Special Issue

Advanced Nanomaterials for High-Performance Batteries and Supercapacitors

Message from the Guest Editors

This Special Issue focuses on all aspects of energy storage and conversion, in particular nanomaterials in lithium-ion batteries, in lithium metal batteries, sodium–ion batteries, potassium ion batteries, Zn-based batteries, Pb-acid batteries, lithium/sodium–sulfur batteries, supercapacitors, and/or novel types of batteries. In this Special Issue, original research papers, reviews and short communications are welcome. Research areas may include (but are not limited to) the following:

- Preparation of novel nanomaterials such as anodes, cathodes, electrolytes, separators, current collectors, and additives for high-performance batteries and supercapacitors;
- New application of nanomaterials in high-performance batteries and supercapacitors;
- Engineering, control, and optimization aspects of nanomaterials in batteries and supercapacitors;
- Applications and future trends of nanomaterials for high-performance batteries and supercapacitors;
- Testing and evaluation of nanomaterials in high-performance batteries and supercapacitors.

Guest Editors

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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