Special Issue

Nanoparticles and Nanocrystals: Design, Characterization, and Applications

Message from the Guest Editor

With the growing concerns about global warming and the depletion of petroleum resources, many researchers' efforts are directed towards the research and development of renewable energy production and energy storage technologies. The development of highperformance and cost-effective bi-functional electrochemical catalysts is highly desirable, considering the energy crisis and environmental problems. This Special Issue will focus on using bifunctional electrocatalysts to generate power or hydrogen. This Special Issue will include reviews and original research articles describing recent developments and advances of bi-functional catalysts in their design, preparation, and characterization with unique properties, with the aim of improving catalytic performance for energy conversion and storage system applications as well as developing our understanding of photocatalytic reactions. It is my pleasure to invite you to submit a manuscript to this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editor

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Deadline for manuscript submissions

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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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