Special Issue

Advanced Optical Neuroimaging and Neurotransmitter Analysis in Cortical Circuits and Sensory Processing

Message from the Guest Editor

- This Special Issue aims to showcase novel approaches in optical neuroimaging and neurotransmitter analysis, focusing on applications in systems neuroscience.
- We invite original research and review articles focused on innovative optical imaging techniques, novel biosensors for detecting neurotransmitters, and computational methods for analyzing neuronal and neurotransmitter activity. Contributions exploring the role of neuromodulators in sensory processing, cognition, and disease models, as well as studies integrating optical imaging with electrophysiology and behavioral paradigms, are also welcomed.
- We look forward to your contributions that expand the boundaries of optical neuroimaging and enhance our understanding of neurotransmitter function in health and disease.

Guest Editor

Dr. Kurtulus Golcuk

Department of Neuroscience, Johns Hopkins University School of Medicine, Baltimore, MD 21205, USA

Deadline for manuscript submissions

15 December 2025

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.