# **Special Issue**

## Signal Processing for Next-Generation Optical Communications and Networks

## Message from the Guest Editors

Over 95% of the current estimated digital data traffic is carried over optical communication networks. Transmission impairments have significantly limited the performance and information rates of optical communication networks, and they appear to be more significant for systems with higher symbol rates, larger transmission bandwidths, closer channel spacing, and higher-order modulation formats. Intelligent digital signal processing and advanced optical signal processing techniques have been investigated and developed to mitigate transmission distortions in optical links and transceivers. This Special Issue aims to collect original research and review articles on recent advances, technologies, and novel applications in the field of digital and optical signal processing techniques in optical communication systems and networks. Potential topics include, but are not limited to:

- Optical communication systems and networks:
- Free-space optical and visible-light communications;
- Distributed and lumped optical amplifications;
- Intelligent digital signal processing;
- Advanced optical signal processing;
- Machine leaning and neural networks.

#### **Guest Editors**

Dr. Feng Wen

Dr. Mingming Tan

Dr. Tianhua Xu

Dr. Bo Tan

### Deadline for manuscript submissions

closed (31 August 2024)



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## Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

### Editor-in-Chief

### Prof. Dr. Vittorio M. N. Passaro

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