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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Contents; Preface; Note on the Choice of Units; Introduction; Modern Electron Theory; Nearly-Free-Electron Approximation: Text-Book Physics or a Tool for Research?; The Tight Binding Approximation: Concepts and Predictions; Order and Phase Stability in Alloys; Point, Line and Planar Defects; Mechanical Properties of Metals at the Nanometre Scale; Permanent Magnets; Magnetic Layered Structures; Future Directions; Appendix;; Index
Sommario/riassunto	Presents recent developments in electron theory which have impacted upon the search for novel alloys with improved mechanical or magnetic properties. The ten chapters outline the ability of electron theory to make quantitative predictions (such as heats of formation, planar fault energies, shear moduli and magnetic anisotropy), and to provide simplifying concepts for understanding trends in alloy behaviour.