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Osteogenesis of 3D printed porous Ti6Al4V implants with different pore sizes

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Abstract

Selective laser melting (SLM) is one of the three-dimensional (3D) printing techniques that manufacturing versatile porous scaffolds with precise architectures for potential orthopedic application. To understand how the pore sizes of porous Ti6Al4V scaffolds affect their biological performances, we designed and fabricated porous Ti6Al4V implants with straightforward pore dimensions (500, 700, and 900 μm) *via* SLM, termed as p500, p700, and p900 respectively. The morphological characteristics of Ti6Al4V scaffolds were assessed showing that the actual pore sizes of these

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