# **Special Issue**

## Semiconductor Lasers: Science and Applications

### Message from the Guest Editors

This Special Issue aims to collect both theoretical and experimental research publications, which will cover the current status, prospects, and challenges of the field in the designing and manufacturing of semiconductor lasers, as well as using semiconductor lasers for cutting-edge technologies. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Lasers based on novel semiconductor materials.
- Laser modeling and experimental characterization of dynamics.
- Laser networks and their synchronization properties.
- Quantum cascade lasers, vertical-cavity surfaceemitting lasers, nanolasers, etc.
- Optical communications and information encryption.
- Lidar/radar/sensor, including imaging and ranging.
- Microwave photonics.
- Neuromorphic computing.
- Random number generation and secure key distribution.
- Spiking dynamics and its applications.
- Other related applications of semiconductor lasers.

#### **Guest Editors**

Prof. Dr. Tao Deng Prof. Dr. Shuiying Xiang Prof. Dr. Dong-Zhou Zhong Prof. Dr. Nianqiang Li Dr. Tao Wang

Deadline for manuscript submissions

closed (15 December 2022)



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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.

### 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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