

Special Issue

Advances in Modeling and Analysis of Additive Manufactured Materials

Message from the Guest Editor

Parallel with the technological advances in additive manufacturing, the interest to be able to predict the mechanical properties of additive manufactured components progressing. As several process variables influence the additive fabrication process, establishing a straightforward method to characterize the material properties has not been easy. Recent focus has been on using experimental methods, which is expensive. Analytical approaches to describe the mechanical responses as a function of the performance parameters a mechanical or structural system is also limited due to the diversity of the manufacturing variables. As a result, modelling and analysis methods such as application of finite element methods seem to be viable though the approaches are still under progressive development. This special issue intends to serve as a platform where recent research advances on modelling and analysis of additive manufactured materials, including polymers, composites and metallic materials, are disseminated and shared. The special issue will accommodate both original research articles and critical reviews.

Guest Editor

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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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