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Surface Plasmon Resonance-Based Biosensor

Guest Editor:

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Deadline for manuscript submissions:

closed (15 February 2024)

Message from the Guest Editor

Surface plasmon resonance techniques offer huge potential in the determination of biomarkers.

These techniques offer label-free determination, simple biosensor construction, and direct biosensor determination. Different SPR techniques are used: fluidic SPR, SPR imaging, and localised SPR, among others. Biosensors are among the most promising tools used for biomarker determination. Molecular biomarkers, exosomes, and even cancer cells are targets of SPR biosensors. In order to achieve the necessary quantification limit, methods for signal enhancement are used, including sandwich structures with gold nanoparticles or application of quantum dots. SPR techniques are also useful in the search for new biomarkers and can be better alternatives to existing methods.

This Special Issue aims to serve as a platform bringing together researchers working on biosensors based on surface plasmon resonance techniques.

- New biomarkers discovered with SPR
- Successful diagnostic applications of SPR
- SPR for personalized diagnosis
- Biomarker detection by localized SPR
- SPR signal enhancement for biomarker determination
- SPR vs. related techniques in diagnosis



mdpi.com/si/138783

Special Issue



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Message from the Editor-in-Chief

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