

# 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 single-photon 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 June 2025



## Photonics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.1  
CiteScore 2.6



[mdpi.com/si/217649](https://mdpi.com/si/217649)

*Photonics*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[photonics@mdpi.com](mailto:photonics@mdpi.com)

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





# Photonics

an Open Access Journal  
by MDPI

Impact Factor 2.1  
CiteScore 2.6



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



## About the Journal

### Message from the Editor-in-Chief

---

#### 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,  
CAPlus / SciFinder, and other databases.

##### Journal Rank:

JCR - Q2 (Optics)

##### Rapid Publication:

manuscripts are peer-reviewed and a first decision is  
provided to authors approximately 14.9 days after  
submission; acceptance to publication is undertaken in 1.9  
days (median values for papers published in this journal in  
the second half of 2024).