

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

Dr. Antonella Maria Loconsole

Department of Electrical and Information Engineering, Politecnico di Bari, Via Orabona, 4, 70125 Bari, Italy

Dr. Francesco Anelli

Department of Electrical and Information Engineering, Politecnico di Bari, Via Orabona 4, 70125 Bari, Italy

Deadline for manuscript submissions

31 December 2025



Photonics

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.5



mdpi.com/si/217529

Photonics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
photonics@mdpi.com

[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)





Photonics

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.5



[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)



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 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

Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q2 (Instrumentation)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).