Special Issue

Application of Carbon-Based Materials in Batteries

Message from the Guest Editor

Due to the low cost and versatility in tailoring the structures and properties, carbon-based materials are already being applied in a variety of batteries. However, there is still a need for improved performance of carbon□based materials, and relevant mechanisms. Nanostructure design strategy and the heteroatom doping method can control the morphology and modulate the chemical and electronic environment of carbon materials to increase the performance of carbon□based materials. However, the structure-to-performance relationships and mechanism of carbon materials are still in their infancy and will require more comprehensive examination in the future. This is a driving force in the development of carbon□based materials applied in batteries, for finding innovative synthesis and technological solutions, as well as understanding the structure-to-properties relationships.

The Special Issue entitled “Application of Carbon-Based Materials in Batteries” aims toward new advances in this attractive field of research. We are pleased to invite you to contribute your research papers for this Special Issue.

Guest Editor

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Deadline for manuscript submissions

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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