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# Innovative Design with Additive Manufacturing, Topology Optimization and Cellular Microstructure

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### **Message from the Guest Editors**

The recent advances in additive manufacturing have created great prospects for both researchers and industry. Based on important advancements, such as the possibility to manufacture complex geometries, the technology is being continuously developed and improved. Despite the manufacturability achievements in the field of design for additive manufacturing (DfAM), many challenges remain. An increasing number of research articles have been focusing on DfAM in order to create and evaluate innovative lightweight structures that are based on the great advantages of additive manufacturing and overcome manufacturing constraints. Topology optimization is the mathematical method that can optimize the material distribution within a specific design domain. Additionally, it is an efficient way to create lightweight structures and it is compatible with additive manufacturing structures. Therefore, the creation and evaluation of cellular microstructures are becoming a difficult challenge for researchers.

This issue will publish original research papers, short reports, and reviews related to design for additive manufacturing, cellular microstructures, as well as topology optimization.







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# **Editor-in-Chief**

### Message from the Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo** Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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