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Nota di contenuto	1. Introductory Chapter: Molecules and Materials Associated with Redox Reactions -- 2. Redox Mediated Electrolytes in Electrochemical Capacitors -- 3. Redox Transitions in Pseudocapacitor Materials: Criteria and Ruling Factors -- 4. Effects of Electrolyte on Redox Potentials -- 5. Charge Carriers for Next-Generation Redox Flow Batteries.
Sommario/riassunto	Redox reactions are involved in biochemistry, energy, corrosion, and much more. In both biology and electrochemistry, the redox reaction is complex and varied. For example, redox shuttles in supercapacitors show aspects of molecular electrochemistry applied to electrode porosity. In pseudocapacitors, the formalism associated with their electrochemical response requires investigation and formalism. Similarly, the simple definition of redox potential opens fundamental questions about its measurement in solutions without supporting salts. This book illustrates the variety of redox reactions in its examination of the importance of redox molecules in the development of new electrical energy storage devices.