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Homogeneous and Efficient Production of a Bacterial Nanocellulose-Lactoferrin-Collagen Composite under an Electric Field as a Matrix to Promote Wound Healing

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S1 ATR-FTIR spectroscopy

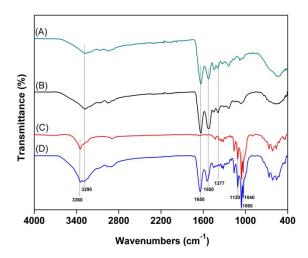


Fig. S1 FTIR spectra of (A) LF, (B) COL, (C) BNC and (D) BNC/LF/COL composite obtained by electrophoresis.

S2 HIGHLIGHTS

- 1. A novel green technology based on electrophoresis was developed to synthesize BNC based composites.
- 2. The technology showed superior advantages with general applicability over the traditional immersion-adsorption methods.
- 3. A bacterial nanocellulose-lactoferrin-collagen composite was fabricated using the electrophoresis.
- 4. The BNC composite exhibited strong antibacterial activity and good cytocompatibility.
- 5. The BNC composite exhibited a greater therapeutic effect in a rat model of wound healing.