

Special Issue

Recent Progress in Vertical-Cavity Surface-Emitting Lasers (VCSELs)

Message from the Guest Editors

Photonics is pleased to announce a Special Issue dedicated to highlighting recent progress in VCSELs and exploring future directions for the development and applications of these devices. We invite contributions on topics including, but not limited to, the following:

- **Physics and Design of Devices:** Novel structures, materials, and fabrication techniques;
- **Performance Optimization:** Efficiency, bandwidth, beam quality, and power scaling;
- **Emerging Applications:** Automotive LiDAR, optical sensing, and high-speed communications;
- **Advanced Concepts:** Wavelength expansion, oxide-free designs, and hybrid integration.

We welcome original research articles, reviews, and perspectives that advance our understanding and application of VCSEL technology.

Guest Editors

Dr. Zhonghe Liu

Southwest Institute of Technology Physics, Chengdu, China

Dr. Dongyue Jin

School of Information Science and Technology, Beijing University of Technology, Beijing, China

Dr. Wei Li

National Engineering Research Center for Optoelectronic Devices, Institute of Semiconductors, CAS, Beijing 100083, China

Deadline for manuscript submissions

31 March 2026



Photonics

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.5



mdpi.com/si/244267

Photonics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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, 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).