1. Record Nr. UNINA9910986144203321

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| Titolo | Advanced Energy Materials for Flexible Batteries / / by Colin Tong |
| Pubbl/distr/stampa | Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025 |
| ISBN | 9783031839719<br>3031839714 |
| Edizione | [1st ed. 2025.] |
| Descrizione fisica | 1 online resource (422 pages) |
| Collana | Springer Series in Materials Science, , 2196-2812 ; ; 349 |
| Disciplina | 530.41 |
| Soggetti | Solid state physics<br>Electric batteries<br>Materials<br>Materials - Analysis<br>Electronic circuits<br>Electrodynamics<br>Electronic Devices<br>Batteries<br>Characterization and Analytical Technique<br>Electronic Circuits and Systems<br>Classical Electrodynamics |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| 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.