

Special Issue

Mid-IR Active Optical Fiber: Technology and Applications

Message from the Guest Editors

Nowadays, optical fiber devices working in the middle-infrared (Mid-IR) range are becoming a topic of interest for academia and industry. This Special Issue aims to bring together recent advances in the design, fabrication, and application of Mid-IR optical fibers. It covers a broad spectrum of topics, including novel fiber materials, waveguiding section designs, fiber-based sensing systems, laser design and fabrication, and the integration of these fibers into actual systems for real-world applications. By highlighting these developments, we hope to shed light on the current state of Mid-IR fiber technology and inspire further research and innovation in this exciting field. We invite researchers and industry experts to contribute original research articles, reviews, and perspectives that explore the latest technological advancements, challenges, and future directions in Mid-IR optical fiber devices. Research areas may include (but are not limited to) the following:

- Fiber sensors;
- Rare-earth (co-)doped fiber devices;
- Novel glasses and photonic materials;
- Nonlinear fiber devices;
- Mid-IR coherent light sources;
- All-in-fiber systems;
- Mid-IR sensing systems.

Guest Editors

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Deadline for manuscript submissions

30 September 2026



Photonics

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Impact Factor 1.9
CiteScore 3.5



mdpi.com/si/217529

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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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