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# Advances in 4D Printing: Material, Processes, Applications

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# **Message from the Guest Editors**

A few years ago, additive manufacturing (AM) processes were primarily seen as efficient tools for rapid prototyping. Today, owing to the remarkable advancements made in both materials and AM machines, these processes are extensively utilized for industrially producing functional parts with complex geometries. While AM has made significant progress, it is not yet fully mature, and the increasing array of available materials is currently expanding its applicability, as seen in the case of 4D printing.

In 4D printing, structures created through 3D printing can undergo geometric deformations over time, controlled by external stimuli such as changes in temperature, electrical fields, etc. This capability finds applications in various fields, including biomedicine, textiles ,among others, can be fabricated.

This Special Issue aims to highlight the latest advances in the 4D printing of polymers and composites. The articles featured will focus into the development of innovative materials, the fabrication of complex structures, and the diverse applications of 4D-printed objects.

**Special**sue



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# **Editor-in-Chief**

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### Message from the Editor-in-Chief

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