Special Issue

New Frontiers of Energy and Optical Materials

Message from the Guest Editors

Nanostructured materials have received significant interest from the perspectives of both scientific research and industrial fields, especially in energy storage and up-conversion luminescent applications. Their suitability for the applications are attributed to the unique properties of these nanostructured materials, such as compositions, tunable porous structures, controllable particle size, large surface area, and controllable surface chemistry. This Special Issue will compile recent developments in the field of nanostructured materials for energy storage and catalytic applications. The articles presented in this Special Issue will cover various topics, ranging from, but not limited to, the synthetic approaches of nanostructured materials, the modification and functionalization of nanostructured materials, the characterization of nanostructured materials, secondary batteries, electrochemical conversion, and catalysis. Topics are also open to up-conversion luminescent nanomaterials for the development of near-infrared photocatalysts applications and electro-chem-luminescent mechanisms investigations.

Guest Editors

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Dr. Bing Sun

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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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