

Special Issue

Electrokinetic Flows and Micropumps

Message from the Guest Editor

“Electrokinetic Flows and Micropumps” is a Special Issue of *Micromachines* targeted at the exchange of state-of-the-art research ideas related to the recent development of electrokinetic micropumping theory. Electrokinetic micropumps have no moving parts but possess a perfect frequency response and the ability to precisely deliver flow at high-pressure and low flow rates. These attributes make them ideally suited for the control of flow in many biomedicine applications. Accordingly, the main objective of this Special Issue is to provide a unique opportunity to share and discuss theoretical science, experimental techniques, fabrication developments, and novel applications of electrokinetic micropumps in biomedicine. This Special Issue shall consider the publication of research or review articles that address recent discoveries and developments in electrokinetic micropumps. This collection of papers will hopefully bring out more innovative ideas and fundamental insights in the general field of electroosmotic flows. Prof.

Guest Editor

Dr. Yasser Aboelkassem

Division of Engineering Technology, College of Innovation and Technology, University of Michigan-Flint, Flint, MI 48502, USA

Deadline for manuscript submissions

closed (30 June 2022)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/69378

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. 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 (Instruments and Instrumentation) / CiteScore - Q1 (Mechanical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.2 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).