



Announcement of an *IEEE/OSA* *Journal of Lightwave Technology Special Issue on:* **Optical Interconnects**

Announcing a Special Issue of the IEEE/OSA Journal of Lightwave Technology on:

OPTICAL INTERCONNECTS

Scope:

Large-scale data centers and high-performance computers (HPC) are becoming increasingly limited by the capacity of interconnects due to the rapidly increasing power consumption and bandwidth demands. As a result of the continuing bandwidth scaling, optical interconnects (OI) have been implemented at ever decreasing communication distances to replace electrical interconnects. Over the past decade, core switches and routers in data centers and HPC systems have adopted fiber optics to deliver the I/O performance between racks in multi-chassis configurations. Meanwhile, the further penetration of OI into shorter distances, such as the board and chip levels, poses new challenges and needs on photonics technologies and further requires innovations in integration and packaging techniques.

This special issue of the Journal of Lightwave Technology covers all aspects in frontier research, technologies and perspectives of next generation optical interconnects that address the rising requirements. Potential topics include: integrated photonics roadmaps, network systems, architectures, subsystems, devices, new optical materials, integration, photonic packaging, testing, and applications.

A portion of this issue will feature expanded versions of papers presented at the 2019 IEEE Optical Interconnects Conference in Sante Fe, New Mexico, United States from April 24-26, 2019. The special issue will include both invited and contributed submissions. It will have an emphasis on, but not limited to, work presented at the 2019 IEEE Optical Interconnects Conference.

On behalf of the Guest Editors and the Editor-in-Chief, we encourage you to submit your work for inclusion in this Special Issue. Accepted papers will appear in the March/April 2020 hardcopy issue with accepted papers posted online within one week of author final file upload. Mandatory page charges of \$260.00 per page are enforced for Original Contributions in excess of 7 pages and in excess of 10 pages for Invited Papers. Tutorial presenters will be invited to write articles that are up to 16 pages in length. The same mandatory fees apply to each Tutorial paper in excess of 16 pages.

Submissions by website only: <http://mc.manuscriptcentral.com/jlt-ieee>

Manuscript Type: "Optical Interconnects 2020"

Submission questions: Doug Hargis, Journal of Lightwave Technology d.hargis@ieee.org

The Guest Editors for this issue are: **Tian Gu**, Massachusetts Institute of Technology, USA; **Lionel Kimerling**, Massachusetts Institute of Technology, USA; **Ashkan Seyedi**, Hewlett Packard Enterprise; **Thomas Schrans**, Rockley Photonics, USA; **Jurgen Michel**, Massachusetts Institute of Technology, USA; **Daoxin Dai**, Zhejiang University, China; **Peter O'Brien**, Tyndall National Institute, Ireland

Submission Deadline: 30 Sept 2019
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