Special Issue

State-of-the-Art Nanomaterials for Energy Storage: Batteries, Solar Cells, Supercapacitors

Message from the Guest Editors

Over the past few years, the design and synthesis of nanostructured materials have been of tremendous research interest for the energy-related systems, focusing on wearable sensors and self-powered energy sources. Nanomaterials hold promising potency for energy storage such as batteries, solar cells, and supercapacitors. Considering the ever-increasing global energy consumption and depletion of unsustainable fossil fuel energy, the energy conversion system and storage devices are highly demanding. Given the strong academic interest in nanomaterials-based energy storage, we invite authors to contribute all topics related to functional energy nanomaterials, with an emphasis on the fabrication, properties, and prospective applications of 1D- or 2D-based energy systems in the forms of reviews, communications, and academic articles. The topics cover a wide range of research fields, both from theoretical approaches and application fields, including batteries, solar cells, and supercapacitors.

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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.

Editor-in-Chief

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