Special Issue

Carbon Dots for Environmental Sensing and Bioimaging

Message from the Guest Editors

This Special Issue will present comprehensive research from the synthesis and characterization of Carbon dots (CDs) to their applications in environmental sensing and bioimaging. Potential topics include, but are not limited to:

- Large-scale synthesis of CDs.
- Green synthesis of CDs with enhanced quantum yield and dependence of quantum yield on surface modification.
- Synthesis of CDs with long emission wavelength.
- Colloidal CDs for sensing imminent contaminants, such as per- and polyfluoroalkyl substances (PFAS).
- CDs that can differentiate multiple environmental contaminants without interference.
- Immobilization of colloid CDs into a solid matrix through electrospinning, etc.
- Portable sensing devices based on CDs.
- CDs as traditional cellular fluorescence agents.
- CDs as novel imaging agents for photoacoustics, magnetic resonance, computerized tomography, etc.
- CDs as green catalysts.

Guest Editors

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closed (20 August 2023)



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Message from the Editor-in-Chief

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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