







Special Issue Reprint

# **Novel Nanomaterials for Energy Storage and Catalysis**

www.mdpi.com/books/reprint/9114

Edited by Zhenyu Yang Jinsheng Zhao

ISBN 978-3-7258-0766-6 (Hardback) ISBN 978-3-7258-0765-9 (PDF)



This reprint delves into the cutting-edge developments and applications of nanomaterials in energy storage and catalysis. The journey through this reprint begins with an exploration of advanced nanomaterials designed for energy storage applications, including batteries, supercapacitors and fuel cells. It delves into the fundamental principles governing their design, synthesis, characterization and performance optimization, highlighting key breakthroughs and emerging trends.

Transitioning into catalysis, the reprint showcases the pivotal role of nanomaterials in catalytic processes for energy conversion, environmental remediation and sustainable chemical engineering. Readers gain valuable insights into design strategies, catalytic mechanisms and performance enhancements enabled by nanomaterial-based catalysts, showcasing their potential to revolutionize diverse sectors.

Throughout this reprint, an emphasis is placed on the interdisciplinary nature of nanomaterial research, highlighting the synergistic integration of materials science, chemistry, physics, engineering and environmental science. Moreover, it underscores the importance of collaboration, knowledge exchange and continuous innovation in driving impactful solutions for global energy and environmental challenges.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/9114



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

