



Silicon Photonics Devices and Integrated Circuits

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Message from the Guest Editors

Dear Colleagues,

Silicon-based optical chips are based on silicon and silicon-based substrate materials and combined with CMOS technology. Compared with traditional semiconductor chips, silicon-based optical chips have the advantages of higher operation efficiency and information transmission, lower energy consumption, and lower amounts of heat generation during operation. In recent years, silicon photonic devices have shown great potential in high-performance optical computing, quantum information processing, optical neural networks, and other fields. These are regarded as one of the promising solutions for low-cost and high-performance chip-based photonic devices and systems. Therefore, silicon photonics devices and integrated circuits have been attracting a great deal of attention in recent years.

This Special Issue aims to be a forum for the presentation of the latest developments in basic and applied research in the field of silicon photonics devices and integrated circuits. We welcome your work in any form, including reviews, articles, and communications.

