



Surface Plasmon Resonance in Optical Sensing

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Message from the Guest Editor

Surface plasmon resonance (SPR) is a powerful optical phenomenon that has revolutionized the field of sensing. It involves the interaction between light and free electrons at the interface between a metal and dielectric material, resulting in enhanced sensitivity and real-time monitoring capabilities. SPR is applied in several fields, including biomedical sciences, environmental monitoring, and chemical analysis, because of its efficiency.

This Special Issue aims to explore the recent advancements in SPR technology, covering sensor design, materials, theoretical models, signal analysis techniques, and applications. It will focus on designing SPR-based sensing platforms with enhanced sensitivity and selectivity and highlight the importance of optimizing plasmonic nanostructures and materials for improved sensor performance. We hope to provide a valuable resource for researchers and scientists in optical sensing and nanotechnology. Potential contribution topics include, but are not limited to, the aforementioned applications.

