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ISBN	3-030-57243-9
Edizione	[Second edition.]
Descrizione fisica	1 online resource (XI, 290 p. 313 illus., 158 illus. in color.)
Collana	Undergraduate Lecture Notes in Physics, , 2192-4791
Disciplina	530
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Livello bibliografico	Monografia
Nota di contenuto	Introductory concepts -- Atoms -- Molecules -- Statistical physics -- Solids.
Sommario/riassunto	This is the second edition of a well-received book. It provides an up-to-date, concise review of essential topics in the physics of matter, from atoms and molecules to solids, including elements of statistical mechanics. It features over 160 completely revised and enhanced figures illustrating the main physical concepts and the fundamental experimental facts, and discusses selected experiments, mainly in spectroscopy and thermodynamics, within the general framework of the adiabatic separation of the motions of electrons and nuclei. The book focuses on what can be described in terms of independent-particle models, providing the mathematical derivations in sufficient detail for readers to grasp the relevant physics involved. The final section offers a glimpse of more advanced topics, including magnetism and superconductivity, sparking readers' curiosity to further explore the latest developments in the physics of matter. .