Special Issue

Advances in Ultra-Precision Machining Technology and Applications, Volume II

Message from the Guest Editors

Ultra-precision machining technology has been widely used in the manufacture of many mission-critical components for various industrial areas, such as advanced optics, photonics aerospace, automotive, telecommunications, biomedical, energy and environmental, etc. Today, ultra-precision machining technology is capable of machining workpieces with sub-micrometer form accuracy and nanometric surface roughness with a high degree of geometrical complexity. Due to the increasing degree of geometrical complexity, high-precision requirements and the evolution of advanced materials of the workpiece being machined lead to numerous research challenges in different fields, including ultra-precision machining technologies, novel machining processes, cutting mechanics, surface generation mechanisms, novel machine design, machine metrology, accurate control of the machining process through modeling and simulation of ultra-precision machining processes, as well as advanced applications for functional uses. This Special Issue aims to provide a collection of the latest research results and findings in recent advances in ultraprecision machining technology and applications.

Guest Editors

Prof. Dr. Benny C. F. Cheung

State Key Laboratory of Ultra-Precision Machining Technology, Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Kowloon, Hong Kong, China

Dr. Chenyang Zhao

School of Mechanical Engineering and Automation, Harbin Institute of Technology (Shenzhen), Shenzhen 518055, China

Deadline for manuscript submissions

closed (30 November 2023)



Micromachines

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0 Indexed in PubMed



mdpi.com/si/159036

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

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

 Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China
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).