# Special Issue

# Advanced Optical Fiber Communication

## Message from the Guest Editors

This Special Issue aims to capture the latest breakthroughs and emerging trends shaping the future of high-capacity, long-haul, and access networks. We invite original research papers and reviews addressing key advancements and challenges. Topics include, but are not limited to, the following:

- Design and fabrication of novel optical fibers (multi-core, multi-mode, hollow-core, rare-earth-doped, and other specialty fibers).
- Space-Division Multiplexing (SDM) systems and components.
- Advanced modulation and coding techniques.
- Coherent detection and DSP algorithms.
- High-capacity transmission experiments.
- Optical amplifiers (SDM amplifiers, Raman, wideband EDFA).
- Photonic integrated circuits for transceivers and switching.
- Free-space optical/fiber hybrid links.
- Intelligent optical networks and performance monitoring.
- Next-generation PON and access network technologies.
- Fiber lasers and modulators.

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## Deadline for manuscript submissions

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# About the Journal

## Message from the Editor-in-Chief

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.

## Editor-in-Chief

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