Special Issue

Frontiers in Optical Interconnects

Message from the Guest Editor

The Internet grows by 30% per year and consumes 9% of all electricity worldwide while transmitting hundreds of terabits per second. Global use of information grows continuously due to the demands of our society. We cannot continue the exponential growth of our use of information without significant reduction in energy consumption. This is a serious challenge for optical interconnects—how to reduce energy consumption and cost while increasing data rates. Datacenters will continue to deploy optical interconnects to meet the required bandwidth density. The solution to energy-efficient and enormous bandwidth density optical interconnects is tight integration between electronics and photonics. Innovation within photonics and electronics has enabled technologies to reduce energy consumption while supporting exponential use of information. A key enabler is the ring resonators for high throughput optical interconnects. Integration of optical technologies into datacenters will enable advances in machine learning and artificial intelligence. This will provide fast and reliable services to users worldwide.
Prof. Dr. Ozolins Oskars

Guest Editor

Prof. Dr. Oskars Ozolins
RISE Research Institutes of Sweden; Senior Scientist & Technical Lead on Optical Transmission; Affiliated Faculty at KTH Royal Institute of Technology; Sweden

Deadline for manuscript submissions

closed (20 September 2021)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/57728

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

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, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

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