

Special Issue

Integrated Photonic Digital PCR Techniques

Message from the Guest Editors

PCR technology has developed over several decades and through three generations due to the utilization of various techniques. As the world has recently experienced COVID-19, PCR technology has become necessary for rapid and early diagnosis. Recently, quantitative analysis has become possible with the development of a fast molecular diagnosis and digital PCR, and the expectations of molecular diagnosis have increased as ultra-fast digital PCR technology has been developed using light energy and energy conversion technologies. Photonic digital PCR is a molecular analysis technique that enables the precise quantification and amplification of DNA or RNA molecules in a sample. This method offers exceptional sensitivity and accuracy by partitioning the sample into thousands of individual reaction volumes, each containing a limited number of target molecules.

Guest Editors

Dr. Kyung Ho Kim

Immunotherapy Research Center, Korea Research Institute of Bioscience and Biotechnology (KRIBB), Daejeon 34141, Republic of Korea

Dr. Oh-Seok Kwon

SKKU Advanced Institute of Nanotechnology (SAINT), Department of Nano Engineering, Sungkyunkwan University, Suwon 16419, Republic of Korea

Deadline for manuscript submissions

closed (29 February 2024)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/184505

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).