Special Issue

Recent Progress in Single-Photon Generation and Detection

Message from the Guest Editor

With the rapid development of quantum technology, progresses in single-photon sources and single-photon detectors have sprung up. And new applications of single-photon sources and single-photon detectors are not limited in the field of quantum technology but extended to a lot of different field such as metrology, biology, materials science and so forth. Therefore, the Special Issue aims to collect the recent progresses in the single-photon source and detection, including related applications. We welcome papers that highlight the evolving research fields of single-photon generation and detection.Topics covered include, but not limited to:

- Single-photon sources and related applications
- Entangled-photon pair sources
- Single-photon frequency upconversion/ downconversion
- Metrology with single-photon sources or singlephoton detectors
- Photon-number resolving detection

Guest Editor

Dr. E Wu State Key Laboratory of Precision Spectroscopy, East China Normal University, Shanghai 200241, China

Deadline for manuscript submissions

30 December 2025



Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



mdpi.com/si/217649

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



photonics



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).