



Laser-Assisted Processing and Manufacturing

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Deadline for manuscript
submissions:

31 December 2024

Message from the Guest Editors

Lasers have been extensively adopted for materials processing and manufacturing due to their distinct advantages in precision, speed, versatility, and non-contact nature. The applications of laser material processing, such as laser welding, laser machining, laser heat treatment, and laser surface treatment, are well-known and have generated tremendous impact on industries. In recent years, emerging applications such as laser additive manufacturing and laser-induced crystallization have also been witnessed. Meanwhile, the recent developments of laser technologies, such as ultrafast lasers, ultra-high-power lasers, green and UV lasers, laser beam combining, and laser beam shaping, have further enabled the advancement of laser manufacturing applications.

This Special Issue aims to collect state-of-the-art research in the broad area of laser-assisted processing and manufacturing. The topics include, but are not limited to, laser-material interaction, manufacturing process innovations, emerging applications, performance and quality enhancement, process–microstructure–performance relationships, and novel laser technologies. Both research and review articles are welcome.





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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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Materials Processing* Editorial Office
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