Special Issue

Optical Fiber and Surface Plasmon Resonance Technology for Chemical Sensing

Message from the Guest Editors

The exploitation of optical fibers and plasmonic phenomena, such as surface plasmon resonance (SPR), localized surface plasmon resonance (LSPR) and hybrid modes, as detection principles, offers several advantages for sensing, such as high signal-to-noise ratio, small size, low cost, flexibility, label-free, real-time detection, and robustness. These sensors are widely applied in biomedicine, biomedical diagnostics, and environmental monitoring due to their high sensitivity and real□time remote sensing capabilities. Several different optical fiber materials (silica, plastic fiber, etc.) and various optical fiber layouts (heterocore structures, lab-on-a-chip, D-shaped, U shaped, etc.) have been investigated. Furthermore, many methods have been used to enhance their performance, e.g., nanostructures, multilayers, and novel materials, such as MXene. This Special Issue aims to highlight the recent advances and applications of optical fibers and SPR principles for chemical sensing. Authors are invited to submit work related to novel materials, sensor structures, mechanism studies, and applications. Both review articles and research papers are welcome.

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Chemosensors continues to grow as a forum for all manners of sensing that encompass chemistry. *Chemosensors* is published in open access format – all articles and content are released on the internet immediately following acceptance, thus allowing unlimited access to the content as soon as it is published. We would be happy to have you join our growing list of authors.

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