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Advanced Materials and Devices for Silicon Photonics

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Message from the Guest Editors

Dear Colleagues,

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.

