

Special Issue

Wide Bandgap Semiconductor Based Solar-Blind Photodetectors

Message from the Guest Editors

Wide bandgap semiconductors—including AlxGa1-xN, Ga2O3, BN, MgxZn1-xO, and diamond—have attracted increasing interest over the last decade both from academia and industry. These materials have given rise to numerous disruptive applications such as ultraviolet (UV) light emitting diodes, UV lasers, power rectifiers and power field effect transistors. In contrast, applications involving the detection of UV light have received much less attention. The recent emergence of new wide bandgap semiconductors such as Ga2O3 polymorphs has sparked renewed interest for UV sensing, in particular in the solar-blind region.

Accordingly, this Special Issue will showcase the latest advances in solar-blind photodetectors based on wide bandgap semiconductors and will cover aspects of material synthesis and device processing, structural and optoelectronic properties of photodetectors, material and device modelling, to name a few.

- Ultraviolet photodetectors
- Wide bandgap semiconductors: AlxGa1-xN, Ga2O3, BN, MgxZn1-xO, Diamond

We look forward to receiving your submissions!

Guest Editors

Dr. Fabien Massabuau

Prof. Dr. Robert W. Martin

Dr. Paul R. Edwards

Prof. Dr. Weihua Tang

Prof. Dr. Chong-Xin Shan

Deadline for manuscript submissions

closed (15 November 2021)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.1
Indexed in PubMed



mdpi.com/si/57775

Micromachines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
micromachines@mdpi.com

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





Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.1
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Micromachines (ISSN 2072-666X) is a forum for cutting-edge interdisciplinary research on micro and nanoscale science and technology. We emphasise the practical, real-world value of micro and nanotechnologies that will place *Micromachines* in a leading position among engineering and technology journals.

Editor-in-Chief

Prof. Dr. Nam-Trung Nguyen

Queensland Quantum and Advanced Technologies Research Institute,
Griffith University, West Creek Road, Nathan, QLD 4111, Australia

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).