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Advances in 3D Bioprinting for Tissue Engineering

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Message from the Guest Editors

Dear Colleagues,

Considering the future demands that the lifetime of organs and tissues exceed that of human life, various tissue engineering methods have been developed to create tissue-mimetic structures. The 3D bioprinting method, which utilizes tissue-specific bioink, has been a key player among these methods. Although extensive work has been conducted in 3D bioprinting, the technology is still far behind in creating clinically relevant tissue mimetic structures that can be used to replace or repair damaged tissue or can be used as a model system to study various diseases. The challenges in this area are related to creating cell-loaded high fidelity functional tissue-like structures while preserving cell viability and directing cell fate. Therefore, to address these challenges, this Special Issue focuses on the advances in 3D bioprinting and bioink to create functional tissue-like structures, such as cardiac tissue, liver, kidney, vascular grafts, neural tissue, bone, and cartilage.













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Editor-in-Chief

Message from the Editor-in-Chief

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