Special Issue

Diagnosis and Prediction of Neurological Diseases: Application of EEG-Based Technology

Message from the Guest Editors

Electroencephalography (EEG) can be considered one of the oldest and most consolidated methods to study the brain. However, we have seen a renewed concept in the use of EEG, due to the introduction of digitalization, and the massive spreading of numerical methods to unveil brain states and dynamics, which are not easily identified by the naked eye. This set of methods is commonly known as quantified EEG (qEEG). This Special Issue will provide an update on the recent clinical and preclinical advances in the prediction and diagnosis of neurological diseases by means of the numerical methods applied to EEG recordings. We aim to underscore the importance of these recent advances for both clinicians and researchers. The following topics are subject to particular interest:

- Utility of gEEG in clinical practice;
- Novel biomarkers with the potential to improve the classification and risk stratification of dementias and psychiatric pathologies;
- Usefulness of qEEG in critically ill patients and multimodal neuro-monitoring.

We cordially invite original preclinical, translational, clinical works, and review articles regarding the abovementioned cutting-edge topics for contribution.

Guest Editors

Dr. Jesús Pastor

Clinical Neurophysiology, Hospital Universitario de la Princesa, Madrid, Spain

Dr. Lorena Vega-Zelaya

Clinical Neurophysiology, Biomedical Research Institute Hospital, Universitario de La Princesa, 28006 Madrid, Spain

Deadline for manuscript submissions

closed (20 December 2024)



Brain Sciences

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.6
Indexed in PubMed



mdpi.com/si/189945

Brain Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
brainsci@mdpi.com

mdpi.com/journal/ brainsci





Brain Sciences

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.6 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

Editor-in-Chief

Prof. Dr. Stephen D. Meriney

Department of Neuroscience, University of Pittsburgh, Pittsburgh, PA 15260. USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, PSYNDEX, PsycInfo, CAPlus / SciFinder, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.2 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.

