Special Issue

Recent Advances and Applications of Multiplexed Analysis and Multiplexed Nanobiosensors

Message from the Guest Editor

Dear Colleague. The rapid growth in personalized medicine has led to significant interest in the development of novel rapid diagnostic tools and methods for reliable determination of clinically significant analytical components. However, to obtain conclusive data from these diagnostic tools, they must have the ability to achieve simultaneous detection of multiple analytes that are necessary for the early and reliable diagnosis of diseases. This significant and ongoing challenge can be resolved through the adoption of recent advances in biosensors and nanobiosensors in the development of smart diagnostic tools with multi-analyte detection capabilities. The accepted contributions for this Special Issue will focus on all aspects of recent developments and utilization of biosensors and nanobiosensors for multiplexed detection, analysis, and monitoring of biomarkers and other clinically significant analytes. These include multiplex quantum dot analysis, fluorometric immunoassay, CRISPR/Cas biosensing, point-of-care testing, lab-on-chip assay, lateral flow detection, microfluidic array and multiplex devices. We welcome reviews and research articles in any of these areas.

Guest Editor

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Deadline for manuscript submissions

closed (31 July 2025)



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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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