

Special Issue

Integration of Optical and Satellite Communication Systems into 5G Edge Networks

Message from the Guest Editor

This Special Issue focuses on the optical and satellite communication systems with cloud-native technology and AI/ML in the context of 5G edge networks. The advent of 5G aims to address these challenges by providing high data rates, low latency, on-demand resource allocation, network scaling, and automation. This Special Issue invites research contributions that explore the integration of optical and satellite communication systems with cloud-native technology and AI/ML in 5G networks. Relevant topics include, but are not limited to, the following:

- Optical and satellite communication technologies in 5G edge networks;
- Cloud native architectures and containerization in 5G infrastructure;
- Orchestration and management of optical and satellite resources in cloud native environments;
- AI/ML techniques for network optimization, prediction, and anomaly detection in 5G edge networks;
- Integration of AI/ML models with optical and satellite communication systems
- Edge computing and distributed AI in satellite, optical and 5G networks;

and etc.

Guest Editor

Dr. Hamzeh Khalili

Principal Investigator and Researcher at Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Barcelona, Spain

Deadline for manuscript submissions

closed (29 February 2024)



Photonics

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 2.6



mdpi.com/si/176167

Photonics

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

[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)





Photonics

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 2.6



[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:

JCR - Q2 (Optics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the second half of 2024).