

## Special Issue

# Nonlinear Propagation in Optical Fiber Application

### Message from the Guest Editors

The invention of glass optical fibers in the 1960s has stimulated worldwide research and industrial applications ever since, initially in high-capacity telecommunications and later extended to high-energy transmission, optical sensing, biomedical imaging, etc. This Special Issue invites manuscripts that introduce recent advances in “Nonlinear Propagation in Optical Fiber Application”. All theoretical, numerical, and experimental studies are within the scope of this issue. Topics include but are not limited to the following:

- Mode-locked fiber lasers;
- Harmonic generation and phase matching techniques;
- Supercontinuum generation and soliton dynamics;
- Ultrashort pulses compression and propagation ;
- Optical parametric amplification and applications;
- Quantum effects: self- and cross-phase modulations and wave mixing;
- Raman scattering and spectroscopy;
- Brillouin scattering and distributed sensors;
- Nonlinear effects in optical communications;
- Highly nonlinear fibers and specialty fibers;
- Progress in high-quality fiber optics, e.g., gratings, couplers, interferometers, etc.

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### Guest Editors

Dr. Yang Chen

Prof. Dr. Wenbin He

Dr. Jiapeng Huang

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### Deadline for manuscript submissions

closed (30 December 2023)



## Photonics

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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.

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### Editor-in-Chief

Prof. Dr. Nelson Tansu

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).