Special Issue

Energy Storage Redefined: The Latest Developments in Graphene-Based Materials

Message from the Guest Editor

In recent decades, the energy storage field has witnessed remarkable progress, with graphene-based materials emerging as key players. Their unique properties, such as their high electrical conductivity, large specific surface area, and excellent mechanical strength, endow them with considerable potential in applications like batteries, supercapacitors, and fuel cells. For example, in supercapacitors, graphene-based electrodes can significantly enhance charge-storage capacity due to their fast ion-transfer kinetics. In light of these advancements, we are pleased to invite contributions for this Special Issue titled “Energy Storage Redefined: The Latest Developments in Graphene-Based Materials”. We welcome original research articles, reviews, and short communications that showcase the latest breakthroughs in the synthesis, characterization, and applications of graphene-based materials in energy storage. Areas of interest include, but are not limited to, novel fabrication methods, composite design, and performance improvements gained by these means in various energy storage devices. We look forward to receiving your submissions.

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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