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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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