

Special Issue

Intracranial Electrodes for Epilepsy: Fabrication, Applications and Indications

Message from the Guest Editors

Intracranial electroencephalography (EEG) is an essential neurodiagnostic tool for studying people with epilepsy whose seizures cannot be controlled with antiseizure medications. Invasive EEG monitoring provides epileptologists with the ability to accurately identify the brain region(s) where seizures originate and subsequently spread. Source localization techniques can assist with such a determination. Additionally, neuroscientists can utilize invasive EEG recordings to study the basic science of epilepsy, both on a macroscopic and microscopic level. Another evolving application of intracranial electrodes is for neurostimulation treatment of refractory epilepsy through neuromodulation of the abnormal epileptogenic networks. The design and manufacturing of macro- and microelectrodes which can be utilized to obtain high-quality intracranial EEG recordings and to effectively treat medication-refractory epilepsy is crucial. This Special Edition of *Micromachines* will be dedicated to the design, fabrication, applications, and indications for intracranial electrodes in epilepsy.

Guest Editors

Dr. Erik Kobylarz

Dr. George Thomas

Dr. George Culler IV

Dr. Nicole Nicole Odom

Deadline for manuscript submissions

closed (31 January 2022)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/85452

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

[mdpi.com/journal/
micromachines](https://mdpi.com/journal/micromachines)





Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



[mdpi.com/journal/
micromachines](https://mdpi.com/journal/micromachines)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Nam-Trung Nguyen

Queensland Quantum and Advanced Technologies Research Institute,
Griffith University, West Creek Road, Nathan, QLD 4111, Australia

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Mechanical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the second half of 2025).