Special Issue

Nano-Carbons for Energy Storage and Conversion

Message from the Guest Editors

Nano-carbons, such as carbon nanotubes, graphene, and fullerenes, have shown remarkable potential in revolutionizing the fields of energy storage and conversion. Their unique physical and chemical properties, including high surface area, excellent electrical conductivity, and good chemical stability, make them ideal candidates for various energy storage and conversion applications. This Special Issue aims to bring together the latest research and technological advancements in the utilization of nano-carbons for energy storage devices like batteries and supercapacitors, as well as energy conversion systems such as fuel cells and solar cells.

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Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometerscale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, Nanomaterials, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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