

# Special Issue

## Advances in Semiconductor Photonic Integrated Circuits

### Message from the Guest Editors

In recent decades, semiconductor photonic integrated circuits (PICs) have advanced significantly, affecting fields like telecommunications, data centers, sensing, and quantum computing. These circuits combine various photonic functions on a single chip, improving performance, lowering costs, and reducing energy use. Ongoing innovations in materials, fabrication, and design are driving this progress. The merging of electronics and photonics on a single platform has led to the development of more efficient and compact devices. Advances in integration technologies and new materials are rapidly expanding PIC applications, including high-speed data transmission and precise biomedical sensing. This Special Issue focuses on the latest advancements in semiconductor photonic integrated circuits. In this Special Issue, original research articles and reviews are welcome. We look forward to receiving your contributions.

---

### Guest Editors

Prof. Dr. Ruiying Zhang

Key Laboratory of Semiconductor Display Materials and Chips, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, Suzhou 215123, China

Dr. Hua Yang

State Key Laboratory of Optoelectronic Materials and Devices, Institute of Semiconductors, Chinese Academy of Sciences, Beijing, China

---

### Deadline for manuscript submissions

closed (31 March 2025)



## Photonics

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.9  
CiteScore 3.5



[mdpi.com/si/213232](https://mdpi.com/si/213232)

*Photonics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[photonics@mdpi.com](mailto:photonics@mdpi.com)

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





# Photonics

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.9  
CiteScore 3.5



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



## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

---

### Editor-in-Chief

Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

#### Journal Rank:

CiteScore - Q2 (Instrumentation)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15 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).