Special Issue

Energy Storage Materials: Experimental Investigation and Multiscale Modeling

Message from the Guest Editor

Among the various energy-storage devices, batteries and supercapacitors (SCs) represent the two leading electrochemical energy-storage (EES) technologies. The main challenge surrounding EES devices is understanding the electrolyte/electrode interface to optimize the overall performance (e.g., high energy density, fast kinetics of the charge–discharge processes, and stability upon cycling). While a great deal of attention has been focused on the electrode, electrolytes are also a versatile tool to modify the electrolyte/electrode interface. This Special Issue on Energy Storage Materials is open for submission of works dealing with experimental results and/or calculations based on multiscale modeling, helping to understand the electrolyte/electrode interface and providing insights about novel electrodes and electrolytes that improve storage performance (in terms of both energy and power density and electrochemical stability).

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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