Special Issue

Single Frequency Fiber Lasers and Their Applications

Message from the Guest Editors

The purpose of this Special Issue is to attract the latest theoretical and experimental results about single-frequency fiber lasers and recent developments in their applications. Topics to be covered include, but are not limited to, the following:

- Fiber lasers operating in traditional and new spectral ranges from NIR to MIR regions;
- New gain optical fibers and gain mechanisms (SBS-based and SRS-based);
- Novel single-longitudinal-mode or single-frequency selection mechanisms;
- Novel optical filters (fiber-based and waveguidebased);
- Laser frequency stabilization, noise suppression and linewidth compression methods;
- Single-frequency laser amplifying and high-power fiber lasers;
- Multi-wavelength lasing, and wavelength-switchable and tunable operations;
- Single-frequency Q-switched lasing operation;
- theoretical modeling of single-frequency fiber lasers; new materials used as saturable absorbers in fiber lasers;
- Practical applications such as LIDAR, optical communication, fiber sensor, spectroscopy, laser manufacturing, microwave photonics, and all other related areas.

Guest Editors

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Deadline for manuscript submissions

closed (20 September 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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