Special Issue

Advances in Nanoparticle-Based Optical Sensors for Biomedical Applications

Message from the Guest Editors

Nanotechnology and nanomaterials have revolutionized the field of disease diagnostics, offering enhanced levels of sensitivity and specificity. Nanoparticle-based optical sensors stand out in this domain, pushing the boundaries of early disease detection. Using the unique interactions of nanoparticles with light, these optical sensors accurately detect and quantify biomolecules, such as pH levels and metal ions, in a range of bodily fluids and biological samples. This acute detection is pivotal for identifying early signs of disease, allowing for prompt and potentially preventive measures. In this Special Issue, we welcome contributions that delve into the latest advancements in nanoparticle-based optical sensors and examine their profound implications for the evolution of biomedical diagnostics and patient care.

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Editor-in-Chief

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