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Titolo	Advances in Nuclear Physics : Structure and Reactions // edited by Rajeev K. Puri, Joerg Aichelin, Sakshi Gautam, Rohit Kumar
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Descrizione fisica	1 online resource (xix, 273 pages) : illustrations (some color), charts
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Soggetti	Nuclear physics Nuclear fusion Mathematical physics Nuclear Physics Nuclear Fusion Theoretical, Mathematical and Computational Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Evolution of cluster production with fragmentation degree -- New signatures of phase transition from models of nuclear multifragmentation -- Study of isospin effects in heavy-ion collisions at intermediate energies using isospin-dependent quantum molecular dynamics model -- Role of mass asymmetry on the energy of peak intermediate mass production and its related dynamics -- Reaction dynamics for stable and halo nuclei reactions at intermediate energies -- Influence of neutron skin of nuclei on observables -- Nuclear matter at high densities: Squeezing out nuclear matter properties from experimental data -- Studies on hypernuclei and superheavy elements -- Systematic study of Po compound nuclei using evaporation residue, fission cross-section and neutron multiplicity as a probe -- Effective surface properties of light and medium mass exotic nuclei.
Sommario/riassunto	This volume comprises select peer-reviewed papers from the Indo-French Workshop on Multifragmentation, Collective Flow, and Sub-Threshold Particle Production in Heavy-Ion Reactions held at the Department of Physics, Panjab University, Chandigarh, India in

February, 2019. The contents highlight latest research trends in intermediate energy nuclear physics and emphasize on the various reaction mechanisms which take place in heavy-ion collisions. The chapters contribute to the understanding of interactions that govern the dynamics at sub-nucleonic level. The book includes contributions from global experts hailing from major research facilities of nuclear physics, and provides a good balance between experimental and theoretical model based studies. Given the range of topics covered, this book can be a useful reference for students and researchers interested in the field of heavy-ion reactions.
