Special Issue

Advancements in High-Power Optical Fibers and Fiber Lasers

Message from the Guest Editors

This Special Issue highlights recent progress in high-power fiber lasers, particularly Yb-doped systems. The scope includes advancements in nonlinear effect suppression, polarization-maintaining fiber lasers, ultra-high-power fiber laser development, and specialty fiber design. Acknowledging the impact of artificial intelligence (AI) tools like deepseek and ChatGPT on research productivity, this Special Issue also welcomes submissions showcasing novel AI applications in related research domains. **Main topics:**

- Stimulated Brillouin scattering
- Stimulated Raman scattering
- Transverse modal instability
- Tandem pumping
- Distributed side-coupled cladding pumping
- Thermal management
- Artificial intelligence-assisted optics
- Polarized light
- Material processing
- Spectroscopy analysis
- Specialty optical fibers
- Fiber optic component

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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.

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