

# Special Issue

## III-V Semiconductors Optoelectronic Materials and Devices

### Message from the Guest Editors

III-V semiconductor optoelectronic materials and devices, including, but not limited to conducting and semiconducting materials used in integrated optoelectronic circuits, light emitting diodes and display devices, lasers, solar cells, photo detectors, optoelectronic sensors, etc., have dramatically impacted the way humans live in the twentieth and twenty-first centuries. Specially, new technology, e.g. nanotechnology, neuromorphic computing technology is introduced into III-V semiconductor materials to develop quantum dot laser, quantum dot LED, quantum dot detectors and so on.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but not limited to) the following:

- Semiconductor lasers and SOA
- VCSEL
- Frequency combs
- Coupled lasers
- Hybrid integrated lasers
- Optical detectors
- Optical modulator
- Quantum dot laser
- III-V compound semiconductor nanowires or quantum dots for optoelectronics
- Hybrid integrated optoelectronic chips
- VCSEL, SOA or semiconductor ring cavity for neuromorphic computing network architectures

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### Guest Editors

Dr. Xiaoying He

School of Electronic Engineering, Beijing University of Posts and Telecommunications, Beijing, China

Dr. Chong Li

Key Laboratory of Optoelectronics Technology, Beijing University of Technology, Beijing 100124, China

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### Deadline for manuscript submissions

closed (15 December 2023)



## Photonics

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

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## 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.

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### Editor-in-Chief

Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15 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 2025).