

Special Issue

Advanced Optical Fiber Sensors and Applications

Message from the Guest Editors

Optical fiber sensing technology has emerged as a transformative solution for precision measurement, offering capabilities far beyond those of conventional electronic sensors. Today, advanced optical fiber sensors are being increasingly applied in a wide range of fields, including structural health monitoring, industrial process control, environmental sensing, and biomedical diagnostics, demonstrating growing scientific and industrial importance. This Special Issue aims to collect and showcase the latest research breakthroughs and innovative applications in advanced optical fiber sensors. We welcome the submission of following topics, but are not limited to:

- Novel sensing mechanisms and device architectures;
- Distributed and quasi-distributed fiber optic sensing systems;
- Multi-parameter and multi-functional sensors for physical, chemical, and biological quantities;
- Advanced signal interrogation, data processing, and sensor network technologies;
- Practical implementations in infrastructure monitoring, smart industry, energy systems, environmental protection, and biomedical applications.

Guest Editors

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About the Journal

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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