Special Issue

Portable Bioelectronic Devices for Telemedicine, Healthcare and Sports Applications

Message from the Guest Editors

The convergence of advanced sensors, wireless connectivity, and data analytics has recently led to a revolution in the application of wearable bioelectronic devices capable of non-invasively registering real-time physiological signals. Using advanced signal-processing tools, they have revitalized telemedicine, healthcare, and sports applications, enabling real-time monitoring, diagnosis, treatment, and performance optimization. Some notable examples are Holter ECG instruments, wearable EEG monitors, fitness bands, and smartwatches, to name a few. Meanwhile, various digital signal-processing techniques are used to evaluate bioelectronic signals collected from wearable devices. The goal of this Special Issue is to promote these developments by providing an overview of various existing technological and data processing approaches for portable bioelectronic devices, as well as stimulating cooperation among experts in different areas. We invite regular research papers and review articles that focus on novel methodological developments in wearable bioelectronic device technology and related evaluation tools for utilization in basic and applied sciences.

Guest Editors

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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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