Special Issue

Recent Advances in Hollow-Core Fiber Optics: Design, Fabrication, and Applications

Message from the Guest Editors

We are pleased to announce this Special Issue, titled "Recent Advances in Hollow-Core Fiber Optics: Design, Fabrication, and Applications", dedicated to exploring recent developments in HCFs across all aspects of research and development. We invite submissions of original research papers and review articles presenting state-of-the-art advancements, technical breakthroughs, experimental demonstrations, and practical applications. Topics of interest include, but are not limited to, the following:

- Novel designs of HCFs;
- Low-loss HCF fabrications across all wavelengths;
- HCFs made of soft glasses and polymers;
- Interconnection between HCFs and traditional solid-core fibers;
- Characterization and properties of HCFs;
- Hollow-core fiber-based components;
- HCFs for high-power delivery systems;
- Applications of HCFs in gas lasers and gas sensing;
- Nonlinear effects in HCFs;
- Microwave photonics utilizing HCFs;
- HCFs in optical networks;
- Emerging applications demonstrated with HCFs.

Guest Editors

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Deadline for manuscript submissions

closed (10 May 2025)

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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 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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