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Challenges in Additive Manufacturing: From Coupon Studies to Components

Guest Editor:

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Deadline for manuscript
submissions:

closed (10 January 2022)

Message from the Guest Editor

Dear Colleagues,

Additive manufacturing (AM) of metallic materials still faces serious hurdles that need to be overcome before a widespread utilisation, particularly for highly loaded and safety-relevant components, can be achieved. A variety of technologies, such as laser powder bed fusion, are available today and new approaches, such as multi-material printing, are under development.

This Special Issue shall be dedicated to new developments in metal and multi-material AM, encompassing (yet not limited to):

materials properties–process relationships;
multi-material AM and new AM approaches;
process modelling, simulations and digitalisation;
in operando process monitoring;
alloy development for AM;
transfer of process and materials knowledge from coupons to components;
component manufacturing: build and post-processing strategies; and
material characterisation in complex AM components.

I invite you to contribute original, high-quality submissions to this Special Issue. Regular and review articles as well as short communications from materials research, theoretical modelling, engineering and process simulation are welcome.

Dr. Jan Haubrich

Special Issue





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Editor-in-Chief

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Message from the Editor-in-Chief

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