

Antibacterial AIE polycarbonates endowed with selective imaging by adjusting electrostaticity of the mixed-charge backbone

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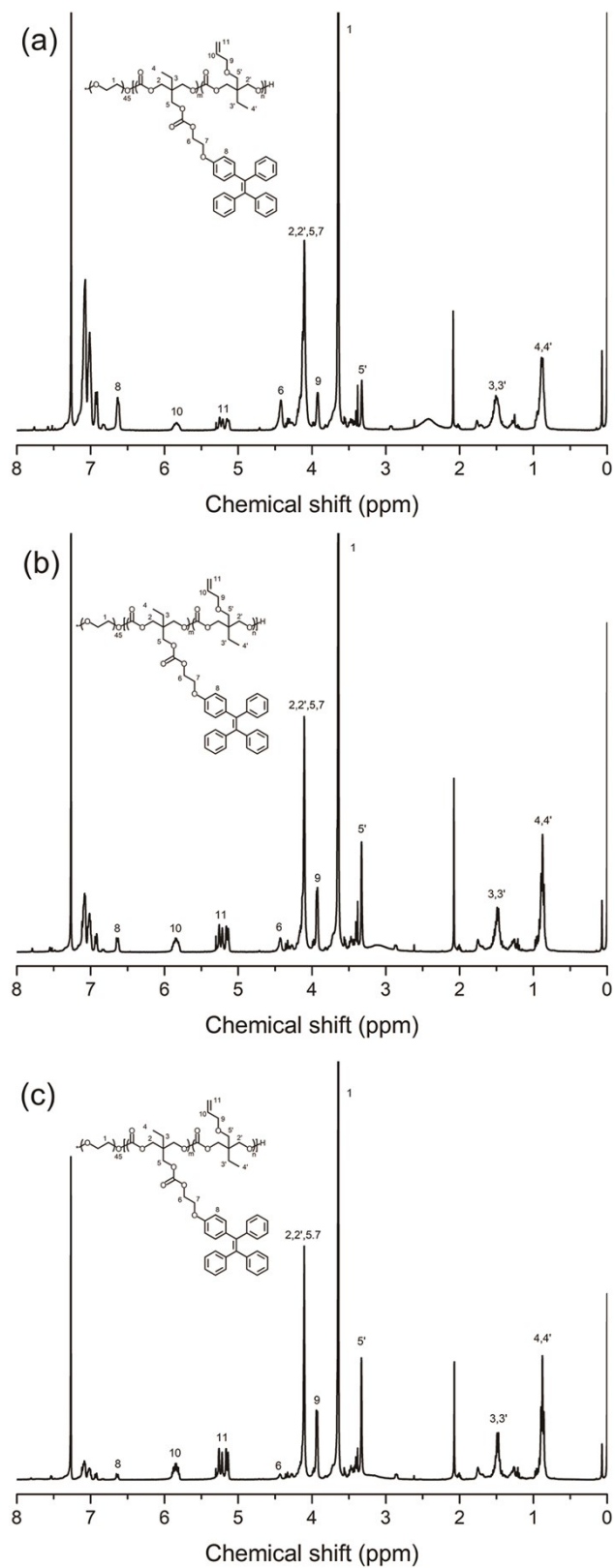


Fig. S1 $^1\text{H-NMR}$ spectra of mPEG-P(AOMEC-TPETC) (a) Entry1; (b) Entry2; (c) Entry 3.

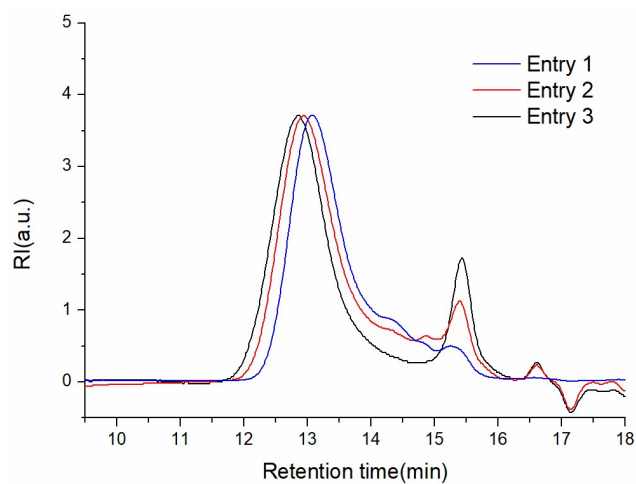
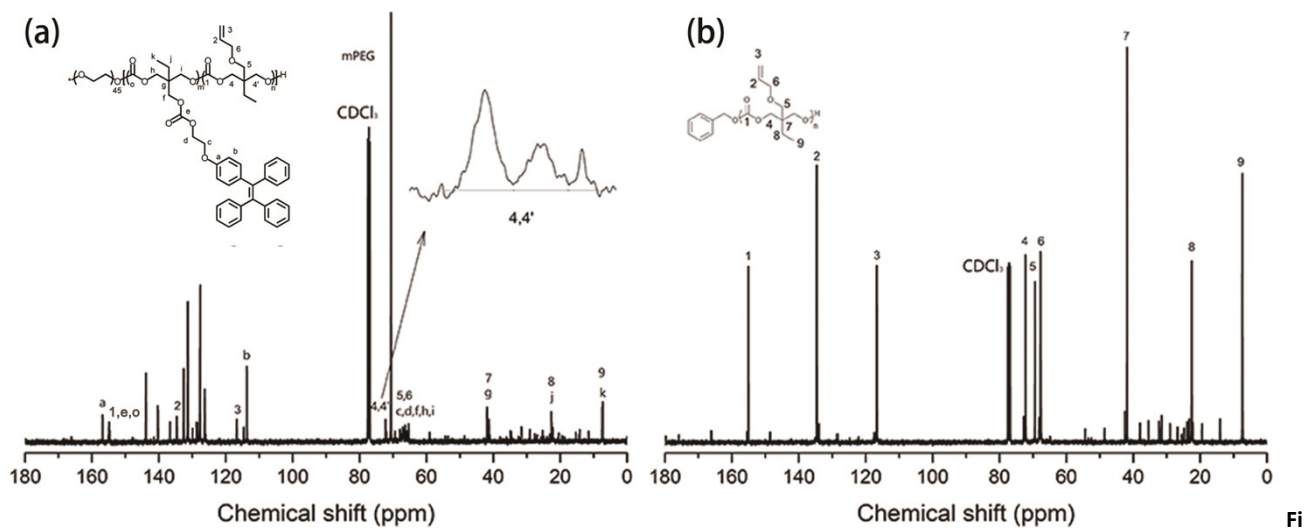


Fig. S2 GPC curves of mPEG-P(AOMECP-TPETC).



g. S3 ^{13}C -NMR spectra of (a) Entry1 and (b) P(AOMECP).

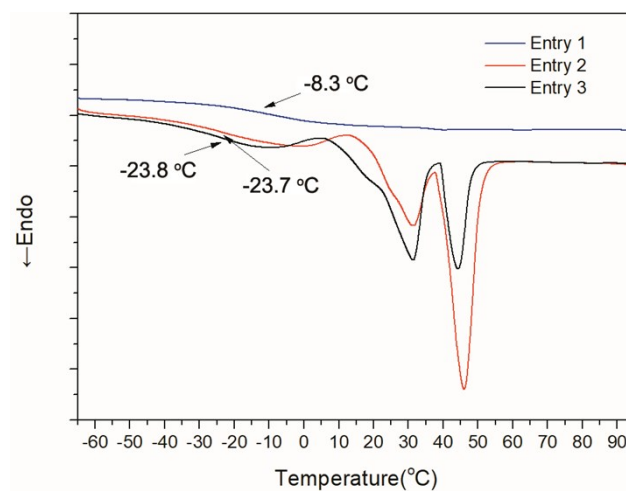


Fig. S4 DSC curves of mPEG-P(AOMECP-TPETC).

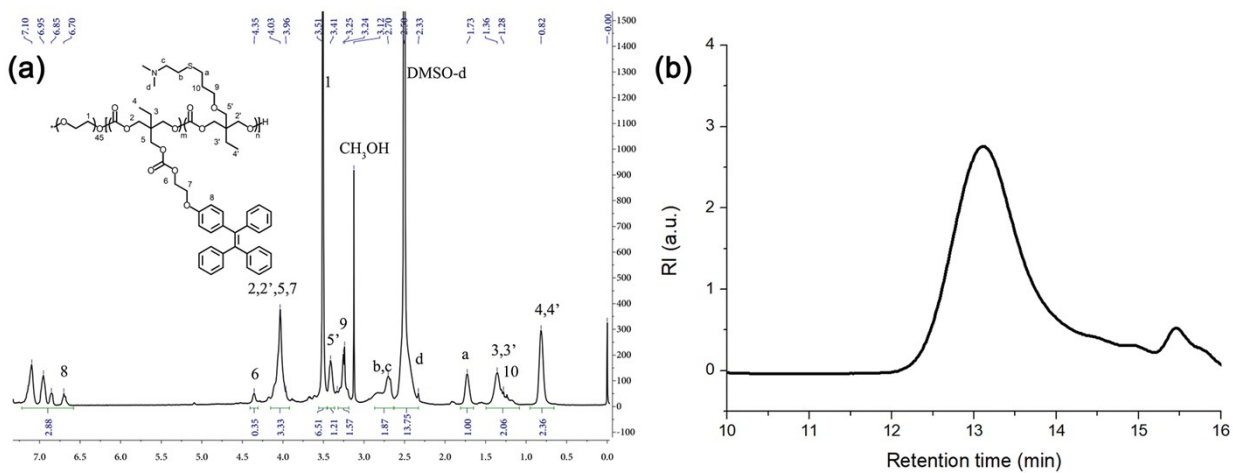


Fig. S5 (a) $^1\text{H-NMR}$ spectrum of NI-P1; (b) GPC curve of NI-P1.

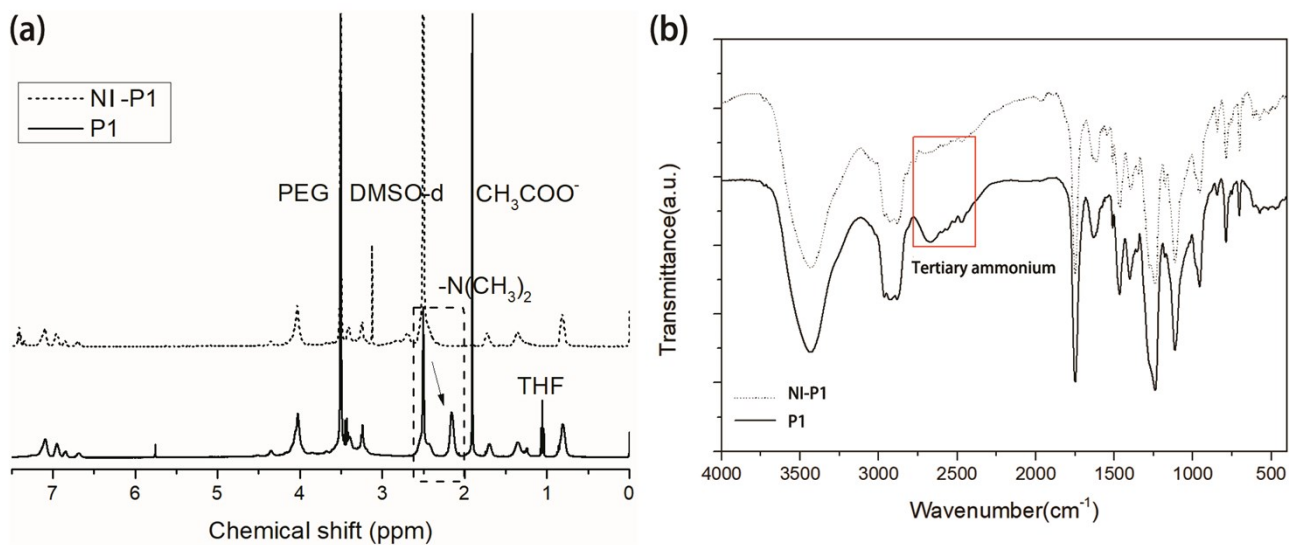


Fig. S6 (a) $^1\text{H-NMR}$ spectra and (b) FT-IR spectra of P1 and NI-P1.

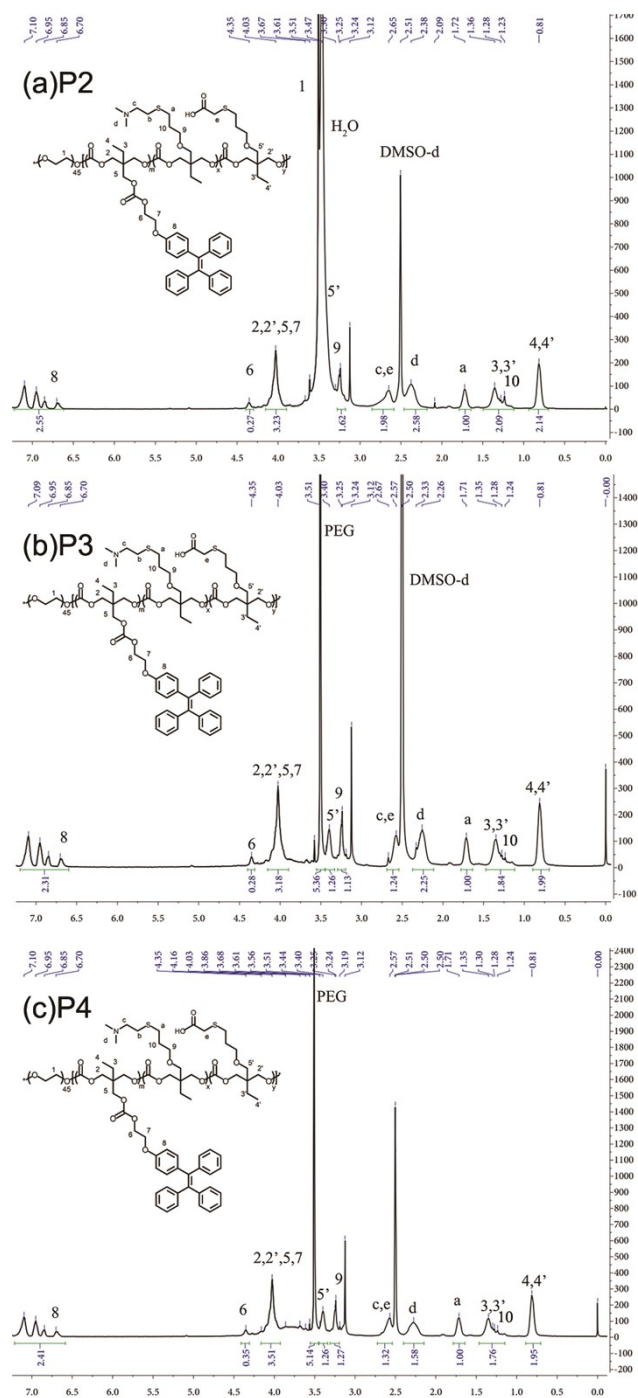


Fig. S7 $^1\text{H-NMR}$ spectra of mixed-charge AIE polycarbonates (a) P2, (b) P3 and (c) P4.

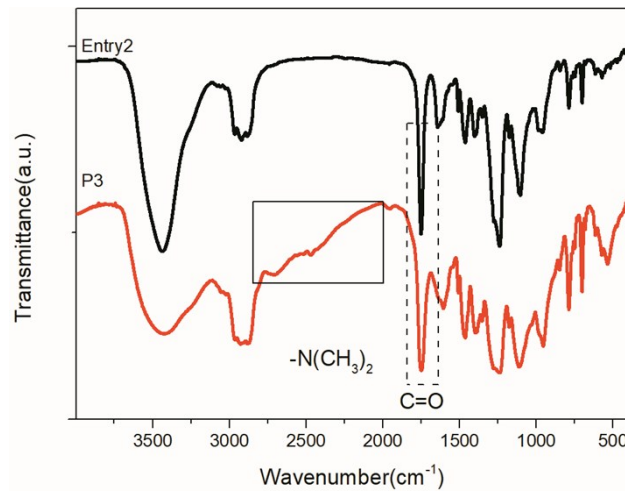


Fig. S8 FT-IR spectra of functional polycarbonates

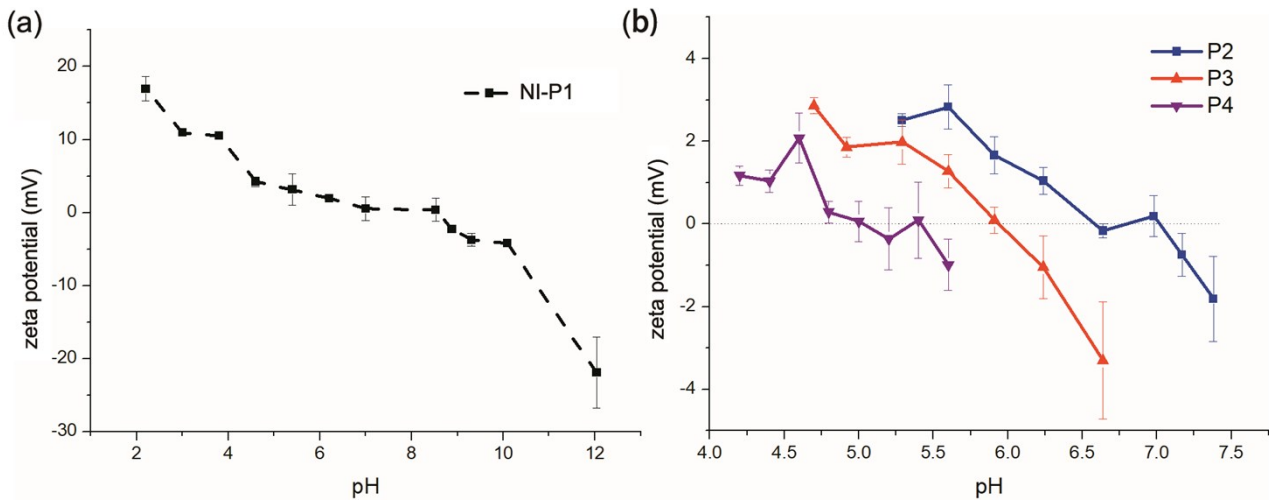


Fig. S9 Changes in zeta potential of cationic and mix-charged polycarbonate aggregates against pH value.

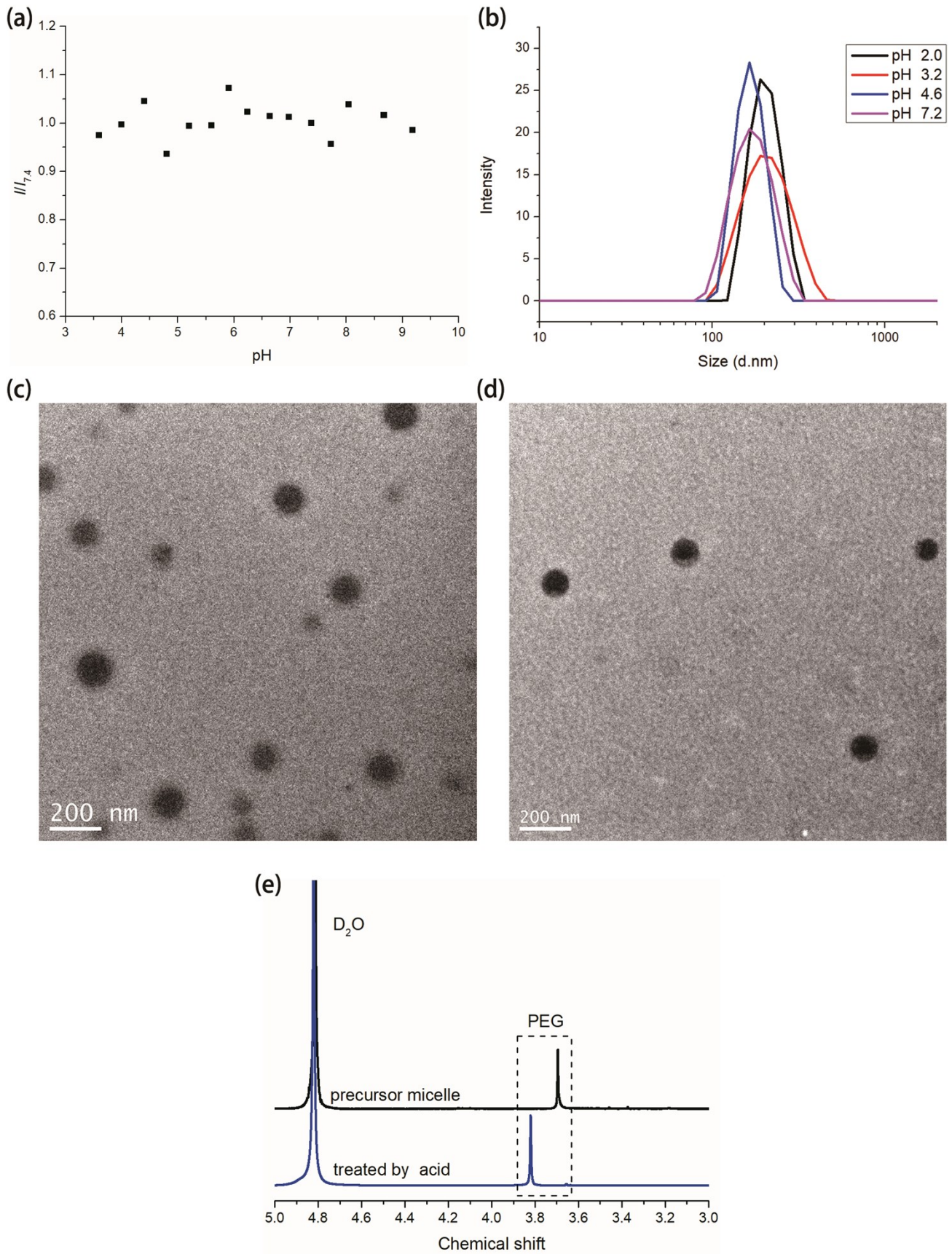


Fig. S10 (a) Changes in fluorescence intensity of NI-P1 against pH value; (b) DLS curves of precursor at different pH; TEM photos of NI-P1 micelle at (c) pH 7.2 and (d) pH 2.2; (e) $^1\text{H-NMR}$ spectra of NI-P1 micelle in D_2O .

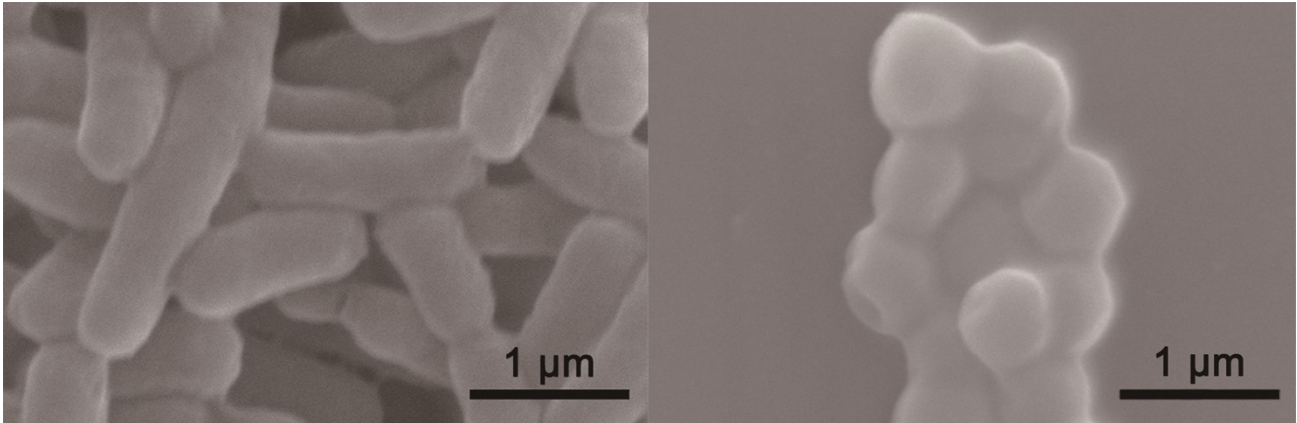


Fig. S11 SEM photos of (a) *E. coli* and (b) *S. aureus*.

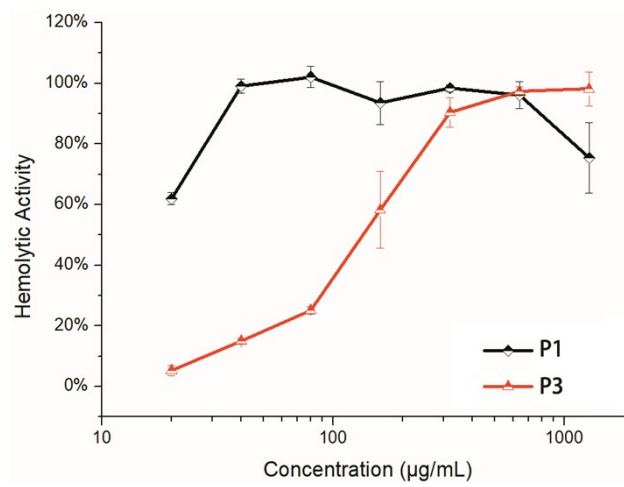


Fig. S12 Haemolysis assay of P1 and P3 with various concentrations.

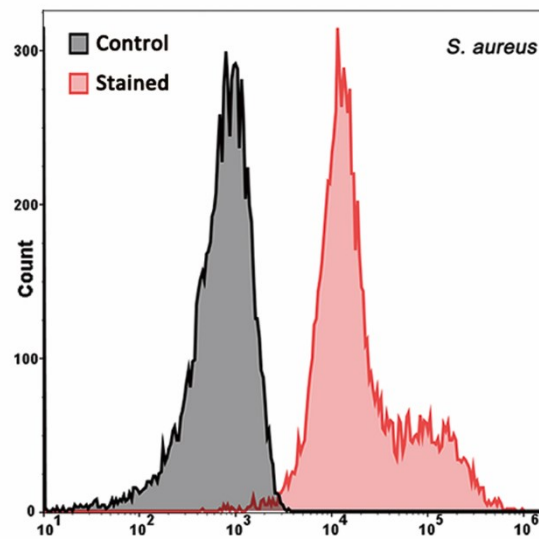


Fig. S13 Flow cytometry analyses of *S. aureus* stained by P2.