

1. Slow Neutron Physics and Neutron Scattering

Papers

Development of a large plano-elliptical neutron-focusing supermirror with metallic substrates
Takeda Shin, Yamagata Yutaka, Yamada Norifumi L., Hino Masahiro, Hosobata Takuya, Guo Jiang, Morita Shinya, Oda Tatsuro, Furusaka Michihiro
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Effect of Mg substitution on crystal structure and hydrogenation of Ce₂Ni₇-type Pr₂Ni₇
K. Iwase, K. Mori, N. Terashita, S. Tashiro, T. Suzuki
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Energy-resolved small-angle neutron scattering from steel
Oba Yojiro, Morooka Satoshi, Ohishi Kazuki, Suzuki Jun-ichi, Takata Shin-ichi, Sato Nobuhiro, Inoue Rintaro, Tsuchiyama Toshihiro, Gilbert Elliot Paul, Sugiyama Masaaki
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Magnetic scattering in the simultaneous measurement of small-angle neutron scattering and Bragg edge transmission from steel
Oba Yojiro, Morooka Satoshi, Ohishi Kazuki, Sato Nobuhiro, Inoue Rintaro, Adachi Nozomu, Suzuki Jun-ichi, Tsuchiyama Toshihiro, Gilbert Elliot Paul, Sugiyama Masaaki
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Neutron detection in the frame of spatial magnetic spin resonance
Jericha Erwin, Bosina Joachim, Geltenbort Peter, Hino Masahiro, Mach Wilfried, Oda Tatsuro, Badurek Gerald
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Kazuhiro Mori, Takuya Kasai, Kenji Iwase, Fumika Fujisaki, Yohei Onodera, Toshiharu Fukunaga
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Synthesis of PuNi₃-type PrCo₃ and its hydrogen absorption-desorption property
K. Iwase, K. Mori, S. Shimizu, S. Tashiro, T. Suzuki
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An effective deuterium exchange method for a neutron structure analysis by use of unfolding-refolding processes.
A. Kita and Y. Morimoto
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B-3 小型多目的中性子回折計建設の進捗状況
小野寺陽平, 森一広, 吉野泰史, 佐藤節夫, 平賀晴弘, 岩瀬謙二, 塩野貴大, 松田浩平
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J-PARC MLF BL06におけるTOF-MIEZE型スピンエコー分光法についての研究
小田達郎, 日野正裕, 川端祐司, 遠藤仁, 山田悟史, 瀬戸秀紀
京都大学原子炉実験所第51回学術講演会報文集 (1月26-27, 2017) 40. (in Japanese)

J-PARC/MLF BL06 中性子共鳴スピネコー分光器群(VIN ROSE)と中性子集光ミラー開発の現状 2
日野正裕, 小田達郎, 吉永尚生, 金山雅哉, 川端祐司, 遠藤 仁, 山田悟史, 細島拓也, 武田 晋, 郭 江, 山形 豊,
森田晋也, 古坂道弘, 瀬戸秀紀
京都大学原子炉実験所第 51 回学術講演会報文集 (1 月 26-27, 2017)23. (in Japanese)

KUR B1 孔を利用した低速陽電子ビームライン輝度増強部の開発
葛谷佳広, 大島永康, 木野村淳, 藪内 敦, 佐藤紘一, 徐 虬
京都大学原子炉実験所第 51 回学術講演会報文集 (1 月 26-27, 2017)47. (in Japanese)

NC 制御加工装置による回転楕円体中性子ミラーの製作 II
吉永尚生, 日野 正裕, 金山雅哉, 細島拓也, 山形 豊, 郭 江, 森田晋也, 武田 晋, 古坂道弘, 川端 祐司
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中性子散乱を利用したリチウムイオン電池研究の最前線
森 一広
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(BL06 VIN ROSE)
遠藤 仁, 日野正裕, 小田達郎
日本中性子科学会誌 **26** (2016) 104-108. (in Japanese)

2. Nuclear Physics and Nuclear Data

Papers

Accuracy of Reactor Physics Parameters in Thorium-Loaded Accelerator-Driven System Experiments at Kyoto University Critical Assembly
M. Yamanaka, C. H. Pyeon, T. Yagi and T. Misawa
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Liquid film dynamics of two-phase annular flow in square and tight lattice subchannels
Daisuke Ito, Petros Papadopoulos and Horst-Michael Prasser
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Measurements of gamma-ray emission probabilities of ^{241}Am , ^{243}Am and ^{239}Np
Terada Kazushi, Nakamura Shoji, Nakao Taro, Kimura Atsushi, Iwamoto Osamu, Harada Hideo, Takamiya Koichi, Hori Jun-ichi
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Medical applications of Cu, Zn, and S isotope effects
Albarede Francis, Télouk Philippe, Balter Vincent, Bondanese Victor P., Albalat Emmanuelle, Oger Philippe, Bonaventura Paola, Miossec Pierre, Fujii Toshiyuki
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Monte Carlo Analysis of the Accelerator-Driven System at Kyoto University Research Reactor Institute
W. K. Kim, H. C. Lee, C. H. Pyeon, H. C. Shin and D. J. Lee,
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燃焼度確証時に利用可能な $^{106}\text{Ru}/^{144}\text{Ce}$ 放射能比の測定と燃焼解析
佐藤駿介, 名内泰志, 早川岳人, 木村康彦, 須山賢也
京都大学原子炉実験所第 5 回炉物理専門研究会 (RPW 2016) (11 月 30-12 月 1 日 2016) 54. (in Japanese)

ADS サイクルを用いた MA 低減と Pu-238 生成に関する研究
小川 健斗, 千葉 豪
京都大学原子炉実験所第 5 回炉物理専門研究会 (RPW 2016) (11 月 30 日-12 月 1 日 2016) 55. (in Japanese)

Investigation for sub-criticality adjustment mechanism of LBE cooled Accelerator-Driven System
A. Oizumi, T. Sugawara, H. Iwamoto, K. Nishihara, K. Tsujimoto
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Investigation of Nuclear Data of Minor Actinides in Variable Neutron Field for Accurate Determination of Thermal Neutron Capture Cross Section at KURRI
Y. Takahashi, J. Hori, T. Sano, T. Yagi, H. Yashima, C. H. Pyeon, S. Nakamura and H. Harada
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KUCA 固体減速架台における反応度評価の不確かさに関する研究
伊藤誠人, 卞 哲浩, 三澤 毅
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三次元多群燃料棒単位詳細炉心計算を再現する高速炉心計算の実現に向けた検討
辻田浩介, 田淵将人, 巽 雅洋
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中性子輸送計算に基づく検出確率を用いた未知放射線源の放射能強度推定
菅谷信二, 遠藤知弘, 山本章夫
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特異値分解とモード展開法を用いた Ringhals1 号機の炉雑音解析
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軽水炉を用いた放射性毒性低減サイクルの検討
和田怜志, 木村 礼, 松宮浩志, 櫻井俊吾, 吉岡研一, 平岩宏司
京都大学原子炉実験所第 5 回炉物理専門研究会 (RPW 2016) (11 月 30 日-12 月 1 日 2016) 72. (in Japanese)

燃料メーカーにおける核データ不確かさ評価研究の位置付け
山本賢治郎, 池原 正, 金 浩久, 山名哲平
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ガンマ線スペクトル解析におけるピーク探査と面積計算実態と今後のスペクトル解析のあるべき姿
青山道夫, 秋山正和, 浅井雅人, 阿部敬朗, 佐藤 泰, 高野直人, 高宮幸一, 濱島靖典, 武藤儀一, 山田隆志, 石津秀剛
RADIOISOTOPES **65** (2016) 267-285. (in Japanese)

3. Reactor Physics and Reactor Engineering

Papers

A Batch Size Decision Strategy by Checking Stability of Fission Source Distribution for Monte Carlo Eigenvalue Calculations
S. H. Kim, M. Yamanaka, M. H. Woo, J. Y. Lee, C. H. Shin and C. H. Pyeon
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S. Dulla, S. S. Hoh, G. Marana, M. Nervo, P. Ravetto and C. H. Pyeon
Ann. Nucl. Energy **101** (2017) 397-407.

Bubbly, Slug, and Annular Two-Phase Flow in Tight-Lattice Subchannels
Prasser Horst-Michael, Bolesch Christian, Cramer Kerstin, Ito Daisuke, Papadopoulos Petros, Saxena Abhishek,
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Development of interfacial area concentration correlations for small and large bubbles in gas-liquid two-phase flows
Shen Xiuzhong and Deng Baoqing
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Effective Delayed Neutron Fraction in Accelerator-Driven System Experiments with 100 MeV Protons at Kyoto
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M. Yamanaka, C. H. Pyeon and T. Misawa
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calculations
T. Yamamoto, H. Sakamoto
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Nuclear Date-Induced Uncertainty Qualification of Neutronics Parameters of Accelerator-Driven System
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H. Iwamoto, K. Nishihara, T. Yagi and C. H. Pyeon
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Prediction of interfacial area transport in a coupled two-fluid model computation
Schlegel Joshua P., Hibiki Takashi, Shen Xiuzhong, Appathurai Santosh, Subramani Hariprasad
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Proposal for selective isotope transmutation of long-lived fission products using quasi-monochromatic γ ray beams
Hayakawa Takehito, Miyamoto Shuji, Hajima Ryoichi, Shizuma Toshiyuki, Amano Sho, Hashimoto Satoshi,
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Sensitivity and Uncertainty Analyses of Lead Sample Reactivity Experiments at Kyoto University Critical Assembly
C. H. Pyeon, A. Fujimoto, T. Sugawara, H. Iwamoto, K. Nishihara, Y. Takahashi, K. Nakajima and K. Tsujimoto
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Uncertainty analysis of minor actinides transmutation in fast reactor cores
Takeda Toshikazu, Fujimura Koji, Sano Tadafumi, Fouad Basma
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気泡微細化沸騰における流れ場の PIV 計測
伊藤大介, 刀塚 淳, 齊藤泰司
日本機械学会論文集 B 編 (in Japanese) **83** (2017) 1-7. (in Japanese)

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A Preliminary Study on Applicability of Artificial Neural Network for Optimized Reflector Designs
S. H. Kim, T. M. Vu and C. H. Pyeon
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Analysis and Interpretation of the KUCA ADS Benchmarks with Deterministic Analysis Codes

W. F. G. van Rooijen, C. H. Pyeon, G. Chiba and T. Endo

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Benchmark Tests of Newly-Evaluated Data of ^{235}U for CIELO Project using Integral Experiments of Uranium-Fueled FCA Assemblies

Masahiro Fukushima, Yasunori Kitamura, Kenji Yokoyama, Osamu Iwamoto, Yasunobu Nagaya and Luiz Leal

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T. Sano and T. Takeda

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Coupling Sjostrand and Feynman Methods in Prompt Neutron Decay Constant Analyses A. Talamo, Y. Gohar,

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Deterministic Analyses of the Phase-I Kinetic Experiments in the KUCA Subcritical A-core Configurations

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Development of Hybrid Imaging Method for Multiphase Flow using X-ray and Neutrons

Daisuke Ito and Yasushi Saito

Proceedings of 11th International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Operation and Safety Gyeongju, Korea (Oct.9-13, 2016).

Estimation of interfacial area concentrations for two-group bubbles in gas-liquid two-phase flows

X. Shen and B. Deng

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Experimental Benchmarks on Accelerator-Driven System at Kyoto University Critical Assembly

S. H. Kim, M. Yamanaka and C. H. Pyeon

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Experimental Benchmarks on Subcriticality of Accelerator-Driven System with 100 MeV Protons at Kyoto University Critical Assembly

C. H. Pyeon, M. Yamanaka and Y. Takahashi

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On Prediction Accuracy of Neutronics Parameters of Accelerator-Driven Sub-Critical System

G. Chiba, W. F. G. van Rooijen, T. Endo and C. H. Pyeon

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Pulsed neutron imaging for non-destructive testing using simulated nuclear fuel samples

Daisuke Ito, Tadafumi Sano, Jun-ichi Hori, Yoshiyuki Takahashi, Hiroyuki Hasemi, Takashi Kamiyama, Ken Nakajima

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Technique for bubble velocity vector in gas-liquid two-phase flow by using 4-sensor probe

Saito Yasushi, Ariyoshi Gen and Ito Daisuke

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Turbulent characteristics in lead-bismuth flows flowing in poor and good wettability pipes

Gen Ariyoshi, Daisuke Ito, Yasushi Saito and Kaichiro Mishima

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Gen Ariyoshi, Daisuke Ito, Yasushi Saito and Kaichiro Mishima

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Two-phase flow structure in a simulated debris bed

Milka Nava Daisuke Ito and Yasushi Saito

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Uncertainty Quantification of Spatial Correction Factor for Sjöstrand Method due to Cross-section Data

T. Kimura, T. Endo and A. Yamamoto

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Variance Reduction Factor Calculations for Neutronics Parameters of Accelerator-Driven System

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Visualization of solidification process in lead-bismuth eutectic

Daisuke Ito, Yasushi Saito, Hiroataka Sato, Takenao Shinohara

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α 壊変反跳核 ^{229m}Th を捕集した試料からの真空紫外光測定

安田勇輝, 笠松良崇, 重河優大, 高宮幸一, 大槻 勤, 三頭聰明, 篠原 厚

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トリウム燃料装荷による PWR 炉心特性への影響評価

小林千将, 竹田 敏, 北田孝典

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ナノ組織化した鉄鋼材料表面に形成する潤滑油膜観察に向けて

足立 望, 日野正裕, 大場洋次郎, 戸高義一

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ロッドバンドル内気液二相流用界面積濃度輸送モデル

沈 秀中, 鄧 保慶

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鉛ビスマス気液二相流に及ぼす壁面濡れ性の影響-プール体系におけるボイド率計測-

稲富良太, 有吉 玄, 伊藤大介, 齊藤泰司

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鉛ビスマス凝固過程のパルス中性子イメージング

伊藤大介, 齊藤泰司, 佐藤博隆, 篠原武尚

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小型分散電源用原子炉システムの開発 -月面・火星ミッションを想定した原子炉炉心の核熱設計-

木村 礼, 和田怜志, 吉田大志, 西岡佳朗, 兵藤義浩

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中性子照射模擬燃料デブリからの核種溶出挙動-試料調製

坂本峻一, 佐々木隆之, 小林大志, 秋山大輔, 桐島 陽, 佐藤修彰

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長寿命超ウラン元素を燃焼可能な軽水炉 RBWR の開発

光安 岳

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Benchmarks of Subcriticality in Accelerator-Driven System at Kyoto University Critical Assembly

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