

Contents

RESEARCH ARTICLES

- 1753** Mass Yield Distributions in the 13.75-MeV Quasi-Mono-Energetic Neutron-Induced Fission of ^{232}Th and ^{238}U
H. Naik, Meghna Karkera, Vibha Vansola, Santhi Sheela Yeraguntla, Mayur Mehta, R. Makwana, S. V. Suryanarayana
- 1771** Proposal of New Integral Experiment Method for the Thermal Scattering Law of Metal Hydride by Neutron Imaging
Rei Kimura, Rui Akayama, Ayumu Okano, Daisuke Ito, Naoya Odaira, Kei Ito, Yasushi Saito
- 1784** Method of Manufactured Solutions for the Neutron Kinetics Equations
William C. Dawn
- 1798** Uncertainty Quantification for Data-Driven Machine Learning Models in Nuclear Engineering Applications: Where We Are and What Do We Need?
Xu Wu, Lesego E. Moloko, Pavel M. Bokov, Gregory K. Delipei, Joshua Kaizer, Kostadin N. Ivanov
- 1821** Theoretical Model for Electromagnetic Flowmeter with Conductive Pipe Wall Based on Weight Function Correlation of Fluid Domain
Yang Yang, Biaohu Yang, Silin Pan, Tianqiu Chen, Chao Zhang, Bin Yang
- 1834** Counter-Current Flow Limitation Studies in Complex Geometries Utilizing Interface Capturing Simulations Coupled with PID Flow Rate Controller
Yuqiao (Joy) Fan, Igor Bolotnov
- 1862** CFD Study on Fluid Flow and Heat Transfer Characteristics of Heat Exchanger Under Swing Conditions
Zhou Jianjun, Lin Jingjun, Yuan Xianbao, Du Xiaochao, Mao Zhangliang
- 1876** Domain-Decomposed Dynamic Mode Decomposition Approach for Prediction of Three-Dimensional Thermal-Fluid Parameters in Molten Salt Reactors
Yuqing Dai, Ming Lin, Maosong Cheng, Xiangzhou Cai
- 1898** Accurate Radioisotope Identification in Mixed Materials Using Convolutional Neural Networks with Minimal Training Data
Christian Fedon, Ilias Mourikis, Antonio Piccolo, Bernard Erasmus, Edo Frederix

—continued—

Contents continued

VOLUME 200 · NUMBER 8 · AUGUST 2026

- 1911** Enhancing Nuclear Fuel Cladding Performance: Optimizing SMAT Duration for Superior Hardness, Wear, and Corrosion Resistance in Zr-1%Nb Alloy
Meysam Karimi, Behrooz Shayegh Boroujeny, Hadi Adelkhani, Seyed Masoud Araghchi
- 1924** Investigations of Shielding Parameters of Gamma, Neutron, and Charged Particles of Synthetic Boron Carbide Nanoparticle–Doped Epoxy Composites
G. B. Hiremath, N. R. Banapurmath, Ashok M. Sajjan, N. H. Ayachit, N. M. Badiger
- 1934** Evaluation of PBR Spent Fuel Criticality and Dose Rate Compliance for Storage and Transportation
Jonathan Wing, Gordon M. Petersen, Robert A. Joseph, Guillermo Ivan Maldonado
- 1951** A Study on the Influence Mechanism of Cognitive Style on Situation Awareness of Nuclear Power Plant Operators
Zigu Guo, Linhui Sun, Jing Yan, Yandan Lin