

## Special Issue

# Advances in High-Performance Machining Operations

### Message from the Guest Editors

High-performance machining operations comprise a variety of advanced manufacturing technologies which are proposed to machine components with high precision and machined surface integrity. In this Special Issue of JMMP, we are looking for recent findings which focus on advances in high-performance machining operations, including experimental studies and numerical modelings of cutting or thermal-mechanical deformation-induced machined surface integrity. We are interested in contributions that focus on topics such as:

- Advanced machining processes using novel or hybrid thermal-mechanical processes to achieve high performance, including high precision and machined surface integrity;
- Theoretical and experimental studies of the mechanism of machined surface integrity achieved via advanced thermal-mechanical processes;
- Numerical modeling of machined surface integrity considering microstructure evolution and the effects of microstructure on mechanical behaviors;
- Studies focused on the combined effect of material, thermal-mechanical deformation processes and surface integrity using an advanced surface modification operation.

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 April 2025)



## Journal of Manufacturing and Materials Processing

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Impact Factor 3.3  
CiteScore 5.2



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## 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*.

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### Editor-in-Chief

Prof. Dr. Steven Y. Liang  
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