Special Issue

Silicon-Based Integrated Optics: From Design to Applications

Message from the Guest Editor

Photonics welcomes your submission to a Special Issue on silicon-based integrated optics: From design to applications. Silicon-based integrated optics is a silicon platform from which photonic-integrated circuits can be made. Not only silicon but also silicon nitride can serve as core materials for silicon-based integrated optics. Silicon-based integrated optics with electronic integrated circuits (ICs) in one chip can provide a complete solution for applications of optical communication, sensors, biomedical sciences, automobiles, astronomy, aerospace, augmented reality (AR), virtual reality (VR), and artificial intelligence (AI). Topics of interest include, but are not limited to, the following:

- Active and passive integrated photonic devices on silicon-based platforms.
- Fabrication and characterization technologies for silicon-based integrated optics.
- Device theory, modelling, and design: machine learning and reverse engineering.
- Applications of silicon-based integrated optics devices.
- Silicon-based integrated nonlinear and quantum optics.
- New materials on silicon platforms for integrated optics.

Guest Editor

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Deadline for manuscript submissions

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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.

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