Special Issue

Biochips for Biosensing of Microphysiological Events

Message from the Guest Editors

Recently, significant advances have been achieved in biosensing platforms for various biomedical applications. Biosensing platforms, such as organ-on-a-chip (OOC) and 3D cellular aggregates (e.g., organoids and spheroids), have been significant for improve the development of biomedical platforms. Different biochips and biological platforms have been developed to demonstrate enhanced structural features and functions of tissues and organs by mimicking physiologically relevant microenvironments, enabling the detection and monitoring of their biological responses by converting visual, electrical, and measurable signals. In this Special Issue entitled “Biochips for Biosensing of Microphysiological Events”, we wish to highlight studies on constructing advanced organ-on-a-chip or 3D cellular platforms for biosensing applications, including but not limited to biochip fabrication and functional biosensing material synthesis.

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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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