

# Special Issue

## Specialty Optical Fibers: Advance and Sensing Application

### Message from the Guest Editors

Over the past fifty years, optical fiber has been well-developed and widely used in optical fiber communication systems, greatly promoting the arrival of the information age. Specialty optical fibers with unique performance, such as ultra-low transmission loss, highly strong evanescent field, ultra-high working temperature, etc., have been intensively studied and become a research hotspot. Novel simulation designs, ingenious fabrication processes, and high performance are constantly being proposed and validated, showing unparalleled advantages in optical fiber sensing applications. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Hollow core fibers;
- Multi-medium and multi-functional optical fibers;
- Microstructured optical fiber sensors;
- Nano-fiber and its sensing applications;
- Sapphire fiber and its sensing applications;
- Optic-fiber sensing system for ocean monitoring and aerospace applications.

Potential topics including fibers for terahertz applications and orbital angular momentum research are also welcomed.

---

### Guest Editors

Dr. Guofeng Yan

Research Center for Optical Fiber Sensing, Zhejiang Laboratory,  
Kechuang Avenue, Hangzhou 311000, China

Dr. Zhengyong Liu

1. Guangdong Provincial Key Laboratory of Optoelectronic Information Processing Chips and Systems, School of Electronics and Information Technology, Sun Yat-sen University, Guangzhou 510275, China  
2. Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai), Zhuhai 519000, China

---

### Deadline for manuscript submissions

closed (1 December 2023)



## Photonics

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.9  
CiteScore 3.5



[mdpi.com/si/168533](https://mdpi.com/si/168533)

*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).