

# Special Issue

## III–V Compound Semiconductors and Devices, 2nd Edition

### Message from the Guest Editors

Compared to silicon technology, III-V compound semiconductors and their applications have attracted considerable attention for use in many different circuits such as power amplifiers, low-noise amplifiers, mixers, frequency converters, phase shifters, and optoelectronics. This Special Issue of *Micromachines* aims to present recent advantages in the fabrication, characterization, and modeling of electron devices based on III-V compound semiconductors and devices. The scope of this Special Issue includes, but is not limited to:

- Characterization techniques for defects in high-k dielectrics/III-V semiconductors.
- Novel methods or concepts for III-V devices (e.g., HBT, field-effect transistors, nanowires, or gate-all-around).
- Electronic or optoelectronic applications for III-V devices (including physical, chemical, and electronic properties).
- Advanced fabrication processes for III-V on insulator (e.g., GaN on silicon or III-V on silicon).
- Advanced simulation or modeling of III-V devices.

---

### Guest Editors

Prof. Dr. Yeong-Her Wang

Institute of Microelectronics, National Cheng Kung University, Tainan 70101, Taiwan

Prof. Dr. Kuan-Wei Lee

Department of Electronic Engineering, I-Shou University, Kaohsiung 84001, Taiwan

---

### Deadline for manuscript submissions

closed (28 February 2026)



# Micromachines

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0  
Indexed in PubMed



[mdpi.com/si/170359](https://mdpi.com/si/170359)

*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).