

## Special Issue

# Functional Materials for Biosensing Applications

### Message from the Guest Editor

Following the COVID-19 pandemic, the imperative of early disease diagnosis has reached a paramount level of significance. Current methods for measuring disease-related biomarkers primarily fall into two categories: nucleic acid amplification methods, such as PCR, and simpler diagnostic approaches utilizing lateral flow assays (LFA). Despite their widespread use, these methods exhibit limited sensitivity, thereby complicating early disease treatment. This has led to an escalating demand for the development of multifunctional biosensors that harness various nanomaterials, offering a promising avenue for the effective diagnosis of a spectrum of diseases. Consequently, this Special Issue aspires to comprehensively explore both the fundamentals and applications of biosensors utilizing diverse nanomaterials, providing a nuanced understanding of the evolving landscape of diagnostic innovation in the post-pandemic era. As the world grapples with the challenges posed by emerging diseases, the focus on leveraging nanomaterials in biosensor technology becomes pivotal, offering a potential paradigm shift in early and accurate disease detection.

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### Guest Editor

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### Deadline for manuscript submissions

closed (20 October 2025)



## Biosensors

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## About the Journal

### Message from the Editor-in-Chief

*Biosensors* is a leading journal, devoted to fast publication of the latest achievements, technological developments and scientific research in the exciting multidisciplinary area of biosensors. Both experimental and theoretical papers are published, including all aspects of biosensor design, technology, proof of concept and application. Special issues are devoted to specific technologies and applications, and a selection of the most outstanding papers each year is recognized. Pushing the boundaries of the discipline, we invite original papers, as well as timely reviews on cutting edge fields within the subject area.

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