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Nota di contenuto	Next Generation Relativistic Models -- Covariant Effective Field Theory for Nuclear Structure and Nuclear Currents -- Exploring The Nucleus in the Context of Low-Energy QCD -- The Relativistic Dirac-Brueckner Approach to Nuclear Matter -- Density Dependent Relativistic Field Theory -- Covariant Density Functional Theory and Applications to Finite Nuclei -- Symmetry in the Relativistic Mean Field Approximation -- Vacuum, Matter, and Antimatter -- Mean Field: Relativistic Versus Non-Relativistic -- Angular Momentum Projection and Quadrupole Correlations Effects in Atomic Nuclei -- Pairing and Continuum Effects in Exotic Nuclei.
Sommario/riassunto	The experimental and theoretical investigation of nuclei far from the valley of beta-stability is the main subject of modern nuclear structure research. Although the most successful nuclear structure models are purely phenomenological, they nevertheless exploit basic properties of QCD at low energies. This book focuses on the current efforts to bridge the gap between phenomenology and the principles derived from QCD using the extended density functional approach which is based on the successful DFT methods to tackle similarly complex interacting systems in molecular and condensed matter physics. Conceived as a series of pedagogical lectures, this volume addresses researchers in the field as well as postgraduate students and non-specialized scientists from related areas who seek a high-level but accessible introduction to the

subject. .