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Original article

Isolated and modulated effects of topology and material type on the mechanical properties of additively manufactured porous biomaterials

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Abstract

In this study, we tried to quantify the isolated and modulated effects of topological design and material type on the mechanical properties of AM porous biomaterials. Towards this aim, we assembled a large dataset comprising the mechanical properties of AM porous biomaterials with different topological designs (i.e. different unit cell types and relative densities) and material types. Porous structures were additively manufactured from Co-Cr using a selective laser melting (SLM) machine and tested under quasi-static compression. The normalized mechanical

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