Special Issue

Quantum Dots and Micro-LED Display, 3rd Edition

Message from the Guest Editors

Quantum Dots (QDs) have many unique physical and optical properties, such as high photoluminescence quantum yield, tunable emission over the entire visible spectral region, narrow emission spectrum, and high color purity. QDs have become a suitable candidate material in the display field and have great potential to replace the traditional phosphor powder and increase the LCD color gamut range. Micro-LEDs are an emerging flat panel display technology. As the name implies, micro-LED displays consist of arrays of microscopic LEDs forming the individual pixel elements. Applications include near-eye displays, wearable devices, head-mounted devices, visible light communications, computer monitors, biomedical devices, and projectors, which benefit from the clear advantages of micro-LED displays in brightness and saturation, as well as high display quality, even in high-intensity ambient light. In this Special Issue, we would like to invite all papers related to the science and technology of Quantum Dots (QDs) ranging from materials research, device structure and properties, device applications for micro-LED displays, manufacturing, and high-color-gamut displays using QDs.

Guest Editors

Prof. Dr. Hao-Chung Kuo

Department of Photonics, College of Electrical and Computer Engineering, National Chiao Tung University, 1001 Ta Hsueh Rd., Hsinchu 300, Taiwan

Prof. Dr. Zhaojun Liu

Department of Electrical and Electronic Engineering, Southern University of Science and Technology, Qingshuihe, Shenzhen, China

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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