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# Application of Electroencephalography (EEG) Signal Analysis in Disease Diagnosis

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Deadline for manuscript submissions: closed (20 June 2023)

### **Message from the Guest Editors**

Over the years, the development of several brain imaging techniques has provided new tools for capturing information about the structure and functions of the brain, which have proven useful in different fields, such as neurosurgery, neurology, and cognitive science. In particular, electroencephalography (EEG) has become a powerful instrument successfully employed in both clinical applications and cognitive neuroscience since it is a noninvasive, easy-to-use, portable, and relatively low-cost tool. Thus, the processing and analyzing of EEG signals can be conveniently exploited to detect abnormalities in the case of a pathological state and improve early diagnosis of brain diseases.

The purpose of this Special Issue is to collect papers that provide original contributions to the field of EEG signal processing in disease diagnosis. Topics can include, but are not limited to, brain source modeling and reconstruction, complex brain network analysis, automatic systems for EEG artifact removal, and application of artificial intelligence to EEG signals.



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# **Editor-in-Chief**

### Message from the Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo** Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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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