

Special Issue

Advances in Two-Dimensional Materials for Electrochemical Biosensors

Message from the Guest Editors

Two-dimensional (2D) materials have attracted much attention in the past decade. They offer a high specific surface area as well as electronic structure and properties that differ from their bulk counterparts due to the low dimensionality. Graphene is the best-known and most-studied 2D material, but metal oxides and hydroxides (including clays), transition metal carbides and nitrides (MXenes), dichalcogenides, boron nitrides (BN), carbon nitrides, monoelemental Xenes (including phosphorene and bismuthene), and other materials that are one or several atoms thick are receiving increasing attention. The specific chemical, physical, and optical properties of 2D materials can influence the performance of bio/sensing, improve drug delivery and photo/thermal therapy and affect their toxicity. Two-dimensional materials have been used in numerous applications and in different fields of research such as biomedicine, biosensing, and chemical sensing as well as energy storage and generation, electronics, etc.

Guest Editors

Dr. Chenhui Yang

Dr. Junfeng Zhai

Dr. Yi Tang

Deadline for manuscript submissions

closed (30 June 2025)



Biosensors

an Open Access Journal
by MDPI

Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed



mdpi.com/si/190712

Biosensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biosensors@mdpi.com

[mdpi.com/journal/
biosensors](https://mdpi.com/journal/biosensors)





Biosensors

an Open Access Journal
by MDPI

Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed



[mdpi.com/journal/
biosensors](https://mdpi.com/journal/biosensors)



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.

Editor-in-Chief

Prof. Dr. Giovanna Marrazza

Department of Chemistry "Ugo Schiff", University of Florence, Via della
Laustruccia 3, 50019 Sesto Fiorentino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Embase, CAPIus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q1 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.6 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).