Special Issue

Photonics for Optical Computing

Message from the Guest Editors

This Special Issue on “Photonics for Optical Computing” aims to cover recent advances in the design, realization, and demonstration of optical computation via discrete optics, diffractive optics, photonics, integrated photonics, meshes, and matrices of repeated elements, which allow linear and/or nonlinear function implementation. This also includes photonics and integrated photonics with time-stretching techniques for wide-band data processing as well as Fourier transform implementation. Photonics for optical computation in applications where ultrafast computing or real-time processing or low power consumption or low-latency or wide-band signal processing matter are included are welcome. This issue includes both theoretical and experimental contributions, which include a scalability analysis and show the photonic engine embedded in the digital/analog electronics environment and interfacing with the outside world.

- optical signal processing
- photonics
- integrated photonics
- ultrafast processing
- low-power signal processing
- wide-band signal processing
- brain-inspired optical computation

Guest Editors

Dr. Ripalta (Patty) Stabile

Institute for Photonic Integration, Technische Universiteit Eindhoven, Eindhoven, The Netherlands

Dr. Christos (Chris) Vagionas

Department of Informatics, Aristotle University of Thessaloniki, 54453 Thessaloniki, Greece

Deadline for manuscript submissions

closed (31 March 2022)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/45923

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, CAPlus / SciFinder, and other databases.

Journal Rank:

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