No. 6), 440~441 (1970)

Papers at Meetings

- 69-P-423 An approach to detecting the brittle transition temperature of pressure vessel steels by means of hardness testing [E]
Sato S.*, *et al.*, First Intern. Conf. on Pressure Vessel Technology, Delft 1969, II-53, 679~693
- 70-P-466 Inspection technique by electric-resistance probe method on a nuclear reactor vessel [E]
Yamaguchi T.*, *et al.*, First Intern. Conf. on Pressure Vessel Technology, Delft 1969, II-75, 959~975
- 70-P-465 Postoperation inspection on JPDR pressure vessel in 1968 [E]
Suguri S., *et al.*, First Intern. Conf. on Pressure Vessel Technology, Delft 1969, II-76, 977~986
- 68-P-788 Characteristics of crack propagation in overlaid nozzle of a nuclear reactor [E]
Fujimura T., *et al.*, First Intern. Conf. on Pressure Vessel Technology, Delft 1969, II-94, 1213~1220
- 68-P-531 Chlorination-distillation processing of irradiated uranium dioxide [E]
Hirano K., Ishihara T.,
Symposium on Reprocessing of Nuclear Fuel, AIME 1969, Nuclear Metallurgy, Vol. 15, 241~259
- 68-P-699 Changes of physical and mechanical properties of graphite in the Tokai Nuclear Power Station [E]
Sato S.*, *et al.*, Proc. of the 12th Japan Congress on Materials Research, Kyoto 1969, 195~200
- 69-P-100 Behavior of helium gas bubbles in neutron-irradiated beryllium and beryllium alloys [E]
Nagasaki R., *et al.*, "Radiation Damage in Reactor Materials", IAEA, Vol. 2, 331~348 (1969)

Reports

- 69-R-080 Proceedings of the 2nd seminar on physical properties of first reactor fuels [J]
Div. Nucl. Fuel Research, *et al.*, JAERI 1172, 62 p. (1969)
- 69-R-081 The design for power reactor fuel assembly · 2
(Analysis of temperature, heat flux distribution and mechanical strength) [J]
Morishima A., *et al.*, JAERI-memo 3352, 213 p. (1969)
- 69-R-082 Swelling of UO₂-PuO₂ fuel for fast breeder reactor [J]
Ohmori S.*, *et al.*, JAERI-memo 3354, 47 p. (1969)
- 69-R-083 Interpretation of fission product escape behavior from by trap model [J]
Iwamoto K., JAERI-memo 3385, 31 p. (1969)

- 69-R-084 Effects of fatigue strength reduction factor on fatigue design of nuclear reactor pressure vessels [J]
Miyazono S., *et al.*, JAERI-memo 3387, 29 p. (1969)
- 69-R-085 An evaluation of some potential vanadium alloys for FBR use concerning their static
nuclear characteristics and the tensile strength [J]
Furuta T., *et al.*, JAERI-memo 3388, 39 p. (1969)
- 69-R-086 Instabilization of structural materials on fast experimental breeding reactor (Literature survey) [J]
Hasegawa M.*, *et al.*, JAERI-memo 3392, 27 p. (1969)
- 69-R-087 Development of circumferential tensile testing method for cladding materials of fast reactor [J]
Nagasaki R., *et al.*, JAERI-memo 3401, 27 p. (1969)
- 69-R-088 Effect of solid fission products on swelling of uranium carbide [E]
Watanabe H., *et al.*, JAERI-memo 3430, 10 p. (1969)
- 69-R-089 The safety performance test and inspection of cold pressed Al capsules for isotope production [J]
Ooka N., *et al.*, JAERI-memo 3451, 31 p. (1969)
- 69-R-090 Remote handling of high temperature tensile testing [J]
Ouchi M., *et al.*, JAERI-memo 3461, 19 p. (1969)
- 69-R-091 The report on fuel irradiation testing at HBWR · 1 [J]
Taketani K., *et al.*, JAERI-memo 3474, 79 p. (1969)
- 69-R-092 Studies on austenitic stainless steels for uses in high temperature nuclear reactors · 1
(Effect of strain aging in carbide-stabilized steels) [J]
Kondo T., *et al.*, JAERI-memo 3479, 21 p. (1969)
- 69-R-093 Metallurgical investigation on the cladding failure in JPDR pressure vessel · 1
(Metallographic analysis) [J]
Kondo T., *et al.*, JAERI-memo 3480, 22 p. (1969)
- 69-R-094 Reprocessing of thorium bearing fuels [J]
Aochi T., *et al.*, JAERI-memo 3482, 25 p. (1969)
- 69-R-095 Characteristic of crack propagation in overlaid nozzles of JPDR [J]
Fujimura T., *et al.*, JAERI-memo 3490, 75 p. (1969)
- 69-R-096 Changes of thermal shock parameter of graphite in the Tokai Nuclear Power Station [J]
Honda T., *et al.*, JAERI-memo 3510, 16 p. (1969)
- 69-R-097 Physical properties of carbide fuels and their evaluation (Including other compound fuels
having the crystal structure similar to carbide) [J]
Kikuchi T., *et al.*, JAERI-memo 3517, 26 p. (1969)
- 69-R-098 Liquid sodium valve development · 2 (Origin of failure and its countermeasure) [J]
Fukaya Y., *et al.*, JAERI-memo 3533, 30 p. (1969)
- 69-R-099 Thermal conductivities of uranium monocarbide, mononitride and carbonitrides [E]
Nasu S., *et al.*, JAERI-memo 3541, 12 p. (1969)

- 69-R-100 Pressure drop in the JPDR test fuel assembly [J]
Morishima A., *et al.*, JAERI-memo 3548, 33 p. (1969)
- 69-R-101 Evaluation of stainless steel pipe for cladding material of fast reactor [J]
Nagasaki R., *et al.*, JAERI-memo 3578, 44 p. (1969)
- 69-R-102 Chlorination-distillation processing of irradiated uranium dioxide [E]
Hirano K., *et al.*, JAERI-memo 3600, 19 p. (1969)
- 69-R-103 Electron microscope observation of the zirconium hydride [J]
Katano Y., *et al.*, JAERI-memo 3635, 21 p. (1969)
- 69-R-104 Studies on safety of NaK capsule · 1 (Double wall type capsule with enclosed NaK) [J]
Nomura S., *et al.*, JAERI-memo 3643, 25 p. (1969)
- 69-R-105 Comparative study in the use of carbide fuel and oxide fuel in 1000 MWe sodium cooled FBR [J]
Ikushima T., JAERI-memo 3661, 28 p. (1969)
- 69-R-106 Service defects and failures in sodium loop system [J]
Fukaya Y., *et al.*, JAERI-memo 3672, 45 p. (1969)
- 69-R-107 The effect of neutron irradiation on the precipitation-hardening of Al-3.8% Cu alloy [J]
Nagasaki R., *et al.*, JAERI-memo 3692, 23 p. (1969)
- 69-R-108 Recrystallization of vanadium-20 wt% titanium alloy [J]
Ogawa Y., *et al.*, JAERI-memo 3731, 19 p. (1969)
- 69-R-109 The report on fuel irradiation testing at HBWR · 3 (Status of IFA-106, -149 and -150 irradiation during the period of Nov. 1968~May 1969 in HBWR) [J]
Ichikawa M., *et al.*, JAERI-memo 3750, 41 p. (1969)
- 69-R-110 Recrystallization of Zr-2.5 wt% Nb alloy [J]
Ogawa Y., *et al.*, JAERI-memo 3764, 21 p. (1969)
- 69-R-111 Proceedings of the 2nd discussion meeting on fuel and material irradiation [J]
Div. of Nucl. Fuel Research, JAERI-memo 3767, 76 p. (1969)
- 69-R-112 Results of cyclic pressure loading test due to JPDR pressure vessel model No. 1 [E]
Mechanical Strength and Structure Lab., JAERI-memo 3769, 8 p. (1969)
- 69-R-113 PuO₂-UO₂ critical experiment · 9 (Critical experiment for HBWR irradiation assembly (IFA-160)) [J]
Div. of JPDR Operation, JAERI-memo 3796, 50 p. (1969)
- 69-R-114 The second postoperation inspection on JPDR reactor pressure vessel [J]
Div. of JPDR Operation, JAERI-memo 3797, 24 p. (1969)
- 69-R-115 Thermal expansion of neutron irradiated reactor graphite [J]
Honda T., *et al.*, JAERI-memo 3800, 29 p. (1969)
- 69-R-116 Results of cyclic pressure loading test due to JPDR pressure vessel model No. 1 [J]
Fujimura T., *et al.*, JAERI-memo 3839, 106 p. (1970)

- 70-R-117 Thermal conductivity of uranium oxycarbide [E]
Saito T., *et al.*, JAERI-memo 3856, 8 p. (1970)
- 70-R-118 Operation characteristics of He gas purification-circulation system in plutonium handling apparatus [J]
Plutonium Fuel Lab., JAERI-memo 3861, 55 p. (1970)
- 70-R-119 Post-irradiation examination facility for Pu-fuels [J]
Yoshida H., *et al.*, JAERI-memo 4009, 87 p. (1970)
- 70-R-120 Results of cyclic pressure loading test due to JPDR pressure vessel model No. 2 [J]
Fujimura T., *et al.*, JAERI-memo 4016, 29 p. (1970)
- 70-R-121 A study on the pitting corrosion in high temperature water of a low alloy steel within the simulated cracks in the protective weld overlay (Metallurgical investigations on the cladding failure in the JPDR pressure vessel · 2) [J]
Kondo T., *et al.*, JAERI-memo 4019, 15 p. (1970)
- 70-R-122 Effect of temperature on the fatigue crack propagation in a low alloy steel in deionized water (Metallurgical investigations on the cladding failure in the JPDR pressure vessel · 3) [J]
Kondo T., *et al.*, JAERI-memo 4020, 20 p. (1970)
- 70-R-123 The effect of frequency of loading on the fatigue of low alloy steel in recirculating deionized water environment (Metallurgical investigations on the cladding failure in the JPDR pressure vessel · 4) [J]
Kondo T., *et al.*, JAERI-memo 4021, 18 p. (1970)
- 70-R-124 The effect of frequency of loading on the fatigue crack propagation of a low alloy steel in high temperature, deionized water (Metallurgical investigations on the cladding failure in JPDR pressure vessel · 5) [J]
Kondo T., *et al.*, JAERI-memo 4022, 18 p. (1970)
- 70-R-125 Progress reports on the sodium mother and daughter test loop experiments (Operation number 4~22) [J]
Sodium Technol. Lab., JAERI-memo 4024, 170 p. (1970)
- 70-R-126 Behavior of boron in stainless steel detected by fission track etching method and effect of radiation on tensile properties [E]
Kawasaki S., JAERI-memo 4077, 15 p. (1970)
- 70-R-127 Application of electrophoresis for burnup determination [E]
Hayashi T., *et al.*, JAERI-memo 4094, 15 p. (1970)
- 70-R-128 Creep and creep-rupture tests of domestic SUS 32 (AISI 316 type) stainless steel as a structural material of fast breeding reactor [J]
Yokoi S., *et al.*, JAERI-memo 4097, 49 p. (1970)
- 70-R-129 The effect of cold working on creep properties of AISI 316 type stainless steel [J]
Furuta T., *et al.*, JAERI-memo 4125, 29 p. (1970)
- 70-R-130 Thermal conductivity of vipac UO₂ fuel · 2 (In-pile measurement in TLG-1) [J]
Shirai E., *et al.*, JAERI-memo 4128, 37 p. (1970)

- 70-R-131 Process of carburization in austenite stainless steel [E]
Nishio G., *et al.*, JAERI-memo 4132, 23 p. (1970)
- 70-R-132 An electron microscope study of neutron irradiation damage in vanadium [J]
Katano Y., *et al.*, JAERI-memo 4149, 30 p. (1970)
- 70-R-133 Irradiation tests of domestic Zry-2 cladding materials in JPDR [J]
Nomura S., *et al.*, JAERI-memo 4192, 20 p. (1970)
- 70-R-134 Analysis of instrumentation data from IFA-150 irradiated in HBWR [J]
Ichikawa M., *et al.*, JAERI-memo 4248, 26 p. (1970)
- 70-R-135 On the columnar grain growth in the center line heated UO₂ pellet [J]
Ichikawa M., *et al.*, JAERI-memo 4249, 23 p. (1970)
- 68-R-276 The recovery of krypton and xenon from the off-gases in reprocessing spent fuels · 1 [E]
(The solubility of various gases in carbon tetrachloride)
Kitani S., *et al.*, PNCT-AR-67, 26~27 (1967)
- 68-R-277 The recovery of krypton and xenon from the off-gases in reprocessing spent fuel · 2 [E]
(Dynamic adsorption of krypton by activated carbon)
Kitani S., *et al.*, PNCT-AR-67, 27~28 (1967)

General Physics

Journal Articles

- 69-J-153 Absolute measurement of beta-disintegrating nuclides emitting conversion electrons in appreciable properties · 1 [E]
Baba H., *et al.*, *Intern. J. Appl. Radiation Isotopes*, **21**, 607~617 (1970)
- 68-J-859 Error evaluation on multi-detector methods in neutron measurements [E]
Ryufuku H., Nakayama T., *Japan. J. Appl. Phys.*, **8** (No. 10), 1242~1251 (1969)
- 69-J-084 Dielectric constant of UO_2 at 9.4 GHz [Short note] [E]
Gesi K., Tateno J., *Japan. J. Appl. Phys.*, **8** (No. 11), 1358 (1969)
- 69-J-263 Low-beta plasma equilibrium stability in linear filamentary multipole magnetic field [E]
Tanaka M., Tamura S., *Japan. J. Appl. Phys.*, **9** (No. 5), 526~531 (1970)
- 69-J-335 Electrical characteristics of an MHD channel using arc cathodes in a potassium-seeded argon plasma [E]
Shirakata H., Yano S., *Japan. J. Appl. Phys.*, **9** (No. 8), 964~970 (1970)
- 70-J-049 High-speed plasma flow in a cusped magnetic field [E]
Tanaka M., *Japan. J. Appl. Phys.*, **9** (No. 9), 1163~1166 (1970)
- 69-J-397 Reply to Smith-Sparks' anomaly at 5 kbar in NiS [Communications] [E]
Anzai S.*, Ozawa K., *J. Appl. Phys.*, **41** (No. 8), 3558~3559 (1970)
- 68-J-092 Calculation of the ^{14}N quadrupole coupling constant in the nitrite ion [Note] [E]
Betsuyaku H., *J. Chem. Phys.*, **50** (No. 7), 3117~3118 (1969)
- 68-J-164 Calculation of the charge distribution and orbital energies of the ground state of the nitrite ion by the CNDO method [Note] [E]
Betsuyaku H., *J. Chem. Phys.*, **50** (No. 7), 3118~3119 (1969)
- 68-J-597 Charge distribution and nuclear quadrupole interactions in ionic crystals [E]
Betsuyaku H., *J. Chem. Phys.*, **51** (No. 6), 2546~2561 (1969)
- 69-J-130 Appearance energy and energy dependence of the recoil product yield in indium ethylenediaminetetraacetate by the $^{115}\text{In}(\gamma, \gamma')^{115}\text{In}$ reaction [E]
Yoshihara K., Kudoh H., *J. Chem. Phys.*, **52** (No. 6), 2950~2953 (1970)
- 69-J-336 Optical study on the phase transitions in KH_2PO_4 and KD_2PO_4 [E]
Sato Y., *J. Chem. Phys.*, **53** (No. 3), 887~892 (1970)
- 69-J-037 The preparation of U_4O_9 single crystal [E]
Masaki N., Ishii T.*, *J. Crystal Growth*, **6**, 207~209 (1970)
- 69-J-087 Secondary defects produced in germanium by fission fragment irradiation and successive annealing [J]
Izui K., Otsu H., *J. Electronmicroscopy (Tokyo)*, **18** (No. 4), 257~265 (1969)

- 69-J-079 Levitation of current carrying hoops of quadrupole magnetic field for thermonuclear fusion device [E]
Kawashima N., Mori S., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 9), 526~530 (1969)
- 68-J-883 Neutron resonance of ^{59}Co at 132eV [E]
Nakajima Y., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 1), 7~12 (1970)
- 68-J-058 On the phase transition in mixed valence type oxides [E]
Tateno J., *J. Phys. Chem. Solids*, **30**, 1321~1326 (1969)
- 68-J-227 Effect of hydrostatic pressure on the phase transitions thiourea [E]
Gesi K., *J. Phys. Soc. Japan*, **26** (No. 1), 107~113 (1969)
- 68-J-617 Identification of dislocations in NaF crystals by electrolytic coloration and chemical etching [E]
Kubo K., *J. Phys. Soc. Japan*, **26** (No. 1), 143~148 (1969)
- 68-J-680 New type of diffuse scatterings and superlattice reflection in AuCu_3 [Short note] [E]
Doi K., *et al.*, *J. Phys. Soc. Japan*, **26** (No. 1), 211 (1969)
- 68-J-502 The parameters of the 0.099-eV neutron resonance in Sm-149 [E]
Asami T., *et al.*, *J. Phys. Soc. Japan*, **26** (No. 2), 225~232 (1969)
- 68-J-214 Rates of total and local radiative energy losses in nonequilibrium plasmas [E]
Hiramoto T., *J. Phys. Soc. Japan*, **26** (No. 3), 785~801 (1969)
- 68-J-608 Dielectric and thermal expansion studies of the phase transition in ferroelectric NaNO_2 at -95°C [E]
Gesi K., *J. Phys. Soc. Japan*, **26** (No. 4), 953~956 (1969)
- 68-J-229 Recovery of fast neutron irradiated copper and gold at low-temperature [E]
Takamura S., *et al.*, *J. Phys. Soc. Japan*, **26** (No. 5), 1120~1124 (1969)
- 68-J-228 Recovery of fast neutron irradiated iron at low-temperatures [E]
Takamura S., *et al.*, *J. Phys. Soc. Japan*, **26** (No. 5), 1125~1127 (1969)
- 68-J-901 Nuclear resonant scattering of 6734-keV lead capture gamma rays from tin [Short note] [E]
Shikazono N., Kawarasaki Y., *J. Phys. Soc. Japan*, **26** (No. 5), 1319 (1969)
- 68-J-961 Ferroelectric phase transition in $\text{AgNa}(\text{NO}_2)_2$ [Short note] [E]
Gesi K., *J. Phys. Soc. Japan*, **26** (No. 6), 1554 (1969)
- 69-J-012 The ground-state transition width of the 7368 keV level of ^{66}Zn [E]
Shikazono N., Kawarasaki Y., *J. Phys. Soc. Japan*, **27** (No. 2) 273~277 (1969)
- 68-J-147 Effect of ^{60}Co gamma-ray irradiation on the phase transitions in NaNO_2 [E]
Gesi K., *J. Phys. Soc. Japan*, **27** (No. 3), 629~632 (1969)
- 69-J-060 The effect of applied electric fields upon optical F-to-M conversion [Short note] [E]
Sato Y., *J. Phys. Soc. Japan*, **27** (No. 3), 792 (1969)
- 69-J-007 Induced absorption band in the N region of LiF crystals by charged particle irradiation at liquid nitrogen temperature [E]
Kamikawa T.*, Ozawa K., *J. Phys. Soc. Japan*, **27** (No. 5), 1212~1216 (1969)

- 69-J-089 ^{23}Na nuclear magnetic resonance study of the phase transition in ferroelectric sodium nitrite, NaNO_2 [E]
Betsuyaku H., *J. Phys. Soc. Japan*, **27** (No. 6), 1485~1500 (1969)
- 69-J-217 Dislocations observed in NaF crystals · 1 (Rosette structure and its changes under external stress) [E]
Kubo K., *J. Phys. Soc. Japan*, **28** (No. 1), 177~187 (1970)
- 69-J-158 Dielectric studies on the ferroelectric phase transition in $\text{AgNa}(\text{NO}_2)_2$ [E]
Gesi K., *J. Phys. Soc. Japan*, **28** (No. 2), 395~401 (1970)
- 69-J-356 Levels of ^{133}Cs excited by means of $(n, n'\gamma)$ reaction [Short note] [E]
Kikuchi S., *et al.*, *J. Phys. Soc. Japan*, **28** (No. 4), 1089 (1970)
- 69-J-242 Studies of the dynamical John-Teller effect on static magnetic susceptibility [E]
Sasaki K., Obata Y., *J. Phys. Soc. Japan*, **28** (No. 5), 1157~1167 (1970)
- 69-J-350 Dielectric relaxation in ferroelectric $\text{AgNa}(\text{NO}_2)_2$ [Short note] [E]
Gesi K., *J. Phys. Soc. Japan*, **28** (No. 5), 1365 (1970)
- 69-J-351 Specific heat anomaly in ferroelectric $\text{AgNa}(\text{NO}_2)_2$ [Short note] [E]
Gesi K., *J. Phys. Soc. Japan*, **28** (No. 5), 1377 (1970)
- 70-J-100 Decay scheme of 5.3h ^{113}Ag and 1.2min $^{113\text{m}}\text{Ag}$ [E]
Matsumoto J., Tamura T., *J. Phys. Soc. Japan*, **29** (No. 5), 1116~1128 (1970)
- 70-J-082 Magnetic resonance of CoCr_2O_4 and MnCr_2O_4 [E]
Funahashi S., *et al.*, *J. Phys. Soc. Japan*, **29** (No. 5), 1179~1193 (1970)
- 69-J-413 Proposal on the equilibrium and stability of the magnetic configuration of the "Tokamak" type [J]
Fujisawa N.*, *et al.*, *Kakuyugo-Kenkyu (Nagoya)*, **22** (No. 6), 380~394 (1969)
- 69-J-088 Proposal of the toroidal theta pinch (Equilibrated by the magnetic configuration of the "Tokamak" type) [J]
Itoh S., *et al.*, *Kakuyugo-Kenkyu (Nagoya)*, **23** (No. 1), 1~10 (1969)
- 68-J-895 Levitation of current carrying hoops of quadrupole magnetic field [J]
Kawashima N., Mori S., *Kakuyugo-Kenkyu (Nagoya)*, **23** (No. 2), 79~85 (1969)
- 68-J-977 A class of plasma equilibria in linear multipole magnetic fields [J]
Tanaka M., Mori S., *Kakuyugo-Kenkyu (Nagoya)*, **23** (No. 3), 173~182 (1969)
- 69-J-096 Analysis of the linear helical heliotron field Plasma Physics Laboratory, Faculty of Engineering, Kyoto University, Kyoto [J]
Matsuda S., Mohri A.*, *Kakuyugo-Kenkyu (Nagoya)*, **23** (No. 6), 346~366 (1969)
- 69-J-135 Well depth, rotational transform, and shear of Tokamak-like configurations [J]
Takeda T., Tanaka M., *Kakuyugo-Kenkyu (Nagoya)*, **24** (No. 2), 88~99 (1969)
- 69-J-301 The calculation of leakage magnetic flux from iron core by the finite element method [J]
Ohta M., Itoh S., *Kakuyugo-Kenkyu (Nagoya)*, **25** (No. 1), 13~24 (1970)

- 71-J-038 Preliminary experiment on the plasma confinement in the heliotron field with buried ring conductors [E]
Mohri A.*, *et al.*, *Memories Faculty Engng., Kyoto University*, **32**, 78~92 (1970)
- 68-J-112 Internal conversion electron measurement by a Si surface barrier detector [E]
Tamura T., Kuroyanagi T., *Nucl. Instrum. Method*, **67** (No. 1), 38~44 (1969)
- 68-J-022 Elastic and inelastic scattering of fast neutrons from iron, nickel and tungsten [E]
Tsukada K., *et al.*, *Nucl. Phys.*, **A 125**, 641~653 (1969)
- 68-J-827 Shell effect on the energy dependence of the nuclear level density [E]
Maruyama M., *Nucl. Phys.*, **A 131**, 145~168 (1969)
- 68-J-930 A study of the decay scheme of ^{134}I [E]
Takekoshi E., *et al.*, *Nucl. Phys.*, **A 133**, 493~504 (1969)
- 68-J-088 Levels of ^{185}W from decay of $^{185\text{m}}\text{W}$ and ^{185}Ta [E]
Kuroyanagi T., Tamura T., *Nucl. Phys.*, **A 133**, 554~571 (1969)
- 69-J-115 The (n, α) reaction on samarium and neodymium isotopes induced by thermal neutrons [E]
Okamoto K., *Nucl. Phys.*, **A 141**, 193~210 (1970)
- 68-J-795 The nuclear shape and rotation [E]
Wakai S., *Nucl. Phys.*, **A 141**, 423~430 (1970)
- 70-J-099 A shell-model nuclear level density [E]
Baba H., *Nucl. Phys.*, **A 159** (No. 2), 625~641 (1970)
- 69-J-186 A corrimation of Bragg angles for misalignment of X-ray diffractometer [J]
Motohashi H., *Oyo Buturi (Tokyo)*, **38** (No. 12), 1139~1140 (1969)
- 69-J-055 Critical condition for the electrothermal instability in a partially ionized plasma [E]
Hiramoto T., *Phys. Fluids*, **13**, 1492~1498 (1970)
- 69-J-008 Temperature effects on channeling of protons in silicon crystal [E]
Ozawa K., *et al.*, *Phys. Letters*, **29 A** (No. 6), 332~333 (1969)
- 69-J-909 The critical condition for electrothermal instabilities [E]
Hiramoto T., *Phys. Letters*, **29 A** (No. 8), 480~481 (1969)
- 69-J-030 Direct measurement of nuclear reaction times by the use of the blocking effect single crystals [E]
Maruyama M., *et al.*, *Phys. Letters*, **B 29** (No. 7), 414~416 (1969)
- 70-J-245 Deuteron motions in KD_2PO_4 [E]
Sato Y., *Phys. Letters*, **33 A** (No. 3), 156~157 (1970)
- 69-J-412 Measurement of high-energy charge-transfer cross sections for incident proton and atomic hydrogen in various gases [E]
Toburen L. H.*, *et al.*, *Phys. Rev.*, **171**, 114~122 (1968)
- 69-J-401 Double-electron-capture cross sections for incident protons in the energy range 75 to 250 keV [E]
Toburen L. H.*, Nakai Y., *Phys. Rev.*, **177**, 191~196 (1969)

- 70-J-037 Lowe-Norberg theory on the nuclear-magnetic-resonance free-induction-decay in solids [E]
Betsuyaku H., *Phys. Rev. Letters*, **24** (No. 17), 934~937 (1970)
- 68-J-660 Mechanical bleaching and reorientation of color centers in NaF [Short note] [E]
Ozawa K., *et al.*, *phys. stat. solidi*, **31**, K117 (1969)
- 69-J-049 ESR of neutron irradiated BaF₂ crystals [E]
Kazumata Y., *phys. stat. solidi*, **34**, 377~384 (1969)
- 69-J-081 Calculation of the contrasts of Moiré patterns from twisted lattices by the dynamical theory of electron diffraction [E]
Izui K., Nishida T., *phys. stat. solidi*, **35**, 973~981 (1969)
- 69-J-126 Effect of plastic deformation on the recovery of stage I after neutron irradiation [E]
Okuda S., *et al.*, *phys. stat. solidi*, **36**, 531~538 (1969)
- 69-J-303 Effect of pressure on the Curie point of the Pseudo-NiAs-type Cr₃Te₄ [E]
Ozawa K., *et al.*, *phys. stat. solidi*, **38**, 385~391 (1970)
- 69-J-364 Channeling of 1.5 MeV protons in alkali halide crystals [Short note] [E]
Mannami M.*, *et al.*, *phys. stat. solidi*, **38**, K1~K6 (1970)
- 68-J-167 Kinetic theory of collective modes in classical liquids [E]
Chihara J., *Progr. Theoret. Phys. (Kyoto)*, **41** (No. 2), 285~295 (1969)
- 70-J-008 A method of calculating the enthalpy of fusion (An application of differential thermal analysis) [E]
Nakase Y., *et al.*, *Repts. Progr. Polymer Phys. Japan*, **13**, 241~242 (1970)
- 68-J-153 Potentials for the hydrogen atoms in normal and deuterated KH₂PO₄ [E]
Sato Y., Mochida Y.*, *Solid State Comm.*, **7**, 327~329 (1969)
- 68-J-967 On the dielectric properties of U₄O₉ and UO₂ [E]
Tateno J., Naito K.*, *Solid State Comm.*, **7**, 807~810 (1969)
- 69-J-197 Divacancy associated hole centers in neutron-irradiated BaF₂ [E]
Kazumata Y., *Solid State Comm.*, **7**, 1753~1755 (1967)
- 70-J-027 Change of the dielectric constant at the phase transition in U₄O₉ [E]
Tateno J., *Solid State Comm.*, **8**, 1043~1045 (1970)

Papers at Meetings

- 68-P-081 Effect of deformation on the recovery of neutron irradiated metals [E]
Okuda S., *et al.*,
Intern. Conf. on Vacancies and Interstitials in Metals, Julich, 1968, KFA Report, 317~326
- 69-P-415 Low-energy neutron-scattering cross-section of ⁶Li [E]
Asami A., Moxon M. C.*, "Nuclear Data for Reactors", IAEA-CN-26/25, 153~160 (1970)
- 69-P-416 Neutron scattering cross-sections of iron [E]
Tomita Y., *et al.*, "Nuclear Data for Reactors", IAEA-CN-26/29, 301~304 (1970)

- 69-P-417 Width-fluctuation and resonance-interference effects in neutron scattering cross-sections of aluminium, copper and zinc [E]
Tsukada K., *et al.*, "Nuclear Data for Reactors", IAEA-CN-26/30, 305~316 (1970)
- 69-P-418 Fast-neutron scattering from Al, Si, S and Zn [E]
Tanaka S., *et al.*, "Nuclear Data for Reactors", IAEA-CN-26/31, 317~323 (1970)
- 69-P-419 Fast-neutron capture cross-sections of Cr, Fe, Ni and Mo [E]
Nishimura K., *et al.*, "Nuclear Data for Reactors", IAEA-CN-26/28, 805~814 (1970)
- 69-P-420 Analysis of neutron inelastic scattering by ^{238}U [E]
Igarasi S., *et al.*, "Nuclear Data for Reactors", IAEA-CN-26/27, 869~879 (1970)
- 67-P-739 Reduced performance of non-equilibrium linear MHD generators with segmented electrodes [E]
Hiramoto T., Yano S., Proc. of a Symp. on Magnetohydrodynamic electrical power generator, Warsaw 1968, SM 107-86 vol. 1, 629~641
- 67-P-738 Experimental study on MHD generators with segmented electrodes at high hall parameters [E]
Yano S., *et al.*, Proc. of a Symp. on Magnetohydrodynamic electrical power generator, Warsaw 1968, SM 107-86 vol. 2, 881~896
- 68-P-685 Dislocation pinning during recovery after fast-neutron irradiation at low temperature [E]
Okuda S., Nakanii T., Symp. on Radiation Damage in Reactor Materials, Vienna 1969, IAEA-SM-120/A-3, 47~59

Reports

- 70-R-186 Two-dimensional MHD flow near the magnetic neutral line [E]
Tanaka M., IC/70/71 Intern. Center Theor. Phys. 8 p. (1970)
- 70-R-246 Equilibrium of triangularly shaped magnetic surfaces [E]
Dagazian R. Y.*, *et al.*, IC/70/120 Intern. Center Theor. Phys. 22 p. (1970)
- 70-R-309 MHD equilibrium of the tokamak multipole [E]
Maschke E. K.*, *et al.*, IC/70/125 Intern. Center Theor. Phys. 25 p. (1970)
- 69-R-135 Proceedings of the 1st seminar on neutron cross sections [J]
Japanese Nuclear Data Committee JAERI 1171 95 p. (1969)
- 69-R-136 Average level spacings and the nuclear level density parameter [E]
Baba H., *et al.*, JAERI 1183, 41 p. (1969)
- 69-R-137 Nuclear physics in energy region of tandem accelerator [J]
Ed. Maruyama M., *et al.*, JAERI 1184, 150 p. (1969)
- 70-R-138 STAX 2: A computer program for calculating neutron elastic and inelastic scattering cross sections by means of the optical model and Moldauer's theory [E]
Tomita Y., JAERI 1191, 25 p. (1970)
- 70-R-139 Study for decay chain of fission products (Report of the Fission Product Working Group No. 1) [J]
Sakata H.*, *et al.*, JAERI 1194, 49 p. (1970)

- 70-R-140 Proceedings of the third conference on inelastic neutron scattering, Tokai 1969 [J]
Solid State Phys. Lab., JAERI 1197, 114 p. (1970)
- 69-R-141 Nuclear data in demand of measurement · 1 [J]
Momota T., *et al.*, JAERI-memo 3355, 22 p. (1969)
- 69-R-142 Neutron transmission coefficients (A=20 to 79) [E]
Igarashi S., JAERI-memo 3368, 75 p. (1969)
- 69-R-143 A computer program for processing of neutron transmission data [E]
Asami A. *et al.*, JAERI-memo 3398, 73 p. (1969)
- 69-R-144 A field theory of M.H.D. and properties of field configuration for plasma confinement [J]
Sasakura Y., JAERI-memo 3475, 6 p. (1969)
- 69-R-145 Report of the committee on nuclear fusion research [J]
Comm. on Nuclear Fusion Research JAERI-memo 3486, 94 p. (1969)
- 69-R-146 Proceeding of the 2nd seminar on neutron cross sections summary [J]
Japanese Nuclear Data Comm. JAERI-memo 3697, 143 p. (1969)
- 69-R-147 An area-analysis program for neutron resonances based on the attaharvey code [E]
Tachibana A.*, *et al.*, JAERI-memo 3728, 39 p. (1969)
- 69-R-148 Instabilities in an inhomogeneous plasma [J]
Sato M., *et al.*, JAERI-memo 3758, 54 p. (1969)
- 69-R-149 Particle losses and instabilities in toroidal systems [J]
Sato M., *et al.*, JAERI-memo 3759, 59 p. (1969)
- 69-R-150 JAERI pulsed type neutron spectrometer [J]
Motohashi H., *et al.*, JAERI-memo 3771, 60 p. (1969)
- 69-R-151 A correction of Bragg angles for misalignment of X-ray diffractometer [J]
Motohashi H., JAERI-memo 3794, 12 p. (1969)
- 69-R-152 Manual for JUPITOR-1 [J]
Wakai M., *et al.*, JAERI-memo 3833, 42 p. (1969)
- 70-R-153 Nuclear reaction data index [J]
Japanese Nuclear Data Comm. JAERI-memo 3854, 95 p. (1970)
- 70-R-154 Data processing programs with graphical outputs · 1 [J]
Kawarasaki Y., JAERI-memo 4013, 52 p. (1970)
- 70-R-155 Apparatus for scattering cross section measurement [J]
Ohtomo S., *et al.*, JAERI-memo 4023, 14 p. (1970)
- 70-R-156 Higher-order contaminations in a LiF (111) neutron monochrometer [J]
Asami T., *et al.*, JAERI-memo 4047, 12 p. (1970)

- 70-R-157 Internal friction measurements in neutron-irradiated iron and iron alloy [J]
Watanabe K., *et al.*, JAERI-memo 4056, 16 p. (1970)
- 70-R-158 Design of medium-beta torus (JFT-2) [E]
Nucl. Fusion Lab., JAERI-memo 4084, 110 p. (1970)
- 70-R-159 Determination of uranium content of the U-Al alloy by detecting fission neutrons [J]
Ohno Y., *et al.*, JAERI-memo 4106, 19 p. (1970)
- 70-R-160 GRAPH: A computer program for plotting experimental data in NEUDATA system [J]
Nakagawa T., *et al.*, JAERI-memo 4116, 39 p. (1970)
- 70-R-161 Plastic deformation of zone-refined tungsten between 4.2 and 300°K [E]
Oku T., *et al.*, JAERI-memo 4124, 17 p. (1970)
- 70-R-162 Manual for JUPITOR-1 (Supplement) [J]
Wakai M., *et al.*, JAERI-memo 4138, 61 p. (1970)
- 70-R-163 Pulse-pileup effect in NaI (TI) detector system [J]
Sekine T., *et al.*, JAERI-memo 4144, 20 p. (1970)
- 70-R-164 Nuclear data in demand of measurement • 2 [J]
Igarashi S., JAERI-memo 4167, 23 p. (1970)
- 70-R-165 Joule heating in JFT-2 [E]
Takeda T., *et al.*, JAERI-memo 4186, 20 p. (1970)
- 70-R-166 Generalization of eikonal approximation (Its application to charge exchange reaction and description of the code CT-1) [J]
Ryufuku H., *et al.*, JAERI-memo 4195, 45 p. (1970)
- 70-R-167 THRUSH: A code for calculating thermal neutron scattering kernel [J]
Kadotani H.*, JAERI-memo 4211, 20 p. (1970)
- 70-R-168 Calculation of the flux of fast neutral particles from a cylindrical, high temperature plasma [E]
Yano S., JAERI-memo 4243, 40 p. (1970)
- 69-R-411 Low energy electron studies in aluminum [E]
Nalley S. J.*, *et al.*, ORNL-TM-2030 (1968)
- 70-R-146 Calorimetric determination of absorbed dose rate of epoxy resin irradiated in JRR-4 [E]
Sakata S.*, *et al.*, SJC-A-70-4 19 p. (1970)

Books

- 69-B-402 Low energy electron mean free paths in solids [E]
Ritchie R. H.*, *et al.*, "Advances in Radiation Biology" Vol. 3, 1~28
(ed. by L. G. Augenstein, *et al.*) Academic Press N. Y. and London (1969)

Chemistry

Journal Articles

- 68-J-180 The enthalpies of formation of trioxane and tetraoxane [E]
Nakase Y., *et al.*, *Acta Chem. Scand.*, **23** (No. 1), 56~60 (1969)
- 68-J-613 Extraction and spectrophotometric determination of microgram quantities of cobalt in various materials, with zinc diethyldithiocarbamate [E]
Motojima K., Tamura N., *Anal. Chim. Acta*, **45** (No. 2), 327~332 (1969)
- 68-J-143 Amination of benzoic acid in γ -radiolysis of liquid ammonia [E]
Sakumoto A., *Bull. Chem. Soc. Japan*, **42** (No. 3), 755~760 (1969)
- 68-J-540 Moderator effects on the radiations of ^{82}Br activated by the isomeric transition with gaseous methyl bromide [E]
Tachikawa E., Okamoto J., *Bull. Chem. Soc. Japan*, **42** (No. 6), 1504~1509 (1969)
- 68-J-299 The isotope effect of hydrogen on the autoxidations of benzene and toluene in the aqueous solutions [E]
Hotta H., *et al.*, *Bull. Chem. Soc. Japan*, **42** (No. 7), 2041~2042 (1969)
- 69-J-077 Isotope effects on the reactions of ^{82}Br activated by isomeric transition between CH_4 and CD_4 [E]
(Short communications)
Tachikawa E., *Bull. Chem. Soc. Japan*, **42** (No. 8), 2404 (1969)
- 68-J-082 The autoxidation of ethylbenzen in the presence of the aqueous phase [E]
Hotta H., *et al.*, *Bull. Chem. Soc. Japan*, **42** (No. 9), 2413~2416 (1969)
- 67-J-699 The effect of organic additives on the autoxidation of benzene and toluene in the aqueous phase and the kinetic analysis [E]
Hotta H., *Bull. Chem. Soc. Japan*, **42** (No. 11), 3056~3064 (1969)
- 69-J-085 Comparison of the recoil reactions in the $^{80\text{m}}\text{Br}-\text{CH}_4$ and $^{82\text{m}}\text{Br}-\text{CH}_4$ systems [E]
Tachikawa E., *Bull. Chem. Soc. Japan*, **43** (No. 1), 63~67 (1970)
- 69-J-083 Effects of alkyl halides on the γ -ray induced polymerization of ethylene in liquid carbon dioxide [E]
Hagiwara M., *et al.*, *Bull. Chem. Soc. Japan*, **43** (No. 1), 172~177 (1970)
- 69-J-188 Thermal annealing behavior of recoil manganese atoms produced in alkali metal permanganates by (n, 2n) and (n, γ) reactions [E]
Shiokawa T.,* Sasaki S., *Bull. Chem. Soc. Japan*, **43** (No. 3), 801~804 (1970)
- 69-J-226 The reactions of ^{80}Br activated by isomeric transition in the gaseous phase (The isotopic variation between CH_4 and CD_4) [E]
Tachikawa E., Kahara T.*, *Bull. Chem. Soc. Japan*, **43** (No. 5), 1293~1297 (1970)

- 70-J-011 The thermal annealing behaviors of ^{80}Br recoils produced by the nuclear isomeric transition in the alkali metal bromates [E]
Sasaki S., Siokawa T.*, *Bull. Chem. Soc. Japan*, **43** (No. 9), 2835~2839 (1970)
- 68-J-062 The abundances of arsenic, tin and antimony in chondritic meteorites [E]
Hamaguchi H.*, *et al.*, *Geochim. Cosmochim. Acta*, **33**, 507~518 (1969)
- 68-J-790 Studies on free ions by an electric conductivity method [Review] [J]
Hayashi K., *Hoshasen Kagaku (Tokyo)*, **4** (No. 7), 199~205 (1969)
- 69-J-065 Preliminary report on the direct fluorination of polyethylene powder [E]
Okada M., Makuuchi K., *I & EC Product Res. Develop.*, **8**, 334~335 (1969)
- 68-J-995 Dependence of the initial retention on recoil energy in zinc phthalocyanine [E]
Yang M. H.*, Yoshihara K., *Inorg. Nucl. Chem. Letters*, **5**, 389~392 (1969)
- 68-J-107 Spectrophotometric determination of palladium and rhodium using oxine and 2-methyl oxine [J]
Hashitani H., *et al.*, *Japan Analyst*, **18** (No. 2), 136~143 (1969)
- 68-J-175 Spectrophotometric determination of boron in U_3O_8 with methylene blue [J]
Onishi H., Nagai H., *Japan Analyst*, **18** (No. 2), 164~168 (1969)
- 68-J-257 8-Quinolinol extraction and spectrophotometric determination of uranium with arsenazo III [J]
Motojima K., *et al.*, *Japan Analyst*, **18** (No. 2), 208~213 (1969)
- 68-J-560 The composition of the uranium (VI and IV)-arsenazo III complexes [Note] [J]
Onishi H., Sekine K., *Japan Analyst*, **18** (No. 4), 524~526 (1969)
- 68-J-587 Spectrophotometric determination of uranium (VI) with arsenazo III after separation from thorium by extraction [J]
Onishi H., Toita Y., *Japan Analyst*, **18** (No. 5), 592~595 (1969)
- 68-J-764 Potentiometric titration of free acid, uranium (IV), (VI) and hydrazine mono nitrate in uranous nitrate solutions with alkali [J]
Emura S., *et al.*, *Japan Analyst*, **18** (No. 8), 976~980 (1969)
- 68-J-885 Fluorescent X-ray analysis of microgram quantities of uranium in zircaloy [Note] [J]
Kawaguchi H., Ouchi Y., *Japan Analyst*, **18** (No. 8), 1024~1027 (1969)
- 69-J-010 Spectrophotometric determination of traces of uranium in zirconium and zircaloy [Note] [J]
Onishi H., Toita Y., *Japan Analyst*, **18** (No. 9), 1134~1136 (1969)
- 69-J-017 The potentiometric determination of plutonium in nitric acid medium [Note] [J]
Emura S., Okazaki S., *Japan Analyst*, **18** (No. 10), 1264~1265 (1969)
- 69-J-069 Determination of vanadium in deposit and airborne particulate matter by neutron activation analysis [J]
Bando S., Imahashi T., *Japan Analyst*, **18** (No. 12), 1477~1482 (1969)
- 69-J-070 Determination of copper arsenic and antimony in pure phosphorus by neutron activation analysis [J]
Bando S., Kishi H.*, *Japan Analyst*, **19** (No. 1), 17~22 (1970)

- 69-J-118 Square wave polarographic determination of iron in highly radioactive solutions by remotely operated method [J]
Emura S., Sugikawa S., *Japan Analyst*, 19 (No. 2), 212~216 (1970)
- 69-J-091 Determination of uranium in zirconium and zircaloy by neutron activation [J]
Yoshida H., Yonezawa C., *Japan Analyst*, 19 (No. 2), 238~241 (1970)
- 69-J-140 Spectrophotometric determination of microquantities of mercury with thiothenoyltrifluoroacetone [J]
Hashitani H., Katsuyama K., *Japan Analyst*, 19 (No. 3), 355~361 (1970)
- 69-J-117 Determination of niobium in zirconium-niobium alloy by hydrogen peroxide photometric method [J]
Hashitani H., Yoshida H., *Japan analyst*, 19 (No. 3), 403~406 (1970)
- 69-J-196 Separation of microgram quantities of thorium and uranium by TTA extraction (Spectrophotometric determination with arsenazo III) [J]
Onishi H., Sekine K., *Japan Analyst*, 19 (No. 4), 547~550 (1970)
- 69-J-119 A direct spectrophotometric determination of uranium in organic solutions of tri-n-butylphosphate with arsenazo III [J]
Emura S., *Japan Analyst*, 19 (No. 5), 637~642 (1970)
- 69-J-288 Separation of molybdenum in fission products by solvent extraction and extraction chromatography [J]
Yoshida H., Yonezawa C., *Japan Analyst*, 19 (No. 6), 819~823 (1970)
- 69-J-293 Spectrophotometric determination of thorium with carboxyarsenazo [J]
Motojima K., *et al.*, *Japan Analyst*, 19 (No. 7), 935~938 (1970)
- 69-J-330 Spectrophotometric determination of nitrogen in uranium using thymol [J]
Hashitani H., Yoshida H., *Japan Analyst*, 19 (No. 8), 1081~1085 (1970)
- 69-J-292 Simultaneous determination of aluminum and iron in plutonium [Note] [J]
Motojima K., *et al.*, *Japan Analyst*, 19 (No. 8), 1091~1093 (1970)
- 69-J-311 Determination of microamounts of manganese in iron and steel by extraction photometry using 2-methyl-oxine [J]
Ishiwatari N., Motojima K., *Japan Analyst*, 19 (No. 9), 1180~1183 (1970)
- 70-J-192 Analytical applications of X-ray excited optical fluorescence spectra · 1 (Determination of rare earth element in uranium and zirconium) [J]
Nakajima T., *et al.*, *Japan Analyst*, 19 (No. 9), 1183~1190 (1970)
- 69-J-377 Determination of ^{137}Cs in irradiated uranium [Note] [J]
Ishimori T., Kimura K., *Japan Analyst*, 19 (No. 9), 1289~1291 (1970)
- 70-J-030 Spectrophotometric determination of traces of nitrogen in zirconium and zircaloy using thymol [Note] [J]
Hashitani H., Yoshida H., *Japan Analyst*, 19 (No. 11), 1564~1566 (1970)
- 68-J-611 Solubility of K_2UO_7 in BaUO_4 [E]
Fujino T., Naito K.*, *J. Am. Ceramic Soc.*, 52 (No. 11), 574~577 (1969)

- 68-J-187 The abstraction of hydrogen atoms from halomethanes by recoil tritium atoms [E]
Tachikawa E., Rowland F. S.*, *J. Am. Chem. Soc.*, **91**, 559~562 (1969)
- 68-J-084 Rheological properties of elastomers based on cellulose fibers [E]
Nakamura Y.*, *et al.*, *J. Appl. Polymer Sci.*, **14**, 929~951 (1970)
- 67-J-411 The impurities in the processed radioisotope manganese-56 by (n, γ) reaction [J]
Nakamura H., Yamabayashi H., *J. Atomic Energy Soc. Japan*, **11** (No. 3), 134~137 (1969)
- 69-J-009 Amount of ^{199}Au in ^{198}Au [J]
Nakamura H., Yamabayashi H., *J. Atomic Energy Soc. Japan*, **11** (No. 12), 721~725 (1969)
- 69-J-307 Separation and determination of ^{95}Zr - ^{95}Nb and ^{106}Ru in the process solutions on reprocessing tests with irradiated fuels [J]
Hashitani H., *et al.*, *J. Atomic Energy Soc. Japan*, **12** (No. 5), 259~263 (1970)
- 69-J-320 Preparation of chromium free-foil by electroplating [J]
Akiha F.*, Murakami Y., *J. Atomic Energy Soc. Japan*, **12** (No. 7), 382~385 (1970)
- 69-J-144 The temperature dependence of the released gases from polyvinyl alcohol-uranium dioxide pellets [J]
Hoshino A., *et al.*, *J. Atomic Energy Soc. Japan*, **12** (No. 8), 442~448 (1970)
- 69-J-145 A study on the origin of hydrogen gas released from uranium dioxide by the tracer technique using heavy water [J]
Hoshino A., *et al.*, *J. Atomic Energy Soc. Japan*, **12** (No. 9), 500~504 (1970)
- 70-J-110 Thermodynamic properties of the actinide nitrides [J]
Tagawa H., *J. Atomic Energy Soc. Japan*, **12** (No. 11), 658~665 (1970)
- 69-J-257 Direct fluorination of polyethylene powder [J]
Okada M., Makuuchi K., *J. Chem. Soc. Japan, Ind. Chem. Sec.*, **73** (No. 6), 1211~1214 (1970)
- 70-J-150 Solvent effect on radiation induced chemical reaction [J]
Kagiya T., Hagiwara M., *J. Chem. Soc. Japan, Ind. Chem. Sec.*, **73** (No. 11), 2261~2265 (1970)
- 68-J-934 Determination of small amounts of Tc-99 in fission products [Note] [J]
Ueno K., *J. Chem. Soc. Japan, Pure Chem. Sec.*, **90** (No. 7), 718~719 (1969)
- 69-J-057 Precipitation of plutonium (IV) molybdate [J]
Watanabe K., Muromura T., *J. Chem. Soc. Japan, Pure Chem. Sec.*, **90** (No. 10), 1025~1027 (1969)
- 69-J-100 Precipitation of plutonium (IV) with sodium metavanadate [J]
Watanabe K., Sagawa C., *J. Chem. Soc. Japan, Pure Chem. Sec.*, **90** (No. 11), 1127~1129 (1969)
- 69-J-147 Formation and reactions of hydrated electrons in UV-irradiated hexacyanoferrate solutions [J]
Ohno S., *J. Chem. Soc. Japan, Pure Chem. Sec.*, **91** (No. 2), 91~102 (1970)
- 68-J-277 Preparation of monodisperse aerosol of dioctyl phthalate by a new apparatus [E]
Kitani S., *et al.*, *J. Colloid Interface Sci.*, **29** (No. 4), 613~616 (1969)

- 68-J-188 γ -radiolysis of aqueous boric acid solution [J]
Suzuki S.*, *et al.*, *J. Faculty Engng, Chiba Univ.*, **19** (No. 36), 173~181 (1968)
- 69-J-001 Studies on metals in air pollution · 2 (Aluminium and manganese amount in deposits measured by radioactivation analysis and their seasonal and geometrical variations) [J]
Yamane Y.*, *et al.*, *J. Hygienic Chem.*, **15** (No. 4), 238~243 (1969)
- 68-J-178 Uranium amalgam from an aqueous solution [E]
Kobayashi Y., Ishimori T., *J. Inorg. Nucl. Chem.*, **31**, 981~984 (1969)
- 68-J-646 The electrolytic behavior of niobium in tracer concentration at mercury electrode [E]
Kobayashi Y., Ishimori T., *J. Inorg. Nucl. Chem.*, **31**, 3545~3548 (1969)
- 69-J-067 Studies on cubic magnesium uranate, $Mg_yU_{1-y}O_{2+x} \cdot 1$ (Phase relations and crystal chemistry) [E]
Fujino T., Naito K.*, *J. Inorg. Nucl. Chem.*, **32**, 627~636 (1970)
- 69-J-163 Uranium-oxygen lattice vibration of lithium, β -sodium and β -strontium uranates [E]
Ohwada K., *J. Inorg. Nucl. Chem.*, **32**, 1209~1218 (1970)
- 69-J-280 Chemical behavior of cadmium-115 recoil atoms in neutron irradiated cadmium phthalocyanine [E]
Kudoh H., Yoshihara K.*, *J. Inorg. Nucl. Chem.*, **32**, 2845~2851 (1970)
- 69-J-348 The precipitation of some actinide element complex ions by using hexamine cobalt (III) cation · 1 (The precipitation of thorium and plutonium (IV) carbonate complex ions with hexamine cobalt (III) chloride) [E]
Ueno K., Hoshi M., *J. Inorg. Nucl. Chem.*, **32**, 3817~3822 (1970)
- 68-J-244 Chemical behavior of chromium-51 recoil atoms produced by low temperature irradiation [E]
Shibata N., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 2), 75~80 (1969)
- 67-J-712 γ -radiolysis of boric acid solution [E]
Koike M., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 4), 163~169 (1969)
- 68-J-655 Mutual separation of U, Pu and fission products with tri-iso-octylamine [E]
Akatsu J., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 5), 285~289 (1969)
- 69-J-101 Preparation of ^{236}Pu [Short note] [E]
Ishimori T., Akatsu E., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 8), 480~482 (1969)
- 69-J-208 Studies on fundamental properties of alumina adsorbent for radioisotope production [E]
Takahashi S., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 3), 130~136 (1970)
- 69-J-063 On the rate controlling step of $\text{UF}_4\text{-BrF}_3$ and $\text{U}_3\text{O}_8\text{-BrF}_3$ reaction [E]
Sakurai T., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 4), 176~181 (1970)
- 69-J-273 Loss of ^{35}S -labeled elementary sulfur during counting [Short note] [E]
Shikata E., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 4), 210~212 (1970)
- 69-J-212 Chemical behavior of recoil atoms produced by various nuclear process in metal phthalocyanine complex [E]
Yeh S. J.*, *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 6), 300~305 (1970)

- 68-J-623 The proton hyperfine coupling in the methyl-substituted phenyl radicals [Note] [E]
Nagai S., *et al.*, *J. Phys. Chem.*, **73** (No. 7), 2438~2439 (1969)
- 69-J-244 Ionicity of some polar crystals [Technical note] [E]
Tateno J., *J. Phys. Chem. Solids*, **31**, 1641~1642 (1970)
- 69-J-279 Network formation induced by acetylenic compounds in the polymerization of methyl methacrylate [E]
Hagiwara M., *et al.*, *J. Polymer Sci., Part B*, **8**, 155~158 (1970)
- 69-J-160 Rapid separation of niobium-95 from zirconium-95 by solvent extraction with α -benzoinoxime [E]
Yoshida H., Yonezawa C., *J. Radioanal. Chem.*, **5**, 201~206 (1970)
- 69-J-172 Analytical applications of X-ray excited optical fluorescence spectra • 1 (Apparatus and direct determination of rare earths in lanthanum oxide) [J]
Nakajima T., *et al.*, *J. Spectroscop. Soc. Japan*, **18** (No. 4), 210~217 (1969)
- 69-J-228 Analytical applications of X-ray excited optical fluorescence spectra • 2 (Direct determination of trace rare earths in aluminium oxide) [J]
Takashima K., *et al.*, *J. Spectroscop. Soc. Japan*, **18** (No. 5), 262~267 (1969)
- 69-J-367 Analytical applications of X-ray excited optical fluorescence spectra • 3 (Determination of rare earth elements in holium oxide and zirconium oxide) [J]
Kawaguchi H., *et al.*, *J. Spectroscop. Soc. Japan*, **18** (No. 6), 299~305 (1969)
- 69-J-275 The spectrochemical determination of U-235 [J]
Fukushima H., Nakajima T., *J. Spectroscop. Soc. Japan*, **19** (No. 1), 38~42 (1970)
- 70-J-321 An improvement in isotopic ratio measurement of uranium [J]
Komori T., *et al.*, *Mass Spectroscopy (Tokyo)*, **18** (No. 4), 1270~1274 (1970)
- 68-J-629 A study of hot atom effects of cadmium phthalocyanine applying a daughter-tracing technique [E]
Yoshihara K., Kudoh H., *Nature*, **222** (No. 5198), 1060~1061 (1969)
- 69-J-277 Importance of the singlet-triplet transition of ethylene in its photopolymerization in the presence of oxygen [E]
Hagiwara M., *et al.*, *J. Polymer Sci. A-1*, **8**, 3295~3302 (1970)
- 69-J-023 Effects of phase homogeneity on the chemical consequences of (n, γ) reactions in binary organic systems containing bromine • 1 [E]
Abedinzadeh Z.*, *et al.*, *Radiochim. Acta*, **9**, 38~41 (1968)
- 69-J-016 The mean range of some fission products produced in the ^{239}Pu (n_{th}, f) reaction [D]
Ishimori T., *et al.*, *Radiochim. Acta*, **9**, 187~194 (1968)
- 69-J-178 The isotope and phase effects associated with thermal neutron capture in halomethanes • 1 [E]
Abedinzadeh Z.*, *et al.*, *Radiochim. Acta*, **12**, 4~11 (1969)
- 67-J-522 Mössbauer spectroscopic study of chemical rate of tin after (n, γ) reaction in tin oxide [E]
Yoshida H., Herber R. H.*, *Radiochim. Acta*, **12**, 14~17 (1969)

- 68-J-177 Studies of the behavior of carrier-free radioisotopes · 3 (The adsorption characteristics of europium on various plastics and glass) [E]
Ichikawa F., Sato T., *Radiochim. Acta*, **12**, 89~93 (1969)
- 68-J-762 Recoil atom behaviors in α - and β - zinc phthalocyanines [E]
Yang M. H.*, *Radiochim. Acta*, **12**, 167~169 (1969)
- 69-J-143 Enrichment of ^{47}Ca and ^{132}Cs by the recoil separation using a catcher method [E]
Ebihara H., Yoshihara K., *Radiochim. Acta*, **13**, 59~60 (1970)
- 69-J-032 Studies of the behaviour of carrier-free radioisotopes · 4 (Some behaviours of carrier-free silicon-31 from the view point of radiocolloid formation) [E]
Ichikawa F., Sato T., *Radiochim. Acta*, **13**, 69~71 (1970)
- 68-J-313 The reaction of ^{82}Br activated by isomeric transition with CH_4 in the gaseous phase [E]
Tachikawa E., Okamoto J., *Radiochim. Acta*, **13**, 159~163 (1970)
- 69-J-214 Study of the relationship between the behavior of recoil atoms and crystal morphology [E]
Yang M.H., *et al.*, *Radiochim. Acta*, **14**, 16~19 (1970)
- 69-J-211 Intercomparison of the hot-atom effects among α , β , γ and δ crystals of copper phthalocyanine [E]
Yang M. H.*, *et al.*, *Radiochim. Acta*, **14**, 52~53 (1970)
- 69-J-156 Crystalline polymorphism and behavior of recoil atoms in copper oxinate [E]
Yang M. H.*, *et al.*, *Radiochem. Radioanal. Letters*, **1** (No. 1), 25~29 (1969)
- 69-J-358 The determination of thorium with hexamine cobalt III chloride [E]
Ueno K., Hoshi M., *Radiochem. Radioanal. Letters*, **4** (No. 4), 221~229 (1970)
- 70-J-240 On the co-precipitation of carrier-free silicon-31 with various metal hydroxides [E]
Sato T., Ichikawa F., *Radiochem. Radioanal. Letters*, **5** (No. 4-5), 165~170 (1970)
- 69-J-231 Determination of $^{235}\text{U}/^{238}\text{U}$ isotopic ratio by neutron activation [J]
Yoshida H., Yonezawa C., *Radioisotopes (Tokyo)*, **19** (No. 2), 73~76 (1970)
- 70-J-012 Chemistry of transplutonium elements [J]
Ishimori T., *Radioisotopes (Tokyo)*, **19** (No. 6), 294~300 (1970)
- 68-J-209 Determination of small amounts of TBP and DBP in uranyl nitrate solutions [E]
Ishimori T., Ueno K., *Talanta*, **16**, 613~616 (1969)
- 68-J-684 Spectrophotometric determination of ruthenium using 8-quinolinol [E]
Hashitani H., *et al.*, *Talanta*, **16**, 1553~1559 (1969)
- 67-J-448 Estimation of U-O bond distance in uranyl compounds from their infrared spectra [E]
Ohwada K., *Spectrochim. Acta*, **24A**, 595~599 (1968)
- 69-J-162 Uranium-oxygen lattice vibration of alkali monouranates [E]
Ohwada K., *Spectrochim. Acta*, **26A**, 1723~1730 (1970)

Papers at Meetings

- 70-P-060 Uranium isotope separation by chemical exchange [E]
Shimokawa J., *et al.*, Proc. Intern. Conf. on Mass Spectroscopy, Kyoto 1969, 397~402
- 70-P-096 Molecular-negative-ion formation of acetonitrile by collision of highly excited atoms [E]
Sugiura T., Arakawa K., Proc. Intern. Conf. on Mass spectroscopy, Kyoto 1969, 848~853
- 70-P-097 Ion-molecule reactions of ethylene oxide and trioxane [E]
Kumakura M., Sugiura T., Proc. Intern. Conf. on Mass Spectroscopy, Kyoto 1969, 988~992
- 70-P-365 Radioactivation analysis for the determination of trace elements in air pollutants [E]
Bando S., *et al.*, "Nuclear Techniques in Environmental Pollution", IAEA, 169~181 (1971)
- 68-P-140 Preparation of zircaloy standards sample chemical composition analysis [E]
Kashu S.*, *et al.*, Trans. of Intern. Vacuum Metallurgy Conf., Beverly Hills 1968, 553~577

Reports

- 69-R-169 Oxidation pulverization of UO₂ pellets [E]
Iwasaki M., JAERI 1174, 9 p. (1969)
- 69-R-170 Collected papers on disintegration studies short-lived nuclides [E]
Ed. Ishimori T., *et al.*, JAERI 1178, 28 p. (1969)
- 69-R-171 Autoxidation of benzene and toluene in the aqueous phase [J]
Hotta H., JAERI 1185, 53 p. (1969)
- 69-R-172 Analysis of zirconium and its alloys [J]
The Committee on Analytical Center of Nuclear Fuels and Reactor Materials JAERI 4050, 212 p. (1969)
- 69-R-173 Status of chemical analysis of sodium [J]
Takahashi M., JAERI-memo 3415, 68 p. (1969)
- 69-R-174 Full energy peak efficiency on the NaI crystal [J]
Baba S., *et al.*, JAERI-memo 3546, 23 p. (1969)
- 69-R-175 Some cautionary problems of fluorometric determination of uranium [J]
Akaishi J., *et al.*, JAERI-memo 3622, 21 p. (1969)
- 69-R-176 Review of the phase relations and the structure of the NaCl type compounds [J]
in the system U-Pu-C-N
Tagawa H., *et al.*, JAERI-memo 3650, 29 p. (1969)
- 69-R-177 Inorganic ion exchanger (A literature search) [J]
Tachimori S., *et al.*, JAERI-memo 3726, 86 p. (1969)
- 69-R-178 Diffusion of ^{99m}Tc in neutron irradiated molybdenum trioxide and its application to separation [J]
Tachimori S., *et al.*, JAERI-memo 3807, 26 p. (1969)

- 69-R-179 Results of activation analysis on carbon and graphite materials [J]
Yoshida H., *et al.*, JAERI-memo 3817, 28 p. (1969)
- 69-R-180 Separation of uranium isotopes by chemical exchange (The isotopic exchange reaction between
U(IV) and U(VI) ions in a mixed system of the solution and cation exchange resin) [J]
Nishio G., *et al.*, JAERI-memo 3961, 67 p. (1970)
- 68-R-899 Solubility of krypton and xenon in some solvents [E]
Kitani S., *et al.*, PNCT-AR-68 (1968)

Reactor Physics

Journal Articles

- 67-J-410 The perturbation method for the neutron diffusion approximation [Short note] [E]
Mizoo N., *J. Nucl. Sci. Technol. (Tokyo)*, **5** (No. 1), 36~37 (1968)
- 68-J-208 Studies of the criticality of 20% enriched uranium fast critical assemblies: FCA-I [E]
Hirota J., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 1), 35~42 (1969)
- 68-J-600 Investigation of the heterogeneity effect of sodium scattering resonance on neutron spectrum [Short note] [E]
Tone T., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 1), 43~44 (1969)
- 68-J-585 Adjusted value of effective width for H₂O and D₂O [Short note] [E]
Mori N., Tsuchihashi K., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 3), 155 (1969)
- 68-J-290 Markoffian description of at-power reactor noise [E]
Saito K., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 5), 261~272 (1969)
- 68-J-627 Discrepancy between calculated and experimental values of prompt neutron life time of FCA fast assemblies [E]
Hiraoka T., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 5), 290~291 (1969)
- 68-J-079 Effects of fission products on physical quantities for burn-up of large Pu-U fast reactors [E]
Tone T., Nakagawa M., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 6), 295~302 (1969)
- 68-J-417 Higher order perturbation method in reactor calculation [E]
Saito R., Katsuragi S., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 6), 303~307 (1969)
- 68-J-534 Temperature dependence of parameters used in intermediate treatment of resonance absorption [E]
Ishiguro Y., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 6), 308~314 (1969)
- 68-J-906 Thermal neutron energy spectrum of JRR-3 [Short note] [E]
Ishiguro Y.*, *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 6), 341~343 (1969)
- 68-J-411 Numerical study of higher order perturbation theory [E]
Saito R., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 7), 359~370 (1969)
- 68-J-533 Intermediate neutron resonance absorption with interference scattering in heterogeneous systems [E]
Ishiguro Y., Takano H., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 7), 380~389 (1969)
- 69-J-028 Some remarks on the concept of the group constants in resonance energy region [Short note] [E]
Nakagawa M., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 7), 408~409 (1969)
- 69-J-038 Effect of broadening of incident neutron energy in measuring scattering law [Short note] [E]
Ayao S., Iizumi M., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 7), 410~413 (1969)
- 69-J-086 Adjoint equation in source-sink method [Short note] [E]
Kaneko Y., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 9), 540~542 (1969)

- 69-J-225 Integral experiment and cross sections of ^{239}Pu in the intermediate energy region [Short note] [E]
Hirota J., Kuroi H., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 9), 542~545 (1970)
- 69-J-132 Some basic relations in the waiting time analysis of neutron counting statistics [Short note] [E]
Saito K., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 10), 604~607 (1969)
- 69-J-361 Dynamics of power reactor [Short note] [E]
Gotoh Y., Koyama K., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 12), 707~710 (1969)
- 69-J-204 On the correlation between group cross sections to be adjusted by use of integral data [Short note] [E]
Mitani H., Kuroi H., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 1), 56~59 (1970)
- 69-J-181 A note on effective cross sections in the resolved resonance region of ^{238}U [E]
Tone T., Nakagawa M., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 4), 182~189 (1970)
- 70-J-065 Analysis of heterogeneity effect by Monte Carlo method [Short note] [E]
Nomoto S., Nakamura S.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 4), 212~215 (1970)
- 69-J-323 Doppler coefficient measurements in FCA [Short note] [E]
Yasuno T., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 5), 271~273 (1970)
- 69-J-233 Model perturbation method applied to diffusion equation [E]
Saito R., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 7), 371~379 (1970)
- 69-J-168 Reactivity measurements on fast systems with natural uranium metal blanket by pulsed neutron method [E]
Hiraoka T., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 9), 458~465 (1970)
- 70-J-014 On the accuracy of analytical treatments for resonance absorption in Doppler resonance regions [E]
Takano H., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 10), 500~510 (1970)
- 69-J-236 The minimum number of resonances for reproducing cross sections [Short note] [E]
Takano H., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 11), 592~595 (1970)
- 70-J-157 Sodium-void experiment in unit k -infinity core [Short note] [E]
Yasuno T., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 12), 642~644 (1970)
- 70-J-140 Gamma-ray discrimination in a proton-recoil spectrometer for a fast reactor spectrum measurement [E]
Obu M., *et al.*, *Nucl. Instrum. Methods*, **89**, 131~139 (1970)
- 68-J-510 An analytical approach to continuous reactor refueling [E]
Yasukawa S., *Nucl. Sci. Engng.*, **35**, 1~13 (1969)
- 68-J-535 A three-dimensional analysis of xenon-induced oscillations in boiling water cooled reactors [E]
Shinoda W., Mitake S., *Nucl. Sci. Engng.*, **36**, 372~388 (1969)
- 68-J-314 Temperature noise in low-power reactors [Technical note] [E]
Saito K., *Nucl. Sci. Engng.*, **37**, 316~321 (1969)
- 68-J-512 Input noise source of at-power reactors with temperature feedback effect [E]
Saito K., *Nucl. Sci. Engng.*, **37**, 380~396 (1969)

- 69-J-146 The construction of the cross sections in unresolved resonance region [E]
Ishiguro Y., *et al.*, *Nucl. Sci. Engng.*, **40**, 25~37 (1970)
- 68-J-027 Temperature dependent ²³⁵U-fission rate in homogeneous system [D]
Yasuno T., *Nukleonik*, **11** (No. 3), 155~156 (1968)
- 70-J-182 Data acquisition and analysis for fast reactor physics in JAERI [E]
Hirota J., *et al.*, *Trans. Am. Nucl. Soc.*, **13** (No. 1), 293 (1970)

Papers at Meetings

- 69-P-020 On the analysis of the long-time burnup behaviors of fast reactor with the closed cycle [E]
Yoshida H., Hirata M., *Intern. Conf. on Fast Reactor Physics, London 1969*, 257~271
- 69-P-008 Correlation of integral data and cross sections in intermediate energy cores [E]
Kuroi H., *et al.*, *Intern. Conf. on Fast Reactor Physics, London 1969*, 82~89

Reports

- 68-R-676 Time transient problem in a fast multiplying system [E]
Goto Y., Koyama K., BNL-12964 (1969)
- 69-R-181 Measurement of control rod worths in graphite moderated core [J]
Kaneko Y., JAERI 1173, 29 p. (1969)
- 69-R-182 Production of group constant for reactor analysis (A report on activities in 1966~1967) [E]
Japanese Nuclear Data Committee, JAERI 1176, 179 p. (1969)
- 69-R-183 Evaluation of thermal neutron scattering cross sections for reactor moderators [E]
Thermalization Group, Japanese Nuclear Data Committee, JAERI 1181, 107 p. (1969)
- 69-R-184 NESAP-2: An IBM 7044 code for calculating noise spectra of at-power reactors [J]
Saito K., JAERI 1186, 39 p. (1969)
- 70-R-185 Theory of reactor noise · 1 [J]
Saito K., JAERI 1187, 148 p. (1970)
- 70-R-186 PROF GROUCH-G: A processing code for group constants for a fast reactor [E]
Tone T., *et al.*, JAERI 1192, 22 p. (1970)
- 70-R-187 JAERI fast reactor group constants systems · Part I [E]
Katsuragi S., *et al.*, JAERI 1195, 140 p. (1970)
- 70-R-188 JAERI fast reactor group constant systems · Part II-1 [E]
Katsuragi S., *et al.*, JAERI 1199, 116 p. (1970)
- 69-R-189 Neutron impulse response function in a fast multiplying medium [J]
Koyama K., *et al.*, JAERI-memo 3360, 12 p. (1969)

- 69-R-190 Measurement of neutron diffusion coefficient in H₂O-Al slabs [J]
Kaneko Y., *et al.*, JAERI-memo 3367, 12 p. (1969)
- 69-R-191 Effect of spin-dependence of fission width on reactor calculation [J]
Kikuchi Y.*, JAERI-memo 3409, 97 p. (1969)
- 69-R-192 Effects of high α -value of ²³⁹Pu on the nuclear characteristics of large fast reactor [J]
Sekimoto H.*, JAERI-memo 3435, 13 p. (1969)
- 69-R-193 PuO₂-UO₂ critical experiment · 2 (Reactivity effects in the thermal neutron field) [J]
Suguri S., *et al.*, JAERI-memo 3436, 27 p. (1969)
- 69-R-194 PuO₂-UO₂ critical experiments · 3 (Fine thermal neutron flux distribution in the PuO₂-UO₂ fuel rod) [J]
Suguri S., *et al.*, JAERI-memo 3437, 76 p. (1969)
- 69-R-195 PuO₂-UO₂ critical experiment · 4 (A measurement of decay characteristic of PuO₂-UO₂ fission product γ -ray) [J]
Suguri S., *et al.*, JAERI-memo 3438, 37 p. (1969)
- 69-R-196 PuO₂-UO₂ critical experiment · 5 (Critical experiment and analysis of power distribution for IFA-159) [J]
Suguri S., *et al.*, JAERI-memo 3439, 108 p. (1969)
- 69-R-197 PuO₂-UO₂ critical experiment · 8 (Computer codes for data processing) [J]
Suguri S., *et al.*, JAERI-memo 3440, 63 p. (1969)
- 69-R-198 The effects of power distributed and slip ratio in frequency domain [J]
Sato K., *et al.*, JAERI-memo 3458, 35 p. (1969)
- 69-R-199 Abstracts of nuclear codes in Japan [J]
Nuclear Code Comm. of Japan JAERI-memo 3460, 38 p. (1969)
- 69-R-200 UGMG 42: modification of fast neutron spectrum and group constant calculation code [J]
Akimoto M., *et al.*, JAERI-memo 3464, 14 p. (1969)
- 69-R-201 Adjoint equation in source-sink method [J]
Kaneko Y., JAERI-memo 3476, 7 p. (1969)
- 69-R-202 Standard resonance spectrum pile: TAKIT-II [J]
Takeda R., *et al.*, JAERI-memo 3477, 28 p. (1969)
- 69-R-203 Fast-neutron measurements by threshold detectors in LHTL of JRR-3 [J]
Kayano H.*, *et al.*, JAERI-memo 3478, 27 p. (1969)
- 69-R-204 Method of measurements of alpha-value of ²³⁹Pu and Doppler effect of ²³⁸U in resonance region [J]
Takeda R., *et al.*, JAERI-memo 3491, 32 p. (1969)
- 69-R-205 Space-time burn-up of an absorbing slab [J]
Takeuchi E.*, *et al.*, JAERI-memo 3501, 36 p. (1969)

- 69-R-206 Evaluation on group constants of plutonium [J]
Sakata H., *et al.*, JAERI-memo 3507, 67 p. (1969)
- 69-R-207 Measurement of thermal neutron spectra in H₂O poisoned with Cd and In [J]
Kaneko Y., *et al.*, JAERI-memo 3515, 26 p. (1969)
- 69-R-208 Calculation of the cruciformed control rod · 4 (The energy dependency of the logarithmic deviative condition) [J]
Takeuchi E.*, *et al.*, JAERI-memo 3534, 36 p. (1969)
- 69-R-209 Statistical inference of resonance parameters and neutron strength function [J]
Tomioka H., JAERI-memo 3559, 19 p. (1969)
- 69-R-210 TRABLL : A computer code for transient boiling of reactor coolant in a single channel [J]
Tone T., *et al.*, JAERI-memo 3602, 43 p. (1969)
- 69-R-211 MULTI-TRABLL : A multi-channel computing model for thermo-hydrodynamical analysis in a liquid metal cooled fast reactor [J]
Ishikawa M., *et al.*, JAERI-memo 3611, 92 p. (1969)
- 69-R-212 EXPANDA-4 : The one-dimensional diffusion equation code for fast reactors using the JAERI-fast-set [J]
Suzuki T., JAERI-memo 3660, 17 p. (1969)
- 69-R-213 Multi-group constants for fission product nuclides · 2 [J]
Tone T., *et al.*, JAERI-memo 3669, 107 p. (1969)
- 69-R-214 Stability of numerical solutions and hydrodynamical characteristics obtained with use of the code MULTI-TRABLL [J]
Nuclear Code Comm., JAERI-memo 3682, 118 p. (1969)
- 69-R-215 Effect of photo-neutron on β of pressure tube type deuterium water reactor [J]
Kaneko Y., JAERI-memo 3699, 6 p. (1969)
- 69-R-216 Improvements to the intermediate treatment of resonance absorption in nuclear reactor theory [E]
Ishiguro Y., JAERI-memo 3700, 108 p. (1969)
- 69-R-217 Concept of reactivity and related problems [J]
Kaneko Y., JAERI-memo 3707, 11 p. (1969)
- 69-R-218 Principle of experimental method to determine migration area in reflected reactor [J]
Kaneko Y., *et al.*, JAERI-memo 3711, 7 p. (1969)
- 69-R-219 Estimation of burn-up from γ -ray energy spectrum of fission products [J]
Koyama K., *et al.*, JAERI-memo 3754, 79 p. (1969)
- 69-R-220 The code FP- γ for the evaluation of gamma-ray spectrum of fission products [J]
Sasamoto N., *et al.*, JAERI-memo 3776, 31 p. (1969)
- 69-R-221 Fundamental study on thermal reactor physics problems by pulsed neutron technique [J]
Kaneko Y., JAERI-memo 3777, 80 p. (1969)

- 69-R-222 Input noise source to the cross power spectral density of at-power reactor noise [J]
Saito K., *et al.*, JAERI-memo 3787, 14 p. (1969)
- 69-R-223 Theoretical analysis of the thermal neutron spectrum in light water poisoned by In and Cd [J]
Akino F., *et al.*, JAERI-memo 3813, 18 p. (1969)
- 69-R-224 Burnup characteristics and fuel management of fast power reactor [J]
Tomioka H., *et al.*, JAERI-memo 3822, 97 p. (1969)
- 69-R-225 Analysis of one-shot pulse experiment at fast reactor systems [E]
Hiraoka T., JAERI-memo 3835, 37 p. (1969)
- 70-R-226 Statistical model calculation of nuclear fission: STAF-PROGRAM [J]
Nakamura H.*, *et al.*, JAERI-memo 3853, 15 p. (1970)
- 70-R-227 Pulsed neutron experiments on FCA III-2 [J]
Nakano M., *et al.*, JAERI-memo 3868, 31 p. (1970)
- 70-R-228 Two-dimensional diffusion equation solved by modal perturbation method [J]
Saito R., JAERI-memo 3872, 17 p. (1970)
- 70-R-229 Experiment and analysis on the differential neutron spectrum [J]
Fast Reactor Phys. Lab. JAERI-memo 3875, 43 p. (1970)
- 70-R-230 A review of the total neutron cross section of carbon up to 2 MeV [E]
Nishimura K., *et al.*, JAERI-memo 3884, 21 p. (1970)
- 70-R-231 Critical experiment of FCA assembly I-5 (Appendix code for calculation of geometrical irregularity on core surface) [J]
Konishi T.*, *et al.*, JAERI-memo 3887, 56 p. (1970)
- 70-R-232 Critical experiments on FCA I-6 [J]
Nakano M., *et al.*, JAERI-memo 3891, 33 p. (1970)
- 70-R-233 Flux distribution measurement near strong absorber using vista method [J]
Takeuchi E.*, *et al.*, JAERI-memo 3893, 68 p. (1970)
- 70-R-234 Effect of photo-neutron on β of pressure tube type deuterium water reactor · 2 [J]
Kaneko Y., *et al.*, JAERI-memo 3966, 28 p. (1970)
- 70-R-235 Semi-experimental measurement of effective delayed neutron fraction of a fast reactor system by application of pulsed neutron technique [E]
Hiraoka T., *et al.*, JAERI-memo 4004, 17 p. (1970)
- 70-R-236 Experimental method for measurement of anisotropic neutron flux near resonance energy of 4.9 eV of Au-197 [J]
Kaneko Y., *et al.*, JAERI-memo 4018, 18 p. (1970)
- 70-R-237 Study of fast neutron spectrum with nuclear emulsion [J]
Nomoto S., JAERI-memo 4036, 67 p. (1970)

- 70-R-238 The analysis of the TCA void experiment using foamed polystyrene blocks [J]
Takeuchi E.*, *et al.*, JAERI-memo 4076, 45 p. (1970)
- 70-R-239 Effects of the scattering models to the lattice constants [J]
Tsuchihashi K., *et al.*, JAERI-memo 4078, 19 p. (1970)
- 70-R-240 Nuclear fuel balance calculation at JPDR [J]
Ezure H., *et al.*, JAERI-memo 4083, 125 p. (1970)
- 70-R-241 Pulsed neutron research in Japan (From 1965 to 1970) [E]
Kaneko Y., *et al.*, JAERI-memo 4109, 27 p. (1970)
- 70-R-242 Group structure and accuracy of group constants in the vicinity of 2.85 keV resonance
scattering of sodium [J]
Tone T., *et al.*, JAERI-memo 4110, 38 p. (1970)
- 70-R-243 Pu-239 fission product yields and their influence on fast reactor characteristics [J]
Hasegawa A., *et al.*, JAERI-memo 4165, 81 p. (1970)
- 70-R-244 Nuclear calculation method of the JMTR core [J]
Oyamada R., *et al.*, JAERI-memo 4180, 112 p. (1970)
- 70-R-245 Thermal neutron scattering from simple liquid metals [E]
Nakahara Y., JAERI-memo 4191, 84 p. (1970)
- 70-R-246 Estimation of fission product decay heat [J]
Sasamoto N., *et al.*, JAERI-memo 4205, 46 p. (1970)
- 70-R-247 An analysis of fast critical experiments and a revision of the JAERI-fast-set [J]
Takano H., *et al.*, JAERI-memo 4215, 68 p. (1970)
- 70-R-248 Analysis of flux measurement near strong absorber using vista method · 1 [J]
Takeuchi E.*, *et al.*, JAERI-memo 4238, 35 p. (1970)
- 70-R-249 Multi-group constants for fission product nuclides · 2 [J]
Tone T., *et al.*, JAERI-memo 4251, 208 p. (1970)

Books

- 70-B-359 Problems in reactor physics [J]
Sugi T., "Problems in reactor physics", GENSHI RYOKU KOSAI-KAI (Tokai), 198 p. (1970)

Radioisotopes and Radiation Applications

Journal Articles

- 69-J-219 Effect of agitation on radiation chemical reactions in involving chloral hydrate aqueous solutions [E]
Kawakami W., Isbin H.S.*, *AIChE J.*, **16** (No. 3), 502~505 (1970)
- 68-J-272 Gamma-irradiation on fermentation mashes consisting mainly of cane molasses [E]
Shibabe S., *et al.*, *Agrical. Biol. Chem. (Tokyo)*, **33** (No. 4), 473~479 (1969)
- 67-J-665 Production of chromium-51 by the Szilard-Chalmers process, applying the oxidation-leaching method [E]
Shibata N., *et al.*, *Atompraxis*, **15** (No. 1), 1~5 (1969)
- 68-J-439 Effects of solvent on the copolymerization of ethylene tetrafluoroethylene by Co-60 gamma radiation [E]
Hagiwara M., *et al.*, *Bull. Chem. Soc. Japan*, **42** (No. 12), 3380~3384 (1969)
- 69-J-220 An analytical method for determining rate constants using a periodical irradiation technique [E]
Kawakami W., Isbin H.S.*, *Can. J. Chem.*, **47** (No. 24), 4531~4535 (1969)
- 67-J-107 γ -irradiation effect of gamma-irradiation on the microflora of rice [E]
Ito H., Iizuka H., *Cereal Chem.*, **45**, 503~511 (1968)
- 69-J-385 Radiation-induced polycondensation of furfural [J]
Kaetsu I., *et al.*, *Chem. High Polymers (Tokyo)*, **27**, 763~768 (1970)
- 69-J-074 Effect of storage on microorganisms on gamma irradiated rice · 5 (Study on radio-pasteurization) [J]
Ito H., *et al.*, *Food Irradiation, Japan*, **4** (No. 1) 1~10 (1969)
- 69-J-295 Radiation dosimeter using peroxy radicals in irradiated polytetrafluoroethylene [E]
Tamura N., *et al.*, *Japan. J. Appl. Phys.*, **9** (No. 9), 1148~1153 (1970)
- 69-J-326 Effect of storage on microorganisms on gamma irradiated rice (Studies on the microorganisms of cereal grain · 10) [J]
Ito H., *et al.*, *J. Agricul. Chem. Soc. Japan*, **43** (No. 11), 773~779 (1969)
- 68-J-074 Structure and properties of polyethylene produced by γ -radiation polymerization in flow system [E]
Machi S., *J. Appl. Polymer Sci.*, **12**, 2639~2647 (1968)
- 69-J-066 Direct preparation of porous polyethylene filters by radiation polymerization of ethylene [E]
Okada M., *et al.*, *J. Appl. Polymer Sci.*, **13**, 2657~2663 (1969)
- 68-J-710 Radioisotope production by irradiation inside a cylindrical fuel element [J]
Nakamura H., *J. Atomic Energy Soc. Japan*, **11** (No. 9), 539~543 (1969)
- 69-J-075 Estimation of self-shielding effect for RI production [J]
Nakamura H., Yamabayashi H., *J. Atomic Energy Soc. Japan*, **12** (No. 1), 2~6 (1970)

- 69-J-102 Purity control of target materials for radioisotope production by activation technique [J]
Nakamura H., *et al.*, *J. Atomic Energy Soc. Japan*, **12** (No. 2), 67~73 (1970)
- 69-J-169 Gamma-ray self-absorption of ^{192}Ir radiographic source [J]
Enomoto S., *et al.*, *J. Atomic Energy Soc. Japan*, **12** (No. 4), 174~178 (1970)
- 69-J-222 Radiation-induced solid state polymerization in binary systems · 3 (Physical properties of glassy phase in polymeric systems) [E]
Kaetsu I., *et al.*, *J. Macromol. Sci., Chem.*, **A3** (No. 8), 1509~1524 (1969)
- 70-J-001 Radiation-induced solid-state polymerization in binary systems · 6 (Polymerization of vinyl compounds in the supercooled liquid phase) [E]
Nakase Y., *et al.*, *J. Macromol. Sci., Chem.*, **A3** (No. 8), 1525~1542 (1969)
- 68-J-541 Isolation of radioniobium from γ -irradiated molybdenum oxide [E]
Ueno K., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 4), 203~206 (1969)
- 69-J-165 Determination of activation cross section by gamma-ray spectrometry [E]
Ishikawa H., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 10), 587~590 (1969)
- 69-J-240 A study on the preparation of ^{35}S -labeled elementary sulfur [E]
Kase T., *et al.*, *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 4), 190~196 (1970)
- 70-J-113 A new target material for the production of I-131 [Short note] [E]
Shikata E., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 9), 481~483 (1970)
- 69-J-299 Determination of $^{14}\text{N}(n, 2n)^{13}\text{N}$ reaction cross section for 14.7 MeV neutrons [E]
Ishikawa H., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 10), 534~538 (1970)
- 67-J-588 The γ -ray induced copolymerization of ethylene and vinyl chloride in liquid carbon dioxide [E]
Hagiwara M., *et al.*, *J. Polymer Sci. A-1*, **7**, 513~523 (1969)
- 68-J-300 A kinetic study of γ -radiation induced polymerization of ethylene in the presence of acetylene [E]
Mitsui H., *et al.*, *J. Polymer Sci. A-1*, **7**, 2575~2586 (1969)
- 70-J-167 Bubble formation in radiation-induced grafting of styrene to polyethylene [E]
Machi S., Silverman J.*, *J. Polymer Sci. A-1*, **7**, 2737~2740 (1969)
- 69-J-064 Effect of hydrogen on the γ -radiation-induced polymerization of ethylene [E]
Mitsui H., *et al.*, *J. Polymer Sci. A-1*, **8**, 451~461 (1970)
- 69-J-328 Radiation-induced postpolymerization of trioxane in solid state · 2 (Kinetic study of radiation induced postpolymerization of trioxane in dry and high-vacuum system) [E]
Ishigaki I., *et al.*, *J. Polymer Sci. A-1*, **8**, 3061~3077 (1970)
- 69-J-278 Participation of an excited monomer in the propagation reaction of the γ -ray induced polymerization of ethylene [E]
Hagiwara M., *et al.*, *J. Polymer Sci. A-1*, **8**, 3303~3310 (1970)
- 67-J-726 Morphology of polyethylene crystals as polymerized by γ -radiation [E]
Toyota N.*, Machi S., *J. Polymer Sci. A-2*, **7**, 153~161 (1969)

- 69-J-040 Radiation induced polymerization of pentoxane in the solid state [E]
Nishii M., *et al.*, *J. Polymer Sci.*, **87**, 891~895 (1969)
- 69-J-290 A study of textures of polyethylene polymerized by γ -ray irradiation in gas phase [J]
Kuriyama I., *J. Soc. Fiber Sci. Technol., Japan*, **26** (No. 2), 66~73 (1970)
- 70-J-026 A new technique of target preparation [E]
Suzuki T., *et al.*, *Nucl. Instrum. Methods*, **87** (No. 2), 311~312 (1970)
- 68-J-612 Charge scavenging in non-polar liquid studied by electrical conductivity measurement [E]
Hayashi K., *et al.*, *Radiation Effects*, **1**, 109~116 (1969)
- 69-J-050 Surface materials used in the facilities for nuclear power and radioisotopes [J]
(γ radiation effects on paints)
Yasunaka H., Wadachi Y., *Radioisotopes (Tokyo)*, **18** (No. 8), 35~38 (1969)
- 69-J-123 Choice of activable tracer for spraying agricultural insecticides by helicopter [J]
Bando S., *et al.*, *Radioisotopes (Tokyo)*, **18** (No. 11), 488~493 (1969)
- 69-J-331 Determination of FWHM of full-energy peak by the use of a normal probability paper [J]
Ishikawa H., Shimizu M.*, *Radioisotopes (Tokyo)*, **19** (No. 7), 337~341 (1970)
- 70-J-174 Preparation of ^{31}Si from (n, p) reaction [J]
Bando S., *Radioisotopes (Tokyo)*, **19** (No. 10), 462~464 (1970)
- 70-J-155 Study of iodine and bromine in soil-plant system in relation to the "reclamation-
akagare" disease of lowland rice by means of RI-techniques [E]
Tensyo K., Yeh Ko-ling*, *Radioisotopes (Tokyo)*, **19** (No. 12), 574~579 (1970)
- 69-J-047 Electron spin resonance study of free radicals in the radiation grafting from irradiated polyethylene [E]
Seguchi T., Tamura N., *Repts. Progr. Polymer Phys. Japan*, **12**, 489~492 (1969)
- 69-J-004 Irradiation effects of polyvinyl capronate [E]
Kohdera K., Okada T., *Repts. Progr. Polymer Phys. Japan*, **12**, 501~504 (1969)
- 70-J-022 Differential thermal analysis of polyethylene obtained by radiation-induced polymerization [E]
Kuriyama I., *et al.*, *Repts. Progr. Polymer Phys. Japan*, **13**, 237~240 (1970)
- 70-J-021 On the single crystals of polyethylene prepared by γ -ray-induced polymerization [E]
Arai H., Kuriyama I., *Repts. Progr. Polymer Phys. Japan*, **13**, 487~490 (1970)
- 70-J-009 A study of the texture of polyethylene polymerized by α -ray irradiation in gas phase [E]
Hosoi M.*, *et al.*, *Repts. Progr. Polymer Phys. Japan*, **13**, 503~506 (1970)

Papers at Meetings

- 69-P-321 Radiation-initiated chlorination of 1, 2-dichloroethane [E]
Danno A., *et al.*,
"Large Radiation Sources for Industrial Processes" IAEA-SM-123/2, 3~19 (1969)

- 69-P-414 Solid-state polymerization: radiation-induced solid-state polymerization of trioxane [E]
Hayashi K.*, *et al.*,
"Large Radiation Sources for Industrial Processes" IAEA-SM-123/16, 215~232 (1969)
- 70-P-181 Radiation-induced grafting of styrene to polyethylene [E]
Machi S., Silverman J.*,
"Large Radiation Sources for Industrial Processes" IAEA-SM-123/24, 341~352 (1969)
- 69-P-149 Aircraft inspection by ^{192}Ir and ^{170}Tm gamma-ray radiography [E]
Kobayashi M., *et al.*,
6th Intern. Conf. Nondestructive Testing, June 1970, Hannover (preprint of session) F7 77~86
- 68-P-948 Design of production facilities at the radioisotope production laboratory, Japan Atomic Energy Research Institute · 8 (Cell for P-32 production) [J]
Shibata N., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/F-1
- 68-P-947 Design of production facilities of the radioisotope production laboratory, Japan Atomic Energy Research Institute · 9 (Production facility of I-131) [J]
Shibata N., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/F-2
- 69-P-410 Studies on the measurement of the heavy water concentration by the application of fast neutrons slowing down method [J]
Tone H., Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), A/M-11
- 68-P-946 Absolute measurement of Tc-99m [J]
Shibata N., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/M-19
- 68-P-954 Development in the production techniques of bromine-82 [J]
Shibata N., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/P-1
- 68-P-953 The technical problems on the routine production of Cr-51 in a high specific activity utilizing the Szilard-Chalmers method [J]
Sibata N., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/P-2
- 68-P-952 The routine production of copper-64 in a high specific activity utilizing the Szilard-Chalmers method [J]
Shibata N., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/P-3
- 68-P-951 Production of Tc-99m from irradiated MoO_3 of low specific activity [J]
Shibata N., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/P-4
- 68-P-950 Catalytic synthesis of carbon-14 labelled benzene under high pressure [J]
Shibata N., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/P-5
- 68-P-949 Chemical behavior of recoil atoms produced by low temperature irradiation [J]
Yeh Si Jung*, *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/P-7
- 68-P-965 Radiation grafting of hydrophilic monomers to polyester fibers [J]
Okada T., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/RC-6

- 69-P-073 Studies on graft-initiating radicals in the radiation grafting from irradiated polyethylene [J]
Seguchi T., Tamura N., Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/RC-7
- 68-P-637 Accelerative effect of acetylene on the γ -radiation induced cross-linking of polyethylene [J]
Mitsui H., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), A/RC-8
- 69-P-407 Development of portable X-ray fluorescence analyzer with solid state detector [J]
Tominaga H., Enomoto S., Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(1)-4
- 69-P-408 Activable tracer study of distribution of insecticide sprayed from a helicopter [J]
Kobayashi M., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(3)-4
- 69-P-409 Calibration curves in gamma-gamma logging [J]
Wada N., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(4)-1
- 69-P-406 The use of solid state detector in radioisotope X-ray fluorescence analysis for uranium concentration determination [J]
Enomoto S., Tominaga H., Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(4)-5
- 68-P-720 Nature of the growing chain radicals in the ethylene polymerization induced by γ -ray or by 2, 2-azobisisobutyronitrile [J]
Hagiwara M., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), B/(6)-1
- 68-P-721 γ -ray induced solution copolymerizations of ethylene with halogenated vinyl monomers [J]
Hagiwara M., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), B/(6)-2
- 68-P-723 Pilot plant study of radiation induced polymerization of ethylene · 1 (Radiation induced polymerization of ethylene by wet wall process) [J]
Takehisa M., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(6)-4
- 68-P-722 Pilot plant study of radiation induced polymerization of ethylene · 2 (Physical properties of polyethylene produced by wet wall process) [J]
Takehisa M., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(6)-5
- 68-P-724 Radiation-induced polymerization of trioxane [J]
Ito A., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(6)-6
- 68-P-725 Pilot scale studies of radiation-induced polymerization of trioxane [J]
Ito A., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(6)-7
- 68-P-726 Acetylation of polyoxymethylene prepared by radiation-induced polymerization of trioxane [J]
Ito A., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(6)-8
- 68-P-727 Physical properties of polyoxymethylene prepared by post polymerization of trioxane [J]
Ito A., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(6)-9
- 68-P-957 Radiation curing of diallylphthalate prepolymer/vinyl-monomer mixture [J]
Gotoda M., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo 1969), B/(6)-10
- 68-P-958 Radiation curing of diallylphthalate prepolymer/monomer mixture [J]
Gotoda M., *et al.*, Proc. 9th Conf. Radioisotopes, Japan (Tokyo, 1969), B/(12)-4

Reports

- 70-R-250 3 MeV 15 kW electron beam generator at Takasaki Research Establishment [J]
Oshima Y., *et al.*, JAERI 1190, 29 p. (1970)
- 70-R-251 Radioisotope production from fission products (A literature search) [J]
Amano H., JAERI 4051, 33 p. (1970)
- 69-R-252 Annual report of Division of Radioisotope Production · No. 1 (April 1967~March 1968) [J]
Div. Radioisotope Production, JAERI 5020, 87 p. (1969)
- 69-R-253 Annual report of Osaka Laboratory for radiation chemistry · No. 2 (April 1968~March 1969) [J]
Osaka Lab., JAERI 5022, 198 p. (1969)
- 69-R-254 Annual report of Division of Radioisotope Production · No. 2 (April 1968~March 1969) [J]
Div. Radioisotope Production, JAERI 5023, 77 p. (1969)
- 70-R-255 Annual report of Osaka Laboratory for radiation chemistry · No. 3 (April 1969~March 1970) [J]
Osaka Lab., JAERI 5026, 171 p. (1970)
- 69-R-256 Magnification effect on ^{192}Ir radiography examined by using optical transfer function [J]
Maeda S., *et al.*, JAERI-memo 3425, 12 p. (1969)
- 69-R-257 Radiographic inspection of aircraft jet engines (JT3D type and JT8D type) by using ^{192}Ir γ -ray source [J]
Kobayashi M., *et al.*, JAERI-memo 3426, 46 p. (1969)
- 69-R-258 Optical transfer function in ^{192}Ir radiography [J]
Maeda S., *et al.*, JAERI-memo 3429, 19 p. (1969)
- 69-R-259 Impurities in processed radioisotopes produced by (n, γ) reaction (Purities of ^{153}Sm and ^{90}Y) [J]
Kubota M., *et al.*, JAERI-memo 3545, 12 p. (1969)
- 69-R-260 Determination of radioactive impurities in the Ca-45 sample produced by the (n, γ) reaction [J]
Takahashi S. *et al.*, JAERI-memo 3579, 20 p. (1969)
- 69-R-261 Minimum detectable limit of activable tracer [J]
Tominaga H., JAERI-memo 3654, 21 p. (1969)
- 69-R-262 Aircraft engine inspections by iridium γ -ray radiography [E]
Kobayashi M., *et al.*, JAERI-memo 3698, 12 p. (1969)
- 69-R-263 The measurement of ground density using the depth type gamma scattering density meter [J]
Appl. and Develop. Sec., JAERI-memo 3741, 36 p. (1969)
- 69-R-264 Investigation on the preparation technique of $^{90}\text{SrTiO}_3$ thermal sources [J]
Appl. and Develop. Sec., JAERI-memo 3760, 12 p. (1969)
- 69-R-265 Chemical reactions by reactor radiation · 4 (Nitrous oxide dosimeter) [J]
Ikezoe Y., *et al.*, JAERI-memo 3780, 26 p. (1969)

- 69-R-266 Studies on fundamental properties of alumina adsorbent for radioisotope production [J]
Amano H., *et al.*, JAERI-memo 3778, 20 p. (1969)
- 69-R-267 Study on fabrication of ^{170}Tm radiography source by using a research reactor JRR-2 [J]
Maeda S., *et al.*, JAERI-memo 3795, 16 p. (1969)
- 69-R-268 Impurities in processed radioisotopes produced by the (n, γ) reaction (Purity of ^{177}Lu) [J]
Kubota M., *et al.*, JAERI-memo 3808, 13 p. (1969)
- 69-R-269 Preparation of ^{35}S -labelled elementary sulfur [J]
Kase T., *et al.*, JAERI-memo 3814, 22 p. (1969)
- 69-R-270 Examination of the target materials for ^{75}Se production [J]
Tachimori S., *et al.*, JAERI-memo 3823, 19 p. (1969)
- 69-R-271 The production of $^{99\text{m}}\text{Tc}$ [J]
Tachimori S., *et al.*, JAERI-memo 3824, 29 p. (1969)
- 69-R-272 Impurities in processed radioisotopes produced by the (n, γ) reaction (Purity of ^{141}Ce) [J]
Kubota M., *et al.*, JAERI-memo 3831, 15 p. (1969)
- 70-R-273 In-pile tests on low temperature fissionochemical loop · 1 [J]
Danno A., *et al.*, JAERI-memo 3852, 29 p. (1970)
- 69-R-274 Impurities in processed radioisotopes produced by the (n, γ) reaction (Purity of ^{166}Ho) [J]
Kubota M., *et al.*, JAERI-memo 3889, 14 p. (1970)
- 69-R-275 Impurities in processed radioisotopes produced by the (n, γ) reaction (Purity of ^{152}Eu) [J]
Kubota M., *et al.*, JAERI-memo 3890, 27 p. (1970)
- 70-R-276 A study on the production of carbon-14 · 1 (Determination of impurities in aluminium nitride-target and its stability against reactor irradiation) [J]
Hata K., *et al.*, JAERI-memo 3897, 21 p. (1970)
- 70-R-277 Production of mercury-197, 203 · 1 (Development of irradiation techniques) [J]
Yamabayashi H., *et al.*, JAERI-memo 3939, 28 p. (1970)
- 69-R-278 Impurities in processed radioisotopes produced by the (n, γ) reaction (Purities of ^{140}La and ^{170}Tm) [J]
Kubota M., *et al.*, JAERI-memo 3955, 20 p. (1970)
- 70-R-279 Development of irradiation technics · 1 (Depth dose distribution by electron beam irradiation) [J]
Ohshima Y., *et al.*, JAERI-memo 4001, 18 p. (1970)
- 70-R-280 Statistical error of peak area determination by polynomial fit method and a computer code [J]
Dojyo M.*, JAERI-memo 4017, 27 p. (1970)
- 70-R-281 Computer data processing of a large number of samples in activable tracer measurements [J]
Tanaka M., *et al.*, JAERI-memo 4039, 37 p. (1970)
- 70-R-282 Direct preparation of porous polyethylene filters by radiation polymerization of ethylene [J]
Okada M., *et al.*, JAERI-memo 4049, 6 p. (1970)

- 70-R-283 Developments and applications of radioisotope power generator in the world [J]
Appl. and Develop. Sec., JAERI-memo 4079, 45 p. (1970)
- 70-R-284 Development of irradiation technics · 2 (Dosimetry of large radiation sources by
polymethylmethacrylate) [J]
Tanaka R., *et al.*, JAERI-memo 4121, 21 p. (1970)
- 70-R-285 Study on the radiation-induced chain crosslinking and crosslinking polymerization [J]
Kagiya T., *et al.*, JAERI-memo 4147, 118 p. (1970)
- 70-R-286 Non-destructive testing of aircrafts by radioisotopes [J]
Appl. and Develop. Sec. JAERI-memo 4163, 153 p. (1970)
- 70-R-287 Production of mercury-197, 203 · 2 (Development of production techniques) [J]
Yamabayashi H., *et al.*, JAERI-memo 4220, 42 p. (1970)
- 69-R-129 Graft-copolymerization of hydrophylic monomers to polyester fibers [J]
Sakurada I., Okada T.,
Annual Report of the Research Institute for Chemical Fibers, Japan, 26, 13~30 (1969)

Health Physics

Journal Articles

- 70-J-062 Sterilization of laboratory animal diets by gamma radiation · 1 (Breeding of barrier-sustained animals with irradiated diets) [J]
Iwado S.*, *et al.*, *Experimental Animals (Tokyo)*, **19** (No. 2, 3), 77~81 (1970)
- 67-J-316 Day-to-day variation of dietary intake and urinary excretion of fallout ¹³⁷Cs and stable K in man [E]
Fujita M., *et al.*, *Health Phys.*, **16**, 185~195 (1969)
- 68-J-172 Variation of strontium-calcium observed ratio (urine/diet) in man [E]
Fujita M., *et al.*, *Health Phys.*, **16**, 441~447 (1969)
- 68-J-168 A proportional counter for personnel neutron dosimetry [E]
Yoshida Y., Dennis J. A.*, *Health Phys.*, **16**, 727~734 (1969)
- 68-J-114 Correlation between ingestion, accumulation and excretion of fallout ⁹⁰Sr in man on a long-term scale [E]
Fujita M., *et al.*, *Health Phys.*, **17**, 41~50 (1969)
- 68-J-881 Assessment of gamma-exposure due to a radioactive cloud released from a point source [E]
Imai K., Iijima T., *Health Phys.*, **18**, 207~216 (1970)
- 68-J-368 Influence of natural radioactivities for monitoring of liquid effluent by a continuous monitor [Note] [J]
Yoshida Y., *et al.*, *J. Atomic Energy Soc. Japan*, **10** (No. 12), 684 (1968)
- 68-J-756 The role of environmental monitors at the reactor accident [J]
Ito N., *J. Atomic Energy Soc. Japan*, **11** (No. 9), 544~549 (1969)
- 69-J-302 Flocculation treatment of radioactive contaminated sea water · 1 (Experimental studies on flocculants) [J]
Sakurai A., *et al.*, *J. Atomic Energy Soc. Japan*, **12** (No. 6), 317~321 (1970)
- 69-J-011 Performance of two types of gas mask cartridges for removal of airborne radioiodine [J]
Naritomi M., Fukuda S., *J. Japan Health Phys. Soc.*, **4**, 502~508 (1969)
- 69-J-076 An application of the lognormal and Rosin-Rammler functions to the radioactive surface contamination data in the controlled working areas [J]
Matsui H., *J. Japan Health Phys. Soc.*, **4**, 544~549 (1969)
- 69-J-114 Determination of ²³⁹Pu [Note] [J]
Wadachi Y., *J. Japan Health Phys. Soc.*, **4**, 556~557 (1969)
- 69-J-198 Method for assessing neutron dose equivalent rate in operational health physics [J]
Minami K., *et al.*, *J. Japan Health Phys. Soc.*, **5**, 1~11 (1970)
- 69-J-373 Direct estimation method of radioactive contamination of ground surface in emergency situations [J]
Moriuchi S., *J. Japan Health Phys. Soc.*, **5**, 55~61 (1970)

- 69-J-384 A study on the characteristics of some personal air samplers [J]
Ohata T., *et al.*, *J. Japan Health Phys. Soc.*, **5**, 63~68 (1970)
- 70-J-089 Environmental monitoring by measurement of activities in environmental materials [J]
Kasai A., *J. Japan Health Phys. Soc.*, **5**, 89~95 (1970)
- 70-J-119 Monitoring for internal exposure · 2 (Experience in the control of personal exposure
at JAERI and problems for solution) [J]
Yabe A., *J. Japan Health Phys. Soc.*, **5**, 145~149 (1970)
- 70-J-176 Autoradiographic analysis of plutonium contamination on pig skin · 2 [J]
Tashiro S., *J. Japan Health Phys. Soc.*, **5**, 187~193 (1970)
- 70-J-149 Solidification in bottle of plutonium liquid wastes [J]
Aikawa H., *et al.*, *J. Japan Health Phys. Soc.*, **5**, 199~203 (1970)
- 68-J-096 Determination of plutonium in blood by anion exchange method [E]
Akaishi J., *J. Nucl. Sci. Technol. (Tokyo)*, **6** (No. 1), 12~19 (1969)
- 69-J-194 Studies on the gamma-ray exposures in environment due to an argon 41 cloud from
a nuclear reactor [E]
Kadokawa M., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 1), 34~40 (1970)
- 69-J-171 Performance of an improved air sample for collecting airborne radioiodine [E]
Fukuda S., Naritomi M., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 9), 450~457 (1970)
- 68-J-243 Retention, excretion and blood concentration of ¹³⁷Cs by rat as influenced by starvation [E]
Fujita M., *et al.*, *J. Radiation Res. (Japan)*, **9** (No. 3-4), 129~134 (1968)
- 69-J-372 Effects of carrier on the retention, excretion and distribution of Ce-144 in the rat [E]
Takada K., *et al.*, *J. Radiation Res. (Japan)*, **11** (No. 1), 24~31 (1970)
- 69-J-182 On the uptake of ⁶⁵Zn and concentration factor of Zn in marine organisms · 2
(Changes in Zn and ⁶⁵Zn concentration in rearing water) [E]
Kameda K., *et al.*, *J. Radiation Res. (Japan)*, **11** (No. 1), 44~52 (1970)
- 69-J-371 Removal of tripalmitin-¹⁴C from cotton cloth [E]
Takada K., *et al.*, *Radioisotops (Tokyo)*, **19** (No. 5), 253~255 (1970)

Papers at Meetings

- 68-P-191 A wide range personnel neutron dosimeter based on a proportional counter [E]
Delafield H. J.*, *et al.*,
Conf. on Nucleonic Instrumentation, IEE Conference Publication No. 47, 223~228
- 68-P-628 Monitoring of the working environment: purpose, accuracy required and interpretation of results [E]
Ishihara T., Yoshida Y., Regional Seminar for Asia and Far East on Radiation Protection
Monitoring, Bombay 1968, STI-Pab-199

- 70-P-462 Radioactive wastes treatment in Tokai Research Establishment of the Japan
Atomic Energy Research Institute [E]
Wadachi Y., *et al.*, "Management of Low- and Intermediate-Level Radioactive Wastes"
IAEA-SM-137/25, 313~322 (1970)

Reports

- 69-R-288 Calculation of primary energy transfer and effective inactivation cross section of
biological targets for heavy charged particles based on microdose concept [E]
Numakunai T., *et al.*, JAERI 1179, 25 p. (1969)
- 69-R-289 Calculation survival rates and effective inactivation cross sections of targets for
heavy charged particles based on microdose concept [E]
Numakunai T., *et al.*, JAERI 1180, 12 p. (1969)
- 70-R-290 Graphic aid in the assessment of gamma-exposure due to a radioactive cloud released
from a point source [J]
Imai K., *et al.*, JAERI 1189, 43 p. (1970)
- 69-R-291 Removal of deposited plutonium from body by chelating agents [Review] [J]
Iwamoto J., *et al.*, JAERI 4048, 61 p. (1969)
- 70-R-292 Nuclear accident in nuclear installations [Survey report] [J]
Onishi T.*, *et al.*, JAERI 4052, 203 p. (1970)
- 69-R-293 Activities in the Division of Health Physics and Safety · No. 11 [J]
Div. Health Phys. and Safety JAERI 5021, 144 p. (1969)
- 70-R-294 Health physics and safety at Oarai Research Establishment · No. 2 [J]
Sec. Health Phys. and Safety JAERI 5024, 52 p. (1970)
- 70-R-295 Activities in the Division of Health Physics and Safety · No. 12 [J]
Div. Health Phys. and Safety JAERI 5025, 104 p. (1970)
- 69-R-296 Radiation control of the personnel working for the inspection of JPDR pressure vessel [J]
Kokubu M., *et al.*, JAERI-memo 3353, 25 p. (1969)
- 69-R-297 A report of the oceanographic investigation off-Tokai-mura in 1967 [J]
Tanigawa Y., *et al.*, JAERI-memo 3384, 58 p. (1969)
- 69-R-298 Some problems associated with the calibration of GM-tube using β -ray sources covered
with an aluminum absorber [J]
Okuyama N., *et al.*, JAERI-memo 3393, 13 p. (1969)
- 69-R-299 Quarterly report of the radiation control · 19 [J]
Health Phys. Adimin. Sec., JAERI-memo 3395, 35 p. (1969)
- 69-R-300 Performance of RI protective clothes-monitor employed at Oarai Research Establishment, JAERI [J]
Mito N., *et al.*, JAERI-memo 3402, 41 p. (1969)

- 69-R-301 Health physics and safety quarterly report · 6 (J)
Health Phys. and Safety Sec., JAERI-memo 3412, 15 p. (1969)
- 69-R-302 Hazard analysis for failure of the heat exchanger of JRR-2 (J)
Nakato K., JAERI-memo 3424, 27 p. (1969)
- 69-R-303 Meteorological statistics for long period continuous release of gaseous waste and
annual mean ground level concentration (J)
Imai K., *et al.*, JAERI-memo 3465, 48 p. (1969)
- 69-R-304 Performance of the large and window type GM tubes containing halogen quenching gas (J)
Okuyama N., *et al.*, JAERI-memo 3469, 23 p. (1969)
- 69-R-305 Performance for the large flat-box type 2π gas flow counter (J)
Yamada N., *et al.*, JAERI-memo 3470, 15 p. (1969)
- 69-R-306 Radiation protection of X-ray diffraction apparatus (J)
Nishi T., *et al.*, JAERI-memo 3471, 29 p. (1969)
- 69-R-307 Quarterly report of the radiation control · 20 (J)
Health Phys. Admin. Sec., JAERI-memo 3524, 38 p. (1969)
- 69-R-308 Oceanographical data · 21 (J)
Environmental Survey Sec., JAERI-memo 3525, 72 p. (1969)
- 69-R-309 Annual report of meteorological data at Oarai-site: 1968 (J)
Hayashi T., *et al.*, JAERI-memo 3562, 68 p. (1969)
- 69-R-310 Evaluation of surface absorbed dose from β -rays (J)
Bingo K., *et al.*, JAERI-memo 3591, 35 p. (1969)
- 69-R-311 Personal monitoring manual at Oarai Research Establishment (J)
Health Phys. and Safety Sec., JAERI-memo 3633, 32 p. (1969)
- 69-R-312 Annual report of meteorological data at Tokai-site (J)
Hayashi T., *et al.*, JAERI-memo 3684, 66 p. (1969)
- 69-R-313 Quarterly report of the radiation control · 21 (J)
Health Phys. Admin. Sec., JAERI-memo 3687, 38 p. (1969)
- 69-R-314 Quarterly report of health and safety at Oarai Research Establishment · 7 (J)
Health Phys. and Safety Sec., JAERI-memo 3688, 17 p. (1969)
- 69-R-315 Studies on accumulation of radioactive materials on fishing-nets · 1 (Concerning the
evaluation of external exposure due to coastal discharge of radioactive liquid wastes) (J)
Ichikawa F., *et al.*, JAERI-memo 3710, 17 p. (1969)
- 69-R-316 Technique for determining the activity and size distribution of β emitting particles
by autoradiography (J)
Matsui H., *et al.*, JAERI-memo 3718, 18 p. (1969)

- 69-R-317 Environmental monitoring and discharge of radioactive waste to sea in the United Kingdom (Dr. H. J. Dunster's lectures at Tokai Research Establishment) [J]
Environmental Survey Sec., JAERI-memo 3734, 71 p. (1969)
- 69-R-318 Examination of some extractions for determining radiocesium and radio-strontium in soil [J]
Kato K., *et al.*, JAERI-memo 3736, 47 p. (1969)
- 69-R-319 Manual of radiation safety and control of Oarai Research Establishment [J]
Oarai Research Establishment, JAERI-memo 3756, 50 p. (1969)
- 69-R-320 Quarterly report of health and safety at Oarai Research Establishment · 8 [J]
Health Phys. and Safety Sec., *et al.*, JAERI-memo 3779, 12 p. (1969)
- 69-R-321 Quarterly report of the radiation control · 22 [J]
Health Phys. Admin. Sec., JAERI-memo 3792, 38 p. (1969)
- 69-R-322 Guide for radiation protection in controlled area [E]
Div. Health Phys. and Safety., JAERI-memo 3821, 15 p. (1969)
- 69-R-323 Data of measurement of the radioactive in the environment samples around the site of Tokai Research Establishment JAERI from 1956 to 1969 [J]
Yanase Y., JAERI-memo 3827, 34 p. (1969)
- 70-R-324 Autoradiographic methods for determining size of plutonium particles (Literature survey) [J]
Murata M., *et al.*, JAERI-memo 3855, 40 p. (1970)
- 70-R-325 Quarterly report of the radiation control · 23 [J]
Health Phys. Admin. Sec., JAERI-memo 3874, 41 p. (1970)
- 70-R-326 Quarterly report of health and safety at Oarai Research Establishment · 9 [J]
Health Phys. and Safety Sec., *et al.*, JAERI-memo 3877, 19 p. (1970)
- 70-R-327 Manual of environmental monitoring at Oarai Research Establishment [J]
Health Phys. and Safety Sec., JAERI-memo 3952, 28 p. (1970)
- 70-R-328 Quarterly report of the radiation control · 24 [J]
Health Phys. Admin. Sec., JAERI-memo 3999, 38 p. (1970)
- 70-R-329 Quarterly report of health and safety at Oarai Research Establishment · 10 [J]
Health Phys. and Safety Sec., JAERI-memo 4010, 30 p. (1970)
- 70-R-330 Calculation of population-time-integrated concentration around Oarai site, JAERI (A tentative approach to the "site index") [J]
Kakuta M., JAERI-memo 4033, 20 p. (1970)
- 70-R-331 Treatment of low level solid wastes in Tokai Research Establishment of JAERI [J]
Hirayama K., JAERI-memo 4053, 39 p. (1970)
- 70-R-332 Characteristics of radioactive aerosol released by cutting of irradiated fuels [E]
Yamamoto H., *et al.*, JAERI-memo 4068, 8 p. (1970)

- 70-R-333 Oceanographical data • 22 (J)
Environmental Survey Sec., JAERI-memo 4069, 67 p. (1970)
- 70-R-334 Processing of radioactive liquid waste with ion exchange membrane method (An experimental investigation) (J)
Aikawa H., *et al.*, JAERI-memo 4080, 13 p. (1970)
- 70-R-335 Health physics and safety at Oarai Research Establishment (April 1969 to March 1970) (J)
Health Phys. and Safety Sec., JAERI-memo 4098, 81 p. (1970)
- 70-R-336 Quarterly report of health and safety at Oarai Research Establishment • 11 (J)
Health Phys. and Safety Sec., JAERI-memo 4112, 19 p. (1970)
- 70-R-337 Bibliography on wastes of plutonium (E)
Waste Disposal and Decontam. Sec., JAERI-memo 4153, 19 p. (1970)
- 70-R-338 Annual report of meteorological data at Tokai-site (J)
Owada T., *et al.*, JAERI-memo 4162, 32 p. (1970)
- 70-R-339 Environmental monitoring in JAERI (Tokai) and vicinities in 1969 (E)
Environmental Survey Sec., JAERI-memo 4175, 34 p. (1970)
- 70-R-340 Quarterly report of health and safety at Oarai Research Establishment • 12 (J)
Health Phys. and Safety Sec., JAERI-memo 4216, 26 p. (1970)
- 68-R-975 Assessment of ^{90}Sr in man by bioassay (J)
Fujita M., KURRI-TR-66, 61~63 (1969)
- 68-R-916 The role of whole body counting with bioassay in the assessment of body activity (J)
Yabe A., KURRI-TR-66, 64~73 (1969)
- 68-R-915 Some examples of the measurements about internal contamination in JAERI (J)
Yabe A., KURRI-TR-66, 74~82 (1969)
- 68-R-914 Some problems on the sampling and analysis of bioassay sampler (J)
Akaishi J., KURRI-TR-66, 83~92 (1969)
- 69-R-044 Effective permissible concentration of radioactive gas produced by high energy accelerator (J)
Kato K., Doke T*, SJC-A-68-7, 19 p. (1969)
- 70-R-272 On the oceanographic observation, current measurement and oceanic diffusion (J)
Fukuda M., Research on the Release of Low Level Radioactive Materials into the Sea,
GENANKYO-22

Engineering in General

Journal Articles

- 68-J-171 Some applications of fixation of photoelastic-fringe patterns by gamma rays [E]
Miyazono S., *Experimental Mechanics*, **9** (No. 10), 473~477 (1969)
- 69-J-019 Thermal resistance of thin gas gap under variable vacuum pressure; its characteristics and applications [J]
Hayashi T., Kudoh M., *J. Japan Soc. Mech. Engrs.*, **73**, 937~945 (1969)
- 70-J-066 Angular information in a gridded chamber and its application [Short note] [E]
Mizuho M., *J. Nucl. Sci. Technol. (Tokyo)*, **7** (No. 9), 476~478 (1970)
- 68-J-365 A leading-edge time pickoff circuit [E]
Kinbara S., Kumahara T., *Nucl. Instrum. Methods*, **67**, 261~266 (1969)
- 68-J-692 A general purpose pulse shape discriminating circuit [E]
Kinbara S., Kumahara T., *Nucl. Instrum. Methods*, **70**, 173~182 (1969)
- 68-J-760 A beam monochromatation system for bunched beam [E]
Okubo M., *Nucl. Instrum. Methods*, **74**, 233~235 (1969)
- 70-J-018 Spectrum measurements of intermediate energy neutrons by an organic scintillator [E]
Furuta Y., *et al.*, *Nucl. Instrum. Methods*, **84**, 269~274 (1970)
- 70-J-124 Resolving time measurement of Geiger counters using a time analyzer [E]
Tojo T., Nakajima T., *Nucl. Instrum. Methods*, **89**, 39~44 (1970)
- 70-J-091 Angle information with a gridded ionization chamber and its applications [E]
Mizuho M., Noguchi M., *Nucl. Instrum. Methods*, **89**, 101~107 (1970)
- 68-J-879 Technique of the pulse-height analysis [J]
Kinbara S., *Radioisotopes (Tokyo)*, **17** (No. 10), 502~504 (1968)
- 68-J-532 Determination of detection efficiencies of NaI scintillation detectors for gamma-ray sources distributed in water [J]
Moriuchi S., Matsushita K., *Radioisotopes (Tokyo)*, **18** (No. 1), 1~7 (1969)
- 70-J-161 Transient response of finned tube-sheet radiation for space power plant [E]
Okamoto Y., Negishi K.*, *Trans. Japan Soc. Aero. Space Sci.*, **12** (No. 21), 73~79 (1970)
- 68-J-671 Analysis of U-shaped bellows (Bellows subjected to mechanical load and/or internal pressure) [J]
Miyazono S., Sakamoto F., *Trans. Japan Soc. Mech. Engrs.*, **35** (No. 203), 185~188 (1969)

- 68-J-218 Fixation of photoelastic fringe patterns by gamma-rays · 4 (Dependence on temperature of the amount of residual fringe patterns and an experiment to fix the thermal stress) [J]
Miyazono S., Sakamoto F., *Trans. Japan Soc. Mech. Engrs.*, **35** (No. 269), 31~39 (1969)

Papers at Meetings

- 68-P-154 New types of the pulse-shape discriminating circuit [E]
Kinbara S., Kumahara T.,
Intern. Symp. on Nuclear Electronics, Versailles 1968, Scintillators and Photomultipliers No. 54
- 70-P-105 The alpha-gamma cell of Japan Atomic Energy Research Institute [E]
Yoshida H., Matsushima H.,
Proc. 17th Conf. on Remote Systems Technol., San Francisco 1969, 80~86

Reports

- 69-R-341 JAERI nuclear instrument module system · 3 [J]
Kinbara S., *et al.*, JAERI-memo 3375, 42 p. (1969)
- 69-R-342 JAERI nuclear instrument module system · 4 [J]
Kinbara S., *et al.*, JAERI-memo 3376, 44 p. (1969)
- 69-R-343 Electronics section technical report · 15 [J]
Electronics Workshop Sec., JAERI-memo 3377, 91 p. (1969)
- 69-R-344 Forced convection boiling heat transfer experiments with water and freon 113 [J]
Shiba M., *et al.*, JAERI-memo 3379, 34 p. (1969)
- 69-R-345 Remotely of the equipment on surface area measurements [J]
Ouchi M., *et al.*, JAERI-memo 3449, 21 p. (1969)
- 69-R-346 Theories and their applications of electromagnetic method in liquid flow rate-measurement [J]
Hayashi T., JAERI-memo 3536, 86 p. (1969)
- 69-R-347 JAERI nuclear instrument module system · 5 [J]
Electronics Workshop Sec., JAERI-memo 3605, 87 p. (1969)
- 69-R-348 Neutron flux measurement using a self-powered detector [J]
Tojo T., *et al.*, JAERI-memo 3612, 18 p. (1969)
- 69-R-349 Counting channel for use with gas flow proportional counter · 2 [J]
Mizuho M., JAERI-memo 3725, 18 p. (1969)
- 69-R-350 JAERI nuclear instrument module system (Standardized part) [J]
Electronics Workshop Sec., JAERI-memo 3768, 46 p. (1969)
- 70-R-351 Improvement of the B & L remote control microscope [J]
Ohuchi M., *et al.*, JAERI-memo 4008, 23 p. (1970)

Other Fields

Journal Articles

- 68-J-591 Computer-based preparation of indexes and statistics on literature in Japan [J]
Furuya M., *Dokumentasyon Kenkyu (Tokyo)*, 19 (No. 2), 37~43 (1969)
- 70-J-016 Tracing of the oral representations at an annual meeting of the society [J]
Furuya M., *J. Atomic Energy Soc. Japan*, 12 (No. 7), 406~409 (1970)
- 68-J-057 Symbolic manipulation for numerical computation [J]
Ishiguro M., *J. Information Processing Soc. Japan*, 10 (No. 2), 111~114 (1969)
- 68-J-679 Problems on conversion programs for FORTRAN languages [J]
Asai K., *J. Information Processing Soc. Japan*, 10 (No. 4), 235~239 (1969)
- 69-J-116 SPM: A pseudo machine for string processing [J]
Asai K. *et al.*, *J. Information Processing Soc. Japan*, 11 (No. 1), 11~19 (1970)

Papers at Meetings

- 68-P-407 FLIP-III FORTRAN list processor with page memory [J]
Nakamura Y., *Proc. Programming Symp., Japan (Hakone, 1969)*, E-72~E-88
- 69-P-286 Polynomial manipulation and polynomial factorization [J]
Ishiguro M., *Proc. Programming Symp., Japan (Hakone, 1970)*, D-60~D-73

Reports

- 69-R-352 Bibliography for thermal neutron scattering (second edition) [E]
The Thermalization Group, Japanese Nuclear Data Committee JAERI 4043, 52 p. (1969)
- 69-R-353 Collected drawings on radioactive waste treatment facility in Tokai Research Establishment [J]
Ed. Hirayama K., JAERI 4049, 61 p. (1969)
- 69-R-354 Irradiation experience of small samples in the reactor JRR-2 [J]
Yamamoto A., *et al.*, JAERI-memo 3473, 38 p. (1969)
- 69-R-355 Power increasing plan of JAERI LINAC [J]
Linac Laboratory, JAERI-memo 3567, 58 p. (1969)
- 69-R-356 String processing machine SPM: a fortran program for string processing [J]
Asai K., *et al.*, JAERI-memo 3595, 68 p. (1969)
- 69-R-357 The observations and analysis of ground motion and nuclear structure response due to natural earthquakes [J]
Construction Sec., JAERI-memo 3784, 63 p. (1969)

- 70-R-358 Construction of the JRR-1
Div. of Research Reactor Operation, [J]
JAERI-memo 4002, 51 p. (1970)
- 70-R-359 PRECEDENCE: A computer program for precedence grammars [J]
Fujimura T., *et al.*, JAERI-memo 4003, 28 p. (1970)
- 70-R-360 Materials for planning of installation of a large tandem accelerator [J]
Nuclear Phys. Lab., JAERI-memo 4035, 114 p. (1970)
- 70-R-361 Precedence grammars with precedence functions [J]
Asai K., JAERI-memo 4168, 58 p. (1970)
- 70-R-362 Table of half-life, gamma-ray energy and intensity of radioisotopes [J]
Kumagai K., JAERI-memo 4189, 31 p. (1970)

Patents

British Patents

- Pat-Brit-52 Apparatus for detecting failures of nuclear fuel elements
Tone H., No. 1125938
- Pat-Brit-53 Reprocessing of spent uranium fuel by means of chlorination and fractional absorption by barium chloride
Ishihara T., *et al.*, No. 1135838
- Pat-Brit-54 An analogue to digital conversion system
Kumahara T., *et al.*, No. 1140074
- Pat-Brit-55 Apparatus for ion temperature measurement
Kawashima N., No. 1157147
- Pat-Brit-56 Steam generator or heater for an atomic power generation plant
Nozawa M., *et al.*, No. 1177533
- Pat-Brit-57 Method for determining a heat treatment temperature for carbon and graphite
Sato S., *et al.*, No. 1177139
- Pat-Brit-58 Process for recovering uranium as uranium dioxide
Ishimori T., *et al.*, No. 1188063
- Pat-Brit-59 Nuclear reactor
Nozawa M., *et al.*, No. 1202920
- Pat-Brit-60 Novel process for manufacturing polyethylene
Machi S., *et al.*, No. 1147727
- Pat-Brit-61 Method and apparatus for promoting chemical reactions by means of radioactive inert gases
Kasamatsu T., *et al.*, No. 1160405
- Pat-Brit-62 Process for modification of polyolefin materials
Araki K., *et al.*, No. 1173638
- Pat-Brit-63 An instrumented pneumatic capsule for irradiating in a nuclear reactor
Simozawa K., *et al.*, No. 1171415
- Pat-Brit-64 A method for pasteurizing biochemical engineering materials and for increasing the fermentation yield
Sibabe S., *et al.*, No. 1184514
- Pat-Brit-65 Polymerization of olefins
Kagiya T., *et al.*, No. 1183501

- Pat-Brit-66 Two stage radiation polymerization of ethylene
Mitsui A., *et al.*, No. 1183502
- Pat-Brit-67 A continuous process for producing powder polyethylene
Takehisa M., *et al.*, No. 1195878

Canadian Patents

- Pat-Can-7 Method and apparatus for promoting chemical reactions by means of radioactive inert gases
Kasamatsu T., *et al.*, No. 828736

French Patents

- Pat-F-62 Method for determining a heat treatment temperature for carbon and graphite
Sato S., *et al.*, No. 1534761
- Pat-F-63 Process for recovering uranium as uranium dioxide
Ishimori T., *et al.*, No. 1578775
- Pat-F-64 A method for pasteurizing biochemical engineering materials and for increasing the fermentation yield
Sibabe S., *et al.*, No. 1563347
- Pat-F-65 An instrumented pneumatic capsule for irradiating in a nuclear reactor
Simozawa K., *et al.*, No. 1567325
- Pat-F-66 Polymerization of olefins
Kagiya T., *et al.*, No. 1569569
- Pat-F-67 Two stage radiation polymerization of ethylene
Mitsui A., *et al.*, No. 1564487
- Pat-F-68 Method and apparatus for promoting chemical reactions by means of radioactive inert gases
Kasamatsu T., *et al.*, No. 1565342
- Pat-F-69 Powder polyethylene absorbent
Takehisa M., *et al.*, No. 1567220

German Patents

- Pat-G-18 Process for separating metals by use of the gradient multistage extraction method
Ishimori T., *et al.*, No. 1277812
- Pat-G-19 Magnetohydrodynamic generating system
Yano T., *et al.*, No. 1297750
- Pat-G-20 Symmetrical magnetic amplifier
Kawaguchi C., No. 1299330

- Pat-G-21 Apparatus for detecting failures of nuclear fuel elements
Tone H., No. 1514290
- Pat-G-22 Time analyzers for counting-rate change measurement
Amano N., *et al.*, No. 1200358
- Pat-G-23 Method and apparatus for promoting a chemical reaction by ionizing radiation
Kasamatsu T., No. 1285463
- Pat-G-24 Method for stabilizing polyoxymethylene
Ito A., *et al.*, No. 1301547

Italian Patents

- Pat-Ita-6 Method for producing polyoxymethylene
Ito A., *et al.*, No. 854945

Japanese Patents

- Pat-J-252 Capsule opener
Ōsugi M., *et al.*, No. 858146
- Pat-J-253 Capsule opener
Ōsugi M., *et al.*, No. 858147
- Pat-J-254 Tongue manipulator
Hayashi K., *et al.*, No. 860366
- Pat-J-255 Axial flow pump
Hayashi K., *et al.*, No. 860365
- Pat-J-256 Method for selecting particle by electromagnetic forces
Hori M., No. 533803
- Pat-J-257 Apparatus for plasma density measurement
Kawashima N., No. 533328
- Pat-J-258 Linear-channel-integration-feedback type reactor period meter
Kuwabara J., No. 535740
- Pat-J-259 Counter-current apparatus
Simokawa J., *et al.*, No. 535280
- Pat-J-260 Shutter of ventilator
Hayashi K., *et al.*, No. 863164
- Pat-J-261 Rotating irradiation capsule device using a bellow
Hayashi T., *et al.*, No. 538086

Pat-J-262	Reactor period meter with controlled time constant by zenor diodes Kuwabara J.,	No. 538087
Pat-J-263	Analog-digital converter Kumahara T., <i>et al.</i> ,	No. 538846
Pat-J-264	An irradiation method for a hydraulic rabbit facility in a reactor Ōuchi S., <i>et al.</i> ,	No. 539801
Pat-J-265	MHD alternating current power generator Yano S., <i>et al.</i> ,	No. 539802
Pat-J-266	Method of increase of heat flux in a liquid boiling cooled reactor Torikai K., <i>et al.</i> ,	No. 539803
Pat-J-267	The materials posting device for posting parts of hot cave or storage facilities Matsumoto T., <i>et al.</i> ,	No. 868092
Pat-J-268	Improvement of research reactor Sawai S.,	No. 868093
Pat-J-269	The method of sealing weld between a thin pipe and a metalplate Miyao J.,	No. 543263
Pat-J-270	Process for separation metals by use of the gradient multistage extraction method Ishimori T., <i>et al.</i> ,	No. 540753
Pat-J-271	Method of heat release of a reactor Torikai K.,	No. 541483
Pat-J-272	An improved method of determining the flow curve of high viscous or non-newtonian fluids Yamazaki Y.,	No. 543724
Pat-J-273	Non-equilibrium MHD generator Matsunaga S.,	No. 545093
Pat-J-274	Process of preparing chlorinated hydrocarbon Danno A., <i>et al.</i> ,	No. 541939
Pat-J-275	Holder to take in irradiated material from reactor experimental hole Sato H., <i>et al.</i> ,	No. 877656
Pat-J-276	Manufacturing method of a followed nuclear fuel rod Torikai K.,	No. 546474
Pat-J-277	Cold trap for liquid metal dump tank Furukawa K., <i>et al.</i> ,	No. 547864
Pat-J-278	Ejecting coolant reducer at loss of coolant accident Ishikawa M., <i>et al.</i> ,	No. 877973

Pat-J-279	Continuous dissolved oxygen analyzer Okashita H.,	No. 549495
Pat-J-280	Purification method of liquid metals Furukawa K., <i>et al.</i> ,	No. 549496
Pat-J-281	Method of reactor control Torikai K.,	No. 553964
Pat-J-282	Temperature control irradiation capsule device using the thermal resistance variations by vacuum control Hayashi T.,	No. 550219
Pat-J-283	Two-dimensional controlled reactor Kobayashi I., <i>et al.</i> ,	No. 550605
Pat-J-284	A self controlled heavy water reactor to be cooled by boiling light water Torikai K.,	No. 550604
Pat-J-285	Manufacturing method of xenon compound by neutron irradiation Kamemoto Y.,	No. 556833
Pat-J-286	Graphite electrode of electrolysis bath Ando Y., <i>et al.</i> ,	No. 886339
Pat-J-287	Disposal method of radioactive waste liquid by ion exchange membrane Sugimoto S., <i>et al.</i> ,	Nh. 560005
Pat-J-288	Nuclear fuel element type irradiation capsule Tanaka I., <i>et al.</i> ,	No. 560462
Pat-J-289	Method and apparatus for ion temperature measurement of streaming plasmas Kawashima N., <i>et al.</i> ,	No. 565780
Pat-J-290	Area-radiation monitor with emergency alarm using a photo multiplier Minami K., <i>et al.</i> ,	No. 563267
Pat-J-291	Method for producing radioactive tellurium Umezawa H., <i>et al.</i> ,	No. 563268
Pat-J-292	A plate with multi fine long holes Torikai K., <i>et al.</i> ,	No. 893364
Pat-J-293	Transport machine for hot cave Itakura A., <i>et al.</i> ,	No. 898386
Pat-J-294	Radiation detection equipment having a current to prevent suffocation phenomena Okuyama N. <i>et al.</i> ,	No. 572981
Pat-J-295	Neutron flux monitor Sato M., <i>et al.</i> ,	No. 903807

Pat-J-296	Log-channel-integration-feedback type reactor period meter Kuwabara J.,	No. 575152
Pat-J-297	Synthetic process of benzene from cyclohexanone Hoizumi K.,	No. 575153
Pat-J-298	Filter Kitani S., <i>et al.</i> ,	No. 606758
Pat-J-299	Sample charging device for vacuum fusion gas analyzer Hoshino A., <i>et al.</i> ,	No. 906730
Pat-J-300	Circuit of electric voltage-current conversion Kinbara S.,	No. 579395
Pat-J-301	A chamber current measuring method in the automatic reactor control system Furukawa Y. <i>et al.</i> ,	No. 579623
Pat-J-302	Fixation of uranium in TBP solution as solid oxalate Akatsu E.,	No. 582118
Pat-J-303	Concentration meter of boron by neutron multiplication Hirata J.,	No. 582119
Pat-J-304	Device for sealing coolant leaks through gaps between fuelling machine and nuclear reactor Kinoshita T., <i>et al.</i> ,	No. 582692
Pat-J-305	Separation of uranium isotopes by cation-ion exchangers Simokawa J., <i>et al.</i> ,	No. 582697
Pat-J-306	Heat exchanger Nozawa M., <i>et al.</i> ,	No. 582714
Pat-J-307	Method for evacuating the system gradually without losing powder sample Hoshino A., <i>et al.</i> ,	No. 583950
Pat-J-308	Method of pulse conversion Kinbara S.,	No. 583964
Pat-J-309	Safety valve with electro-magnetic actuated rupture plate Yatsurugi T., <i>et al.</i> ,	No. 912039
Pat-J-310	Preparation of monodispersed spherical particles of solid Kitani S., <i>et al.</i> ,	No. 586062
Pat-J-311	Irradiation equipment Hirayama S.,	No. 589291
Pat-J-312	Exchanger for nuclear fuel elements Nozawa M. <i>et al.</i> ,	No. 587947

- Pat-J-313 A method of isotope separation by a rotating electric field
Furuta Y., No. 591675
- Pat-J-314 Method and apparatus for promoting a chemical reaction by ionizing radiation
Kasamatsu T., No. 538085
- Pat-J-315 Method for manufacturing non heat silica gel polyvinyl chloride fibers with radiation grafting
Okada T., *et al.*, No. 540782
- Pat-J-316 Graft polymerization of fibrous cellulose with aluminum gel catalyst
Kubota H., *et al.*, No. 539800
- Pat-J-317 Radiation synthesis of benzyl chloride and its derivatives
Abe T., *et al.*, No. 545094
- Pat-J-318 New process for producing graft polymers
Araki K., *et al.*, No. 546475
- Pat-J-319 Graft polymerization of vinyl compound onto cellulose
Udagawa A., *et al.*, No. 550603
- Pat-J-320 Irradiator
Kasamatsu T., *et al.*, No. 558163
- Pat-J-321 Polymerization of ethylene by means of radical initiation using carbon dioxide as reaction medium
Hagiwara M., *et al.*, No. 566756
- Pat-J-322 Photo-polymerization of ethylene
Hagiwara M., *et al.*, No. 566757
- Pat-J-323 New method for radiation-initiated polymerization of ethylene containing oxygen
Mitsui A., *et al.*, No. 566245
- Pat-J-324 Radiation polymerization of ethylene using carbon dioxide as reaction medium
Mitsui A., *et al.*, No. 566246
- Pat-J-325 Novel process for manufacturing polyethylene
Mitsui A., *et al.*, No. 566247
- Pat-J-326 Two stage radiation polymerization of ethylene
Mitsui A., *et al.*, No. 572110
- Pat-J-327 Process for manufacturing easily dyeable polyester fibers
Okada T., *et al.*, No. 575154
- Pat-J-328 Graft polymerization of vinyl compound onto cellulose
Udagawa A., *et al.*, No. 583810
- Pat-J-329 Preparative method of graft copolymer between polyester and acid acrylate by means of ionizing radiation
Araki K., *et al.*, No. 590380

- Pat-J-330 Method and apparatus for promoting chemical reactions by means of radioactive inert gases
Kasamatsu T. *et al.*, No. 591702

U. S. Patents

- Pat-US-21 Process for disposing solid radioactive waste
Sugimoto S., No. 3418788
- Pat-US-22 Circuit arrangement for flattening air energy response of a scintillation counter in bias modulation of a pulse height discriminator
Moriuchi S., No. 3441733
- Pat-US-23 Steam generator or heater for an atomic power generation plant
Nozawa M., *et al.*, No. 3446188
- Pat-US-24 A device for the measurement of the neutron flux
Kinoshita T., *et al.*, No. 3444374
- Pat-US-25 System for measuring the period of a nuclear reactor using frequency conversion or period conversion
Amano N., *et al.*, No. 3444461
- Pat-US-26 Brazing carbonaceous materials
Fujimura T., *et al.*, No. 3439410
- Pat-US-27 Brazing carbonaceous materials
Fujimura T., *et al.*, No. 3439858
- Pat-US-28 Methods of separating or classifying materials refining molten metal, and manufacturing ingots or other casting and apparatus for boiling electrically conducting liquids
Hori M., *et al.*, No. 3466154
- Pat-US-29 Method for determining a heat treatment temperature for carbon and graphite
Sato S., *et al.*, No. 3503248
- Pat-US-30 Ion exchange method for separating uranium isotopes
Simokawa J., *et al.*, No. 3511620
- Pat-US-31 Process for recovering uranium as uranium dioxide
Ishimori T., *et al.*, No. 3511621
- Pat-US-32 Giles' gas recoil neutron spectrometer
Mizuho M., *et al.*, No. 3524061
- Pat-US-33 Pulse integrating circuit system
Kinbara S., No. 3535645
- Pat-US-34 Time analyzers for counting-rate change measurement
Amano N., *et al.*, No. 3518539

- Pat-US-35 Method for producing radioactive tellurium
Umezawa H., *et al.*, No. 3545925
- Pat-US-36 Polymerization of ethylene by means of radical initiation using carbon dioxide as reaction medium
Machi S., *et al.*, No. 3471463
- Pat-US-37 Graft polymerization of vinyl compound onto cellulose
Gotoda M., *et al.*, No. 3481848
- Pat-US-38 Radiation polymerization of ethylene using carbon dioxide as reaction medium
Machi S., *et al.*, No. 3516912
- Pat-US-39 Method and apparatus for promoting a chemical reaction by ionizing radiation
Kasamatsu T., No. 3531388
- Pat-US-40 Two stage radiation polymerization of ethylene
Mitsui A., *et al.*, No. 3531389
- Pat-US-41 Method for stabilizing polyoxymethylene
Ito A., *et al.*, No. 3553090
- Pat-US-42 A continuous process for producing powder polyethylene
Takehisa M., *et al.*, No. 3553187
- Pat-US-43 Method and apparatus for promoting chemical reactions by means of radioactive inert gases
Kasamatsu T., *et al.*, No. 3560362
- Pat-US-44 Novel process for manufacturing polyethylene
Machi S., *et al.*, No. 3573183

Swedish Patents

- Pat-Swed-2 Polymerization method for cyclic ethers in the presence of maleic anhydride or its halide derivatives
Okamura S., *et al.*, No. 321803

List of journals carrying the JAERI papers and their abbreviations shown in bold-type letters

- Acta Chemica Scandinavica**
Agricultural Biology and Chemistry (Tokyo)
AICHE Journal
Analytica Chimica Acta
Atompraxis
Bulletin of the Chemical Society of Japan
Buturi (Tokyo)
Canadian Journal of Chemistry
Cereal Chemistry
Chemistry of High Polymers (Tokyo)
Dokumentasyon Kenkyu (Tokyo)
Experimental Animals (Tokyo)
Experimental Mechanics
Food Irradiation, Japan
Geochimica Cosmochimica Acta
Health Physics
Hoshasen Kagaku (Tokyo)
I & EC, Product Research and Development
Inorganic and Nuclear Chemistry Letters
International Journal of Applied Radiation and Isotopes
Isotopenpraxis
Japan Analyst
Japanese Journal of Applied Physics
Journal of Agricultural Chemical Society of Japan
Journal of the American Ceramic Society
Journal of the American Chemical Society
Journal of Applied Physics
Journal of Applied Polymer Science
Journal of Atomic Energy Society of Japan
Journal of Chemical Physics
Journal of Chemical Society of Japan, Industrial Chemistry Section
Journal of Chemical Society of Japan, Pure Chemistry Section
Journal of Colloid and Interface Science
Journal of Crystal Growth
Journal of Electromicroscopy (Tokyo)
Journal of Faculty of Engineering, Chiba University
Journal of Hygienic Chemistry (Tokyo)
Journal of Information Processing Society of Japan
Journal of Inorganic and Nuclear Chemistry
Journal of the Japan Health Physical Society
Journal of Japan High Pressure Institute
Journal of Japan Society of Mechanical Engineers
Journal of the Japan Welding Society
- Journal of Macromolecular Science, Chemistry**
Journal of Non-destructive Inspection, Japan
Journal of Nuclear Materials
Journal of Nuclear Science and Technology (Tokyo)
Journal of Physical Chemistry
Journal of the Physical Society of Japan
Journal of Physics and Chemistry of Solids
Journal of Polymer Science
Journal of Radiation Research (Japan)
Journal of Radioanalytical Chemistry
Journal of the Society of Fiber Science and Technology, Japan
Journal of the Society of Materials Science, Japan
Journal of the Spectroscopical Society of Japan
Kakuyugo-Kenkyu (Nagoya)
Mass Spectroscopy (Tokyo)
Memories of the Faculty of Engineering, Kyoto University
Nature
Nuclear Instruments and Methods
Nuclear Physics
Nuclear Science and Engineering
Nukleonik
Oyo Buturi (Tokyo)
physica status solidi
Physical Review
Physical Review Letters
The Physics of Fluids
Physics Letters
Progress of Theoretical Physics (Kyoto)
Radiation Effects
Radiochemical Radioanalytical Letters
Radiochimica Acta
Radioisotopes (Tokyo)
Reports on Progress in Polymer Physics in Japan
Review of Scientific Instruments
Solid State Communications
Spectrochimica Acta
Talanta
The Thermal Power (Japan)
Transaction of the American Nuclear Society
Transactions of the Japan Institute of Metals
Transaction of the Japan Society for Aeronautical and Space Science
Transaction of Japan Society of Mechanical Engineers