

## Special Issue

# Advances in Powder Bed Fusion Technologies

### Message from the Guest Editor

Powder bed fusion (PBF) technology has experienced rapid development in the last decade. PBF technology has been successfully applied to a wide range of material systems, such as metals, polymers, ceramics, etc., of which the processing capabilities and quality show advantages to traditional processing routes. In the meantime, with the deepening of this research and the continuous demands of the industry, many innovative concepts have emerged, such as energy-field-assisted manufacturing, multi-material manufacturing, (laser) beam shaping, and hybrid additive/subtractive manufacturing. Besides those conceptual improvements, advances in PBF technologies are reflected in various aspects, including novel design and modeling, equipment upgrades, the expansion of applicable materials, appropriate post-processing methods, process monitoring, and quality evaluation. In this Special Issue, we aim to present a comprehensive collection of research articles, reviews, and short communications, so as to highlight recent advances with regard to powder bed fusion technologies.

### Guest Editor

Dr. Xiaoyu Liang

Department of Mechanical Engineering, Tsinghua University, Beijing 100084, China

### Deadline for manuscript submissions

30 April 2025



## Journal of Manufacturing and Materials Processing

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 5.1



[mdpi.com/si/211833](https://mdpi.com/si/211833)

*Journal of Manufacturing and  
Materials Processing*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[jmmp@mdpi.com](mailto:jmmp@mdpi.com)

[mdpi.com/journal/  
jmmp](https://mdpi.com/journal/jmmp)





# Journal of Manufacturing and Materials Processing

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 5.1



[mdpi.com/journal/  
jmmp](https://mdpi.com/journal/jmmp)



## About the Journal

### Message from the Editor-in-Chief

*Journal of Manufacturing and Materials Processing (JMMP)* (ISSN 2504-4494) is a new MDPI peer-reviewed, open access venue with a focus on the scientific fundamentals and engineering methodologies of manufacturing and materials processing. We offer an online platform facilitating effective exchange of innovative scientific and engineering ideas and the dissemination of recent, original, and significant research and developmental findings. On behalf of the Editorial Board, I extend an invitation to our scientific and engineering colleagues to contribute high-quality, innovative, and ground-breaking research articles to *JMMP*.

---

### Editor-in-Chief

Prof. Dr. Steven Y. Liang

George W. Woodruff School of Mechanical Engineering, Georgia  
Institute of Technology, Atlanta, GA 30332-0405, USA

---

### Author Benefits

#### High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec,  
CAPlus / SciFinder, Ei Compendex and other databases.

#### Journal Rank:

JCR - Q1 (Engineering, Mechanical) / CiteScore - Q2  
(Mechanical Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is  
provided to authors approximately 14.7 days after  
submission; acceptance to publication is undertaken in 2.8  
days (median values for papers published in this journal in  
the first half of 2024).