Special Issue

New-Generation Advanced Materials for Next-Generation Supercapacitors

Message from the Guest Editors

Energy plays a significant role in human development. Energy demand consumption is increasing exponentially daily; hence, environmentally friendly and efficient energy storage devices are needed. In this regard, electrochemical energy storage systems such as the battery, supercapacitors, etc., have gained much attention because of their environmentally friendly nature. The supercapacitor is one of the most helpful technologies due to its extraordinary features, high power, long cycle life, low maintenance, and simple geometry. A supercapacitor's device performance and durability are governed by the selected electrodes' physical, chemical, and electrical properties. In this perspective, many materials such as carbon, metal oxides, and polymers and their combination have been utilized as electrodes in supercapacitors. This *Materials* MDPI Special Issue provides an excellent opportunity to explore the unexplored advanced functional nanomaterials' properties/applications for advanced next-generation supercapacitors.

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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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