Special Issue

Advances in Silicon Photonics: From Fundamentals to Applications

Message from the Guest Editors

The purpose of this Special Issue is to introduce the development of novel chip-scale technologies, novel devices and novel materials compatible with silicon photonics and its new applications, ranging from Lidar to biomedical devices. We invite you to present a research paper on the theoretical fundamentals and practical applications of silicon photonics in this Special Issue of *Photonics* on "Advances in Silicon Photonics: From Fundamentals to Applications". This Special Issue will feature original research articles as well as reviews. Topics include, but are not limited to, the following:

- High-speed modulators;
- Phase-shifters for tuning and switching;
- Silicon photonic MEMS;
- High-speed photodetectors;
- Laser integration;
- Avalanche photodetectors;
- Efficient fiber-to-waveguide couplers;
- Microresonator physics;
- Hermitian and non-Hermitian physics;
- Neuromorphic photonics;
- Nonlinear silicon photonics;
- Integrated quantum photonics;
- Silicon PhC devices.

Guest Editors

Dr. Chong Li

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

Dr. Hui Cong

Institute of Semiconductors, Chinese Academy of Sciences, Beijing 100083, China

Deadline for manuscript submissions

closed (20 February 2025)

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Photonics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
photonics@mdpi.com

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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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