Special Issue

Biosensors Based on Microfluidic Devices—2nd Edition

Message from the Guest Editors

Biosensors have been widely used in point-of-care testing (POCT) fields, such as clinical diagnosis, food safety, and environmental monitoring. Recently, significant efforts have been made on the development of portable, reliable, and rapid-responsive biosensing platforms. Because of their easy integration, small sample consumption, precise manipulation of fluid, and high-throughput analysis, microfluidics offer significant advantages over traditional biosensing systems. Various microfluidic structures have been designed for analyte enrichment, target separation, multiplexed analysis, and sensing material fabrication. Based on the application scenarios, these microfluidic components, when integrated with signal transducers such as surface-enhanced Raman scattering (SERS), surface plasma resonance (SPR), and electrochemical techniques, form miniaturized devices that have gained increasing popularity in POCT applications. This issue aims to focus on the biosensing methods and devices based on microfluidics. Original research articles, short communications, and reviews are all welcome.

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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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