## CONTENTS

SHELL-MODEL THEORY OF THE NUCLEUS, H. J. Mang and H. A. Weidenmüller	1
HIGH-ISOSPIN NUCLEI AND MULTIPLETS IN THE LIGHT ELEMENTS,  Joseph Cerny	27
ELEMENTS BEYOND 100, PRESENT STATUS AND FUTURE PROSPECTS,  Glenn T. Seaborg	53
REVIEW OF NUCLEAR WEAPONS EFFECTS, Harold L. Brode	153
Nuclear Propulsion for Space Vehicles, R. S. Cooper	203
Current Algebra, J. D. Bjorken and M. Nauenberg	229
THE MEASUREMENT OF SHORT NUCLEAR LIFETIMES, A. Z. Schwarz-schild and E. K. Warburton	265
MAGNETIC DIPOLE MOMENTS OF EXCITED NUCLEAR STATES, L. Grodzins	291
Compound Nuclear Reactions Induced by Heavy Ions, T. Darrah Thomas	343
THE RADIOACTIVITY OF THE ATMOSPHERE AND HYDROSPHERE, D. Lal and Hans E. Suess	407
Accelerators for High Intensities and High Energies, Ernest D.  Courant	435
MATERIALS FOR WATER-COOLED REACTORS, W. C. Francis	465
Effects of Radiation on Man, Arthur C. Upton	495
SOME RELATED ARTICLES APPEARING IN OTHER Annual Reviews .	529
Author Index	531
CUMULATIVE INDEX OF CONTRIBUTING AUTHORS, VOLUMES 9 TO 18.	546
CUMULATIVE INDEX OF CHAPTER TITLES, VOLUMES 9 TO 18	548