

1. Slow Neutron Physics and Neutron Scattering

Papers

Potential-Dependent Structure of the Ionic Layer at the Electrode Interface of an Ionic Liquid Probed Using Neutron Reflectometry

N. Nishi, J. Uchiyashiki, Y. Ikeda, S. Katakura, T. Oda, M. Hino and N. L. Yamada

The Journal of Physical Chemistry C **123** (14) (2019) 9223- 9230.

Current status of the neutron resonance spin echo spectrometer on BL06 “VIN ROSE” at MLF, J-PARC

H. Endo, T. Oda, M. Hino and T. Hosobata

Physica B: Condensed Matter **564** (2019) 91- 93.

Elliptic neutron-focusing supermirror for illuminating small samples in neutron reflectometry

T. Hosobata, N. L. Yamada, M. Hino, H. Yoshinaga, F. Nemoto, K. Hori, T. Kawai, Y. Yamagata, M. Takeda and S. Takeda

Optics Express **19** (2019) 26807.

A study of TOF-MIEZE reflectometry for nanomagnetic dynamics

M. Hino, T. Oda, H. Endo, N. L. Yamada, H. Seto, H. Ohshita and Y. Kawabata

Journal of Physics: Conference Series **1316** (2019).

Experimental test of ^3He neutron-spin filter in MIEZE spectrometer

H. Hayashida, M. Hino, H. Endo, T. Oku, T. Okudaira, K. Sakai and T. Oda.

Journal of Physics: Conference Series **1316** (2019) 012013.

Focusing and imaging of cold neutrons with a permanent magnetic lens

J. T. Cremer, H. Filter, J. Klepp, P. Geltenbort, C. Dewhurst, T. Oda and R. H. Pantell.

Review of Scientific Instruments **91**(1) (2020) 013704.

Structural and electrochemical features of $(\text{Li}_2\text{S})_x(\text{SiS}_2)_{100-x}$ superionic glasses

K. Mori, K. Iwase, Y. Oba, K. Ikeda, T. Otomo and T. Fukunaga

Solid State Ionics **344** (2020) 115141.

Proceedings

小角 X 線散乱法による DN-polymers の構造解析 /

SAXS study of the DN-polymers under different temperature and humidity atmosphere

T. Tominaga, R. Inoue, N. Sato and M. Sugiyama

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb5-6, 2020) 19. (in Japanese)

X 線小角散乱法による潤滑油中の添加剤の解析 /

Structural analysis of lubricant additive using small-angle X-ray scattering

Y. Oba, M. Hino, N. Adachi, Y. Todaka, R. Inoue and M. Sugiyama

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 20. (in Japanese)

核共鳴小角散乱による電子状態の微細構造観測手法の開発 /

Nuclear resonant small-angle scattering for investigation of microstructures in electronic states

S. Kitao, M. Kurokuzu, Y. Kobayashi, M. Seto, Y. Yoda and S. Kishimoto

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 32. (in Japanese)

MPPC を使用した二次元中性子検出器 Mpix の性能評価 /

Performance evaluation of a two-dimensional neutron detector with MPPC (Mpix)

H. Ohshita, H. Endo, T. Seya, Y. Yasu, M. Hino and T. Oda

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 40. (in Japanese)

中性子準弾性散乱測定を用いた溶媒依存性主鎖らせん反転を示す高分子の分子ダイナミクスの解明/

Elucidation of the molecular dynamics of the macromolecules exhibiting the solvent-depeibiting helix inversion by using quasielastic neutron scattering measurement

Y. Nagata, M. Suginome, M. Sugiyama, R. Inoe, N. Sato and K. Morishima

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 43. (in Japanese)

X 線小角散乱法および動的光散乱法による潤滑油中粘度指数向上剤の構造解析/

Structural analyses of viscosity index improvers in lubricant oil by means of dynamic light scattering and small angle X-ray scattering

R. Takahashi, T. Hirayama, N. Sato, M. Sugiyama, Y. Takashima, T. Nakano and Y. Oba

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 44. (in Japanese)

中性子と X 線を利用した複合イメージング手法の高度化/

Development of hybrid imaging technique using neutrons and X-ray

D. Ito, R. Okumura, K. Ito and Y. Saito

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 52. (in Japanese)

X 線・中性子反射率法による潤滑界面の平均構造評価/

Investigation of lubrication interface by X-ray and neutron reflectometry

M. Hino, N. Adachi, Y. Todaka, Y. Oba, T. Hirayama, T. Oda, K. Oda, H. Endo and T. Hirayama

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 55. (in Japanese)

実験手法と計算機手法の融合による溶液散乱法の最前線/

Mariage of computational and experimental techniques for solution small-angle scattering

R. Inoue, M. Sugiyama, N. Sato, K. Morishima, A. Okuda and R. Urade

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 56. (in Japanese)

箱型自己集合体の水中における動的特性/

Dynamic property of a box-shaped self-assembly in water

N. Sato, Y. Y. Zhang, Q. Jiang, T. Kojima, K. Morishima, T. Koide, M. Tachikawa, M. Sugiyama and S. Hiraoka

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 57. (in Japanese)

小角散乱と超遠心分析の協奏的解析(AUC-SAS)による弱会合性タンパク質複合体の構造解析/

Structural analysis of weakly bound protein complex with concerted use of small angle scattering and analytical ultracentrifugation (AUC-SAS)

Ken Morishima, Maho Yagi-Utsumi, Rintaro Inoue, Nobuhiro Sato, Aya Okuda, Reiko Urade, Koichi Kato, and Masaaki Sugiyama

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 58. (in Japanese)

X 線小角散乱による大豆タンパク質の構造解析/

Nanostructural analysis of soy bean proteins by small-angle X-ray scattering

N. Sato, R. Urade, A. Okuda, K. Morishima, R. Inoue and M. Sugiyama

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 59. (in Japanese)

KUR-IBS を用いた多層膜中性子ミラー開発の現状/

Current status of multilayer neutron mirror development with KUR-IBS

M. Hino, T. Oda, F. Funama, H. Yoshinaga, Y. Kawabata, T. Hosobata, M. Takeda, S. Ikebe and Y. Yamagata, H. Endo and N. L. Yamada

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 60. (in Japanese)

強相関 f 電子系金属間化合物の結晶・磁気構造の研究/

Magnetic and crystal structure analyses on strongly correlated f-electron systems

Chihiro Tabata

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 64-65. (in Japanese)

Reviews

100nm 未満の空間分解能を発揮する超微粒子原子核乳剤を用いた冷・超冷中性子検出器
長繩直崇
日本中性子科学会誌 波紋 **29(3)** (2019) 133-137. (in Japanese)

2. Nuclear Physics and Nuclear Data

Papers

Neutron total cross section measurements of polyethylene using time-of-flight method at KURNS-LINAC
J. Lee, J. Nishiyama, J. Hori, R. Kimura, T. Sako, A. Yamada and T. Sano
Journal of Nuclear Science and Technology **57(1)** (2019) 1-8.

Measurements of Spallation Products Induced by Heavy Ions
H. Yashima and T. Nakamura
RADIOISOTOPES **68(8)** (2019) 567-573.

X-ray pumping of the ^{229}Th nuclear clock isomer
T. Masuda, A. Yoshimi, A. Fujieda, H. Fujimoto, H. Haba, H. Hara, T. Hiraki, H. Kaino, Y. Kasamatsu, S. Kitao, K. Konashi, Y. Miyamoto, K. Okai, S. Okubo, N. Sasao, M. Seto, T. Schumm, Y. Shigekawa, K. Suzuki, S. Stellmer, K. Tamasaku, S. Uetake, M. Watanabe, T. Watanabe, Y. Yasuda, A. Yamaguchi, Y. Yoda, T. Yokokita, M. Yoshimura and K. Yoshimura
Nature **7773** (2019) 238-242.

Conceptual study on parasitic low-energy RI beam production with in-flight separator BigRIPS and the first stopping examination for high-energy RI beams in the parasitic gas cell
T. Sonoda, I. Katayama, M. Wada, H. Iimura, V. Sonnenschein, S. Iimura, A. Takamine, M. Rosenbusch, T. M. Kojima, D. S. Ahn, N. Fukuda, T. Kubo, S. Nishimura, Y. Shimizu, H. Suzuki, H. Takeda, M. Tanigaki, H. Tomita, K. Yoshida and H. Ishiyama
Progress of Theoretical and Experimental Physics **11** (2019) 113D02.

IMPROVEMENT OF GAMMA-RAY SUBTRACTION PROCEDURE FOR A CURRENT-MODE NEUTRON DETECTOR WITH A PAIR OF ^6Li - AND ^7Li -GLASS SCINTILLATORS
T. Matsumoto, A. Masuda, H. Harano, J. Hori and T. Sano
Radiation Protection Dosimetry **ncz266** (2019) 1-6.

Experimental study of multiplex energy recovery internal target ring
H. Okita, A. Taniguchi, Y. Kuriyama, T. Uesugi, Y. Ishi, Y. Mori, M. Muto, Y. Ono, N. Ikeda, Y. Yonemura, A. Sato, M. Kinsho, Y. Miyake, M. Yoshimoto and K. Okabe
Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment **953** (2019) 162988.

Proceedings

Measurement of Temperature-dependent Thermal Neutron Spectrum in CaH_2 Moderator Material for Space Reactor
J. Lee, T. Sano, J. Hori, T. Sako, R. Kimura, A. Yamada and J. Nishiyama
International Conference on Nuclear Data for Science and Technology (ND2019) Beijing, China (May19-24, 2019).

Neutron Capture Cross Section Measurement of Minor Actinides in Fast Neutron Energy Region for Study on Nuclear Transmutation System
T. Katabuchi, J. Hori, N. Iwamoto, O. Iwamoto, A. Kimura, S. Nakamura, Y. Shibahara, K. Terada, K. Tosaka, S. Endo, G. Rovira, Y. Kodama and H. Nakano
Proceedings of the 2019 Symposium on Nuclear Data Fukuoka, Japan (Nov.28-29, 2019).

MCS Multi-group Cross Sections Generationfor Fast Reactor Analysis
T. D. C. Nguyen, H. Lee, X. Du, V. Dos, T. Q. Tran and D. Lee
Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 2-5.

A Systematic Way to Determine Neutron Generation Size in Monte Carlo Simulation Accelerated by the CMFD

T. D. C. Nguyen, H. Lee, X. Du, V. Dos, T. Q. Tran and D. Lee

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 6-9.

Validation of Activation Analysis Methodon RWRVI of Kori Unitl using MCCARD/ORIGEN2

Y. I. Kim, S. H. Jang, D. H. Lee and H. J. Shim

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 10-13.

Uncertainty Quantification of Neutronics Characteristics in Thermal Systems using Random Sampling andContinuous Energy Monte-Carlo Methods

H. Oike, R. Kondo, T. Endo amd A. Yamamoto

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 14-17.

Peak Power Characteristics of Postulated Criticality in Fuel Debris

Y. Yamane

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 31-33.

DevelopmentofIntegral Kinetic Model with Delayed Neutrons Effect for Criticality Accident Analysis of Fukushima Daiichi NPP Fuel Debris

H. Takezawa, D. Tuya and T. Obara

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 34-35.

Radiation Dose by Criticality Accidents of Fuel Debris in Water

K. Fukuda, J. Nishiyama and T. Obara

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 36-39.

Development of Criticality Safety Evaluation Method Based on the Actual Dynamic Behavior of the Fuel Debris in Water

T. Muramoto, J. Nishiyama and T. Obara

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 40-43.

Treatment of R-matrix Limited Formula in FRENDY

K. Tada and S. Kunieda

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 229-232.

Validation of New Fission Yield by Analysis of Post-Irradiation Examination

A. Iso, S. Takeda and T. Kitada

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 233-235.

Continuous Thermal Neutron Scattering Data Processing Capability in RMC Code

L. Zheng, K. Wang and W. Wang

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 236-239.

Thermal neutron Scattering Data Generation Function in the nuclear Data Processing Code NECP-Atlas

Y. Tang, T. Zu, S. Yi, J. Xu and L. Cao

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 240-243.

Quantification of Effectiveness of Integral Data Using Active Sub-Space in nuclear Data Testing

D. Imazato and G. Chiba

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 244-247.

Estimated Criticality Lower-Limit Multiplication Factor Considering Neutronic Similariy and Uncertainties of Effective Multiplication Factor Using the Bootstrap Method(1) Teory

T. Hayashi, F. Nishioka, T. Endo and A. Yamamoto

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 250-253.

Estimated Criticality Lower-Limit Multiplication Factor Considering Neutronic Similariy and Uncertainties of Effective Multiplication Factor Using the Bootstrap Method (2) Application

F. Nishioka, T. Hayashi, T. Endo and A. Yamamoto

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 254-257.

Covariance-Oriented Sample Transformation Method for Uncertainty Analysis

Z. Sui, L. Cao and C. Wan

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 258-261.

Effectiveness of Subcritical Measurement at Solid Moderated KUCA Corefor Reducing nuclear Data-Induced Uncertainties in Other Light Water Reactor Analysis

T. Endo and A. Yamamoto

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 262-265.

Benchmark Study of Nuclear Processed Systems with NCA Data

S. Wada, K. Yoshida and T. Sugita

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 266-269.

Sensitivity Analysis for Generalized Response with RMC code

G. Shi, C. Jia, Q. Cheng and K. Wang

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 270-273.

Uncertainty Analysis of neutron Parameters for NESTOR

H. Liao, Q. Li, Y. Yu and Y. Hu

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 274-277.

Comparison of Methods of Generating Covariance Matrix of Fission Yield

K. Honta and G. Chiba

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 278-281.

Application of Surrogate Modeling with Singular Value Decomposition for Design Basis Accident Aiming Statistical Safety Analysis

M. Matsushita, T. Endo and A.Yamamoto

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 282-285.

Preliminary Performance Assessment of the GPU Acceleration Modulein a Pinwise Core Thermal Hydraulics Code ESCOT

K. M. Kim, N. Choi, J. Lee and H. G. Joo

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 288-291.

BEAVRS Benchmark Analysisby Whole Core Transport Code nTER

H. Park and J. Y. Cho

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 292-295.

Initial Assessment of Anderson Acceleration on Pinwise Coupled Neutronics/Thermal-Hydraulics Code nTER/ESCOT

J. Lee, J. Y. Cho and H. G. Joo

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 296-299.

Pin-By-Pin Multi-physics Analysis and Evaluation of the Critical Heat Flux(CHF) in a PWR Core

J. Kim, K. S. Chaudri and Y. Kim

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 300-303.

Functional Expansion Tallies in Monte Carlo High Fidelity LWR Analysis

Bamidele Ebironjumi, Hyunsuk Lee, Peng Zhang and D. Lee

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 304-307.

Hybrid Parallelism of Internal Coupling Method between Monte Carlo Code RMC and Sub-channel Thermal-Hydraulic Code CTF

K. Li, S. Liu, J. Guo and K. Wang

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 308-311.

NECP-X and CTF Solutions to VERA Benchmark

B. Wang, Z. Liu and L. Cao

Proceedings of Reactor Physics Asia Conference 2019 (RPHA2019) Osaka, Japan (Dec.2-3, 2019) 312-315.

CRITICAL EXPERIMENT OF THORIUM LOADED THERMAL CORES AT KUCA (1) A NEW CRITICAL

EXPERIMENT OF THORIUM LOADED CORE WITH HARDER NEUTRON SPECTRUM IN KUCA

T. Sano, J. Hori, J. Lee, Y. Takahashi, K. Takahashi and H. Unesaki

Physics of Reactor Conference 2020 (PHYSOR2020) Cambridge, UK (Mar. 2020).

CRITICAL EXPERIMENT OF THORIUM LOADED THERMAL CORES AT KUCA (2) CRITICALITY ANALYSIS OF THORIUM LOADED CORES IN KUCA

H. Unesaki, J. Hori, Y. Takahashi, J. Lee and T. Sano

Physics of Reactor Conference 2020 (PHYSOR2020) Cambridge, UK (Mar. 2020).

Experimental Study on Neutron Correlation Analysis for a Subcritical System Driven by a Pulsed Spallation Neutron Source in KUCA

K. Nakajima, K. Takahashi, A. Sakon, S. Hohara, T. Sano, M. Yamanaka, C.H. Pyeon and K. Hashimoto

Physics of Reactor Conference 2020 (PHYSOR2020) Cambridge, UK (Mar. 2020).

短寿命 RI を用いた核分光と核物性研究/

Nuclear spectroscopy and condensed matter physics using short-lived nuclei

Y. Ohkubo, A. Taniguchi, M. Tanigaki, M. Shibata, Y. Kojima, W. Sato, and S. Komatsuda

Proceedings of the 54th KURNS Scientific Meeting Kumatori, Japan (Feb.5-6, 2020) 10-14. (in Japanese)

Reviews

燃料デブリ核特性評価に関わる核データニーズ－中性子照射ガンマ線スペクトル測定－

名内泰志

核データニュース **122** (2019) 54-66.

3. Reactor Physics and Reactor Engineering

Papers

AN IMPROVED PRESSURE CALCULATION METHOD FOR SIMULATIONS OF GAS-LIQUID TWO-PHASE FLOWS ON UNSTRUCTURED MESHES

K. Ito, T. Kunugi, T. Ezure, M. Tanaka, D. Ito and Y. Saito

Multiphase Science and Technology **31(2)** (2019) 109-131.

Benchmarks of Criticality in Solid-Moderated and Solid-Reflected Core in at Kyoto University Critical Assembly

M. Yamanaka and C. H. Pyeon

Nuclear Science and Engineering **193** (2019) 404-416.

Experimental Analysis of Unique Combination-Number for the Third- and Fourth-order Neutron-Correlation Factors in the Zero Power Reactor Noise

T. Endo, A. Yamamoto, M. Yamanaka and C. H. Pyeon

Journal of Nuclear Science and Technology **56(4)** (2019) 322-336.

Measurements of the ^{243}Am Neutron Capture and Total Cross Sections with ANNRI at J-PARC

A. Kimura, S. Nakamura, K. Terada, T. Nakao, K. Mizuyama, N. Iwamoto, O. Iwamoto, H. Harada, T. Katabuchi, M. Igashira, T. Sano, Y. Takahashi, C. H. Pyeon, S. Fukutani, T. Fujii, T. Yagi, K. Takamiya and J. Hori

Journal of Nuclear Science and Technology **56** (2019) 479-492.

Proton Beam Characteristics with Wavelength Shifting Fiber Detector at Kyoto University Critical Assembly

M. Yamanaka, K. W. Jang, S. H. Shin, C. H. Pyeon and B. Lee

Japanese Journal of Applied Physics **58** (2019) 036002-1_036002-6.

A Monte Carlo technique for sensitivity analysis of alpha-eigenvalue with the differential operator sampling method

T. Yamamoto and T. Sakamoto

Annals of Nuclear Energy **127** (2019) 178-187.

Effect of Neutron Spectrum on Subcritical Multiplication Factor in Accelerator-Driven System

N. Aizawa, M. Yamanaka, T. Iwasaki and C. H. Pyeon

Progress in Nuclear Energy **116** (2019) 158-167.

Experiments on gas entrainment phenomena due to free surface vortex induced by flow passing beside stagnation region

T. Ezure, K. Ito, M. Tanaka, H. Ohshima and Y. Kameyama

Nuclear Engineering and Design **350(15)** 90-97.

First Nuclear Transmutation of ^{237}Np and ^{241}Am by Accelerator-Driven System at Kyoto University Critical Assembly

C. H. Pyeon, M. Yamanaka, A. Oizumi, M. Fukushima, G. Chiba, K. Watanabe, T. Endo, W. F. G. van Rooijen, K. Hashimoto, A. Sakon, N. Aizawa, Y. Kuriyama, T. Uesugi and Y. Ishi

Journal of Nuclear Science and Technology **56(8)** (2019) 684-689.

Integral Experiments on Critical Irradiation of ^{237}Np and ^{241}Am Foils at Kyoto University Critical Assembly

C. H. Pyeon, M. Yamanaka, T. Sano and K. Takamiya

Nuclear Science and Engineering **193(9)** (2019) 1023-1032.

Calculation of the Cross and Auto Power Spectrum Densities for Low Neutron Counting from Pulse Mode Detectors

A. Talamo, Y. Gohar, T. Yamamoto, M. Yamanaka and C. H. Pyeon

Annals of Nuclear Energy **131** (2019) 138-147.

Removal of Scale from Feed-water in Thermal Power Plant by Magnetic Separation

-Analysis of Oxygenated Treatment Scale-

M. Hiramatsu, J. Yamamoto, Y. Akiyama, F. Mishima, S. Nishijima, H. Okada, N. Hirota, T. Yamaji, H. Matsuura, S. Namba, T. Sekine, Y. Kobayashi and M. Seto

Journal of Physics: Conference Series **1293(1)** (2019) 012079.

Visualization of phase distribution in lead–bismuth eutectic during one-dimensional solidification process

D. Ito, H. Sato, Y. Saito, J. D. Parker, T. Shinohara and T. Kai

Journal of Visualization **22(5)** (2019) 889-895.

An Impact of Inherent Neutron Source on Subcriticality Measurement in A Highly Enriched Uranium Core of Kyoto University Critical Assembly

A. Sakon, T. Sano, S. Hohara, C. H. Pyeon and K. Hashimoto

Journal of Nuclear Science and Technology **56** (2019) 935-944.

Decomposition of neutron noise in a reactor into higher-order mode components and investigation of the space and frequency dependence

T. Yamamoto and H. Sakamoto

Progress in Nuclear Energy **117** (2019) 103098.

Two-step Monte Carlo sensitivity analysis of alpha- and gamma-eigenvalues with the differential operator sampling method

T. Yamamoto and H. Sakamoto

Annals of Nuclear Energy **133** (2019) 100-109.

Application of Linear Combination Method to Pulsed-Neutron Source Measurement at Kyoto University Critical Assembly

R. Katano, M. Yamanaka and C. H. Pyeon

Nuclear Science and Engineering **193** (2019) 1394-1402.

Experimental study on local interfacial parameters in upward air–water bubbly flow in a vertical 6×6 rod bundle

X. Han, X. Shen, T. Yamamoto, K. Nakajima, H. Sun and T. Hibiki

International Journal of Heat and Mass Transfer **444** (2019) 118696.

Feasibility Study on Application of an Artificial Neural Network for Automatic Design of a Reactor Core at the Kyoto University Critical Assembly

S. H. Kim, S. G. Shin, S. S. Han, M. H. Kim and C. H. Pyeon

Progress in Nuclear Energy **119** (2020) 103183.

Calculation of the Prompt Neutron Decay Constant of the KUCA Facility Configurations Driven by a Californium of Spallation External Neutron Sources

A. Talamo, Y. Gohar, M. Yamanaka and C. H. Pyeon

Journal of Nuclear Science and Technology **57** (2020) 145-156.

Estimation of Kinetics Parameters by Monte Carlo Fixed-Source Calculations for Accelerator-Driven System
H. J. Shim, D. H. Kim, M. Yamanaka and C. H. Pyeon
Journal of Nuclear Science and Technology **57**(2) (2020) 177-186.

Experimental Analyses of b_{eff} / L in Accelerator-Driven System at Kyoto University Critical Assembly
M. Yamanaka, C. H. Pyeon, T. Endo, K. Watanabe, G. Chiba and W. F. G. van Rooijen
Journal of Nuclear Science and Technology **57**(2) (2020) 205-215.

Measurement of Prompt Neutron Decay Constant with Spallation Neutrons at Kyoto University Critical Assembly using Linear Combination Method
R. Katano, M. Yamanaka and C. H. Pyeon
Journal of Nuclear Science and Technology **57** (2020) 169-176.

Nuclear Data-Induced Uncertainty Quantification of Prompt Neutron Decay Constant based on Perturbation Theory for ADS Experiments at KUCA
T. Endo, K. Watanabe, G. Chiba, M. Yamanaka, W. F. G. van Rooijen and C. H. Pyeon
Journal of Nuclear Science and Technology **57** (2020) 196-204.

Paralyzable and Non-Paralyzable Dead-Time Corrections for the Neutron Detectors of the KUCA Facility using External Neutron Sources
A. Talamo, Y. Gohar, M. Yamanaka and C. H. Pyeon
Journal of Nuclear Science and Technology **57** (2020) 157-168.

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京都大学「原子炉実験所」から「複合原子力科学研究所」へ/

From Research Reactor Institute to Institute for Integrated Radiation and Nuclear Science, Kyoto University

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