Special Issue

Synthesis of Transition Metal Oxide/MXene, MOF and MWCNTs for Supercapacitor and Li-Ion Battery

Message from the Guest Editors

Global warming, increasingly worsening environmental pollution and the compulsion for energy security have stimulated the urge to develop energy storage devices that can store energy obtained from renewable sources, like solar, wind turbines and hydropower, and supply the same whenever required. In this regard, design and development of sustainable, eco-friendly and high-performance energy storage devices coupled with renewable energy sources is indispensable. In parallel, materials that are supposed to possess high energy densities as well as high power densities are of great concern, so that a hybrid device consisting of supercapacitors (SCs) (with high power densities) and Li-ion batteries (LIBs) (with high energy densities) could fulfill the above mentioned target up to some extent. This Special Issue aims to, but is not limited to, exploring the synthesis of transition metal oxide nanomaterials, MOFs, MWCNTs, MXenes, and composite materials to enhance the performance of energy storage devices. We welcome interested scholars to submit their articles to this Special Issue.

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Message from the Editorial Board

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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