Distributed Optical Fiber Sensing

Message from the Guest Editors

Distributed optical fiber sensors are receiving an ever-increasing interest as they offer the unique and unparalleled ability of mapping diverse physical fields along the area span by an optical fiber. Up to a million of sensing points can be interrogated with a single distributed optical fiber sensor, covering distances than can range from some tens of meters to a few hundreds of kilometers, with a spatial resolution of meters down to millimeters.

This Special Issue aims at collecting both original and review papers on all aspects of distributed optical fiber sensing research, including (but not limited to) Rayleigh, Brillouin and Raman scattering theoretical aspects (e.g. inverse scattering problems, polarization issues, noise modelling, nonlinear effects), novel interrogation schemes (e.g. time, frequency- and correlation-domain interrogation methods, etc.), laboratory and field applications (small- and large-scale experiments), signal processing in distributed optical fiber sensors, specialty fibers, coatings and cables for distributed sensing, etc.
**Message from the Editorial Board**

*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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