Special Issue

Silicon Photonics – Emerging Devices and Applications

Message from the Guest Editors

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 alreadyexisting 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.

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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