







an Open Access Journal by MDPI

# Signal Processing for Next-Generation Optical Communications and Networks

Guest Editors:

Dr. Feng Wen

Dr. Mingming Tan

Dr. Tianhua Xu

Dr. Bo Tan

Deadline for manuscript submissions:

closed (31 August 2024)

## **Message from the Guest Editors**

Dear Colleagues,

Over 95% of the current estimated digital data traffic is optical communication over networks. Transmission impairments have significantly limited the and information rates of optical performance 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.













an Open Access Journal by MDPI

### **Editor-in-Chief**

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

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

# **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.

#### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases. **Journal Rank:** JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

#### **Contact Us**