Special Issue

Application of Multi-Physic Modelling in Fused Filament Fabrication

Message from the Guest Editor

This Special Issue invites high-quality contributions that advance the application of multi-physics numerical simulation techniques in polymer-based AM processes. We welcome original research articles and comprehensive reviews that address modeling approaches, numerical methods, and simulation-driven insights into the behavior of polymers during Fused Filament Fabrication. Topics of interest include, but are not limited to:

- Thermal and mechanical modeling;
- Multi-scale and multi-material simulations;
- Process optimization strategies;
- Validation techniques and experimental benchmarking;
- Simulation-assisted design and process planning.

Studies that integrate experimental and computational methods to enhance model accuracy are especially encouraged. The goal of this issue is to foster innovation and bridge the gap between theory and practical implementation, ultimately contributing to the broader adoption and refinement of polymer AM technologies.

Guest Editor

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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.*

Editor-in-Chief

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