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Additive Manufacturing Methods and Modeling Approaches

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Message from the Guest Editors

Materials and technologies related to additive manufacturing (AM) are quickly evolving, both in terms of production processes and in terms of available materials. One should notice that the term AM has basically substituted the terms rapid prototyping and 3D printing, in order to underline a closer link to the end-use components.

Regarding AM of metal parts, the main challenges are represented by the costs and the capability to obtain good performances. As for plastic parts, the current issues are similar, although the 3D printing of some low-cost plastics is already widely available. In this case, several materials can now be employed, ranging from the well-known ABS and PLA up to soft, rubber-like polymers. As for composites, this technology is rather new and offers interesting challenges and perspectives (including, also, the potential to replace metal).

Within this context, this Special Issue aims to provide an opportunity for researchers from both academia and industry to share recent advances in the field, with special attention to material modeling, design methods and criteria, software tools, and case studies, in this case, including industrial applications.













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Message from the Editor-in-Chief

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