



## Quantum Dots

Guest Editor:

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Deadline for manuscript  
submissions:

**closed (31 March 2023)**

### Message from the Guest Editor

Dear Colleagues,

For the last few decades, quantum dots (QDs) have been the subject of extensive and intensive interdisciplinary research and development. Since the concept of QD can be realized on different technological platforms using a very large variety of materials, it is very flexible and adoptive. As a result, QD-related research has spread over many different branches and scientific journals.

This Special Issue of Nanomaterials will attempt to bring together researchers from different fields across technology, materials science, fundamental and applied physics. Potential topics include but are not limited to:

- Synthesis, fabrication, self-organization, and self-ordering.
- Composite and hybrid structures, such as QD molecules, organic–inorganic hybrid, exciton–plasmon structures and others.
- Electronic and optical properties, single photon emitters, non-linear optical phenomena.
- Spin and magnetic phenomena, quantum coherence, and quantum information technologies.
- Applications for energy harvesting, light emission, sensors, detectors, etc.

Dr. Vladimir Chaldyshev  
Guest Editor



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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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