

## 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.

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### Guest Editor

Dr. Hamzeh Khalili

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

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### Deadline for manuscript submissions

closed (29 February 2024)



## Photonics

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*Photonics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[photonics@mdpi.com](mailto:photonics@mdpi.com)

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## 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.

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### Editor-in-Chief

Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

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