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Optical Fiber Interferometric Sensors: New Production Methodologies and Novel Applications

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Deadline for manuscript submissions:

closed (31 May 2021)



mdpi.com/si/41278

Message from the Guest Editors

Optical fiber interferometric sensors have been widely investigated for potential application in many situations, such as, for example, monitoring temperature, strain, pressure, and most recently, in the detection and characterization of different physical, chemical, and also physiological parameters.

This Special Issue will focus on current state-of-the-art research in optical fiber interferometric sensors, covering recent technological improvements, new production methodologies, and emerging applications.

The manuscripts should cover, but are not limited to, the following topics:

- New and/or low-cost interferometers production methods
- Novel optical fibers and Fabry-Perot, Mach-Zehnder, Michelson, and Sagnac-based sensors
- Optical fiber interferometric based sensing for physical and chemical parameters
- Optical fiber interferometric systems with microfluid integration
- Low-cost, miniaturized, selective and multiparameter optical fiber interferometric devices
- New bio/chemical probes for biomedical applications
- Wearable/biomedical interferometric sensors
- Advanced signal processing techniques
- New interrogation techniques for interferometric

sensors