

Contents

RESEARCH ARTICLES

- 873** A Comprehensive Deep Learning–Based Approach to Field Reconstruction in Reactor Cores
Bo Xu, Han Li, Lei Zhang, Helin Gong
- 888** A Hybrid Data Assimilation and Dynamic Mode Decomposition Approach for Xenon Dynamic Prediction of Nuclear Reactor Cores
Jianpeng Liu, Zhiyong Wang, Qing Li, Gong Helin
- 907** Feasibility of Photonuclear Transmutation of Long-Lived Fission Products Extracted from Used Nuclear Fuel
Puran Deng, Ryan Willat, Won Sik Yang
- 930** Prediction of Decay Heat from PWR Spent Nuclear Fuel Using Fuel Parameters
Virginie Solans, Henrik Sjöstrand, Sophie Grape, Erik Branger, Anders Sjöland
- 941** A Consistent Comparison of Upper Subcritical Limit Methods
Bobbi Riedel, Christopher M. Perfetti, Forrest B. Brown
- 957** Study on Photon Beam Imaging Properties of CsPbBr₃-PP Scintillator: Monte Carlo Simulation Approach
Zhigang Li, Junfeng Zhao, Yuanjie Sun, Yue Zhang, Hongtao Zhao
- 967** Structural, Electronic, and Mechanical Properties of α (U) and α (U-Zr) Alloy Fuels
Tijo Vazhappilly, Arup Kumar Pathak
- 977** On the Feasibility of a RGA-Based Decoupling Control in the Reactor-Follow-Turbine Operation of a PWR
M. Zarei
- 988** Alkaline Hydrolysis of Tri-iso-amyl Phosphate in n-dodecane Using Sodium Hydroxide: Part 1—Factors Affecting the Hydrolysis Process
Satyabrata Mishra, Vishnu Anand P, Gnanasoundari J, Rajeev R, Desigan N, Venkatesan K A
- 1000** Investigation of Energy Deposition by Soft X-rays into Solar Cell Materials
Youssef Abouhussien, Gennady Miloshevsky

—continued—

Contents continued

VOLUME 199 · NUMBER 6 · JUNE 2025

- 1010** Neutronic and Thermodynamic System Solution of the Nuclear Power Plant
Fred D. Lang

NOTE

- 1029** Experiments on Central Reaction Rate Ratios and Fission Distributions in the FCA-XXII-1 Assembly Simulating Highly Enriched MOX-Fueled Tight Lattice LWR Cores
Masahiro Fukushima, Masaki Andoh, Yasunobu Nagaya