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Recent Advances in Synthesis, Characterization and Applications of Functional Nanoparticles and Quantum Dots

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Deadline for manuscript submissions:

closed (31 May 2023)

Message from the Guest Editors

We invite researchers and scientists to submit original research and review papers that will progress the development of QDs/NPs in practical applications and provide potential solutions for current problems and difficulties. The Special Issue is particularly focused on QD/NP material synthesis, polymer/QD film engineering, optoelectronic devices, bio-sensing, and environmental problems. Potential topics include but are not limited to:

- Synthesis and characterization of QDs, polymer/QDs or polymer/NPs nanocomposites;
- Fluorescence, optoelectronic, carrier transport, stability, and other physical properties;
- Self-assembly of QDs or NPs to different nanostructures;
- Biosensing and biomedical applications;
- Lighting and display applications;
- Light harvesting, storage, and sensing;
- OLEDs and QLEDs;
- Explorations of new applications for QDs/NPs;
- Environmental issues of QDs and NPs.



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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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