Special Issue

Optical Network on Chip and Silicon Photonics

Message from the Guest Editor

The rapid advancement in computational technologies demands increasingly efficient data transfer mechanisms within integrated circuits. Traditional electronic interconnects are approaching their limits in terms of bandwidth and energy efficiency, which is where Optical Network on Chip (ONoC) and Silicon Photonics come into play. These technologies promise to revolutionize on-chip communication by leveraging the high bandwidth and low latency characteristics of optical signals, along with the scalability and integration benefits of silicon photonics. This Special Issue dedicated to "Optical Network on Chip and Silicon Photonics" will provide a much-needed platform for researchers to present cutting-edge developments, innovative solutions, and emerging trends that address the critical challenges of on-chip data communication, thereby pushing the boundaries of computational performance and energy efficiency. It will serve as a comprehensive resource for academics and industry professionals seeking to understand and implement optical solutions in their designs.

Guest Editor

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Optics (ISSN 2673-3269) aims at establishing *Optics* as a leading journal for publishing high impact fundamental research and applications in optics field with a fast processing time and high quality service. The journal particularly welcomes both theoretical (simulation) and experimental research within our journal's scope. We encourage scientists to publish their experimental and theoretical results in as much detail as possible. So, there is no restriction on the length or pages of the papers. The full experimental details must be provided so that the results can be reproduced. Electronic files and software regarding the full details of the calculation or experimental procedure, if unable to be published in a normal way, can be deposited as supplementary electronic material.

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