

Contents

RESEARCH ARTICLES

- 1 Simulation of the NuScale SMR and Investigation of the Effect of Load-Following on Component Lifetimes
Una Baker, Marisol Garrouste, Sooyoung Choi, Gabriel J. Soto, Ross Snuggerud, Brendan Kochunas, Ben Lindley
- 23 Optimizing the Implementation of Small Modular Reactors into Ontario's Future Energy Mix
C. Colterjohn, S. Nagasaki, Y. Fujii
- 46 Experimental Simulation of Decay Heat of Corium at the Lava-B Test-Bench
M. K. Bekmuldin, M. K. Skakov, V. V. Baklanov, A. V. Gradoboev, A. S. Akayev, K. O. Toleubekov
- 55 Estimation Method for Residual Sodium Amount on Unloaded Dummy Fuel Assembly
Munemichi Kawaguchi, Yasushi Hirakawa, Yusuke Sugita, Yutaka Yamaguchi
- 72 Validation and Neutronic Analysis of the GENM TRIGA MARK II SCALE Research Reactor Model: Computations Versus Experiment
H. Ziani, T. El Bardouni, C. Elyounoussi, I. Berriban, T. El Ghalbzouri, B. El Bakkari, O. El Hajjaji, S. ElMaliki ElHlaibi, M. Lahdour, H. El Yaakoubi
- 84 Examination of Deep Learning Algorithm for Nuclear Proliferation Risk Modeling
Philseo Kim, Man-Sung Yim, Justin V. Hastings, Philip Baxter
- 100 Sequential Deployment of Mobile Radiation Sensor Network Using Reinforcement Learning in Radioactive Source Search
Siyao Gu, Miltiadis Alamaniotis
- 112 Detecting Anomalies in Simulated Nuclear Data Using Autoencoders
Pedro Mena, R. A. Borrelli, Leslie Kerby
- 126 Optimized FSF Controller for Bulk Power Control of Large-Core PHWRs
P. D. Vaswani, P. K. Tamboli, Debraj Chakraborty
- 137 Cherenkov Glass Detectors with Wavelength Shifting Fibers for Neutron Measurements
Hattan Natto, Haori Yang

—continued—

Contents continued

VOLUME 210 · NUMBER 1 · JANUARY 2024

147 Performance Evaluation of Batchwise Multistage Countercurrent Extraction in a LiCl–KCl/Cd System to Separate Actinides from Rare Earth Fission Products
Yoshiharu Sakamura

165 One-Dimensional Steady-State Thermal Model of CNTP Reactor
Jacob Keese, D. Keith Hollingsworth

NOTE

180 Geant4 Extension for Neutronic Calculation of Nuclear Reactor Core
Hossein Hashemi-Jozani, Khalil Moshkbar-Bakhshayesh, Soroush Mohtashami, Behzad Rokhbin