

## Special Issue

# Fabrication of Optical Fiber and Fiber Amplifiers: From Design to Applications

### Message from the Guest Editors

The earliest development stage of optical fibers benefited from peoples' pursuit of high-capacity communication. Apart from light transmission, optical fibers can also be utilized in sensing, filtering, amplification, and lasering. Fiber amplifiers comprise an important branch of fiber optic devices. There are two main categories of fiber amplifiers: rare-earth-doped fiber amplifiers and nonlinear fiber amplifiers. This Special Issue on "Fabrication of Optical Fiber and Fiber Amplifier: From Design to Applications" will welcome basic, methodological, and cutting-edge research contributions, as regular and review papers that focus on:

- The development and improvement of materials, and design and fabrication methods for optical fibers;
- Specialty optical fibers, such as micro-structured optical fibers and polymer fibers;
- Special erbium-doped fiber amplifiers, such as few-mode EDFAs and multicore EDFAs;
- Other rare-earth-doped fiber amplifiers;
- Nonlinear fiber amplifiers, including fiber Raman amplifiers and fiber Brillouin amplifiers;
- Applications based on optical fibers and fiber amplifiers, such as optical fiber sensors and optical fiber lasers.

---

### Guest Editors

Dr. Shiyong Xiao

Dr. Beilei Wu

Dr. Yudong Lian

---

### Deadline for manuscript submissions

closed (15 May 2025)



## Photonics

---

an Open Access Journal  
by MDPI

---

Impact Factor 1.9  
CiteScore 3.5



[mdpi.com/si/182732](https://mdpi.com/si/182732)

*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).