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Disciplina	530.41
Soggetti	Condensed matter Mathematical physics Materials - Analysis Engineering mathematics Engineering - Data processing Condensed Matter Physics Theoretical, Mathematical and Computational Physics Characterization and Analytical Technique Mathematical and Computational Engineering Applications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Electron Transport in Solids -- Cross-Sections: Basic Aspects -- Scattering Mechanisms -- Random Numbers -- Monte Carlo Strategies -- Backscattering Coefficient -- Secondary Electron Yield -- Electron Energy Distributions -- Applications.
Sommario/riassunto	This book presents the potential of the Monte Carlo (MC) technique to solve mathematical and physical problems of great complexity. This book focusses on the study of the electron-solid interaction (transport MC) and presents some physical problems related to the transport of hot electrons in solid targets using transport MC. The numerical and theoretical results are validated through a comparison with

experimental results. The author also addresses methodological aspects. In particular, systematic comparisons among different calculation schemes are presented. Different expressions for the calculation of cross sections and/or stopping power and different simulation methods are described and discussed.
