Special Issue

DNA-Based Electrochemical Biosensors and Aptasensors: Advances in Medical Diagnostics and Detection

Message from the Guest Editor

This Special Issue aims to explore the latest advancements in biosensor technologies tailored for medical diagnostics. Electrochemical DNA biosensors and aptasensors represent a rapidly growing field, offering unique advantages such as high sensitivity, specificity, rapid response, and potential for miniaturization.

This Special Issue will serve as a platform for researchers to showcase novel approaches and breakthroughs in sensor development and their applications in detecting biomarkers, pathogens, and disease-related molecules. Topics of interest include, but are not limited to, the following: The development of new electrochemical biosensor and aptasensor platforms; Advanced materials and nanotechnologies for enhanced aptasensor performance; Applications in point-of-care diagnostics, personalized medicine, and the rapid detection of diseases; Integration of biosensors with microfluidic systems and wearable devices; Multiplexed detection and its implications for simultaneous analysis; Case studies demonstrating the clinical validation of biosensors and aptasensors for medical applications.

We look forward to receiving your submissions!

Guest Editor

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Editor-in-Chief

Prof. Dr. Ai-Qun Liu
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