

Accepted Manuscript

Rational design and fabrication of multiphasic soft network composites for tissue engineering articular cartilage: a numerical model-based approach

Onur Bas, Sara Lucarotti, Davide D. Angella, Nathan J. Castro, Christoph Meinert, Felix M. Wunner, Ernst Rank, Giovanni Vozzi, Travis J. Klein, Isabelle Catelas, Elena M. De-Juan-Pardo, Dietmar W. Hutmacher

PII: S1385-8947(18)30020-2
DOI: <https://doi.org/10.1016/j.cej.2018.01.020>
Reference: CEJ 18340

To appear in: *Chemical Engineering Journal*



Please cite this article as: O. Bas, S. Lucarotti, D.D. Angella, N.J. Castro, C. Meinert, F.M. Wunner, E. Rank, G. Vozzi, T.J. Klein, I. Catelas, E.M. De-Juan-Pardo, D.W. Hutmacher, Rational design and fabrication of multiphasic soft network composites for tissue engineering articular cartilage: a numerical model-based approach, *Chemical Engineering Journal* (2018), doi: <https://doi.org/10.1016/j.cej.2018.01.020>

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 proof before it is published in its final 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.

Title

Rational design and fabrication of multiphasic soft network composites for tissue engineering articular cartilage: a numerical model-based approach

Authors list and affiliations

Onur Bas^{1,2,6}
Sara Lucarotti^{1,3}
Davide D'Angella^{4,5}
Nathan J. Castro^{1,6}
Christoph Meinert^{1,6}
Felix M. Wunner¹
Ernst Rank^{4,5}
Giovanni Vozzi³
Travis J. Klein^{2,6}
Isabelle Catelas^{6,7}
Elena M. De-Juan-Pardo^{1,6}
Dietmar W. Hutmacher^{1,2,4,6*}

*Corresponding author

Email: dietmar.hutmacher@qut.edu.au

¹ Centre in Regenerative Medicine, Institute of Health and Biomedical Innovation, Queensland University of Technology (QUT), Kelvin Grove, Brisbane, QLD 4059, Australia

² ARC Training Centre In Additive Biomanufacturing, Queensland University of Technology (QUT), Brisbane, QLD 4059, Australia

³ Research Center "E. Piaggio", University of Pisa, 56100 Pisa, Italy

⁴ Institute for Advanced Study, Technische Universität München, 85748 Garching, Germany

⁵ Chair for Computation in Engineering, Technische Universität München, D-80333 Munich, Germany

⁶ School of Chemistry, Physics and Mechanical Engineering, Science and Engineering Faculty (SEF), Queensland University of Technology (QUT), Brisbane, QLD 4001, Australia

⁷ Department of Mechanical Engineering, University of Ottawa, Ottawa, ON, K1N 6N5, Canada

Download English Version:

<https://daneshyari.com/en/article/6579939>

Download Persian Version:

<https://daneshyari.com/article/6579939>

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