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Carbon Dots and Carbon Dots-Based Materials for Multifunctional Applications

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Message from the Guest Editors

Dear Colleagues,

Nanoscale carbon dots are of great interest in nanotechnology due to their unique physical, chemical, and biological properties. These can lead to many potential applications, which unlock many new pathways in nanotechnology.

This Special Issue aims to introduce the reader to the synthesis and development of carbon quantum dots or doped carbon dots for multifunctional application. Modifications of either the nanosized metals and the carbon dots can allow their binding to many organic molecules, polymers, ligands, antibodies, proteins, DNA, and drugs. The development of carbon quantum dots or carbon dot-based nanomaterials is a fast-growing area due to their wide range of applications and recyclability in various fields, such as catalysis, sensors, optics, electronics, functional protective coatings, and more. With this nanotechnology concept in mind, this Special Issue aims to combine the preparation and characterization of innovative nanoscale carbon dots materials with applications in various fields based solely on nanoscale technology.

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Special Issue



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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 nanometer-scale 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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