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Nonlinear Propagation in Optical Fiber Application

Guest Editors:

Dr. Yang Chen

Prof. Dr. Wenbin He

Dr. Jiapeng Huang

Deadline for manuscript submissions:
closed (30 December 2023)

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.