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Nota di contenuto	Frontmatter -- Foreword -- Contents -- About the authors -- About the translators -- Chapter 1 Atomic structure and interatomic bonding -- Chapter 2 The structure of solids -- Chapter 3 Crystal defects -- Chapter 4 Deformation and recrystallization -- Chapter 5 Diffusion in solids -- References -- Index
Sommario/riassunto	This textbook summarizes physical aspects of materials at atomic and molecular level, and discusses micro-structure of metals, alloys, ceramics and polymers. It further explains point defects, dislocations and surface imperfections, and the motions of atoms and molecular in solid state. As first volume in the set, it prepares students for further studies on phases and transitions which are discussed in the next volume.