

# Special Issue

## Quantum Dot Frontiers

### Message from the Guest Editors

Colloidal quantum dots (QDs), also known as nanocrystals (NCs) of a specific size range (2–20 nm), hold great promise for application in various fields, including but not limited to advanced lightings, photonics, optoelectronics, and bioimaging, which is mainly due to the customizable spectral properties of QDs. In terms of the visible range, cadmium chalcogenide QDs, such as CdSe or its alloys, exhibit vivid color performance in green and red, thus prompting QDs to be regarded as ideal light sources specifically when used for wide-gamut color displays. Particularly, the efforts expended toward developing ecofriendly QDs, such as InP and its alloys, have resulted in QDs being currently positioned on the verge of a new era based on the QD display technique. Moreover, newly emerged QDs, such as perovskite nanocrystals (PeNCs), are providing many new concepts for designing optoelectronic devices with much lower fabrication costs than those of conventional QDs.

---

### Guest Editors

Dr. Wei Chen

College of Engineering Physics, Shenzhen Technology University, Shenzhen 518118, China

Dr. Junjie Hao

Department of Electrical and Electronic Engineering, Southern University of Science and Technology, Shenzhen 518055, China

---

### Deadline for manuscript submissions

closed (31 December 2022)



## Micromachines

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0  
Indexed in PubMed



[mdpi.com/si/101209](https://mdpi.com/si/101209)

*Micromachines*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[micromachines@mdpi.com](mailto:micromachines@mdpi.com)

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





# Micromachines

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.

#### Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Mechanical Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the second half of 2025).