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Specialty Optical Fibers: Advance and Sensing Application

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Deadline for manuscript submissions:
closed (1 December 2023)

Message from the Guest Editors

Over the past fifty years, optical fiber has been well-developed and widely used in optical fiber communication systems, greatly promoting the arrival of the information age. Specialty optical fibers with unique performance, such as ultra-low transmission loss, highly strong evanescent field, ultra-high working temperature, etc., have been intensively studied and become a research hotspot. Novel simulation designs, ingenious fabrication processes, and high performance are constantly being proposed and validated, showing unparalleled advantages in optical fiber sensing applications.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Hollow core fibers;
- Multi-medium and multi-functional optical fibers;
- Microstructured optical fiber sensors;
- Nano-fiber and its sensing applications;
- Sapphire fiber and its sensing applications;
- Optic-fiber sensing system for ocean monitoring and aerospace applications.

Potential topics including fibers for terahertz applications and orbital angular momentum research are also welcomed.