

Special Issue

Wireless Power Transfer Systems for Biomedical Devices

Message from the Guest Editors

Wireless power transfer (WPT) technology has recently emerged as an alternative source of batteries and wired power supply for biomedical devices such as pacemakers, retinal implants and neurostimulators. However, the power requirement of some of these devices is a major challenge. This Special Issue aims to present novel findings on design analysis and implementation of WPT for biomedical devices. This Special Issue is focused on, but not limited to, the following topics: Theoretical analysis of WPT techniques for biomedical devices; Necessary electromagnetic theory; Design and implementation of WPT coils and antennas; Measurement and safety analysis of WPT for biomedical application; Power management electronics for WPT; Simulation of WPT for biomedical devices; WPT efficiency analysis; Power electronics and batteries; Near field, mid field and far field; Wireless data transfer; Tissue safety analysis; Energy harvesting; Antenna and wave propagation; RFID.

Guest Editors

Dr. Sadeque Reza Khan

Institute of Sensors, Signals and Systems, School of Engineering and Physical Sciences, Heriot-Watt University, Edinburgh EH14 4AS, UK

Dr. Mohammad Alibakhshikenari

Electronics Engineering Department, University of Rome "Tor Vergata", 00133 Rome, Italy

Deadline for manuscript submissions

closed (31 March 2023)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 5.2
Indexed in PubMed



mdpi.com/si/134667

Micromachines
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 5.2
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. 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

Author Benefits

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)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.7 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2024).