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Nanostructured Materials for Energy Applications

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Message from the Guest Editors

Dear Colleagues,

The synthesis and processing of nanostructured materials play a key role in the adoption of such technologies as batteries, fuel cells, and supercapacitors. Moreover, the characterization of such materials becomes more critical, as our understanding of phenomena occurring at atomistic length scales relies heavily on novel characterization techniques equipped with a synchrotron source. Likewise, applications in energy storage and conversion rely heavily on the discovery of novel materials. By exploiting materials at the nanoscale, tremendous advancements have been made that have played a role in developing many industries. Research on novel nanostructured materials for energy-related applications requires the dissemination of new and exciting research, and we, therefore, welcome contributions from many different fields. Topics of interest include, but are not limited to, the following: batteries; electrocatalysis; electrodeposition energy; energy storage; fuel cells; hydrogen production; new materials; nanotubes; nanostructures; optoelectronic; photochemical devices; photochemical cells; processing; supercapacitors; synthesis; water harvesting.



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Special Issue



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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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