Special Issue

Advanced Functional Nanomaterials for Energy Storage Applications, Volume II

Message from the Guest Editors

Nanomaterials possess a large specific surface area, rich pore structure, and special physical and chemical properties, which is deemed to be suitable materials for energy storage. However, simply utilizing these nanomaterials is not enough. To further enhance electrochemical performance, functionalization of nanomaterials, including structure optimization, composite architecture, and elemental doping is necessary. However, some breakthroughs on functional nanomaterials are still needed, including understanding the energy storage behavior at nanoscale, exploring the relationship of functionalization and energy storage performance, as well as studying the potential chemical and physical mechanisms of functional nanomaterials for energy storage. This Special Issue mainly focuses on the energy storage applications of functional nanomaterials, which can accelerate the development of highly efficient, rapid, and low-cost energy storage systems. We also welcome research related to integrated devices and flexible devices for energy storage. We sincerely hope this Special Issue will provide some new insights into functional nanomaterials for energy storage application.

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 nanometerscale 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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