

Supporting Information

Communication

Preparation and Antibacterial Properties of PLA-Based Composite Nanofiber Membrane Material Loaded with Cationic Antibacterial Agent by Electrospinning

Hongyu Gong ^{1,†}, Lin Li ^{1,†}, Na Li ¹, Lina Tian ¹, Tao Zhang ², Lexin Zhang ^{1,*} and Tifeng Jiao ^{1,*}

¹ State Key Laboratory of Metastable Materials Science and Technology, Hebei Key Laboratory of Applied Chemistry, Hebei Key Laboratory of Nano-Biotechnology, Hebei Key Laboratory of Heavy Metal Deep-Remediation in Water and Resource Reuse, Yanshan University, Qinhuangdao 066004, China; hy_gong0606@163.com (H.G.); lilin0808@stumail.ysu.edu.cn (L.L.); nali0512@stumail.ysu.edu.cn (N.L.); lilin071098@163.com (L.T.)

² Qinhuangdao Huaheng Bioengineering Co., Ltd., Qinhuangdao 066200, China; wuzihang@stumail.ysu.edu.cn

* Correspondence: zhanglexin@ysu.edu.cn (L.Z.); tfjiao@ysu.edu.cn (T.J.)

† These authors contributed equally to this work.

This material includes

Cytotoxicity test

Supplementary Fig. S1 and Fig. S2

Cytotoxicity tests

The 3-(4,5-Dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) method is one of the commonly used methods for cytotoxicity of the nanofiber membranes. Cell viability represents the percentage of live cells to untreated cells, which served as a control group. The prepared nanofibers were sterilized by UV for 30 min and then soaked in the prepared culture solution at 37 °C for 24 hours to obtain a fiber extract, respectively. Finally, 3T3 cells were plated in 96-well plates at a density of 105 cell wells and incubated at 37 °C for 24 hours.

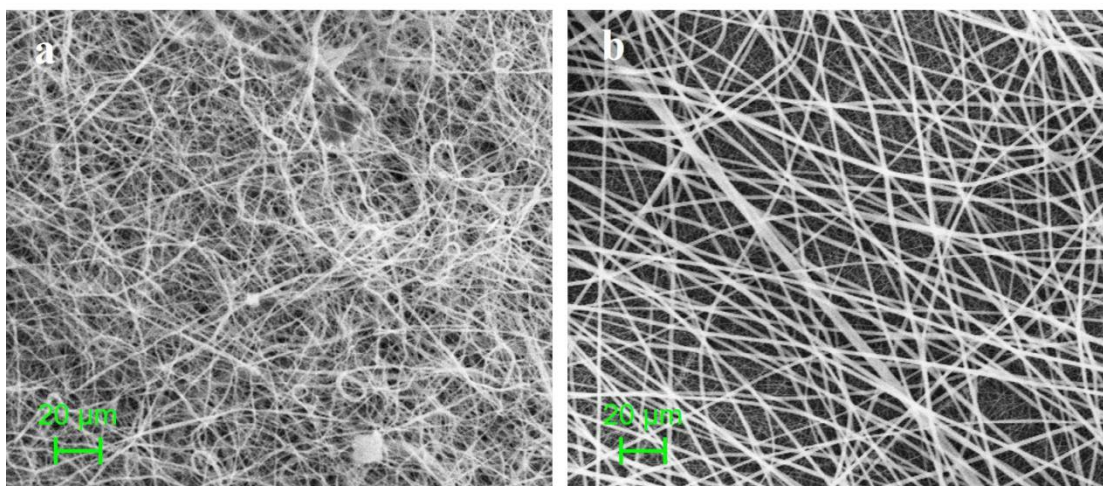


Figure S1. SEM images of (a) PLA/5-Cl8Q with 0.1 g and (b) PLA/5-Cl8Q with 0.2 g.

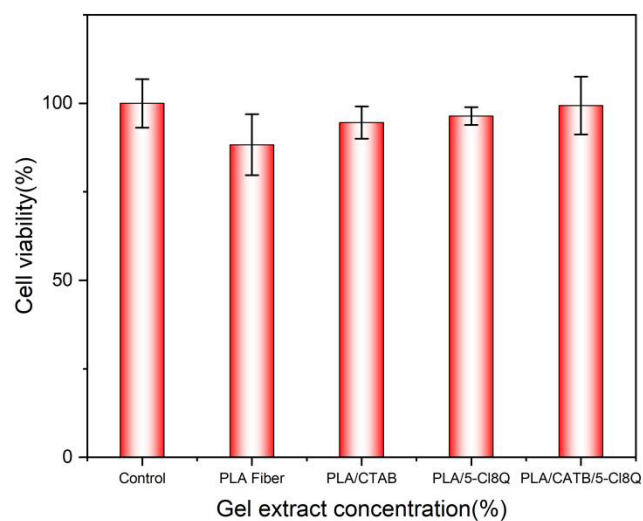


Figure S2. Image of Cytotoxicity results.