

Special Issue

Nanostructured 2D Materials in Biosensing

Message from the Guest Editor

Two-dimensional nanomaterials have attracted great interest as electrode materials since the discovery of carbon nanotubes and graphene. The recent progress on nanostructural engineering on carbon nanotubes, graphene, and other low-dimensional materials, such as transition metal dichalcogenides (TMDs), MXenes, carbon nitrides, and boron nitride as well as metal organic frameworks (MOF), covalent organic frameworks (COF), and porphyrins has opened up a new class of materials for in the development of next-generation sensors and biosensors. This Special Issue seeks papers related to advanced sensors and biosensors based on low-dimensional nanomaterial for the detection of biomolecules, pathogens, and food compounds as well as neural biomarkers. We accept original, technical, or review papers on (but not limited to) the following topics: Graphene-based biosensors; TMD-based biosensors; MXene-based biosensors; MOFs and COFs in sensing; Organic complexes (porphyrins) in biosensing; Flexible low-dimensional material based composites in sensing; Nanomaterial-enhanced interfaces (including nano-liquid/micro-liquid/liquid interface) for sensing; Neural interfacial sensor of 2D materials.

Guest Editor

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Deadline for manuscript submissions

closed (25 September 2022)



Biosensors

an Open Access Journal
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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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