



Design and Properties of 3D Printing Concrete

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Concrete 3D printing has received a lot of interest in recent years, leading to the development of new concepts, printing devices and construction designs. The disruptive development of 3D printing in the building field has induced multidisciplinary research development, leading to new mixed designs of printable materials, the definition of fresh state properties and rheological behaviour requirements, structural and architectural designs of printed structures using topology optimization, and robotics innovation.

This Special Issue focuses on works related to those innovations. Paper topics can include many aspects related to the digital fabrication of concrete and cement-based materials: processing, case studies, fresh state properties and rheological requirements, the mechanical behaviour of printed cement-based material, the structural design of printed parts and structures, and environmental and economic impacts.

This Special Issue is expected to provide a collection of articles showing an overview of recent advances in the field of concrete 3D printing and drawing future perspectives for these new revolutionary methods.





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Message from the Editor-in-Chief

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