



Silicon Photonics – Emerging Devices and Applications

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Deadline for manuscript
submissions:

closed (31 October 2019)

Message from the Guest Editors

Dear Colleagues,

The impressive development of silicon photonics in recent years has made it the preferred platform for the on-chip integration of high performing photonic devices. For instance, silicon photonics is widely recognized as an enabling technology for next generation datacom applications, as it holds the promise to leverage already-existing CMOS facilities for the large-volume production of ultra-compact and low-power consumption optoelectronic transceivers, delivering unprecedented data rates. Nevertheless, this enormous technological development has created a myriad of exciting new opportunities for Si photonics beyond datacom. Indeed, a remarkable effort is being devoted, both, at academic and industrial levels, to develop silicon photonic circuits for applications as diverse as chemical and biological sensing, radio-over-fiber and microwave photonics and quantum cryptography and computing. This Special Issue focuses on the latest research and development of silicon photonics, targeting cutting edge performance devices and systems.

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Message from the Editor-in-Chief

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