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2. ISGMR Results and Discussion; 3. PDR Results and Discussion; 4. Summary; Acknowledgments; References; Chiral Unitary Study of the pp pLK+ and pp p 0K+ Processes H.X. Chen, J.J. Xie and E. Oset; 1. Introduction; 2. Formalism and ingredients; 3. Numerical results and Discussion; Acknowledgments; References; Recent Progress on the Determination of the Symmetry Energy L.W. Chen; 1. Introduction; 2. The symmetry energy
3. The symmetry energy around the saturation density3.1. Nuclear reactions; 3.1.1. Heavy ion collisions; 3.1.2. Nucleon optical potential; 3.2. Nuclear structures; 3.2.1. Nuclear mass; 3.2.2. Neutron skin thickness; 3.2.3. Nuclear isobaric analog state energies; 3.2.4. Pygmy dipole resonance; 3.3. The properties of neutron stars; 3.4. Discussions; 4. The symmetry energy at supra-saturation densities; 5. Summary; Acknowledgments; References; Reflection Asymmetric Shell Model Description for the Parity Doublets in 237U and 239Pu Q.M. Chen, Z.C. Gao and Y.S. Chen; 1. Introduction
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3. Result and discussion

Sommario/riassunto

This volume is a collection of the contributions to the 14th National Conference on Nuclear Structure in China (NSC2012). It provides an important updated resource in the nuclear physics literature for researchers and graduate students studying nuclear structure and related topics. Recent progress made in the study of nuclear spectroscopy of high-spin states, nuclear mass and half-life, nuclear astrophysics, super-heavy nuclei, unstable nuclei, density functional theory, neutron star and symmetry energy, nuclear matter, and nuclear shell model are covered. Sample Chapter(s). Tensor Effects on
