Special Issue

Artificial Intelligence and Machine Learning in Photonics

Message from the Guest Editors

Photonics invites manuscript submissions in the subject area of "Artificial Intelligence and Machine Learning in Photonics". The emerging fields of artificial intelligence and machine learning, especially deep learning, have opened up new horizons for extensive technologies coming from the areas of photonic materials, photonic devices, photonic integrated circuits, optical systems, and so on. AI-powered systems show impressive performance and robustness compared with traditional methods. The purpose of this Special Issue of *Photonics* is to highlight the recent progress and trends in developing AI-enhanced photonics technologies. Areas of interest include (but are not limited to):

- Reinforcement learning to control optical systems.
- Artificially engineered photonic structures, materials, and devices.
- Neural networks on photonic integrated platforms and free-space optics.
- Photonics and intelligent sensing.
- High-speed optical communication and computing.
- Super-resolution imaging and 3D imaging.
- Quantum information processing.
- Next-generation ultrafast photonics.

Guest Editors

Prof. Dr. Zhuoran Wang

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

Dr. Guohui Yuan

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

Deadline for manuscript submissions

closed (30 September 2023)

hv

Photonics

an Open Access Journal by MDPI

Impact Factor 1.9
CiteScore 3.5

mdpi.com/si/124409

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

mdpi.com/journal/photonics

MDPI

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).