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Nota di contenuto	Dynamics at Solid State Surfaces and Interfaces; Contents; Preface; List of Contributors; Colour Plates; 1 The Electronic Structure of Solids; 1.1 Single-Electron Approximation; 1.1.1 The Drude Model of the Free Electron Gas; 1.1.2 The Electronic Band Structure: Metals, Insulators, and Semiconductors; 1.2 From Bloch Theory to Band Structure Calculations; 1.2.1 Bloch Theory; 1.2.2 The Tight Binding Approach to the Solid; 1.2.3 Band Structure Calculations; 1.3 Beyond the Band Picture; 1.3.1 Mott's Hydrogen Solid; 1.3.2 Mott Insulators in Nature; 1.4 Electronic Structure of Correlated Materials 1.4.1 The Hubbard Model 1.4.2 Dynamical Mean Field Theory; 1.4.3

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Sommario/riassunto

This two-volume work covers ultrafast structural and electronic dynamics of elementary processes at solid surfaces and interfaces, presenting the current status of photoinduced processes. Providing valuable introductory information for newcomers to this booming field of research, it investigates concepts and experiments, femtosecond and attosecond time-resolved methods, as well as frequency domain techniques. The whole is rounded off by a look at future developments.
