

Special Issue

Quantum Dots and Micro-LED Display

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, which has great potential to replace the traditional phosphor powder and increase the LCD color gamut range. Micro-LED is an emerging flat panel display technology. As the name implies, micro LED displays consist of arrays of microscopic LEDs forming the individual pixel elements. The applications include near-eye display, wearable devices, head mount devices, visible light communications, computer monitors, biomedical devices and projectors, which are benefit from the obvious advantages of Micro-LED display in brightness and saturation, high display quality even in high-intensity ambient light. In this Special Issue, we would like to invite all papers related science and technologies of Quantum Dot (QD) ranging from materials research, device structure and properties, device applications for micro-LED display, manufacturing and high color gamut of display using QD.

Guest Editors

Prof. Dr. Hao-Chung Kuo

Prof. Dr. Lung-Chien Chen

Prof. Dr. Zhaojun Liu

Deadline for manuscript submissions

closed (31 October 2020)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.4
CiteScore 8.5
Indexed in PubMed



mdpi.com/si/29913

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

[mdpi.com/journal/
nanomaterials](https://mdpi.com/journal/nanomaterials)





Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.4
CiteScore 8.5
Indexed in PubMed



[mdpi.com/journal/
nanomaterials](https://mdpi.com/journal/nanomaterials)



About the Journal

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

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPIus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Multidisciplinary) / CiteScore - Q1
(General Chemical Engineering)