

# 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.

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### Guest Editors

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### Deadline for manuscript submissions

closed (28 February 2026)



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### Editor-in-Chief

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