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Authors: Yongmei Xiao, Liduo Rong, Bijia Wang, Zhiping Mao, Hong Xu, Yi Zhong, Linping Zhang, Xiaofeng Sui

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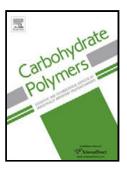
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A light-weight and high-efficacy antibacterial nanocellulose-based

sponge via covalent immobilization of gentamicin

Yongmei Xiao, Liduo Rong, Bijia Wang, Zhiping Mao, Hong Xu, Yi Zhong, Linping

Zhang, Xiaofeng Sui\*

Key Lab of Science & Technology of Eco-textile, Ministry of Education, College of

Chemistry, Chemical Engineering and Biotechnology, Donghua University, Shanghai

201620, People's Republic of China.

\*Corresponding author:

Address: No. 2999 North Renmin Road, Shanghai 201620, China.

Tel.: +86 21 67792605. Fax: +86 21 67792707.

E-mail: suixf@dhu.edu.cn

**Highlights** 

Antibacterial nanocellulose-based sponges were prepared via

covalently bonding

Contact-active antibacterial sponges with bactericidal rate: >99.9% for

*E. coli* and > 99.9% for *S. aureus* 

Simple surface modification of CNF sponges for improved

mechanical performance

CNF sponges provide a platform to exploit new forms of advanced

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