Special Issue

Novel Electrochemical Materials for Energy Storage and Conversion

Message from the Guest Editor

The aim of this Special Issue is to cover from traditional and fundamental concepts to cutting edge technologies used to manufacture, test and employ different materials for energy storage and conversion. Interested areas include, but are not limited to:

- noble metal nanomaterials electrodes.
- metal oxide composites for electrochemical capacitors,
- carbon (ordered mesoporous materials) and carbon fibres.
- graphitic nanomaterials,
- aqueous and non-aqueous electrolytes,
- ion exchange membranes and microporous separators,
- turbulence promoters,
- current collectors.
- redox active materials.
- active electrodes such as carbon nanotubes, metals oxides, conductive polymers and nanocomposites
- electrode materials for microbial fuel cells.

The focus is also on current progress in energy storage including: Battery development, energy storage from renewable sources, new energy sources for transport and specific fields of portable devices, redox flow cells and electrochemical engineering.

Guest Editor

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Deadline for manuscript submissions

closed (15 December 2017)



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About the Journal

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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