Special Issue

Recent Advances and Applications in Optical Fiber Sensing

Message from the Guest Editors

This Special Issue aims to present the latest research on optical fiber sensing technologies, novel sensor designs, and innovative applications. We invite researchers from diverse fields to contribute original articles, review articles, and technical notes that explore recent breakthroughs in fiber-optic sensing. Furthermore, we welcome a wide range of applications, including temperature, strain, vibration, rotation, magnetic field, current, gas, and biomedical sensing. Contributions addressing integration with artificial intelligence, machine learning, and advanced signal processing techniques are also encouraged. Topics include but are not limited to the following:

- Fiber, grating, and components for optical fiber sensing;
- Physical sensors, chemical sensors, and biosensors;
- Micro- and nano-structured fiber-optic sensors;
- Distributed optical fiber sensing;
- Geophysical sensing;
- Rotational sensing;
- Environmental and structural monitoring;
- Applications in geoscience;
- Biomedical optical sensing;
- Signal processing and data fusion in fiber-optic sensing;
- Instrumentation and measurements in optical fiber sensing;
- AI and machine learning in optical fiber sensing.

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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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