Special Issue

Quantum Dots in LED and Advanced Display Technologies

Message from the Guest Editors

This Special Issue will highlight the latest advances in the synthesis, characterization, and device integration of quantum dots for LED and advanced display applications. Topics of interest include new synthetic strategies for high-stability QDs, surface engineering for improved optoelectronic performance, scalable fabrication techniques such as inkjet printing, and innovative device architectures. Contributions that bridge fundamental material design, theoretical modeling, and practical device implementation are especially encouraged. By gathering state-of-the-art studies, this Special Issue will showcase cutting-edge developments and innovative solutions to current challenges, including long-term operational stability, environmental safety, and large-scale manufacturability. We will foster cross-disciplinary discussions that can inspire breakthroughs in quantum dot-enabled optoelectronic and display technologies. We invite you to submit your contributions to this Special Issue.

Guest Editors

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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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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