

Publications in 2011

1 JOURNAL PAPER/PROCEEDINGS

- Hiroki TSUJI, Shigetaka MAEDA, Hideki TOMITA, Jun KAWARABAYASHI, Tetsuo IGUCHI, Tetsuro MATSUMOTO and Jun-ichi HORI, Epithermal neutron response on moderated neutron spectrometer with multi-resonance filters, *Progress in Nuclear Science and Technology*, **1**, 316-319, (2011).
- Yuri NAKAGAWA, Jun KAWARABAYASHI, Kenichi WATANABE, Hideki TOMITA, Hiroyuki TOYOKAWA, Kei KAMADA, Takayuki YANAGIDA, Akira YOSHIKAWA and Tetsuo IGUCHI, Design consideration on position sensitive detectors based on LuAG:Pr scintillators for high energy X-ray cargo inspectio, *Progress in Nuclear Science and Technology*, **1**, 285-287, (2011).
- S. Maeda, H. Tomita, J. Kawarabayashi, T. Iguchi Fundamental Study on Neutron Spectrum Unfolding using Maximum Entropy and Maximum Likelihood Method, *Progress in Nuclear Science and Technology*, **1**, 233-236, (2011).
- Takuma Noto, Hideki Tomita, Jun Kawarabayashi, Tetsuo Iguchi, Norihiko Nishizawa, PRESELECTING MEHTOD FOR PLUTONIUM PARTICLE ANALYSIS IN ENVIRONMENTAL SAMPLES BY NUCLEAR EMULSION, *Radiation Measurements*, **46**, 1807-1809, (2011).
- Yusuke Nomura, Hideki Tomita, Jun Kawarabayashi, Tetsuo Iguchi, Mitsutaka Isobe, Kunihiro Morishima, Toshiyuki Nakano, Mitsuhiro Nakamura, Seiki Ohnishi, Design Consideration on Compact Neutron Pinhole Camera with Nuclear Emulsion for Energetic-ion Profile Diagnostics, *Plasma and Fusion Research*, **6**, 2402148, (2011).
- 前田茂貴、井口哲夫, 原子炉ドシメトリーの高精度化・高信頼化に向けた中性子スペクトルアンフォルディング法の現状と課題, *日本原子力学会和文論文誌*, Vol.10, No.2, 63-75, (2011)
- Hikaru HAYAKAWA, Hideki TOMITA, Jun KAWARABAYASHI, Tetsuo IGUCHI, Development of Thin and High-aspect-ratio Scintillator with Designed Surface Profile, *KEK Proceedings*, **2011-8**, 162-166, (2011).
- Takuma Noto, Hideki Tomita, Jun Kawarabayashi, Tetsuo Iguchi, Proposal for Analytical Method for Plutonium Particles in Environmental Samples, *KEK Proceedings*, **2011-8**, 167-172, (2011).
- Hikaru HAYAKAWA, Jun KAWARABAYASHI, Hideki TOMITA, and Tetsuo IGUCHI, Development of Thin and High-aspect-ratio Scintillator with Designed Surface Profile, *IEEE Nuclear Science Symposium Conference Record 2011*, 1602-1604, (2011).
- Jun Kawarabayashi, Yosuke Sato, Hikaru Hayakawa, Hideki Tomita, Tetsuo Iguchi, A CHERENKOV THRESHOLD COUNTER USING LIQUID CORE FIBER FOR ESTIMATION OF RADIOACTIVE

WASTE INVENTORY, Proceedings of 19th International Conference On Nuclear Engineering (ICONE19) CD-ROM, ICONE19-43639, (2011).

- Yoshikawa, T. Yanagida, Y. Yokota, K. Kamada, N. Kawaguchi, K. Fukuda, A. Yamazaki, K. Watanabe, A. Uritani, T. Iguchi, G. Boulon, M. Nikl, Development of novel rare earth doped fluoride and oxide scintillators for two-dimensional imaging, *Journal of rare earth*, **29**, 1178-1182, (2011).
- T. Yanagida, Y. Fujimoto, S. Kurosawa, K. Watanabe, H. Yagi, T. Yanagitani, V. Jary, Y. Futami, Y. Yokota, A. Yoshikawa, A. Uritani, T. Iguchi, M. Nikl, Ultrafast Transparent Ceramic Scintillators Using the Yb^{3+} Charge Transfer Luminescence in RE_2O_3 Host, *APPLIED PHYSICS EXPRESS*, **4**, 126402, (2011).
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- T. Yanagida, A. Yamaji, N. Kawaguchi, Y. Fujimoto, K. Fukuda, S. Kurosawa, A. Yamazaki, K. Watanabe, Y. Futami, Y. Yokota, A. Uritani, T. Iguchi, A. Yoshikawa, M. Nikl, Europium and Sodium Codoped LiCaAlF_6 Scintillator for Neutron Detection, *APPLIED PHYSICS EXPRESS*, **4**, 106401, (2011).
- T. Yanagida, N. Kawaguchi, Y. Fujimoto, K. Fukuda, Y. Yokota, A. Yamazaki, K. Watanabe, J. Pejchal, A. Uritani, T. Iguchi, A. Yoshikawa Basic study of Europium doped LiCaAlF_6 scintillator and its capability for thermal neutron imaging application, *OPTICAL MATERIALS*, **33**, 1243-1247, (2011).

2 THESIS

2010 年度修士論文

- 村松 圭芳 同位体選択的光脱離を用いた加速器質量分析のための高繰り返し率注入同期チタンサファイアレーザーの開発
- 野村 祐介 重水素核融合プラズマにおける先進原子核乾板法を用いた中性子発生空間分布測定に関する研究
- 佐藤 陽介 チェレンコフ放射に基づく先進閾値型放射線検出器の開発と応用に関する基礎研究
- 竹澤 邦将 高繰り返し率チタンサファイアレーザーを用いた難揮発性元素の共鳴イオン化質量分析に関する基礎研究

2011 年度博士論文

Prof. Iguchi Group, Department of Quantum Engineering, Nagoya University

- 前田 茂貴 原子炉ドシメトリーにおける先進的中性子スペクトル評価法に関する研究