Special Issue

Advances in the Study of Cortical Excitability, Connectivity and Plasticity by Using TMS-EEG and Other Neurophysiological Techniques

Message from the Guest Editors

The combination of techniques designed to provide readouts of the electrical activity of the brain (electroencephalography, magnetoencephalography) or to transiently interact with cortical circuitry (transcranial magnetic or electrical stimulation) provides powerful methods to assess local cortical responses and characterize causal interactions between distant brain areas. While some working principles of these techniques have been elucidated, much work is still needed to frame them in a broad physiological context and in the investigation of brain diseases. In this view, the aim of this Special Issue is to explore advancements in the study of cortical physiology and pathophysiology by using TMS-EEG and other cutting-edge neurophysiological techniques. We invite methodologically rigorous contributions in the form of original research articles, systematic reviews, metaanalyses, and case reports investigating normal physiology, as well as central nervous system disorders.

Guest Editors

Dr. Florinda Ferreri

Dr. Andrea Guerra

Dr. Sara Määttä

Dr. Lorenzo Rocchi

Deadline for manuscript submissions

closed (5 September 2023)



Brain Sciences

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.6
Indexed in PubMed



mdpi.com/si/84288

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.

