

1. Record Nr.	UNINA9910760275703321
Autore	Zhang Jun
Titolo	Carbon-Based Electrodes for High-Performance Sodium-Ion Batteries and Their Interfacial Electrochemistry // by Jun Zhang
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	9789819975662 9819975662
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (117 pages)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5061
Disciplina	620.11 621.31242
Soggetti	Electric batteries Materials Electrochemistry Nanotechnology Materials science Batteries Materials Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Experiment -- Folded-Graphene as an Ultrafast Cathode Material -- The Interplay of oxygen functional groups and folded texture in folded-graphene cathode -- Achieving efficient sodium storage on carbon anodes -- Evolution of the electrochemical interface with ether-based electrolytes -- Conclusion and perspective.
Sommario/riassunto	This book focuses on the development of high-performance carbon electrodes for sodium ion batteries (SIBs). By proposing folded-graphene as the high-density cathode with excellent rate capability, it provides insight into the interplay between oxygen functional groups and folded texture. It also highlights the superiority of ether electrolytes matching with carbon anodes, which are shown to deliver largely improved electrochemical performance. The achievements presented offer a valuable contribution to the carbon-based electrodes in SIBs.

