Special Issue

Materials and Techniques for Bioanalysis and Biosensing

Message from the Guest Editor

Bioanalysis and biosensors are ever-evolving subjects, striving for rapid improvement in terms of performance and expanding the target range to meet the enormous societal and market demands. The key performance factors for a biosensor that drive the research are sensitivity, selectivity, accuracy, reproducibility, and response time, with additional requirements of its portability and inexpensive nature. These performance factors are largely governed by the materials and techniques being used in these bioanalytical platforms. The selection of materials to meet these requirements is critical, as their interaction or involvement with the biological recognition elements should initiate or improve these performance factors. The technique discussed primarily applies to transducers involved in converting a biochemical signal to optical or electrical signals. In recent years, the emergence of novel materials and techniques has drastically improved the performance of these bioanalytical systems, enabling them to expand their analytical horizons. This Special Issue offers new perspectives on the recent advance in materials and techniques for bioanalysis and biosensing.

Guest Editor

Prof. Dr. Nongyue He

State Key Laboratory of Digital Biomedical Engineering, School of Biological Science and Medical Engineering, Southeast University, Nanjing 210096, China

Deadline for manuscript submissions

closed (30 December 2023)



Biosensors

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 6.6 Indexed in PubMed



mdpi.com/si/126816

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

mdpi.com/journal/ biosensors





Biosensors

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 6.6 Indexed in PubMed



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 (Chemistry, Analytical) / CiteScore - Q1 (Engineering (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2024).

