

Special Issue

Recent Advances in Fiber Optic Sensor Technology

Message from the Guest Editors

In recent years, optical fiber sensing technology has resulted in significant advancements in various fields, including power, petroleum, the chemical industry, construction, transportation, healthcare, and environmental protection. With high sensitivity, immunity to electromagnetic interference, and miniaturization and long-distance transmission capabilities, optical fiber sensors have become a crucial component of modern intelligent sensing systems. As optical materials, optical fiber power transmission, and intelligent signal processing technologies continue to evolve, and the accuracy, stability, and application scope of optical fiber sensing are constantly expanding. This has enabled its vast potential in complex environment monitoring, smart cities, structural health monitoring, and biomedical sensing applications. This Special Issue will focus on the latest developments in the field of novel mechanism-based optical fiber sensors, advancements in optical fiber sensing systems, and their applications in complex scenarios.

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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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