

Nuclear Technology

VOLUME 201 · NUMBER 1 · JANUARY 2018

Contents

- iii Commentary: The Return of the Commentary
Andrew C. Klein

TECHNICAL PAPERS

- 1 Nuclear Forensics Methodology for Reactor-Type Attribution of Chemically Separated Plutonium
Jeremy M. Osborn, Evans D. Kitcher, Jonathan D. Burns, Charles M. Folden III, Sunil S. Chirayath
- 11 A Nuclear Jet at Chernobyl Around 21:23:45 UTC on April 25, 1986
Lars-Erik De Geer, Christer Persson, Henning Rodhe
- 23 Wear Depth Prediction for Steam Generator Tubes Using an Estimated In Situ Wear Coefficient
Chi-Yong Park, Huinam Rhee, Ki-Wahn Ryu
- 41 A Feasibility Study on the Transmutation of ^{100}Mo to $^{99\text{m}}\text{Tc}$ with Laser-Compton Scattering Photons
Jiyoung Lee, Haseeb ur Rehman, Yonghee Kim
- 52 High-Temperature Oxidation of a Sponge-Based E110 Cladding Tube Material: Weight Gain and Reaction Layer Kinetics
J. Krejčí, V. Vrtílková, J. Kabátová, A. Příbyl, P. Gajdoš, D. Rada, J. Šustr
- 66 Numeric Determination and Validation of Neutron-Induced Radioactive Nuclide Inventories for Decommissioning and Dismantling of Light Water Reactors
Peter-W. Phlippen, Luc Schlömer, Michael Nekipelov, Roger Vallentin, Bernard Lukas, Stefan Palm, Thomas Mispagel
- 80 Novel Methodologies for Modeling the Net Fission-Poison Reactivity Transients to Accurately Predict Criticals and Hot-Startup ECPs for the MURR Core
N. J. Peters, K. Kutikkad

TECHNICAL NOTE

- 99 Hydraulic and Heated Equivalent Diameters Used in Heat Transfer Correlations
Juliana P. Duarte, Michael L. Corradini