Special Issue

Advanced Materials and Devices for Silicon Photonics

Message from the Guest Editors

It is our pleasure to invite you to contribute to this Special Issue of Photonics, entitled "*Advanced Materials and Devices for Silicon Photonics*". Over the last two decades, silicon photonics has emerged as a mature technology and has become the leading platform of photonic integrated circuits (PICs) and different photonic components due to its compatibility with complementary metal oxide semiconductor (CMOS) fabrication and ability to integrate with other material platforms such as silicon nitride, III–V materials (InP, GaAs, etc.), and microelectromechanical system (MEMS) materials. With its unique optical and material properties, including low optical loss, high refractive index, infrared wavelength transparency, high thermal conductivity and stability, and nonlinear optical properties, silicon photonics has enabled a wide range of applications in telecommunications and data centers, sensing, bio-photonics, light detection and ranging (LiDAR), optical computing, and quantum photonics. This Special Issue aims to publish selected contributions on advances in silicon photonics-related materials and devices.

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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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