Special Issue

Machine Learning and Photonics Cooperation: Principles, Algorithms, and Systems

Message from the Guest Editor

This Special Issue will focus on the fundamental theory, frameworks, techniques, and applications of machine learning/deep learning combined with photonics, with the aim of sharing and discussing recent advances and future trends. The topics of interest include but are not limited to the following: Typical systems and applications

- Biomedical imaging
- Objection recognition/detection
- Machine learning applications
- Optical communication systems

Photonic neuromorphic computing and neural networks

- High-performance computing
- Optics for neuromorphic and reservoir computing
- Optical convolutional neural network
- Programmable photonics
- Optical unitary conversion

Optical components

- Semiconductor lasers and fiber-based lasers devices
- Programmable multi-purpose photonic integrated circuits
- Fibers
- Optical amplifiers

Guest Editor

Prof. Dr. Niangiang Li

School of Optoelectronic Science and Engineering, Soochow University, Suzhou 215006, China

Deadline for manuscript submissions

closed (31 August 2022)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/102016

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

mdpi.com/journal/electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

