

Special Issue

Microfluidic Chips for Life Science and Health Care Applications

Message from the Guest Editors

Silicon-chip-based technologies have been widely adopted in life science and healthcare applications for the detection and characterization of biological substances. The advanced fabrication technologies and unique chemical characteristics of silicon make it a versatile material for bio-sensing structures. Complex structures can be created on silicon chips using etching, doping, film deposition, and surface chemistry. Silicon technology is used for detecting, sensing, and manipulating biological substances at various levels. Silicon-based sensors can detect chemical, electrical, and photonic signals in vitro and in vivo. Surface chemistry allows tethering of various molecules to the silicon surface for bio-sensing. However, silicon is expensive compared to polymers, and its mechanical stiffness limits direct implantation in organisms. This Special Issue welcomes original papers, reviews, and perspectives on recent advances in structural design, silicon fabrication, surface modification, and novel applications in life science and healthcare. Researchers are invited to submit contributions and contact the editors with any questions.

Guest Editors

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Deadline for manuscript submissions

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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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