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Carbon-Based Nanomaterials for Bioimaging, Sensor, Catalytic, and Photoelectronic Applications

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Deadline for manuscript submissions: closed (20 June 2023)

Message from the Guest Editors

Novel trending smart carbon-based nanomaterials, carbon dots (CDs), carbon-based 0-dimensional fluorescent materials, and graphene-based hybrid composites with a cost-effective fabrication mechanism, as well as a wide range of raw materials with excellent physical, chemical, optical, and electrical properties, have attracted the attention of many researchers in recent years because of their stable and adjustable photoluminescence behaviors, good biocompatibility, and abundant surface defects. Hybrid carbon-based nanocomposites with suitable physical properties can expand the application scope of CDs, make up for the limitations of single-component CDs in applications, improve the application performance of inorganic nanomaterials, and enhance the versatility of inorganic nanomaterials.

In this Special Issue, we will focus on brand-new assessment techniques to elucidate the unique functions of CDs in composition regulation, structural fabrication, surface modification, and host-guest interactions in electrocatalysis and ultimately to establish the relationships among structure, composition, and activity.









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Message from the Editor-in-Chief

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