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# Laser Powder Bed Fusion Additive Manufacturing: Experimental, Simulation, and Machine Learning

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Deadline for manuscript submissions:

20 December 2024

# **Message from the Guest Editors**

Dear Colleagues,

Laser powder bed fusion (LPBF) additive manufacturing represents a cutting-edge frontier in the field of advanced manufacturing technologies. Distinguished for its precision and versatility, LPBF continues to revolutionize how we approach design and production across various industries. This Special Issue is dedicated to exploring the expansive and dynamic realm of LPBF, highlighting the synergy between experimental methods, simulation techniques, and the burgeoning field of machine learning.

We invite researchers, academics, and industry professionals to contribute their latest research papers, communications, and reviews on the experimental, simulation, and machine learning aspects of LPBF. This issue aims to cover a wide spectrum of topics, including, but not limited to, alloy development, process parameter optimization, microstructure analysis, thermal modeling, and data-driven process control in LPBF.













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# **Message from the Editor-in-Chief**

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