Special Issue

Lattice Structure and Metamaterial Design for Additive Manufacturing

Message from the Guest Editor

This Special Issue is dedicated to exploring the latest developments in lattice structures and metamaterials fabricated through AM. We welcome submissions focused on designing lattice structures and metamaterials for AM, utilizing optimization, generative, and Al-based algorithms and design tools. We also welcome articles that address the design and optimization of lattice structures and metamaterials for specific applications, the mechanical behavior and performance of AM lattice structures and metamaterials, and the development of new AM processes and materials for the production of these structures. We invite researchers from academia and industry who are working in this exciting field to submit their research to this Special Issue. This is an excellent opportunity to share your work, exchange ideas, and form a comprehensive collection of research in this field.

- additive manufacturing (AM) and 3D printing
- lattice and cellular structures
- mechanical metamaterials
- triply periodic minimal surfaces (TPMS)
- auxetic structures
- design for additive manufacturing
- generative design
- optimization
- artificial intelligence (AI)
- powder bed fusion

Guest Editor

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Deadline for manuscript submissions

closed (30 April 2024)



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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 .IMMP.

Editor-in-Chief

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