

## Special Issue

# Photonics for Emerging Applications in Communication and Sensing

### Message from the Guest Editors

Photonics play an important role as a key enabler in emerging and promising applications in communication and sensing, such as datacenters, automotive driving, 5G wireless networks, cloud computing, internet of things (IoT), and virtual reality. This Special Issue focuses on recent advances and future challenges in photonics technologies for enabling and supporting these emerging applications, covering optical fibers, photonic devices and systems, and signal processing techniques. Topics of interest include but are not limited to the following areas:

- Silicon passive and active devices for data communication, 5G, sensing, or imaging;
- Optical fiber subsystems for communication, detection, and sensing;
- Photonic signal processing based on nonlinear optics for optical networks;
- Digital signal processing for optical transmission systems.

---

### Guest Editors

Dr. Guo-Wei Lu

Prof. Dr. Zhenzhou Cheng

Dr. Ting-Hui Xiao

---

### Deadline for manuscript submissions

closed (31 August 2022)



## Photonics

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.9  
CiteScore 3.5



[mdpi.com/si/62062](https://mdpi.com/si/62062)

*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 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).