

Publications in 2008

1 JOURNAL PAPER/PROCEEDINGS

- H. Tomita, Ch. Mattolat, T. Kessler, S. Raeder, F. Schwellnus, K. Wendt, K. Watanabe and T. Iguchi, Ultra Trace Determination Scheme for ^{26}Al by High-Resolution Resonance Ionization Mass Spectrometry using a Pulsed Ti:Sapphire Laser Journal of Nuclear Science and Technology, Supplement6, 37-42, (2008)
- Takahumi AOYAMA, Chikara ITO, Koki OKAZAKI, Hideki HARANO, Kenichi WATANABE, Tetsuo IGUCHI, Development of sodium leak detection technology using laser resonance ionization mass spectrometry Journal of Nuclear Science and Technology, Supplement6, 43-50, (2008)
- K. Asai, K. Yukawa, T. Iguchi, H. Iwai, N. Naoi and J. Kawarabayashi, Improvement of Multi-Scattering Time-of-Flight Neutron Spectrometer to Measure the D/T Ratio in a Fusion Experimental Reactor Journal of Nuclear Science and Technology, Supplement6, 69-72, (2008)
- Teruhisa MATSUI, Jun KAWARABAYASHI, Kenichi WATANABE and Tetsuo IGUCHI, Evaluation of Single-Electron Transistors for Cryogenic Radiation Detector Journal of Nuclear Science and Technology, Supplement6, 73-77, (2008)
- Toshio HIRANO, Jun KAWARABAYASHI and Tetsuo IGUCHI, Anodic Oxidation Technique using an Atomic Force Microscope to Fabricate a Single-Electron Device for a Radiation Imaging Detector Journal of Nuclear Science and Technology, Supplement6, 78-80, (2008)
- Mitsunobu HAYASHI, Jun KAWARABAYASHI, Keisuke ASAI, Haruki IWAI, Position-Sensitive Radiation Detector with Flexible Light Guide and Liquid Organic Scintillator to Monitor Distributions of Radioactive Isotopes, Journal of Nuclear Science and Technology, Supplement6, 81-84, (2008)
- Y. Higuchi, K. Watanabe, T. Hasegawa, H. Tomita, J. Kawarabayashi and T. Iguchi, Resonance Ionization Mass Spectrometry using Inductively Coupled Plasma as an Atom Source Journal of Nuclear Science and Technology, Supplement6, 93-96 (2008)
- Seiji SASADA, Kenichi WATANABE, Yuki HIGUCHI, Hideki TOMITA, Akiko GOTO, Masayo MINAMI, Kazuhiro SUZUKI, Takenori KATO, Takuya HASEGAWA, Jun KAWARABAYASHI and Tetsuo IGUCHI, Strontium Isotope Analysis using Resonance Ionization Mass Spectrometry for Determination of Bone Origin Journal of Nuclear Science and Technology, Supplement6, 97-100, (2008)
- T. Kessler, H. Tomita, C. Mattolat, S. Raeder, K. Wendt, "An injection seeded high repetition rate Ti:sapphire laser for high-resolution spectroscopy and trace analysis of rare isotopes" Laser Physics, 18, 842-849, (2008)
- K. Asai, K. Yukawa, T. Iguchi, N. Naoi, K. Watanabe, J. Kawarabayashi, M. Yamauchi and C. Konno, Multi-scattering time-of-flight neutron spectrometer for deuterium to tritium fuel ratio measurement in fusion experimental reactors Fusion Engineering and Design, 83, 1818-1824, (2008)

- H. Tomita, K. Watanabe, Y. Takiguchi, J. Kawarabayashi and T. Iguchi, "Radioactive Carbon Isotope Monitoring System Based on Cavity Ring-down Laser Spectroscopy for Decommissioning Process of Nuclear Facilities" *Journal of Power and Energy Systems*, 2, 221-228, (2008) 1
- 河原林順、森嶋邦博、中竜太、渡辺賢一、井口哲夫, 原子核乾板の原子力工学への新しい応用の期待 *日本写真学会誌*, 71, 332-334, (2008)

2 THESIS

2007 年度修士論文

- 大沢竜也, "ヘリコン波プラズマイオン源を用いたコンパクト加速器 DD 中性子源の開発"
- 那須祐介, "検出器応答パターン認識に基づく放射線発生プロファイル推定手法の開発"
- 平野登志雄, "AFM 陽極酸化法を用いた放射線検出器のための単電子素子に関する基礎研究"