micromachines

IMPACT FACTOR 3.0

Indexed in: PubMed

CITESCORE 5.2

an Open Access Journal by MDPI

Micromachines for Neurological Research

Guest Editors:

Dr. Paul Holloway
Radcliffe Department of Medicine, University of Oxford, Oxfordshire OX1, UK

Dr. Michele Zagnoni
Centre for Microsystems and Photonics, EEE Department, University of Strathclyde, Glasgow G1 1XW, UK

Deadline for manuscript submissions:
closed (30 June 2022)

Message from the Guest Editors

Over the past few decades microfluidic systems, microfabrication techniques and microelectronics have synergistically advanced the possibilities to study, mimic and probe the central nervous system.

Advanced cell culture systems enabled by microfluidic topologies have provided precise control of flows and the chemical microenvironment to manipulate and guide the growth of heterogeneous cell populations.Advances in micro-electrode arrays have allowed for enhanced spatial and temporal resolution of neuronal recording both in vitro and in vivo. Developments in materials sciences are now paving the way for transparent and flexible electrodes to extend the potential for integrated recording of trans-endothelial resistance and barrier properties in blood brain barrier models, along with the stimulation and recording of neuronal activity in complex 3D microenvironments.

This Special Issue seeks to showcase research papers, protocols, and review articles that focus on the application and development of microfluidic systems, micro-electronics and micro-machines for neurobiological research.

micromachines

IMPACT FACTOR 3.0 | Indexed in: PubMed | CITESCORE 5.2

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Ai-Qun Liu
1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China
2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.
Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Mechanical Engineering*)

Contact Us

Micromachines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/micromachines
micromachines@mdpi.com
𝕏@micromach_mdpi