

Special Issue

Biosensors Applications Based on Field-Effect Transistors Technologies

Message from the Guest Editor

Field-effect-transistor (FET) type biosensors have attracted the attention of researchers in academia and industry for various applications, including early detection of COVID-19. Considerable progress has been attained in designing FET devices, such as ion-selective field-effect transistor (ISFET) and bio-FET, especially for biomedical diagnosis and cell-based assays in the past few decades. The exceptional electronic properties, compactness, and scalability of these novel tools are very desirable for the rapid, label-free, and mass detection of biomolecules. This Special Issue will address the design, implementation, modelling, characterization, validation, and/or optimization of FET-based biosensors using standard microelectronic technology, such as complementary metal-oxide semiconductors (CMOS) and other microfabrication technologies.

Guest Editor

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Deadline for manuscript submissions

closed (31 July 2021)



Biosensors

an Open Access Journal
by MDPI

Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed



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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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