







Special Issue Reprint

Functionalized Nanostructures for Novel Energy Storage Systems

www.mdpi.com/books/reprint/11249

Edited by Wilhelm Pfleging

ISBN 978-3-7258-4569-9 (Hardback) ISBN 978-3-7258-4570-5 (PDF)



The Special Issue "Functionalized Nanostructures for Novel Energy Storage Systems" brings together eleven carefully selected manuscripts that explore the role of nanostructures in advancing energy storage technologies. This collection highlights innovative approaches to improving lithium-ion batteries and related systems, focusing on enhanced performance, environmental sustainability, and scalability for commercial applications. Topics include hierarchically structured cathodes, laser-structured electrodes, novel anode materials, aqueous manufacturing processes, and catalytic applications of nanomaterials. By addressing challenges such as ion transport, mechanical stability, and environmental impact, these studies provide valuable insights into the design and optimization of next-generation energy storage systems. This Special Issue is a must-read for researchers, engineers, and industry professionals seeking cutting-edge solutions to meet the growing demand for efficient and sustainable energy storage technologies.





MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

