Special Issue

Advances in Fiber Laser Mode Locking

Message from the Guest Editors

The generation of short pulses is often referred to as mode locking, which is generally initiated from noise and achieves locking the phases of numerous longitudinal modes inside the laser cavity. During the past few years, there have been considerable advances in fiber laser mode locking with the development of two-dimensional materials, understanding of complex nonlinear spatiotemporal dynamics in multimode fiber cavities, and emergence of automatic mode-locking techniques. This Special Issue aims to present original state-of-the-art research articles on “Advances in Fiber Laser Mode Locking”. Topics include but are not limited to:

- Actively and passively mode-locked fiber lasers;
- Automatic mode locking with the genetic algorithm, human-like algorithm, etc.;
- Spatiotemporal mode locking;
- Fourier domain mode locking;
- Kerr nonlinear beam cleanup;
- Harmonic mode locking;
- Material saturable absorbers including two-dimensional materials, SESAM, etc.;
- Artificial saturable absorber including nonlinear polarization evolution, nonlinear loop mirrors, etc.;
- Nonlinear dynamics of mode-locked fiber lasers;

Guest Editors

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Deadline for manuscript submissions

closed (30 November 2023)

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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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