# Special Issue

# Technologies and Applications of Large Core Optical Fibers

## Message from the Guest Editors

The discovered new multi- and few-mode effects, as well as the utilization and customization of known multi- and few-mode regimes for specified applications in telecommunications, sensorics, medicine, fiber-optic lasers/laser delivery systems, light sources for illumination, endoscopes, remote viewing and other matters, are the key areas in the presented Special Issue. This publication will cover a large scope of research in the area of multi- and few-mode effects in optical fibers, including topics of:

- MMFs and FMFs for telecommunications;
- MDM / SDM technique for optical networking;
- MIMO technique for optical networks with MMFs and FMFs:
- laser optimized multimode optical fibers;
- FMFs / multicore FMFs:
- laser-based multi-Gigabit data transmission over large core optical fibers;
- fiber optic sensors based on a few-mode effects;
- extremely enlarged core optical fibers;
- MMFs and FMFs in medicine;
- MMFs and FMFs in lasers / laser delivery systems;
- image transmission over MMFs and FMFs;
- chiral MMFs and FMFs:
- microstructured and photonic crystal MMFs and FMFs;
- polymer optical fibers and microstructured polymer optical fibers.

### **Guest Editors**

Prof. Dr. Anton Bourdine

Dr. Ruslan Kutluyarov

Dr. Artem A. Kuznetsov

Prof. Dr. Manish Tiwari

Dr. Airat Zh. Sakhabutdinov

## Deadline for manuscript submissions

closed (29 February 2024)



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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 peerreviewed 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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