Special Issue

EEG-Based Wearable Devices for Body Monitoring

Message from the Guest Editors

This Special Issue focuses on advancing research and innovation in the development and application of EEG-based wearable devices for comprehensive body monitoring. Recent advancements in neurotechnology, sensor miniaturization, and signal processing have enabled the design of portable, non-invasive systems capable of capturing high-quality brain activity data in real-world settings. These devices could revolutionize such areas as neurological disorder diagnosis, cognitive state assessment, sleep monitoring, rehabilitation, and brain–computer interfaces (BCIs). This Special Issue seeks contributions that explore novel hardware designs, signal enhancement algorithms, machine learning techniques for EEG data interpretation, and integration with multimodal sensing platforms (e.g., ECG, EMG, or motion sensors). We also welcome studies that address challenges in usability, long-term wearability, energy efficiency, and ethical considerations. Submissions may include original research, reviews and case studies for healthcare, sports science, and personalized wellness.

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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