

## Accepted Manuscript

Title: A novel microporous oxidized bacterial cellulose/arginine composite and its effect on behavior of fibroblast/endothelial cell

Authors: Hui Qiao, Tengfei Guo, Yudong Zheng, Liang Zhao, Yi Sun, Yang Liu, Yajie Xie



PII: S0144-8617(17)31432-7  
DOI: <https://doi.org/10.1016/j.carbpol.2017.12.026>  
Reference: CARP 13088

To appear in:

Received date: 1-8-2017  
Revised date: 3-12-2017  
Accepted date: 12-12-2017

Please cite this article as: Qiao H, Guo T, Zheng Y, Zhao L, Sun Y, Liu Y, Xie Y, A novel microporous oxidized bacterial cellulose/arginine composite and its effect on behavior of fibroblast/endothelial cell, *Carbohydrate Polymers* (2010), <https://doi.org/10.1016/j.carbpol.2017.12.026>

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.

# A novel microporous oxidized bacterial cellulose/arginine composite and its effect on behavior of fibroblast/endothelial cell

Hui Qiao<sup>a,†</sup>, Tengfei Guo<sup>b,†</sup>, Yudong Zheng<sup>a,\*</sup>, Liang Zhao<sup>b,\*</sup>, Yi Sun<sup>a</sup>, Yang Liu<sup>b</sup>, Yajie Xie<sup>a</sup>

<sup>a</sup> School of Materials Science and Engineering, University of Science and Technology Beijing, Beijing 100083, PR China.

<sup>b</sup> Research Center for Bioengineering and Sensing Technology, School of Chemistry and Biological Engineering, Beijing Key Laboratory for Bioengineering and Sensing Technology, University of Science & Technology Beijing, Beijing 100083, P. R. China.

## Highlights

- The nanostructure of BC is transformed into microstructure, which increased the contact area.
- The Schiff base reaction between Arg and MOBC forms C=N covalent bond, which has reduced the cytotoxicity of aldehyde to the cell.

Download English Version:

<https://daneshyari.com/en/article/7783962>

Download Persian Version:

<https://daneshyari.com/article/7783962>

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