

Author's Accepted Manuscript

Nondestructive characterization of bone tissue scaffolds for clinical scenarios

Ali Entezari, Zhongpu Zhang, Andrian Sue, Guangyong Sun, Xintao Huo, Che-Cheng Chang, Shiwei Zhou, Michael V Swain, Qing Li



PII: S1751-6161(18)30181-4
DOI: <https://doi.org/10.1016/j.jmbbm.2018.08.034>
Reference: JMBBM2945

To appear in: *Journal of the Mechanical Behavior of Biomedical Materials*

Received date: 19 February 2018
Revised date: 26 April 2018
Accepted date: 24 August 2018

Cite this article as: Ali Entezari, Zhongpu Zhang, Andrian Sue, Guangyong Sun, Xintao Huo, Che-Cheng Chang, Shiwei Zhou, Michael V Swain and Qing Li, Nondestructive characterization of bone tissue scaffolds for clinical scenarios, *Journal of the Mechanical Behavior of Biomedical Materials*, <https://doi.org/10.1016/j.jmbbm.2018.08.034>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Nondestructive characterization of bone tissue scaffolds for clinical scenarios

Ali Entezari ^a, Zhongpu Zhang ^a, Andrian Sue ^a, Guangyong Sun ^a, Xintao Huo ^b, Cheng Chang ^a, Shiwei Zhou ^c, Michael V Swain ^a, Qing Li ^{a,*}

^a School of Aerospace, Mechanical and Mechatronic Engineering, The University of Sydney, Darlington NSW 2006, Australia

^b State Key Laboratory of Advanced Design and Manufacture for Vehicle Body, Hunan University, Changsha 410082, China

^c Centre for Innovative Structures and Materials, School of Engineering, RMIT University, GPO Box 2476, Melbourne VIC 3001, Australia

ali.entezari@sydney.edu.au

leo.zhang@sydney.edu.au

andrian.sue@gmail.com

guangyong.sun@sydney.edu.au

huoxintao@hnu.edu.au

ccha8453@uni.sydney.edu.au

shiwei.zhou@rmit.edu.au

michael.swain@sydney.edu.au

qing.li@sydney.edu.au

* Corresponding Author: Prof. Qing Li; Postal Address: School of Aerospace, Mechanical and Mechatronic Engineering, J07, University of Sydney, Darlington, NSW 2006, Australia; Phone: +61 2 9351 8607; Fax: +61 2 9351 7060; Qing.Li@Sydney.edu.au

Abstract

Objectives:

This study aimed to develop a simple and efficient numerical modelling approach for characterizing strain and total strain energy in bone scaffolds implanted in patient-specific anatomical sites.

Download English Version:

<https://daneshyari.com/en/article/11027726>

Download Persian Version:

<https://daneshyari.com/article/11027726>

[Daneshyari.com](https://daneshyari.com)