

Special Issue

Design and Fabrication of Fiber Optic Sensors for Bio-Chemical Sensing Applications

Message from the Guest Editors

Bio-chemical sensing is significantly important in a number of applications, such as in medical diagnostics, industrial applications, food safety, and security. Fiber optic technology, which is considered to be one of the most promising sensing techniques for bio-chemical sensing has been extensively studied in past decades due to its advantages of a small size, low cost, label-free features, high sensitivity, immunity to electromagnetic interference and ionizing radiation, distributed sensing and remote sensing capabilities. A number of fiber optic bio-chemical sensors based on WGM, fiber interferometers, SPR, fluorescence, absorption, optical fiber optofluidic lasers (FOFL), surface-enhanced Raman scattering (SERS) and fiber microfluidic sensing technics have been reported. This Special Issue aims to provide an up-to-date overview on the recent advances and challenges in the design and fabrication of fiber optic bio-chemical sensors and sensing systems. Potential topics include but are not limited to: the fiber optic sensing of explosives, bacteria, viruses, biological markers, nucleic acid, heavy metal ions, pollutants, PH, gases and fiber microfluidic sensing devices.

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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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