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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Preface -- Contents -- Chapter 1: Basics of elementary particles -- Chapter 2: Lagrange formalism. Symmetries and gauge fields -- Chapter 3: Canonical quantization, symmetries in quantum field theory -- Chapter 4: The Feynman theory of positron and elementary quantum electrodynamics -- Chapter 5: Scattering matrix -- Chapter 6: Invariant perturbation theory -- Chapter 7: Exact propagators and vertices -- Chapter 8: Some applications of quantum electrodynamics -- Chapter 9: Path integrals and quantum mechanics -- Chapter 10: Functional integrals: scalars and spinors -- Chapter 11: Functional integrals: gauge fields -- Chapter 12: The Weinberg-Salam model -- Chapter 13: Renormalization -- Chapter 14: Nonperturbative approaches -- Bibliography -- Index
Sommario/riassunto	This book discusses the main concepts of the Standard Model of elementary particles in a compact and straightforward way. The work illustrates the unity of modern theoretical physics by combining approaches and concepts of the quantum field theory and modern condensed matter theory. The inductive approach allows a deep understanding of ideas and methods used for solving problems in this field.