Special Issue

Advanced Metal Oxide and Its Composites for Electro/Photo-Catalytic Hydrogen Generation and Supercapacitors

Message from the Guest Editors

The world is seeking new affordable, sustainable, and nonpolluting alternatives. Therefore, there is an undeniable need to focus on energy generation and storage from abundantly available renewable energy sources. This Special Issue, titled “Advanced Metal Oxide and Its Composites for Electro/Photo-Catalytic Hydrogen Generation and Supercapacitors” is aimed to collect and original research as well as review articles on electrocatalysis, photocatalysis, and supercapacitor applications. The potential materials include inorganic metal oxide, layered double hydroxides (LDHs), composites, and heterostructures. Subtopics include the fabrication of functional materials by using various techniques, the optimizing and enhancement of electrochemical performances, the investigation of mechanisms and structural, optical, and morphological properties, in situ and ex situ technique unitization for analysis, theoretical investigations, DFT analysis, and so on. It will provide a great avenue for examining the recent trends and progress in the generation of alternative energy and storage materials studied for the purpose of coping with present energy demands.

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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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