Special Issue

Distributed Optical Fiber Sensing Technology and Applications

Message from the Guest Editors

Distributed fiber optic sensing (DOFS) technology transforms standard optical fibers into continuous sensing media, enabling real-time, simultaneous measurement of temperature, strain, vibration, and acoustic signals at any point along tens of kilometers of fiber. This Special Issue seeks to present cutting-edge research and innovative applications that advance this rapidly evolving field, highlighting its unique advantages for infrastructure health monitoring and environmental sensing. We invite original research and review articles addressing theoretical advances, technological innovations, and practical applications in DOFS:

- Distributed Fiber Optic Sensor Devices and Modules;
- Distributed Fiber Optic Sensing Principles and Systems;
- Applications in Civil Engineering and Transportation;
- Applications in the Energy Sector;
- Applications in Public Safety and Natural Disaster Management;
- Applications in Marine Monitoring;
- Applications in Aerospace
- Special Fiber Optic Cables for Distributed Fiber Optic Sensing.

If you want to learn more details, please contact Dani Hai (dani.hai@mdpi.com).

Guest Editors

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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.

Editor-in-Chief

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