

Technical Publications
by JAERI Staff

from January 1977
to December 1977

November 1978

JAERI Reports and the Availability

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Technical Publications by JAERI Staff from January 1977 to December 1977

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Approximately 430 journal articles, papers at meetings, reports and books are given, which have been published by personnel of JAERI from January 1977 to December 1977. The contents for each entry include the title, language in which it is written, author(s), and journal name or origin. They are presented in INIS subject categories. The indexes are both by authors and report number. A list of the patents, originating at JAERI, including both Japanese and other patents, is also given.

November 1978

Division of Technical Information
Japan Atomic Energy Research Institute

日本原子力研究所研究成果発表リスト (1977年1月～1977年12月)

1977年1月から1977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430件について、その標題・著者・所在を示した。これらをINIS(International Nuclear Information System)の主題分類を用いて分類し、著者索引とレポート番号索引をつけた。また、研究所で発生した国内・国外の特許一覧表を付した。

1978年11月

日本原子力研究所
技術情報部

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 - A13 Solid-State and Fluid Physics
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 - A15 Astrophysics and Cosmology, Cosmic Radiation
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 - A17 Low-Temperature Physics
 - A20 HIGH ENERGY PHYSICS
 - A21 Elementary Particles (Theory)
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 - A30 NEUTRON AND NUCLEAR PHYSICS
 - A31 Neutron Physics
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 - A33 Nuclear Theory
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- B00 CHEMISTRY, MATERIALS AND EARTH SCIENCES
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 - B15 Corrosion
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 - B20 MATERIALS
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 - B30 EARTH SCIENCES
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 - C11 Effects of External Radiation on Biochemicals, and on Cell and Tissue Cultures
 - C12 Effects of External Radiation on Microorganisms
 - C13 Effects of External Radiation on Plants
 - C14 Effects of External Radiation on Animals
 - C15 Effects of External Radiation on Man
 - C20 RADIONUCLIDE EFFECTS AND KINETICS
 - C21 Tissue Distribution, Metabolism, Toxicology and Removal of Radionuclides
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 - C30 TRACER STUDIES IN LIFE SCIENCES
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 - C50 HEALTH, SAFETY AND ENVIRONMENT
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 - E37 Production Reactors (Producing Fissionable Materials), Irradiation Reactors such as Chemonuclear Reactors, Isotope Production Reactors, Tritium Production Reactors, Materials Testing Reactors, Material Processing Reactors
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 - E40 INSTRUMENTATION
 - E41 Particle and Radiation Detection and Measuring Instruments and Methods
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 - E43 Radiation Effects on Instruments, Components or Electronic Devices
 - E50 WASTE MANAGEMENT
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GENERAL PHYSICS

- 77001 Detection of the position and cross-section of a tokamak plasma with magnetic probes. (In Japanese).
— Aikawa, Hiroshi; Ogata, Atsushi; Suzuki, Yasuo.
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- 77002 Derivation of plasma displacement in a tokamak from magnetic probe signals.
— Aikawa, Hiroshi; Ogata, Atsushi; Suzuki, Yasuo.
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— Chihara, Junzo.
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- 77006 Annual report of the Division of Thermonuclear Fusion Research, JAERI. Covering the period of April 1, 1975 to March 31, 1976.
— Div. of Thermonuclear Fusion Research; Div. of Large Tokamak Development.
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- 77007 Design study of superconducting poloidal magnets for tokamak fusion power reactor. (In Japanese).
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- 77008 Design study of electrical power supply system for tokamak fusion power reactor. (In Japanese).
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- 77009 Design study of superconducting toroidal field magnet for tokamak fusion power reactor. (In Japanese).
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- 77011 Repair/maintenance design for tokamak fusion power reactor. (In Japanese).
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- 77012 Design study of cooling system for tokamak fusion reactor. (In Japanese).
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- 77013 Design study of superconducting poloidal magnets for a tokamak experimental fusion reactor. (In Japanese).
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- 77014 Design study of superconducting inductive energy storages for tokamak fusion reactor. (In Japanese).
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- 77015 Design study of a neutral beam injection system for the JAERI Experimental Fusion Reactor (JXFR). (In Japanese).
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- 77016 Design study of fuel circulating system for tokamak experimental fusion reactor. (In Japanese).
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- 77018 First preliminary design of an experimental fusion reactor. (In Japanese).
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- 77024 Incommensurate phase in $(ND_3)_2BeF_4$.
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- 77025 Numerical studies of lower hybrid wave propagation in JFT-2. (In Japanese).
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- 77030 Eddy current analysis by the finite element circuit method. (In Japanese).
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- 77039 Two-dimensional simulation of the MHD stability, (2).
 — Kurita, Gen-ichi; Amano, Tsuneo*.
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- 77040 Study on plasma ignition of JAERI experimental fusion reactor. (In Japanese).
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- 77041 Evaluation of radiation cross sections of K X-rays and application to measurement of metal impurity densities in high-temperature plasma. (In Japanese).
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- 77043 Influence of error fields on the plasma confining field and the plasma confinement in tokamak.
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- 77044 A note on certain multiple integrals.
 — Mehta, M.L.*.
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- 77045 Stepwise lamellar thickening of nylon 66 crystal by annealing in glycerol.
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- 77046 Lamellae thickening of nylon 66 crystals annealed in glycerol.
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- 77047 Theoretical investigations of lower hybrid resonance heating in a tokamak.
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- 77048 Stress analysis of the bellows and its connection with a thick ring of the vacuum vessel. (In Japanese).
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- 77053 Numerical stress analysis of toroidal coil by three-dimensional finite element method.
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- 77055 Crystallite size and lattice distortion in polytrioxane and polytetraoxane.
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- 77057 Formalization for optimal feedback control of plasma current and position in a tokamak.
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- 77060 Phase diagrams in the pseudobinary systems of Li_2BeF_4 , alkali fluoroborates and alkali fluorides.
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- 77062 Numerical simulation of lower hybrid wave propagation. (In Japanese).
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- 77069 Development of thin-film thermometer to measure transient plasma heat flux in diverter assembly (DIVA).
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- 77071 A study on impurities and scrape-off layer plasma in a large tokamak.
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- 77072 Plasma equilibrium in axisymmetric hybrid systems.
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- 77074 Sputtering yield measurement on first wall materials of thermonuclear fusion devices.
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 — JAERI-M 7043. Apr 1977. 27 p.
- 77076 Intensity calibration of a vacuum monochromator in a wavelength region of 1000-2000Å and spectroscopic measurement in DIVA. (In Japanese).
 — Sugie, Tatsuo; Shiho, Makoto*; Kasai, Satoshi; Odajima, Kazuo; Nagami, Masayuki; Maeda, Hikosuke; Shimomura, Yasuo.
 — JAERI-M 7217. Aug 1977. 21 p.
- 77077 Nonlinear saturation of dissipative trapped ion instability and anomalous transport.
 — Sugihara, Masayoshi*; Ogasawara, Masatada*.
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- 77078 Three-dimensional analysis of eddy current with the finite element method. (In Japanese).
 — Takano, Ichiro*; Suzuki, Yasuo.
 — JAERI-M 7062. May 1977. 86 p.
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- 77080 A 10-channel neutral particle energy analyser for measurements of ion temperatures on tokamak plasmas.
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