

## Special Issue

# New Innovations in Laser Hybrid Welding Processing and Monitoring

### Message from the Guest Editor

In this Special Issue of *JMMP*, we are looking for recent findings that focus on laser hybrid welding technologies including their application and associated research fields. Papers will be considered that show significant advancement according to the progress and quality of laser hybrid welding processing and mechanism aspects, as well as process monitoring, defect prediction, and process control. We are interested in contributions that focus on topics such as:

- New materials and new processing technology of laser hybrid welding;
- Defect monitoring, on-line detecting, controlling and its forming mechanism;
- Multi-source information fusion monitoring and its application to laser hybrid welding;
- Explainable deep learning methods and their application to the laser hybrid welding process and parameter optimization;
- Performance evaluation and prediction of typical parts in laser hybrid welding processing;
- Large-sized parts processing and monitoring of laser hybrid welding.

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### Guest Editor

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### Deadline for manuscript submissions

closed (1 September 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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.9 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).