Record Nr. UNINA9910534363603321 Advanced battery materials / / edited by Chunwen Sun, Beijing Institute **Titolo** of Nanoenergy and Nanosystems, China Pubbl/distr/stampa Beverly, Massachusetts;; Hoboken, New Jersey:,: Scrivener Publishing :,: Wiley,, [2019] ©2019 **ISBN** 1-119-40770-2 1-119-40771-0 1-119-40766-4 Descrizione fisica 1 online resource (671 pages) Collana THEi Wiley ebooks Disciplina 621.312420284 Soggetti Electric batteries - Materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Carbon anode materials for sodium-ion batteries 1 / Hongshuai Hou Nota di contenuto and Xiaobo Ji -- Lithium titanate based lithium-ion batteries /Jiehua Liu, Xiangfeng Wei and Fancheng Meng -- Rational material design and performance optimization of transition metal oxide-based lithium ion battery anodes / Qingshui Xie and Dong-Liang Peng. "Electrochemical energy storage has played important roles in energy Sommario/riassunto storage technologies for portable electronics and electric vehicle applications. During the past thirty years, great progress has been made in research and development of various batteries, in term of energy density increase and cost reduction. However, the energy density has to be further increased to achieve long endurance time. In this book, recent research and development in advanced electrode materials for electrochemical energy storage devices are presented. including lithium ion batteries, lithium-sulfur batteries and metal-air batteries, sodium ion batteries and supercapacitors. The materials involve transition metal oxides, sulfides, Si-based material as well as graphene and graphene composites"-- Provided by publisher.