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Recent Advances in Metal Powder Based Additive Manufacturing

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Deadline for manuscript submissions:

closed (20 September 2024)

Message from the Guest Editors

This Special Issue welcomes original research and high-quality comprehensive reviews on recent advances in metal-powder-based additive manufacturing. The focus of this topic includes the design of new alloy compositions, developing the understanding of microstructure evolution and the impacts on mechanical properties. Material systems of interest include, but are not limited to, structural materials, different types of steels, aluminium, titanium, nickel, copper, cobalt-based alloys, refractory metals, shape-memory alloys, high-entropy alloys, and bulk metallic glasses.

Contributing papers are solicited in the following fields:

- Novel alloy design tailored for AM;
- Novel metal powder AM processes;
- Multi-materials processing in AM;
- Microstructural evolution during the AM processes;
- Microstructure and property relationships of AM components;
- Microstructural response of AM components to post-processing conditions.



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Special Issue



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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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