

Special Issue

Field-Effect Transistor-Based Biosensors

Message from the Guest Editor

FET-based biosensors can detect biomarkers, proteins, and nucleic acids with high sensitivity and specificity. Lab-on-a-chip platforms incorporating FET biosensors have revolutionized healthcare by providing real-time, on-site diagnostics, reducing the need for centralized laboratories, and minimizing turnaround times. This advancement is pivotal in remote and resource-limited areas, ensuring timely disease detection and management. FET-based biosensors on lab-on-a-chip devices are poised to play a critical role in personalized medicine, early disease detection, and continuous health monitoring, making them indispensable tools in the future of healthcare. Accordingly, this Special Issue seeks to showcase research papers, short communications, and review articles that focus on the following topics: (1) field-effect transistor platform development for biosensors using new technologies; (2) lab-on-a-chip-based FET platform for rapid detection and diagnosis; and (3) a point-of-care diagnosis system for on-site application etc.

Guest Editor

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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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