Special Issue

Advances in Seizure Prediction and Detection

Message from the Guest Editor

Seizure prediction based on EEG/iEEG is complicated by two factors. The first is that preictal and interictal EEG/iEEG patterns across patients vary substantially. The second is that EEG/iEEG is highly complex and varies over time, and no single measure of EEG/iEEG has yet been predictive on its own. Therefore, high sensitivity is possible using a patient-specific classification method based on multiple features extracted from EEG/iEEG. Technological advances have focused on various feature extraction approaches to seizure prediction. Feature extraction approaches include, but are not limited to, univariate linear and nonlinear measures, and bivariate linear measures. In terms of advancements in classification, support vector machines are currently the most popular approach in supervised machine-learning and have been adopted in a large number of seizure-prediction studies. Other classifiers that have had a reasonably high degree of success are artificial and cellular neural networks. The overall aim of this Brain Sciences Special Issue is to disseminate and discuss recent advances in seizure prediction methodologies.

Guest Editor

Dr. Mark Myers
Department of Anatomy and Neurobiology, University of Tennessee Health Science Center, Memphis, TN 38163, USA

Deadline for manuscript submissions

closed (15 April 2022)

Brain Sciences

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.6
Indexed in PubMed

mdpi.com/si/85856

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

mdpi.com/journal/brainsci

MDPI

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.