

Special Issue

Functional Nanomaterial-Based Electrochemical Biosensor

Message from the Guest Editors

The field of electrochemical biosensors is attractive and expanding rapidly because of their ability to deliver fast, precise, sensitive, and selective analysis with an easy-to-use device. Their performance is mainly determined by the sensing materials used, the sensor design, and miniaturization. Functional nanomaterials (especially rGO, MoS₂, LIG, and MXene) have combined superiorities, such as a large active surface area, lightweight, inherent electrochemistry, excellent electrical conductivity, high chemical, thermal stability, and ease of chemical functionalization, making them promising candidate materials for electrochemical biosensors. Therefore, this Special Issue focuses on the controlled fabrication of functional nanomaterials with rationally designed micro/nanostructures and strategies for integrating them into desired substrates for application in next-generation electrochemical biosensors. We welcome research submissions that contribute to the development of electrochemical biosensors and their applications for the analysis of biomarkers with attractive features such as long-term validity, high sensitivity, and a low limit of detection (LOD).

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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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