

Special Issue

State-of-the-Art Nanofluidics

Message from the Guest Editor

Recently, nanofluidics has gained a tremendous amount of interest in high-performance microfluidic lab on a chip applications at the smallest scale level as well as conventional research fields. Basically, nanofluidics is the study of the behavior, manipulation, and control of fluids that are confined to structures of nanometer (typically 1–100 nm) characteristic dimensions (1 nm = 10⁻⁹ m). A significant growth of research in nanofluidics has been achieved, but there are still many challenges to understand new physical phenomena and underlying mechanism for nanofluidics. Based on those studies, a various applications for nanofluidics can be developed providing considerable opportunities. This special issue will highlight the progress that has been made in theory, fabrication, and application of recent micro/nano fluidics, as well as show readers new opportunities and insight of future nanofluidics. **Keywords**

- micro/nano fluidics
- lab-on-a-chip
- mass transport
- electrokinetics
- concentration polarization
- fabrication of nanofluidic device
- application of nanofluidics

Guest Editor

Dr. Bumjoo Kim

Department of Mechanical and Automotive Engineering, Kongju National University, Cheonan 31080, Republic of Korea

Deadline for manuscript submissions

closed (20 February 2022)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/64425

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.

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).