Special Issue

Recent Advances in Microneedle Array Electrodes in Biomedicine

Message from the Guest Editors

Physiological electrical signals can directly reflect people's physical conditions and play an important role in disease diagnosis and treatment. With the emergence of various portable devices and wearable devices, the collection of physiological electrical signals has received increasing amounts of attention. In recent years, as many researchers have devoted themselves to the research of physiological electrical signal collection electrodes, microneedle array dry electrodes based on Micro Electro Mechanical Systems (MEMSs) technology have gradually matured. Microneedle array dry electrodes penetrate human skin through microneedles to achieve the continuous, long-term, and efficient collection of physiological electrical signals. Due to their low cost, simple operation, no discomfort to the subject, and high collection quality, they have gradually replaced traditional wet electrodes, thus providing an effective solution for surface biopotential recording in a safe and efficient way. This Special Issue of *Biosensors*, titled "Recent Advances in Microneedle Array Electrodes in Biomedicine", will focus on various aspects of research and development related to this field.

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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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