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Microfluidic Electrochemical Sensors

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Deadline for manuscript submissions: closed (30 June 2022)

mdpi.com/si/71462

Message from the Guest Editors

Dear Colleagues,

Impedance-based biosensors offer the advantage of labelfree, sensitive, selective, low-cost, low-power, and realtime sensing. The amalgamation of microfluidics with impedance biosensors offers advantages such as precise control over the flow of solution, multiplexing the detection system with multiple analytes on the same platform, automation of the process, and many more. Microfluidic impedance biosensors can be implemented to develop point-of-care diagnostic devices. Additional applications include on-site detection of food-borne pathogens, biowarfare agent detection, point-of-use device for testing contaminants (chemical and biological) in environmental samples such as soil and water.

For this Special Issue, we invite original research articles and review papers on "Microfluidic Impedance Sensors" dedicated to cutting-edge research and innovation in building next-generation devices for a point-of-care diagnosis for diseases like COVID-19, which affected the entire world. This Special Issue will focus on applications including medical diagnosis, global health, food safety, plant-based pathogens, and environmental monitoring.







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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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