

Nuclear Technology

VOLUME 209 · NUMBER 6 · JUNE 2023



Contents

CRITICAL REVIEW

- 787** Molybdenum-99 from Molten Salt Reactor as a Source of Technetium-99m for Nuclear Medicine: Past, Current, and Future of Molybdenum-99
Jisue Moon, Kristian Myhre, Hunter Andrews, Joanna McFarlane

TECHNICAL PAPERS

- 809** Modeling of an Energy-Diverse Embedded Grid for Microreactor Integration
Lucas Wodrich, Alvin J. H. Lee, Tomasz Kozlowski, Caleb S. Brooks
- 835** An Assessment of Heterogeneous Effects on System Reactivity for Criticality Safety Analyses with LEU+ and HALEU Materials
Philip H. Sewell, Robert B. Hayes
- 857** Thermal-Hydraulic Analysis of Inward and Outward Fuel Plate Buckling in a Typical MTR Reactor
Abdelfatah Abdelmaksoud, Hesham Elbakhshawany, Mohamed Abdelaziz
- 872** Multiaxial Plastic Deformation of Zircaloy-4 Nuclear Fuel Cladding Tubes
David Kamerman, Malachi Nelson
- 887** A Hydrothermal Phase Diagram for the Low-Temperature Synthesis of Nonstoichiometric Nickel Ferrite Nanoparticles
Bhavani Sasank Nagothi, John Arnason, Kathleen Dunn
- 895** Cross-Section Calculations for the Production of ^{123}I and ^{124}I Radioisotopes via (p,n) and $(\text{p},2\text{n})$ Reactions Using Collective Nuclear Level Density Model
Deniz Canbula, Bora Canbula
- 902** Comprehensive Analysis and Evaluation of Fukushima Daiichi Nuclear Power Station Unit 3
Takuya Yamashita, Takeshi Honda, Masato Mizokami, Kenichiro Nozaki, Hiroyuki Suzuki, Marco Pellegrini, Takeshi Sakai, Ikken Sato, Shinya Mizokami