

Special Issue

Advances in Fiber Optic Sensors: Innovations, Challenges and Applications

Message from the Guest Editor

This special issue aims to showcase state-of-the-art developments in fiber optic sensing, covering novel sensor designs, advanced interrogation techniques, and new applications in emerging industries. Topics of interest include distributed and point-based sensing, smart fiber sensors for IoT and AI-driven applications, multiplexing strategies for large-scale deployments, and the integration of fiber optics with photonic and nanomaterial-based technologies. Additionally, we encourage contributions addressing current challenges, such as cost reduction, miniaturization, and improved durability in harsh environments. **Potential topics include but are not limited to:**

- Fiber optic sensing technologies
- Distributed and multiplexed sensing
- Smart sensors and IoT integration
- Optical signal processing and AI-enhanced analytics
- Structural health monitoring and industrial applications
- Biomedical and environmental sensing
- Advanced materials for fiber sensors
- Harsh environment sensing and durability

Guest Editor

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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