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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Capabilities of approximate methods in quantum theory -- Basics of the operator method -- Applications of OM for one-dimensional systems -- Operator method for quantum statistics -- Quantum systems with several degrees of freedom -- Two-dimensional exciton in magnetic field with arbitrary strength -- Atoms in the external electromagnetic fields -- Many-electron atoms -- Systems with infinite number of degrees of freedom.
Sommario/riassunto	This book introduces systematically the operator method for the solution of the Schrödinger equation. This method permits to describe the states of quantum systems in the entire range of parameters of Hamiltonian with a predefined accuracy. The operator method is unique compared with other non-perturbative methods due to its ability to deliver in zeroth approximation the uniformly suitable estimate for both ground and excited states of quantum system. The method has been generalized for the application to quantum statistics and quantum

field theory. In this book, the numerous applications of operator method for various physical systems are demonstrated. Simple models are used to illustrate the basic principles of the method which are further used for the solution of complex problems of quantum theory for many-particle systems. The results obtained are supplemented by numerical calculations, presented as tables and figures.