Special Issue

Electroencephalography (EEG) Signal Processing: Advanced Technology and Application

Message from the Guest Editors

This Special Issue aims to bring together and present significant advances in EEG signal processing and analysis. In this Special Issue, original research articles and reviews are welcome. Specifically, submissions should focus on novel developments in the analysis techniques of periodic and aperiodic EEG signals, new advancements in EEG source reconstruction algorithms, and emerging insights from EEG connectivity analyses. We also welcome contributions detailing innovations in applying machine learning to EEG data, progress in neurofeedback and brain–computer interfaces (BCIs), and data processing challenges of wearable and ambulatory EEG systems. Furthermore, we strongly encourage submissions that address the progress in algorithmic and computational tools for integrating EEG with other neuroimaging (fMRI, MEG, and fNIRS) and neurophysiological techniques (TMS and EMG).

Keywords:

- electroencephalography signal processing
- EEG complexity
- microstate analysis
- source reconstruction
- connectivity analysis
- machine learning
- neurofeedback
- brain–computer interfaces (BCIs)
- wearable EEG
- multimodal neurophysiology

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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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