

## Special Issue

# Wide Bandgap Semiconductor (WBG) Microelectronics and Optoelectronic Devices

### Message from the Guest Editors

This Special Issue is intended to cover the latest development of WBG device technologies with a focus on the following topics:

- Advanced WBG semiconductors based on nitride, oxide, carbide, or diamond materials systems: substrate technology, epitaxial growth of heterostructures, quantum-mechanical structures, or devices.
- New device concepts using WBG semiconductors.
- WBG electronic devices including but not limited to: Heterojunction field effect transistors or high-electron-mobility transistors; High-voltage power switches: rectifiers and transistors; High-frequency and millimeter-wave transistors and integrated circuits; Oxide-based electronic devices.
- WBG optoelectronic devices including but not limited to: MicroLEDs: device fabrication and packaging technologies; UV photodetectors and imaging systems; UV emitters: light-emitting diodes and laser diodes for UVA, UVB, UVC, and EUV applications; WBG-integrated photonics.
- Emerging nanoscale WBG devices: Low-dimension electronic and optoelectronic devices; Energy conversion devices, chemical catalysis devices; Quantum-scale phenomenon, micro-cavity enhanced phenomenon.

---

### Guest Editors

Prof. Dr. Shyh-Chiang Shen

Prof. Dr. Chien-Chung Lin

Prof. Dr. Chao-Hsin Wu

---

### Deadline for manuscript submissions

closed (30 September 2021)



## Micromachines

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0  
Indexed in PubMed



[mdpi.com/si/56606](https://mdpi.com/si/56606)

*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.

---

### Editor-in-Chief

Prof. Dr. Ai-Qun Liu

1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China

2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

---

### 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 17.2 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).