



Advances in Metal-Based Multi-Material Additive Manufacturing

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Additive manufacturing techniques open up a wide range of new possibilities in application and research. These processes combine high geometric degrees of freedom with new potentials for alloy design resulting from high cooling rates. While a great level of understanding has been achieved for additive manufacturing of single materials through experimentation and modeling, little is known about implementing a combination of materials into additive manufacturing processes.

I would like to invite you to contribute to this current research topic with this Special Issue. Potential topics may include:

- Additive manufacturing of metallic compounds or graded materials with Laser Powder Bed Fusion, Direct Energy Deposition, or other AM processes, whereby for composites the substrate can already represent a component
- Experiments and models to gain knowledge on process conditions
- Experiments and theories of thermophysical properties for the composition of mixing zones to obtain a deepened understanding of the multi-material process
- Multimaterial applications through combination of different mechanical or functional properties



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Special Issue



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Message from the Editor-in-Chief

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