Special Issue

Recent Advances for Next-Generation High-Speed Optical Networks: Technologies, Components, Systems and Architectures

Message from the Guest Editors

Recently advanced Si- and InP-based photonic platforms have scaled the per lane speed up to 100G and even 200G, facilitating the next generation of Tb/s capacity transceivers. The quest to develop novel active and passive building blocks that will address these future requirements in a low-cost and scalable way continues. For the deployment of next-generation metro/core networks, the combination of sliceable bandwidth variable transceivers and reconfigurable switching nodes is gaining momentum, allowing the effective allocation of resources and facilitating the programmability of the network. Authors are invited to submit manuscripts within the scope of the Special Issue including, but not limited to, the following topics:

- High-speed transceivers and switches;
- Photonic Integrated Circuits;
- Optical components, sub-systems, and devices;
- Network architectures;
- Switch architectures;
- Optical Communication Technologies;
- Photonics-Electronics synergies and Co-Packaged Optics;
- Neuromorphic circuits;
- Photonic Sensors for Network Monitoring;
- Quantum transceivers.

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Deadline for manuscript submissions

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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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