

NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 72, NUMBER 3, DECEMBER 1979

CONTENTS TECHNICAL PAPERS

- 281 Maximum Density and Capture Rate of Neutrons Moderated from a Pulsed Source *G. C. Baldwin, J. C. Solem*
- 290 The Direct Pumping of Gamma-Ray Lasers by Neutron Capture *G. C. Baldwin, J. C. Solem*
- 293 The Interaction of Fast Neutrons with Nickel-60 *A. Smith, P. Guenther, D. Smith, J. Whalen*
- 304 Linear Response of the Neutron Field to a Propagating Perturbation of Moderator Density (Two-Group Theory of Boiling Water Reactor Noise) *K. Behringer, G. Kosály, I. Pázsit*
- 322 One-Dimensional Network for Multidimensional Fluid-Structural Interactions *K. Takeuchi*
- 330 Dissociating Nitrogen Tetroxide (N_2O_4) as a Working Fluid in Thermodynamic Cycles *Alecsei Sorokin*
- 347 The Initiation of Melt Fragmentation in Fuel-Coolant Interactions *Douglas S. Drumheller*

TECHNICAL NOTES

- 357 The Thermal-Neutron Capture Cross Section for the Production of ^{108m}Ag *T. B. Ryves*
- 359 The $Th(n, \chi\gamma)$ Reaction Cross Section for Neutrons of Energy Between 0.3 and 20 MeV *G. L. Morgan*
- 361 Improved Treatment of the Neutron Streaming Through Control Rod Followers in a Sodium-Cooled Fast Reactor *Tadashi Yoshida*

COMPUTER CODE ABSTRACTS

- 366 BURNER *G. W. Cunningham, D. R. Vondy*
- 366 PERTUBAT *D. R. Vondy, T. B. Fowler*
- 367 RODMOD *D. R. Vondy, T. B. Fowler*

(Continued)

CONTENTS
(Continued)

LETTERS TO THE EDITOR

- 368** On the Correct Use of the Bayesian Method for Reactor Core Melt Frequency *Harry F. Martz, Jr.*
- 369** Reply to "On the Correct Use of the Bayesian Method for Reactor Core Melt Frequency" *George Apostolakis, Ali Mosleh*

BOOK REVIEW

- 371** Measurement of Two-Phase Flow Parameters, G. W. Hewitt *R. T. Lahey, Jr.*

372 ANNOUNCEMENT OF CURRENT PUBLICATIONS

376 VOLUME 72 AUTHOR AND SUBJECT INDEXES