Special Issue

Optical Communication and Networks Facilitating Emerging Applications and Services

Message from the Guest Editors

We cordially invite original contributions focused on the applications and services that can take advantage of optical networks. Topics of interest include but are not limited to:

- Application-aware optical network design and optimization;
- Quality of experience of emerging applications offered through optical networks;
- Emerging, network-based, applications provisioned through optical networks: advantages and challenges;
- Optical network slicing:
- Softwarization and virtualization of optical networks;
- Integration between optical and mobile networks;
- Optical interconnectivity for distributed computing;
- Elastic optical networks;
- Dynamic reconfiguration of optical networks for the purpose of emerging applications;
- Monitoring of optical networks, including monitoring of transmission parameters (modulation formats, optical signal-to-noise ratio (OSNR), symbol rate, etc.) monitoring;
- Use of AI/ML for improving performance in optical networks:
- Proof of concept showing usage of optical networks for the purpose of emerging applications.

Guest Editors

Prof. Dr. Piotr Borylo

Prof. Dr. Piotr Chołda

Dr. Edyta Biernacka

Deadline for manuscript submissions

closed (31 July 2024)



Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



mdpi.com/si/164804

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).

