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Science and Applications of Optical Fiber Sensors: Recent Advances and Future Trends

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Message from the Guest Editors

Dear Colleagues,

Optical fiber sensors have revolutionized several branches of sensing technology due to some excellent properties intrinsic of optical fibers, such as immunity to electromagnetic interference, malleability, low weight, ease of use, handling and cabling, biocompatibility, and no need for power supplies at the sensing point. Thanks greatly to the revolution in telecommunications provided by low-loss optical fibers and solid-state optical power sources, off-the-shelf fiber-based sensors and sensing systems are being commercialized today for a multitude of applications ranging from structural health monitoring to biosensing. Nevertheless, new materials and technologies are helping the development and improvement of novel fiber-based sensors and systems at an ever-growing pace of innovation in response to challenges posed by new demands of a more sustainable, greener society. This Special Issue of *Photonics* addresses all types of optical fiber sensors and systems, from fundamentals to applications.



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