Special Issue

New Trends in Next-Generation Optical Networks

Message from the Guest Editor

This Special Issue of Applied Sciences will provide new research on, and practical solutions to, CMOS-compatible photonic integrated devices used for communications in high-capacity optical networks. This Special Issue investigates how new photonic integrated technologies and new network-layer approaches may drive the medium–long-term evolution of optical networks for communication. This Special Issue covers a large scope of research in optical networking and communications, and solicits contributions in, but not limited to, Photonic higher-speed transceivers;
Lasers and amplifiers;
Coherent systems;
Advanced digital signal processing;
Compatible optical switching, devices, and architectures;
The design and performance evaluation of optical network components;
Energy-efficient optical networks and systems;
Data center networks;
Optical access networks and FTTx;
Optical packet, burst, and flow switching;
Failure monitoring and localization;
Protection and restoration in optical networks;
Elastic optical networks;
Optical network security;
Support to grid and cloud computing;
Radio-over-fiber technology;
The convergence of optical and wireless networks.

Guest Editor

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Deadline for manuscript submissions

closed (20 August 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/202948

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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