Special Issue

Smart Multispectral Imaging Flow Cytometry

Message from the Guest Editors

We encounter microparticles everywhere, and they are the foundation of living matter. Because of their diverse properties, they are valuable materials for the food industry, plant cultivation, and environmental applications. On the other hand, they can appear as pollutants, such as heavy metals and microplastics, which require reliable monitoring of their concentrations and interactions with biological systems. Due to their small size, the holistic, non-contact, and non-destructive characterization of particles is a challenge in fundamental research. Due to recent advances in imaging flow cytometry, this method is particularly suitable for the characterization of particles. This Special Issue focuses on optical sensing arrangements, microfluidic particle focusing techniques, spectral detection capabilities, and data analysis methods for characterizing particles in microfluidic flow. In addition, microfluidic confinement, and manipulation of particles within the focal plane of the imaging system through, e.g., hydrodynamics and/or acoustophoresis, as well as sorting technologies that use spectral and/or geometric features for sorting decisions are highly welcome.

Guest Editors

Dr. Thomas Henkel

Daniel Kraus

Julia Sophie Böke

Deadline for manuscript submissions

closed (20 October 2022)

Micromachines

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed

mdpi.com/si/117740

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

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

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).

MDPI