Special Issue

Advancements in Metal Additive Manufacturing

Message from the Guest Editor

Metal additive manufacturing has evolved from prototyping to a key technology for high-value applications. Advances in process control, alloy design, simulation, in situ monitoring, and data-driven optimization are enhancing reliability and adoption. Central to this progress is understanding micro- and nano-scale phenomena—melt pool dynamics, solidification, grain evolution, and micro-defects—which govern performance. Challenges remain in defect control and qualification.This Special Issue, "Advancements in Metal Additive Manufacturing," invites contributions addressing these challenges. Aligned with Micromachines, it emphasizes research bridging macro-scale process engineering with micro-/nano-scale material behavior. We welcome original research and reviews on process development, alloy innovation, defect detection, process monitoring, modeling, simulation, machine learning, digital twins, post-processing, property evaluation, and industrial case studies.We invite researchers to submit their latest findings. This collection shares scientific progress and future directions in metal additive manufacturing.

Guest Editor

Dr. Young Won Kim

Korea Additive Manufacturing Innovation Center (KAMIC), Korea Institute of Industrial Technology, 113-58, Seohaean-ro, Siheung-si 15014, Gyeonggi-do, Republic of Korea

Deadline for manuscript submissions

31 December 2026

Micromachines

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed

mdpi.com/si/275435

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

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.

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).