Special Issue

Advanced Nanomaterials for Electrochemical Energy Conversion and Storage

Message from the Guest Editor

With the rapid development of human society, global issues such as climate change, global warming, and the energy crisis, energy shortages and environmental pollution have become serious problems faced by human society. This Special Issue aims to cover all the latest innovations on advanced nanomaterials for efficient energy conversion, energy storage and environmental protection. Special emphasis will be placed on developing new advanced nanomaterials for electrocatalysis applications. Additionally, contributions analyzing the effect of the structure of advanced nanomaterials on their electrochemical properties are also appreciated. We are also interested in mechanistic studies on electrocatalytic activity and stability. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome. Topics of interest include, but are not limited to, the following:

- Electrocatalysts;
- Nanomaterials;
- Two-dimensional materials;
- Electronic structure;
- Green synthesis;
- Hydrogen evolution reaction/oxygen evolution reaction/water splitting;
- Carbon dioxide reduction reaction;
- Mechanistic studies.

Guest Editor

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Deadline for manuscript submissions

closed (20 September 2024)

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Message from the Editor-in-Chief

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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