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Autore	Tong Xingcun Colin
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Soggetti	Solid state physics Electric batteries Materials Materials - Analysis Electronic circuits Electrodynamics Electronic Devices Batteries Characterization and Analytical Technique Electronic Circuits and Systems Classical Electrodynamics
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Nota di contenuto	Chapter 1: Flexible battery as the power solution for flexible electronics -- Chapter 2: Characterization methodology to assess flexible batteries -- Chapter 3: Construction and configuration of flexible batteries -- Chapter 4: Flexible lithium-ion batteries -- Chapter 5: Flexible lithium-sulfur and analogous alkali metal-chalcogen batteries -- Chapter 6: Flexible zinc-ion batteries -- Chapter 7: Flexible sodium-ion batteries -- Chapter 8: Flexible metal-air batteries -- Chapter 9: Perspectives and future trends toward multifunctional batteries.
Sommario/riassunto	This book provides a comprehensive guide to the cutting-edge science and engineering behind the development of flexible batteries. These innovative devices, capable of bending, twisting, and stretching, hold immense potential for applications ranging from wearable electronics

to large-scale energy storage systems. The book presents a thorough overview of the essential materials and design principles that underpin flexible battery technology. It explores the latest advancements in electrode materials, electrolytes, and separators, focusing on materials that exhibit exceptional flexibility, high energy density, and excellent rate capability. In addition to materials selection, the book addresses the challenges and opportunities associated with designing and manufacturing flexible batteries. It discusses strategies for creating flexible battery cells that can withstand mechanical deformation, as well as efficient manufacturing processes and performance evaluation methods. By offering a deep understanding of the materials science and engineering principles governing flexible batteries, this book aims to inspire further research and development in this rapidly evolving field. This book is an essential resource for engineers and materials scientists involved in battery development.

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