Special Issue

Fiber Optical Sensor: Recent Advancements, Techniques and Applications

Message from the Guest Editors

Recently, the working conditions of mechanical equipment are becoming more and more severe, resulting in grave difficulties to monitor and evaluate their operating condition. Owing to some distinct advantages, including resistance to electromagnetic noise and harsh environments, compact size, passive sensing, and distributed measurement, optical fiber sensors (OFS) including the FBG, have gradually grown into an important tool for mechanical equipment operating condition monitoring. Therefore, the objective of this Special Issue is to put together current research and advancements in equipment operating condition monitoring based on OFS. This is seen especially in the aspects of extreme parameters (such as ultra-high temperature, ultra-high pressure, intense radiation, micro-force, micro-displacement, etc.) of sensing and multi-parameter dynamic measurement. Contributions addressing the recent design, encapsulation, calibration, and error compensation technologies for OFS are in demand. Additionally, recent OFS applications in advanced and special mechanical equipment are also welcomed.

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.

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