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Recent Scientific Developments in Carbon-Based Nanomaterials for Batteries and Supercapacitors

Guest Editor:

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Deadline for manuscript submissions: closed (10 May 2024)

Message from the Guest Editor

Porous carbon is a promising anode material, as it possesses the advantages of low cost, high efficiency, long lifetime, and multifunctionality. By constructing a threedimensional hierarchical structure of porous carbon electrode, the transport process of ions can be optimized to achieve satisfied magnification performance. Moreover, porous carbon can also be employed as effective carriers to receive diverse guest components in multi-active sites, thereby allowing for the full utilization of high specific capacity of active substances; additionally, the stabilizing effect of carbon-based materials help to obtain a negative electrode material endowed with both high capacity and stability.

This Special Issue of *Nanomaterials* invites submissions of research papers and review articles that address the application of novel carbon materials in advanced energy storage technologies including, but not limited to, lithium/sodium/potassium/zinc/calcium ion battery, lithium-sulfur battery, zinc-iodine battery, aqueous supercapacitors, organic supercapacitors and solid electrolyte supercapacitor.

Specialsue



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Message from the Editor-in-Chief

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