

Special Issue

The Application of Nanoscale Materials in Batteries, Sensors and Supercapacitors (2nd Edition)

Message from the Guest Editors

In recent years, nanomaterials have been extensively studied for application in charge storage and sensors due to their high performance, large surface area and special morphology, as well as unique properties. They can present many new features for energy-storage devices and sensors, such as small and thin sizes, a long cycle life, high sensitivity, and a large energy density. Novel energy storage devices, sensors, biosensors and supercapacitors are developed via the enhancement of nanomaterials. Potential topics include, but are not limited to, the following: Novel fabrication methods for nanomaterials and composites; Modification, functionalization and doping of nanomaterials;

Advanced characterization techniques;

Assembly and processing of nanomaterials;

Various composites containing different nanomaterials;

Advanced batteries; Electrolytes; Supercapacitors;

All kinds of sensors using nanoscale materials;

Unique electrodes containing nanoscale material. See more information in: <https://www.mdpi.com/si/197839>

Guest Editors

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About the Journal

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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