

Topical Collection

New Trends in Optical Networks

Message from the Collection Editors

This Special Issue covers recent advances and new trends in the research and standardization of optical networks with high impact on the future digitized society and economy, encompassing all network layers, from new optical components to smart network operations. Covered topics include, but are not limited to, the following: new materials, technologies, and production processes for integrated photonics devices; ultra-high-speed optical transport networks, beyond terabit/s; broadband optical amplification; high bandwidth density and energy-efficient interconnection systems; co-packaged electrical and optical ICs; photonics applications for broadband radio systems; optical generation and detection of millimeter waves and THz; optical wireless communications; self-configuring optical networks; virtualized highly flexible network control; integrated fixed-mobile architectures; convergence of mobile, optical, and cloud computing; evolution of NFV, SDN, and AI-based network control; multi-domain routing; secure optical networking; quantum secure networks. Survey papers and reviews are welcome.

Collection Editors

Dr. Fabio Cavaliere

Ericsson Research, Via Moruzzi 1 c/o CNR, Ericsson, 56124 Pisa, Italy

Prof. Dr. Luca Poti

Consorzio Nazionale Interuniversitario per le Telecomunicazioni - CNIT,
Via Moruzzi 1, 56124 Pisa, Italy



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/46440

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/

[applsci](https://mdpi.com/journal/applsci)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

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

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)