Special Issue

Cellular Sensing and Precision Medicine

Message from the Guest Editors

Cell sensing represents the ability of cells to detect and respond to various physical, chemical, and biological signals in their surrounding environment, which is fundamental for cell survival and the normal functioning of cells, playing a key role in maintaining tissue homeostasis. Research related to cell sensing has shown outstanding potential in tumor treatment, immunotherapy, drug sensitivity testing, cell-to-cell interactions and communication, and AI-assisted medical care. This Special Issue covers but is not limited to the following topics:

- Mechanisms of cell sensing, including the sensing of physical signals (mechanical force, temperature, electric fields, magnetic fields), chemical signals (hormones, neurotransmitters, growth factors, extracellular nutrients, and metabolic waste), and biological signals (cell-to-cell communication, paracrine, and autocrine signals);
- Cell sensing detection technologies;
- Target discovery for precision medicine based on cell sensing;
- Regulation of cell sensing in precision medicine;
- Drug sensitivity testing;
- Cell activity monitoring;
- Drug screening;
- Tumor immune microenvironment;
- Cell biology;
- Biorheology.

Guest Editors

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Deadline for manuscript submissions

25 August 2025

Biosensors

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Impact Factor 5.6
CiteScore 9.8
Indexed in PubMed

mdpi.com/si/225939

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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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