

# Special Issue

## Advances in Integrated Photonics: From Materials to Devices and Systems

### Message from the Guest Editors

In the area of Integrated photonics, plenty of exciting achievements have been reached in recent years, ranging from the low-loss and high-accuracy fabrication of various substrate materials, including III-V semiconductors, silicon, silica, silicon nitride, lithium niobate, aluminum nitride, polymers, metal optics, etc., to high-performance integrated photonic devices with both passive (modulators, switches, filters, etc.) and active (lasers, amplifier, detectors, etc.) aspects. With these constituent materials and building blocks, compact and cost-effective integrated optical systems can be created, resulting in breakthroughs in sensing, computation, and communication technologies and in many other areas in both classical and quantum scenarios, thereby helping to revolutionize photonics. The aim of this Special Issue is to present recent the advances in the diverse aspects of integrated photonics, from materials to devices and systems.

---

### Guest Editors

#### Dr. Hua-Ying Liu

National Laboratory of Solid State Microstructures, School of Physics, Nanjing University, Nanjing 210093, China

#### Dr. Xiao-Hui Tian

National Laboratory of Solid State Microstructures, School of Electronic Science and Engineering, Nanjing University, Nanjing 210093, China

---

### Deadline for manuscript submissions

closed (10 July 2024)



# Photonics

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.9  
CiteScore 3.5



[mdpi.com/si/183395](https://mdpi.com/si/183395)

*Photonics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
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](http://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).

