Special Issue

The Interaction between Photonics and Machine Learning

Message from the Guest Editors

This Special Issue aims to explore the intersection between photonics and machine learning, highlighting their synergistic relationship and the potential for groundbreaking advancements in various fields. Topics include, but are not limited to, the following:

- computational optics and machine learning
- deep learning for optical systems
- AI-empowered photonic sensor networks
- adaptive optics and machine learning algorithms
- optoelectronic neural networks for information processing
- machine learning-based optimization of photonic devices
- photonics-enabled machine vision systems
- AI-driven design of optical components
- quantum photonics and quantum machine learning
- reinforcement learning to control optical systems

Guest Editors

Dr. Guohui Yuan

Yangtze Delta Region Institute (Quzhou), University of Electronic Science and Technology of China, Quzhou 324003, China

Prof. Dr. Zhuoran Wang

School of Information and Communication Engineering, University of Electronic Science and Technology of China, Chengdu 610054, China

Deadline for manuscript submissions

31 December 2025

Photonics

Photonics

an Open Access Journal by MDPI

Impact Factor 1.9
CiteScore 3.5

mdpi.com/si/196129

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

mdpi.com/journal/photonics

Photonics

an Open Access Journal by MDPI

Impact Factor 1.9
CiteScore 3.5

mdpi.com/journal/photonics

MDPI

About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

Editor-in-Chief

Prof. Dr. Nelson Tansu
School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

Author Benefits

High Visibility:

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

Journal Rank:

CiteScore - Q2 (Instrumentation)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).