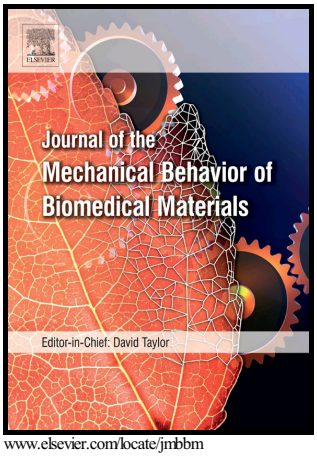

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Mechanical Properties and Biocompatibility of Porous Titanium Scaffolds for Bone Tissue Engineering

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Abstract

Synthetic scaffolds are a highly promising new approach to replace both autografts and allografts to repair and remodel damaged bone tissue. Biocompatible porous titanium scaffold was manufactured through a powder metallurgy approach. Magnesium powder was used as space holder material which was compacted with titanium powder and removed during sintering. Evaluation of the porosity and mechanical properties showed a high level of