

# Special Issue

## Materials, Properties and Applications for Two-Dimensional Materials

### Message from the Guest Editors

In the last few years, we have all witnessed a significantly growing interest in the development of two-dimensional (2D) materials. The exploration of completely new physics in 2D materials could overturn existing perceptions and promote innovation in related industries. Great scientific progress has been made in the preparation and photoelectric properties of 2D materials. It is now important to find more abundant 2D materials as carriers for scientific study, and to explore their physical mysteries. We hope that these emerging properties will make 2D materials a strong candidate for use in next-generation semiconductor technologies.

This Special Issue aims to publish high-quality papers that study the emerging important technologies in materials, properties and applications for 2D materials. Research areas may include (but are not limited to) the following topics:

- Van der Waals layered material;
- Photoluminescence;
- Raman;
- Nonlinear optical effect;
- Photo-electrical effect;
- Photocatalysis;
- Moiré superlattices;
- Twistronics;
- Ultrafast spectroscopy.

### Guest Editors

Dr. Xiaopeng Fan

College of Physics and Optoelectronics, Taiyuan University of Technology, Taiyuan 030024, China

Dr. Hao Hong

School of Physics, Peking University, Beijing 100871, China

### Deadline for manuscript submissions

31 July 2025



## Photonics

an Open Access Journal  
by MDPI

Impact Factor 1.9  
CiteScore 3.5



[mdpi.com/si/222771](https://mdpi.com/si/222771)

*Photonics*  
Editorial Office  
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 1.9  
CiteScore 3.5



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