Special Issue

Advances in 3D Printing Technologies of Metals

Message from the Guest Editors

For this Special Issue, we welcome the submission of articles that focus on the characterization of metallic parts obtained with different additive manufacturing processes, regarding their metallurgy, surface finish, porosity, mechanical properties, geometry features, etc. Topics of interest for the SI include (but are not limited to) the following different AM processes:

- VAT polymerization techniques such as stereolithography (SL) with metallic-filled resin.
- Metal binder jetting techniques.
- Material extrusion techniques such as fused deposition modeling (FDM), also known as fused filament fabrication (FFF) with metal-filled filament, direct ink writing (DIW) with metal-filled inks, solid-state friction welding and Joule printing.
- Metallic material jetting techniques as nano particle jetting (NPJ), liquid metal 3Dprinting, and supersonic 3D deposition
- Powder bed fusion techniques such as selective laser melting (SLM), or electron beam melting (EBM).
- Directed energy deposition processes such as powder DED and wire DED based on different energy sources: wire arc additive manufacturing (WAAM).
- Other (ultrasonic consolidation, ...)

Guest Editors

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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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