

Special Issue

Nanocomposites for Ion Batteries

Message from the Guest Editor

As a kind of energy storage, ion batteries are widely used in daily life. With the increasing energy demand of electronic devices, electric vehicles and smart grid, it is very necessary to study and prepare ion battery electrode materials with high energy density, power density and long life span. Nanocomposites have been used for the improvement and development of ion batteries due to their excellent properties. For example, nanoporous carbon based composites have attracted much attention in energy storage due to their nanoporous structure, large specific surface area, good conductivity, and high stability. And nanocomposites can not only stabilize battery electrode structure during cycling, but also facilitate the ion and electron transport, resulting enhanced electrochemical performance. This special issue is intended to provide a discussion platform for the application of nanocomposites for ion batteries. We welcome the research and review articles covering all the aspects of design, synthesis and application of nanocomposites for ion batteries.

Guest Editor

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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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