

Special Issue

Novel Advances and Applications of Signal Processing Techniques for Optical Communications

Message from the Guest Editor

Thanks to the (r)evolution in optical communication systems, many signal processing techniques are being developed for new, energy-efficient, high-capacity, fully transparent all-optical and hybrid optical-wireless networks for novel telecom and datacom applications.

The signal processing techniques developed in the field of Optical Communications are not only aimed at systems but also at networks. Application areas include but are not limited to: possibilities for increasing the data throughput, for effective utilization of available bandwidth and wavelength resources; advanced techniques of computing power, spectral and energy efficiency, power and link budget optimization, network synchronization, multi-carrier modulations, multiple access and relay-assisted transmissions; advances to meet system capacity and security requirements of the future IoT applications, etc.

In this Special Issue, we invite submissions exploring the development of novel advances, applications, and new trends on signal processing techniques in optical and/or electrical domains for optical fiber and/or wireless communications. Survey papers and reviews are also welcomed.

Guest Editor

Dr. Rastislav Róka

Institute of Multimedia Information and Communication Technologies,
Slovak University of Technology, Ilkovičova 3, 812 19 Bratislava, Slovakia

Deadline for manuscript submissions

closed (15 November 2021)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/87955

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

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





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)