

Special Issue

2D Materials-Based Biosensors for Diseases Diagnosis

Message from the Guest Editor

Since the isolation of graphene in 2004, different types of two-dimensional (2D) materials have received considerable attention in the design of next-generation nanomedical tools for diagnostic and therapeutic applications. This Special Issue will be focused on recent advances in novel synthesis, surface functionalization, and their application in a wide range of nanomedical applications. With the aim of highlighting the recent developments in 2D-materials-based nanomedical tools, the following topics will be explored in this Special Issue.

- Synthesis of 2D materials and their nanocomposites for biosensing, chemical sensing and bioimaging applications.
- Green and sustainable 2D materials for diagnostic applications.
- 2D materials for the delivery of therapeutics.
- Surface engineering of 2D materials to improve immobilization conditions for proteins.
- New technological advancements in developments of 2D materials-based electrodes for biosensors.
- Applications of 2D materials in industrial diagnostics and therapeutic products.
- 2D-materials-integrated microfluidic devices for health monitoring.
- Role of 2D materials in the diagnostics of emerging infectious diseases.

Guest Editor

Dr. Chandan Singh

Department of Analytical Chemistry, Reference Materials,
Bundesanstalt für Materialforschung und -prüfung (BAM), Richard-
Willstätter-Straße 11, 12489 Berlin, Germany

Deadline for manuscript submissions

closed (31 August 2023)



Biosensors

an Open Access Journal
by MDPI

Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed



mdpi.com/si/145827

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
Lastruccia 3, 50019 Sesto Fiorentino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, CAPlus / 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 21.8 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).