Special Issue

Advances in Biosensors Based on Reflectometry

Message from the Guest Editors

In the last 10-15 years, reflectometric measurement methods in particular, which are usually derived from ellipsometry, have gained in importance over refractometric transduction principles, although the boundaries between these areas sometimes seem to become blurred. Basically, however, reflectometry in biosensing is characterized by the typical feature that multiple reflections of electromagnetic radiation on at least one thin layer are used for signal generation. The driving force behind the many current developments is, among other things, applications that benefit, for example, from the ease of parallelization, the connection to common sample handling formats or, finally, the robustness towards temperature fluctuations in real-world operation. Against this background, this special issue of "Biosensors" will highlight the latest developments in reflectometric transduction and report on current applications such as the screening of biologics, biomolecular interaction analysis of receptors and ligands relevant to molecular medicine, as well as cell-based assays and diagnostics.

Guest Editors

Dr. Günther Proll

Institute of Physical and Theoretical Chemistry, Eberhard Karls Universität, Auf der Morgenstelle 18, 72076 Tübingen, Germany

Dr. Peter Fechner

Institute of Physical and Theoretical Chemistry, Eberhard Karls Universität, Auf der Morgenstelle 18, 72076 Tübingen, Germany

Deadline for manuscript submissions

closed (20 May 2024)

Biosensors

an Open Access Journal by MDPI

Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed

mdpi.com/si/145671

Biosensors
Editorial Office
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 5.6
CiteScore 9.8
Indexed in PubMed

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).

MDPI