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Quantum Dots for Optoelectronic Devices

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Message from the Guest Editors

Dear Colleagues,

Semiconductor quantum dots (QDs) have been receiving immense attention due to their intriguing beneficial attributes—particularly in electronic and optical aspects. Thus, they are considered a promising class of active nanomaterials for next-generation optoelectronic devices. Enabled by the great advances in the synthesis of QDs and their in-depth electro- and photo-physical understanding, they are very near the level of commercialization.

This Special Issue is aimed at offering recent informative QD-associated resources to readers by including a broad range of subjects from QD materials chemistry, characterization and processing to optoelectronic device fabrication. Special focus will cover not only the synthesis of colloidal QDs with diverse compositions including not only the group II-VI, III-V, I-III-VI, IV-VI, halide perovskite, and carbon species; heterostructural/morphological engineering; surface functionalization and electro/photophysical findings, but also their various optoelectronic applications.



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Special Issue



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Message from the Editor-in-Chief

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