Special Issue

Optical Fiber Communication Systems and Networks

Message from the Guest Editor

Optical fiber communication has been a disruptive technology, enabling fast and reliable communication over long distances. Today, the explosion of data traffic brings challenges and opportunities for change in optical networks. This Special Issue aims to provide a comprehensive platform for relevant researchers, engineers, and industry players to share their latest discoveries, advances, and applications. This Special Issue covers a wide range of topics related to optical fiber communications, including but not limited to:

- Architecture and design of optical networks;
- Optical network switching technologies and protocols;
 Optical network sensing technologies and sensing systems;
- Flexible and elastic optical fiber networks:
- Network convergence, including Access, Metro, 5G/6G mobile, and distributed edge computing;
- Photonic integrated circuits and devices;
- High-speed optical communication systems and technologies;
- Distributed networks; Optical access networks;
- Machine learning and artificial intelligence (AI) in optical networks;
- Data center networks for cloud and edge computing;
- New trends and future directions in optical fiber communications.

Guest Editor

Prof. Dr. Wei Ji

School of Information Science and Engineering, Shandong University, Qingdao 266237, China

Deadline for manuscript submissions

closed (30 April 2024)



Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



mdpi.com/si/172958

Photonics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
photonics@mdpi.com

mdpi.com/journal/photonics





Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



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 peerreviewed 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).

