

Supplementary Information

Fabrication of pH Responsive Core-Shell Nanosystem with Low-Temperature Photothermal Therapy Effect for Treating Bacterial Biofilm Infection

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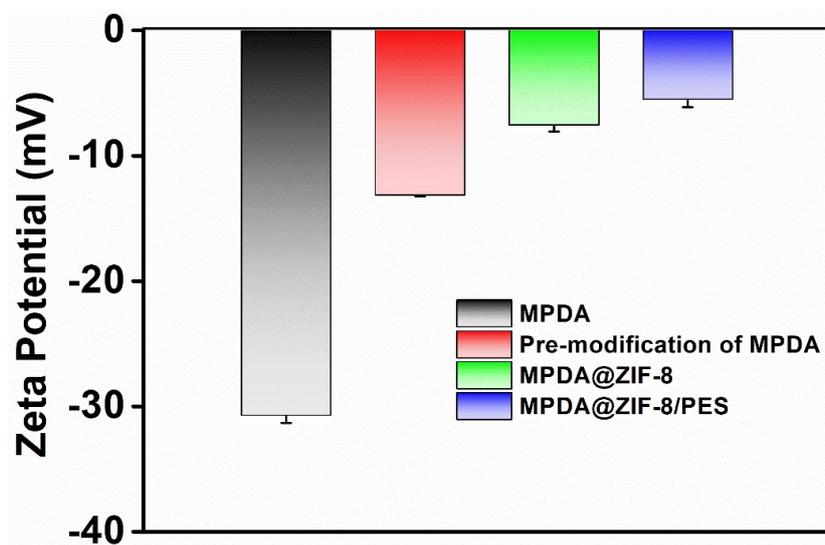


Figure S1. Zeta potentials of different NPs.

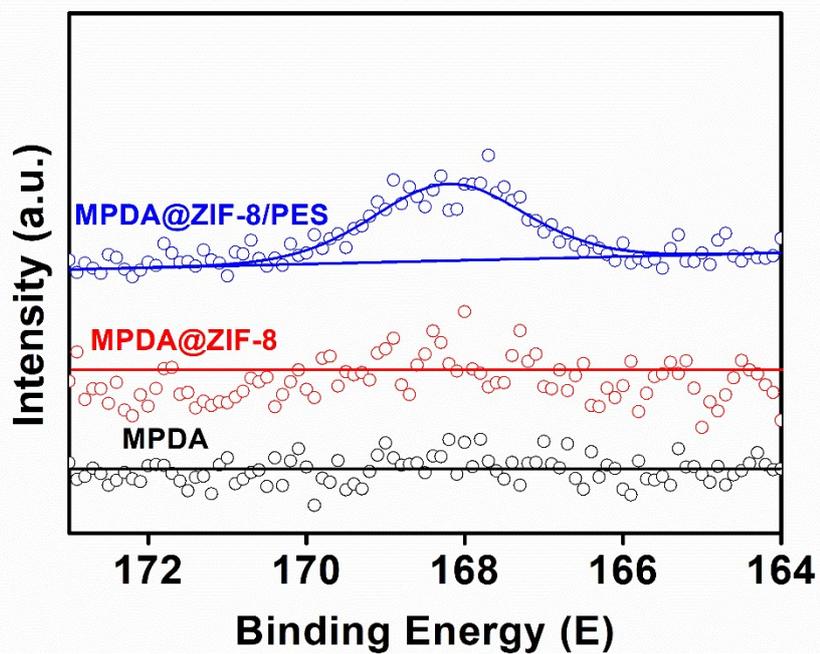


Figure S2. XPS spectra of S_{2p} obtained MPDA, MPDA@ZIF-8 and MPDA@ZIF-8/PES NPs.

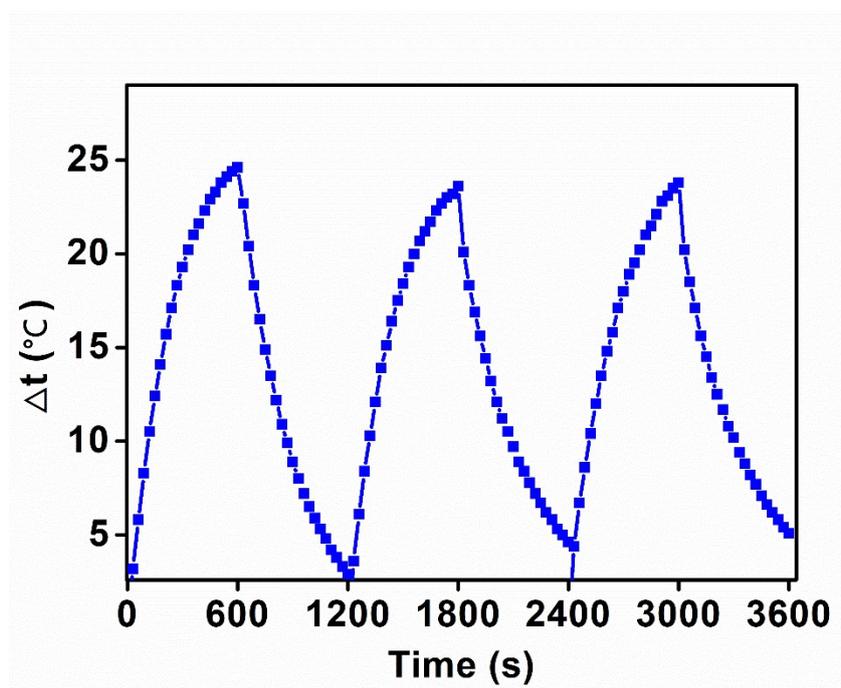


Figure S3. Photostability of MPDA@ZIF-8/PES NPs with 3 cycles under 808 nm irradiation (1 W/cm^2), $[\text{MPDA@ZIF-8/PES}] = 0.5 \text{ mg/mL}$.

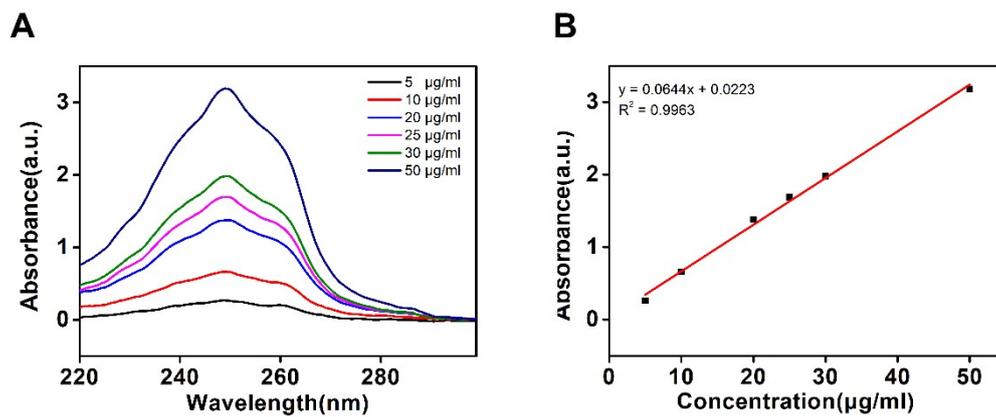


Figure S4. Standard curve for PES.

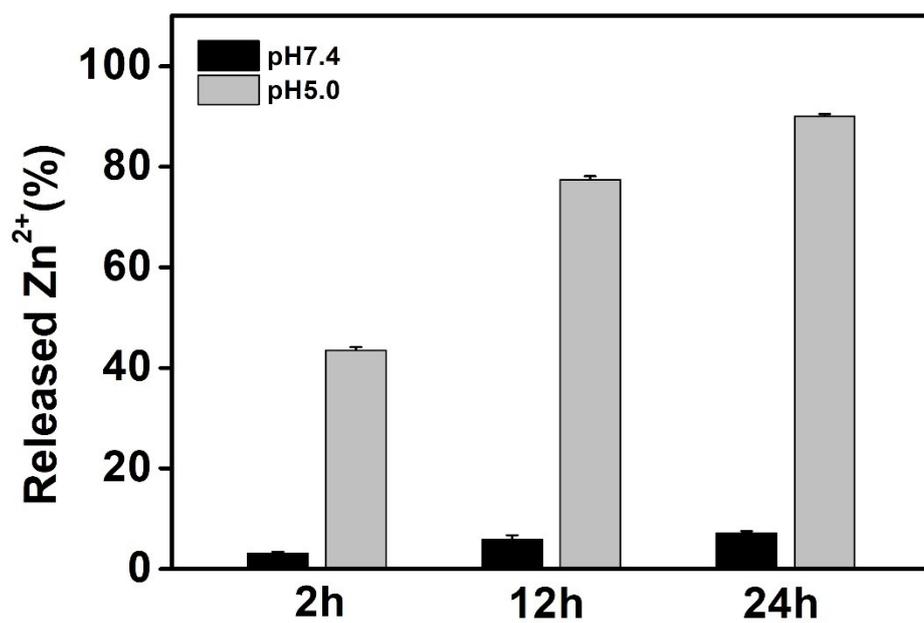


Figure S5. Cumulative release of Zn²⁺ under pH 7.4 and 5.5, respectively.

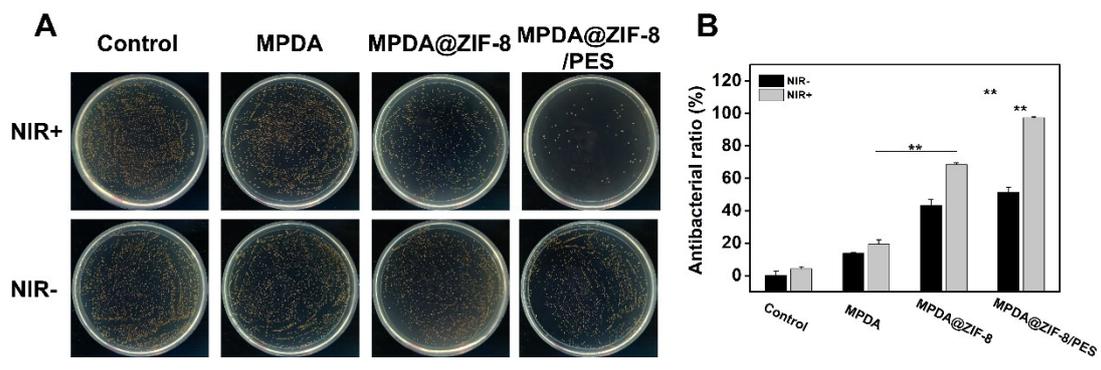


Figure S6. (A) *S. aureus* with various treatments at the same concentration of 0.2 mg/mL. (B) The corresponding antibacterial rate of *S. aureus* with various treatments.

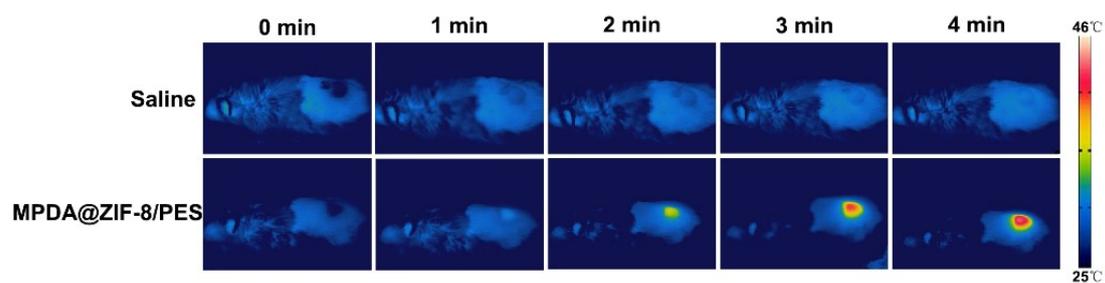


Figure S7. Infrared thermal images of *S. aureus* infected wounds in Balb/c mice treated with saline and MPDA@ZIF-8/PES NPs with NIR laser irradiation (1 W/cm^2) at different times.

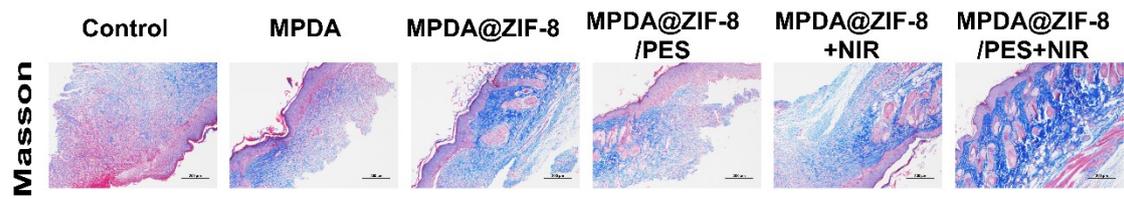


Figure S8. Histologic analysis of wound tissue samples obtained from the *S. aureus* infected mice by Masson's trichrome staining after 8 days of treatment.

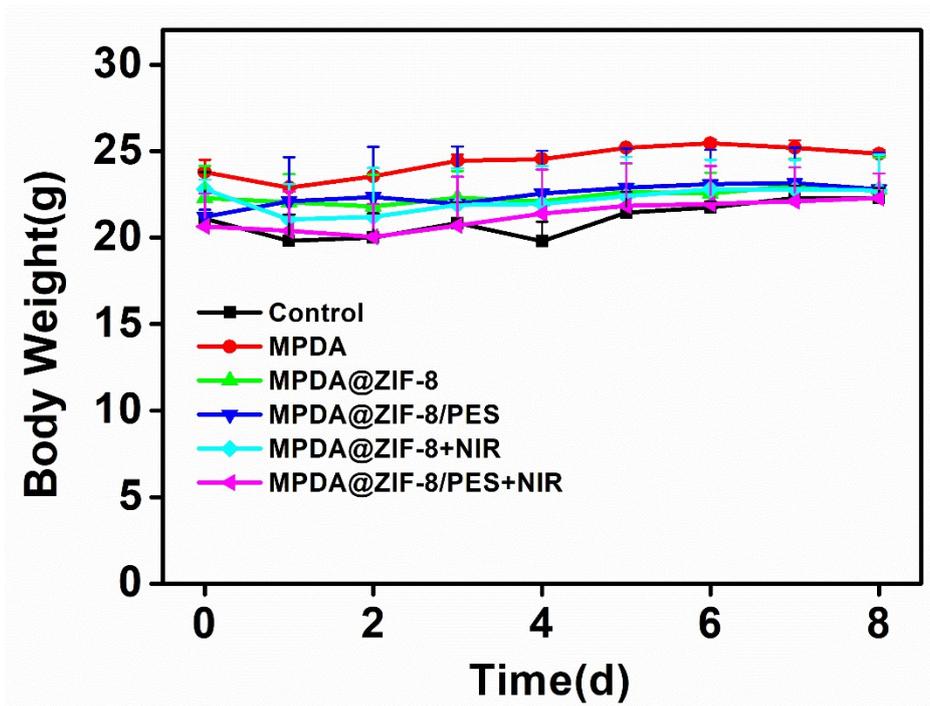


Figure S9. Changes of body weight of the mice with different treatments.

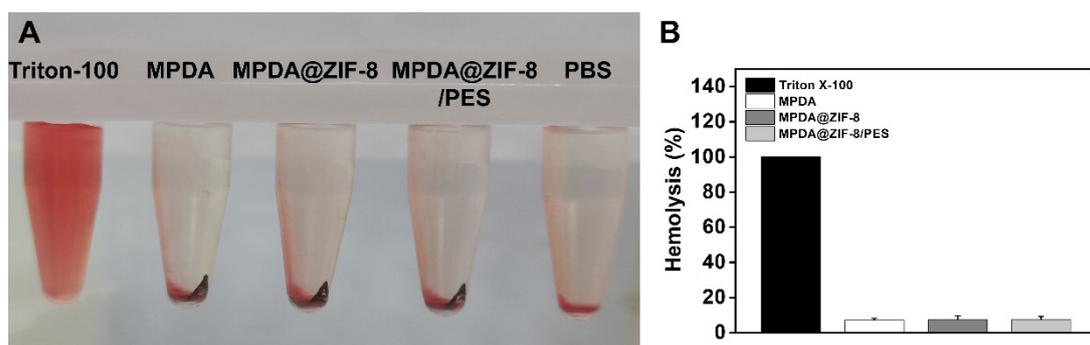


Figure S10. (A) Photograph of erythrocyte suspension with different treatments. (B) Hemolytic analysis of different treatments of NPs. Triton X-100 (1%) was used as a positive control (100%), whereas PBS was used as a negative control (0%).