Special Issue

Preparation and Properties of Advanced Materials for Energy Storage Technologies

Message from the Guest Editor

The new energy storage (ES) devices seek a compromise between high performance (high energy and specific power, long life, and efficiency), low cost (abundant materials and not politically compromised), and sustainability (safe and environmentally friendly ES devices). Innovative protocols are lacking to prepare and improve advanced materials to become more durable, more resistant, more respectful to the environment, and with increasingly interesting properties targeting new energy storage solutions. The progress of high-performance and robust materials involves a comprehensive knowledge of the complex phenomena that take place at the nanoscale. The nano/microstructure of materials plays an extremely important role: it defines the properties of a material, such as its stability or its flexibility, crucial to predicting the performance of a material, but also to formulate new ones. The Special Issue has the objective of creating an international endeavor for academics, stakeholders, industrials, researchers, and scientists worldwide to publish results and proposals regarding the soundest topics related to advanced materials with great potential in energy storage applications.

Guest Editor

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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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