Special Issue

Emerging Trends in Silicon Photonics

Message from the Guest Editor

Recently, there have been many advances in the field of optics and photonics. Among these fields, quantum optics, optical communication, sensors, cryptography, and telecommunications have seen remarkable strides. To make these advancements faster and more effective, it is crucial to connect optical and electronic technologies. Silicon photonics emerges as a dynamic solution to this challenge and offers a method for faster, smaller, and more energy-saving devices and systems. By integrating photonics with silicon-based electronics, we can leverage the scalability, manufacturability, and cost-effectiveness of silicon technology while harnessing the unique optical properties of photons.

This Special Issue aims at presenting original state-of-the-art research articles dealing with photonic designs and devices based on silicon. Researchers are invited to submit their contributions to this Special Issue. Topics include, but are not limited to, the following: silicon photonics, optoelectronics, integrated photonics, nanophotonics, biophotonics, communication systems, sensing, imaging, quantum photonics, quantum computers, on-chip light sources and detectors.

Guest Editor

Dr. Amin Babazadeh
Quantum Optics, Quantum Nanophysics and Quantum Information, University of Vienna, 1090 Vienna, Austria

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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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