

## 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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### Deadline for manuscript submissions

28 February 2026



## Micromachines

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Impact Factor 3.0  
CiteScore 6.0  
Indexed in PubMed



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## About the Journal

### Message from the Editor-in-Chief

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### Editor-in-Chief

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