

# NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 138, NUMBER 1, MAY 2001

## CONTENTS

### TECHNICAL PAPERS

- |    |                                                                                                                      |                                                                              |
|----|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 1  | A Parametric Study of the DUPIC Fuel Cycle to Reflect Pressurized Water Reactor Fuel Management Strategy             | <i>Daniel Rozon, Wei Shen</i>                                                |
| 26 | Split-Cell Exponential Characteristic Transport Method for Unstructured Tetrahedral Meshes                           | <i>Charles R. Brennan,<br/>Rodney L. Miller, Kirk A. Mathews</i>             |
| 45 | Multidimensional Deterministic Nuclear Data Sensitivity and Uncertainty Code System: Method and Application          | <i>Ivan Kodeli</i>                                                           |
| 67 | Boiling Water Reactor Loading Pattern Optimization Using Simple Linear Perturbation and Modified Tabu Search Methods | <i>Suetsugu Jagawa, Takashi Yoshii,<br/>Akihiro Fukao</i>                    |
| 78 | Transient Criticality in Fissile Solutions—Compressibility Effects                                                   | <i>C. C. Pain, C. R. E. de Oliveira,<br/>A. J. H. Goddard, A. P. Umpleby</i> |
| 96 | An Approximate Monte Carlo Adaptive Importance Sampling Method                                                       | <i>Thomas E. Booth</i>                                                       |