



Recent Advances in Infrared Photodetectors

Guest Editor:

Prof. Dr. Yingjie Ma

Shanghai Institute of Technical
Physics, Chinese Academy of
Sciences, 500 Yutian Road,
Shanghai 200083, China

Deadline for manuscript
submissions:

closed (15 January 2024)

Message from the Guest Editor

III-V InGaAs photodetectors have been serving as the key element for ground and space light sensing applications in the short-wavelength infrared (SWIR) band.

This Special Issue aims to address issues that involve the materials as well as the device design, the processing technology, the characterization, and the applications of InGaAs photodetectors featuring novel structures, higher performances and new functionalities. This includes:

- Short-wavelength infrared (SWIR) InGaAs photodetectors;
- Lattice-mismatch material design and epitaxial growth;
- Extended wavelength InGaAs photodetectors;
- Misfit dislocation mitigation technologies;
- InGaAs focal plane arrays (FPAs);
- Large array format and fine pixel pitch FPAs;
- SWIR read-out integrated circuit (ROIC) designs;
- Application exploration of InGaAs photodetectors;
- Polarization-integrated InGaAs photodetectors;
- SWIR spectral imaging;
- NIR-I and NIR-II biology and medical diagnostics;
- SWIR image processing.





an Open Access Journal by MDPI

Editor-in-Chief

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

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, Ei Compendex, dblp, and other databases.

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

Contact Us

Micromachines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/micromachines
micromachines@mdpi.com
[X@micromach_mdpi](https://twitter.com/micromach_mdpi)