

Supplementary material

A multifunctional piezoelectric ZIF-8/PVDF fiber dressing for managing infected wound healing

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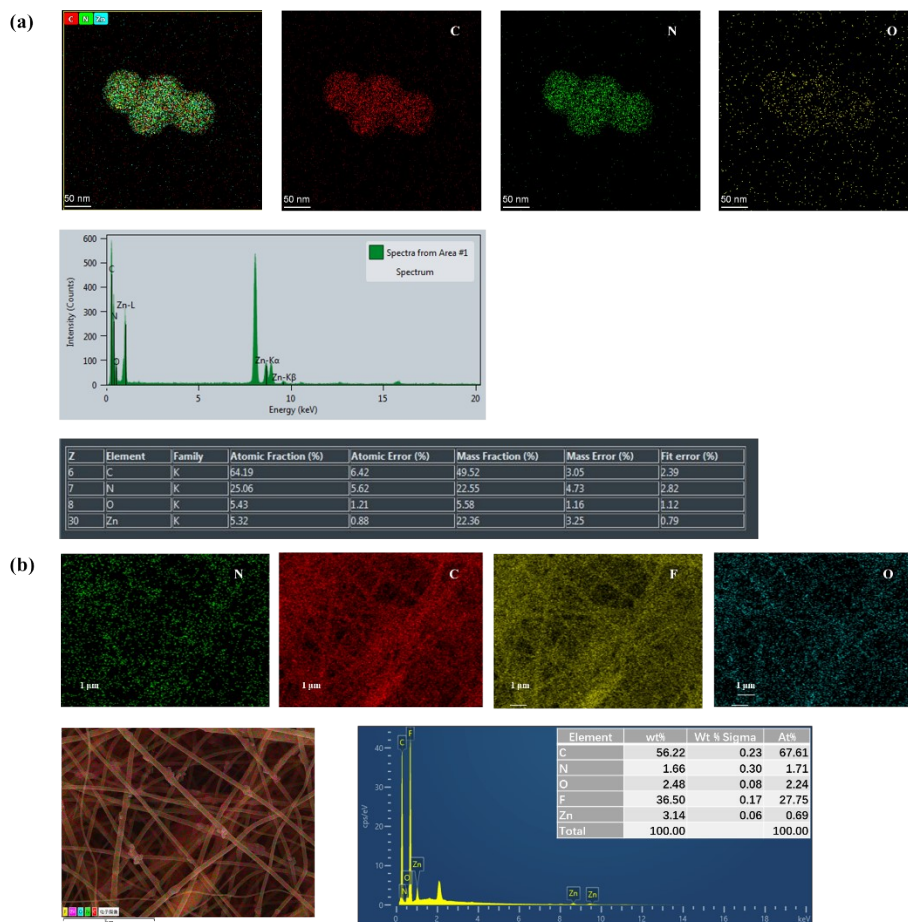


Fig. S1 (a) EDS elemental mapping and spectra of corresponding elements of C, N, and O of ZIF-8 NPs. (b) EDS elemental mapping and spectra of corresponding elements of N, C, F, and O of 5 % ZIF-8/PVDF fiber film.

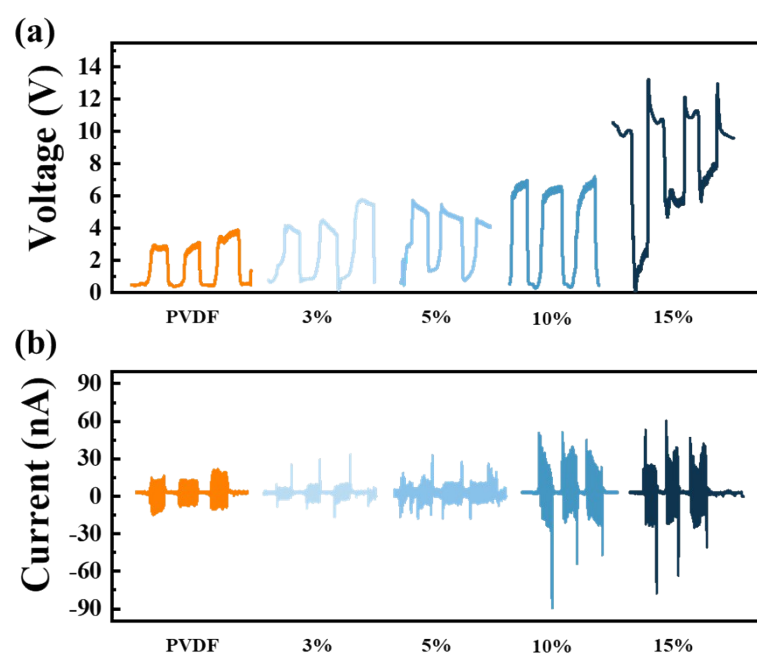


Fig. S2 Values of (a) V_{oc} and (b) I_{sc} of PVDF and ZIF-8/PVDF fiber films under ultrasound.

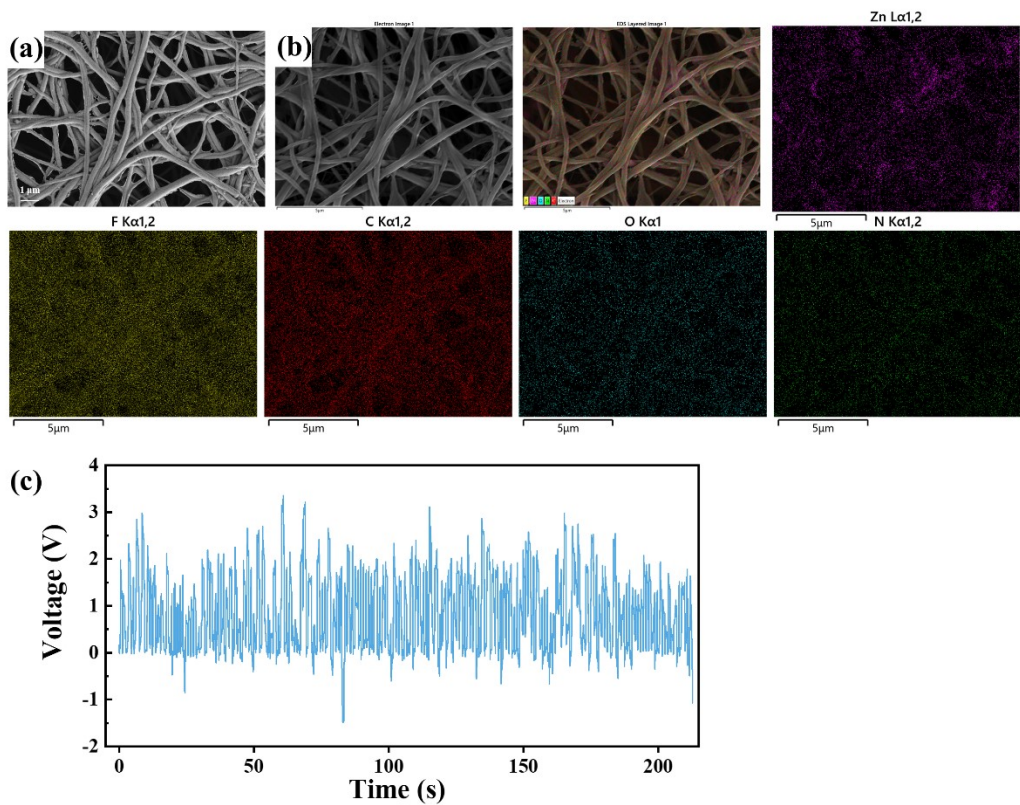


Fig. S3 (a) The SEM images of 5% ZIF-8/PVDF fiber film after 14-day ultrasound. (b) Corresponding EDS elemental mapping of Zn, F, C, O, and N of 15% ZIF-8/PVDF fiber film 14-day ultrasound. (c) Voc of 5% ZIF-8/PVDF fiber films after 14-day ultrasound.

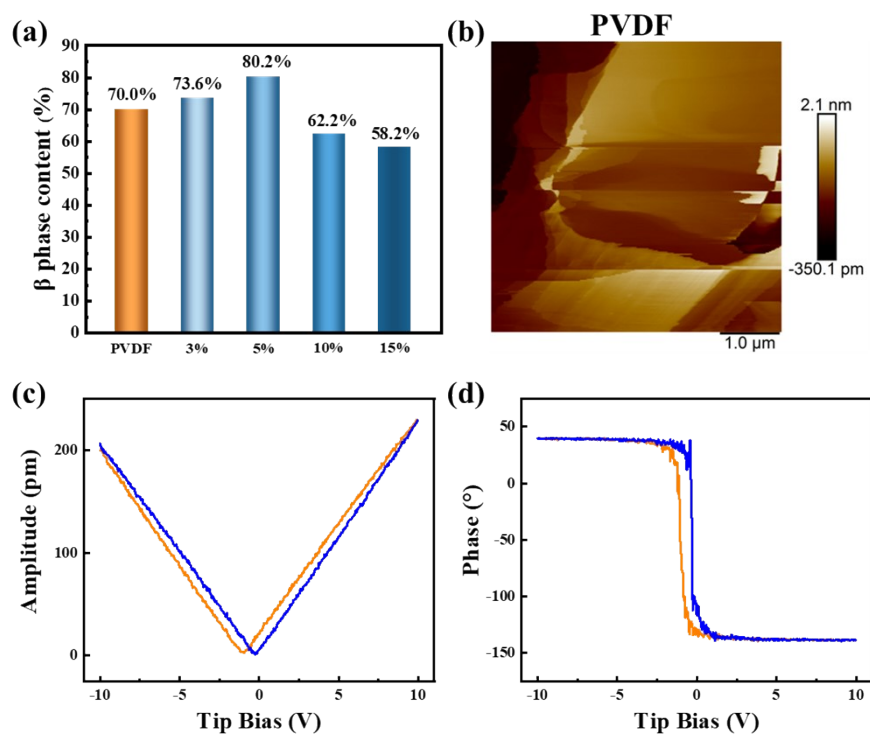


Fig. S4 (a) The relative content of the β phase of PVDF and ZIF-8/PVDF fiber films. (b) PFM amplitude image, (c) The amplitude loop, and (d) The phase hysteresis loop of the PVDF fiber film.

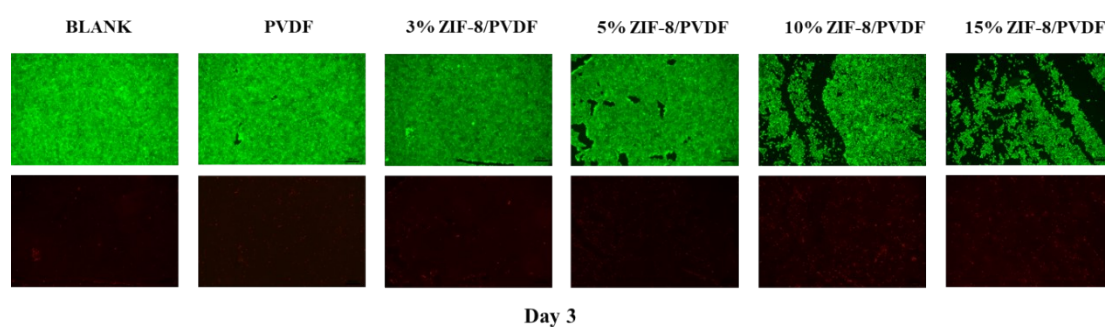


Fig. S5 Live/dead cell staining images of cells cocultured with the different fiber films for 3 days.

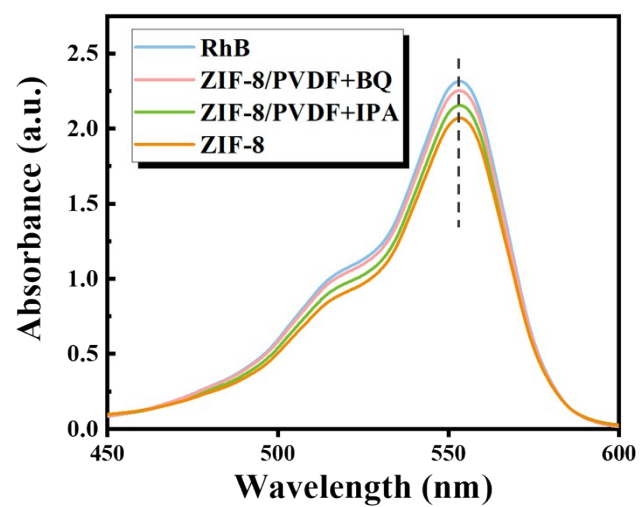


Fig. S6 RhB degradation ratio over the 5% ZIF-8/PVDF fiber film in the presence of various radical scavengers at 5 min of ultrasound.

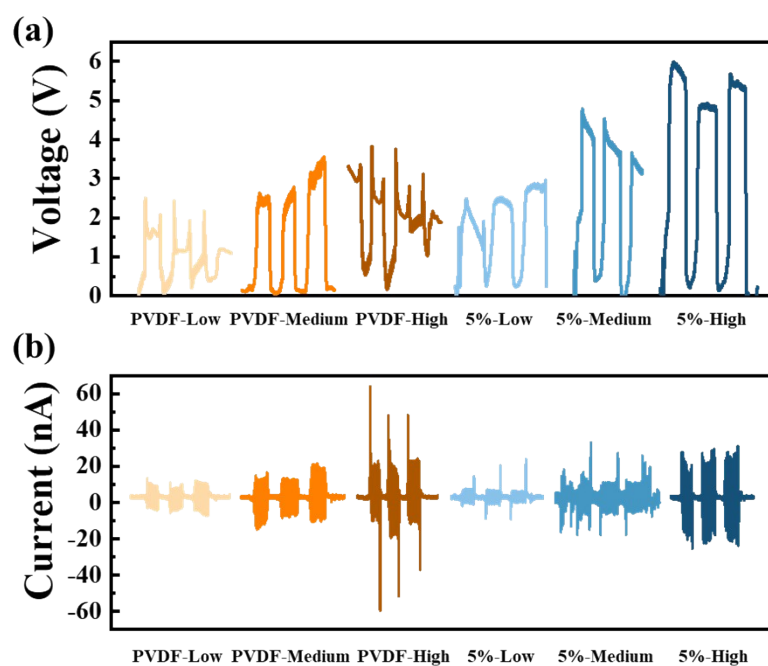


Fig. S7 Values of (a) V_{oc} and (d) I_{sc} of PVDF and 5% ZIF-8/PVDF fiber films under different ultrasound frequencies.

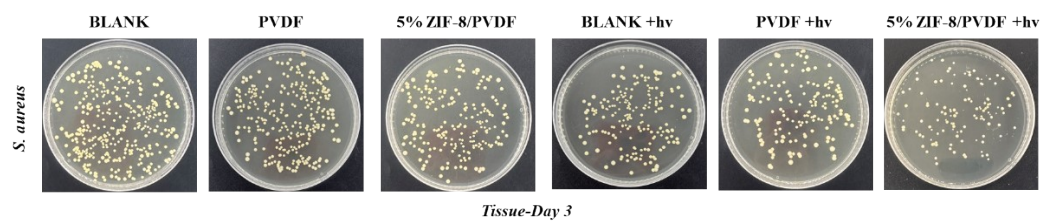


Fig. S8 Plate photographs of the colonies formed by *S. aureus* on day 3.