Special Issue

Optical Fiber Sensors: Refractivity and Interferometric Applications

Message from the Guest Editors

The Special Issue: Optical Fiber Sensors: Refractivity and Interferometric Applications, aims to highlight recent advances and fundamental developments in the design, modeling, and deployment of optical fiber sensors that rely on refractive index variations or interference-based mechanisms. Contributions may span innovations in sensor architectures, signal processing, novel materials, and emerging application areas where high-precision sensing is essential.

Topics of interest include, but are not limited to, the following:

- Interferometric fiber-optic sensors.
- Refractive index sensing using fiber Bragg gratings, long-period gratings, or evanescent wave sensors.
- Fiber-optic biosensors and chemical sensors.
- Resonator- and cavity-based fiber sensing systems.
- Optical coherence and phase-sensitive measurement techniques.
- Applications in structural health monitoring, biomedicine, environmental sensing, and industrial diagnostics.
- Hybrid systems integrating interferometric sensing with other modalities.
- Advances in demodulation and signal interpretation for interferometric data.

We look forward to receiving your valuable contributions.

Guest Editors

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Deadline for manuscript submissions

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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 peerreviewed 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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