



materials



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Additive manufacturing and Biofabrication of Tissue Engineering Scaffolds

Guest Editor:

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Message from the Guest Editor

In tissue engineering, scaffolds play a crucial role. A scaffold, which is a porous three-dimensional (3D) structure, is used to facilitate cell/tissue growth and the transportation of nutrients and wastes while interacting with biological environment. The emergence of new technology- additive manufacturing and 3D printing has enabled scientists to fine tune the internal and external structure of scaffolds and to incorporate various bioinstructive molecules such as genes, growth factors, and cytokines within the scaffolds to ultimately enhance rate of tissue regeneration. The present Special Issue of Materials will include the most recent and relevant contributions from materials scientists, biologists, and tissue engineers, focusing on novel 3D tissue scaffold fabrication; tissue and organ printing; the modelling of biofabrication processes and biofabricated constructs; architecture optimisation; and the fabrication of bioinstructive scaffolds using the volumetric incorporation of genes, growth factors, and cytokines.



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Message from the Editor-in-Chief

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