Special Issue

Specialty Optical Fibers: Advances in Design, Fabrication, Performance and Applications

Message from the Guest Editors

The growing demand for specialty optical fibers is driven by the increasing need for more precise, efficient, and robust solutions in different fields, including high-tech industries, healthcare, aerospace, and environmental monitoring. This Special Issue aims to collate recent works regarding the design and fabrication of optical fibers with enhanced performance and versatility, playing a critical role in advanced technologies that demand more than just data transmission capabilities. We encourage researchers to submit original research articles and in-depth reviews that highlight the benefits of specialty optical fibers and address existing research gaps in this field. Research areas may include, but are not limited to, the following:

- Soft glasses-based optical fibers;
- Radiation-resistant optical fibers;
- Photonic crystal fibers;
- Hollow core fibers;
- Multicore and hollow core fibers;
- Biocompatible and biodegradable optical fibers for medical applications;
- Nonlinear optical processes in specialty fibers;
- Advanced fiber fabrication and functionalization techniques for specialty optical fibers.

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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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