

## Accepted Manuscript

Tailor Design Electrospun Composite Nanofibers with Staged Release of Multiple Angiogenic Growth Factors for Chronic Wound Healing

Huan-Ju Lai, Chen-Hsiang Kuan, Hsi-Chin Wu, Jui-Che Tsai, Tim-Mo Chen, Dar-Jen Hsieh, Tzu-Wei Wang

PII: S1742-7061(14)00204-9  
DOI: <http://dx.doi.org/10.1016/j.actbio.2014.05.001>  
Reference: ACTBIO 3223

To appear in: *Acta Biomaterialia*

Received Date: 6 February 2014  
Revised Date: 25 April 2014  
Accepted Date: 1 May 2014

Please cite this article as: Lai, H-J., Kuan, C-H., Wu, H-C., Tsai, J-C., Chen, T-M., Hsieh, D-J., Wang, T-W., Tailor Design Electrospun Composite Nanofibers with Staged Release of Multiple Angiogenic Growth Factors for Chronic Wound Healing, *Acta Biomaterialia* (2014), doi: <http://dx.doi.org/10.1016/j.actbio.2014.05.001>

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.



**Tailor Design Electrospun Composite Nanofibers with Staged  
Release of Multiple Angiogenic Growth Factors for Chronic Wound  
Healing**

*Huan-Ju Lai*<sup>1</sup>, *Chen-Hsiang Kuan*<sup>2</sup>, *Hsi-Chin Wu*<sup>3</sup>, *Jui-Che Tsai*<sup>3</sup>, *Tim-Mo Chen*<sup>4</sup>,  
*Dar-Jen Hsieh*<sup>5</sup>, *Tzu-Wei Wang*<sup>1,6</sup> \*

<sup>1</sup> Department of Materials Science and Engineering, National Tsing Hua University,  
Hsinchu, Taiwan

<sup>2</sup> Department of Plastic Surgery, National Taiwan University Hospital Hsinchu  
Branch, Hsinchu, Taiwan

<sup>3</sup> Department of Material Engineering, Tatung University, Taipei, Taiwan

<sup>4</sup> Division of Plastic Surgery, Department of Surgery, Tri-Service General Hospital,  
National Defense Medical Center, Taipei, Taiwan

<sup>5</sup> Sunmax Biotechnology CO., LTD, Tainan, Taiwan

<sup>6</sup> Institute of Biomedical Engineering, National Tsing Hua University, Hsinchu,  
Taiwan

Keywords: electrospinning, nanofiber, angiogenic growth factors, controlled release,  
skin tissue engineering

\* Corresponding Author:

Tzu-Wei Wang, Ph.D.

Associate Professor

Department of Materials Science and Engineering, and Institute of Biomedical  
Engineering

National Tsing Hua University

101, Section 2, Kuang-Fu Road, Hsinchu, Taiwan 30013, R.O.C.

Tel: +886-3-5715131 ext. 33856

Fax: +886-3-5722366

Email: twwang@mx.nthu.edu.tw

Download English Version:

<https://daneshyari.com/en/article/10158995>

Download Persian Version:

<https://daneshyari.com/article/10158995>

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