Special Issue

Multifunctional Electrode Materials for Sustainable Energy Storage Devices

Message from the Guest Editors

This Special Issue focuses on the cutting-edge research and recent advancements in the field of energy storage systems, specifically targeting various metal-ion batteries, supercapacitors., etc. Metal-ion batteries, challenges such as performance degradation and safety issues remain to be addressed. Supercapacitors, their relatively low energy density limits broader application. This Special Issue aims to collect the latest research findings in these areas, including material design, performance optimization, mechanism studies, and application prospects. It seeks to explore the current technical challenges and future development directions, providing both theoretical foundations and practical guidance for the advancement of energy storage technologies. Potential topics include, but are not limited to, the following:

- Electrochemical reactions;
- Surface/interface chemistry;
- Electrode materials design;
- Electrolyte design;
- Flexible batteries and supercapacitors;
- Batteries and supercapacitors at extreme working temperatures.

Guest Editors

Prof. Dr. Xiang Wu
School of Materials Science and Engineering, Shenyang University of Technology, Shenyang 110870, China
Dr. Depeng Zhao
Department of New Energy Materials and Devices, Shenyang Institute of Engineering, Shenyang 110136, China

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Batteries
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
batteries@mdpi.com

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Message from the Editor-in-Chief

Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

Editor-in-Chief

Prof. Dr. Karim Zaghib
Department of Chemical and Materials Engineering, Concordia University, Montréal, QC H3G 1M8, Canada

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