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3D printed biomaterials for tissue engineering

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The present study investigated the synthesis and in vitro evaluation of 3D bio-printed chitosan based scaffold. Chitosan based scaffolds are considered as bio-combatable and biodegradable biomaterial. It can be applied directly for several surgical sites. Physic-chemical characterization was performed. FTIR, FESEM, XRD and Thermal analysis were used. In vitro degradation behavior within biological solution

was followed. The results improved the successful synthesis of 3d printed chitosan based scaffold with the desired characteristics. The biodegradation process exhibited the controllable degradation behavior that permit the integration of the other tissues.

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