

Special Issue

Enabling Optical Communication Technologies for Intelligent Computing Networks

Message from the Guest Editors

The advent of the intelligent computing era, particularly the training and inference of large-scale models, has imposed more stringent requirements on data transmission. As the cornerstone of data center interconnect (DCI) and data center networks (DCNs), optical communication technology is poised to encounter both opportunities and challenges. In the context of intelligent computing, optical communication must not only continue to evolve in terms of ultra-large bandwidth but also place significant emphasis on ultra-low latency, high reliability, low power consumption, and full autonomy. To address these demands, researchers need to drive continuous innovation to develop new algorithms, devices, architectures, and technologies in optical communications. This Special Issue, titled “Enabling Optical Communication Technologies for Intelligent Computing Networks”, is dedicated to showcasing the latest explorations and advancements in this research field. We are pleased to invite you to submit your latest research findings to this Special Issue, which welcomes both original research articles and reviews from researchers, academicians, and industry experts.

Guest Editors

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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