Optical Signal Processing: Advances and Perspectives

Guest Editors:

Prof. Dr. Jian Wang

Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology, Wuhan 430074, China

Prof. Dr. Antonella Bogoni

Integrated Research Center for Photonic Networks Technologies, Photonic Networks National Laboratory – CNIT, Pisa, Italy

Deadline for manuscript submissions:
closed (30 April 2018)

Message from the Guest Editors

Dear Colleagues,

The arrival of the big data era has fueled the increasing demand on both high-speed signal transmission and ultrafast signal processing. This Special Issue aims to explore the recent enabling devices and techniques motivating optical signal processing. It will focus on the state-of-the-art advances and future perspectives of optical signal processing.

Topics of interest include, but are not limited to, the following areas:

Mechanisms, materials, devices/platforms, techniques for optical signal processing.

Semiconductor optical amplifiers, highly nonlinear fiber, periodically poled lithium niobate waveguides, photonic integrated circuits, graphene for optical signal processing.

Optical signal processing exploiting the spatial structure of lightwaves.

High-speed electronics assisted advanced digital signal processing (DSP) for optical signal processing.

Various optical signal processing functions, such as wavelength conversion, (de)multiplexing, multicasting, logic gate, computing, switching, true time delay, optical buffer, regeneration, etc.

Special Issue

Editor-in-Chief

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

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.

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), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us