

## Supporting Information

### Light-driven Self-healing Polyurethane based on PDA@Ag Nanoparticles with Improved Mechanical and Antibacterial Properties

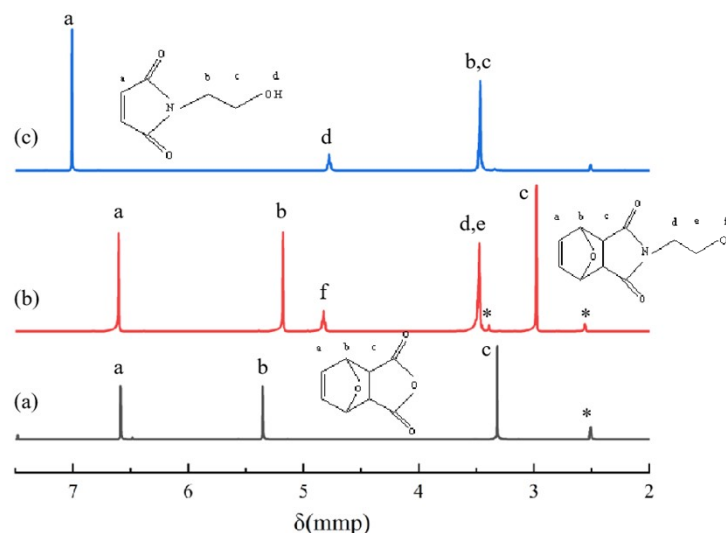
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**Fig. S1** <sup>1</sup>H NMR spectrum of monomer. (a) Furan A; (b) HEMI-A; (c) HEMI

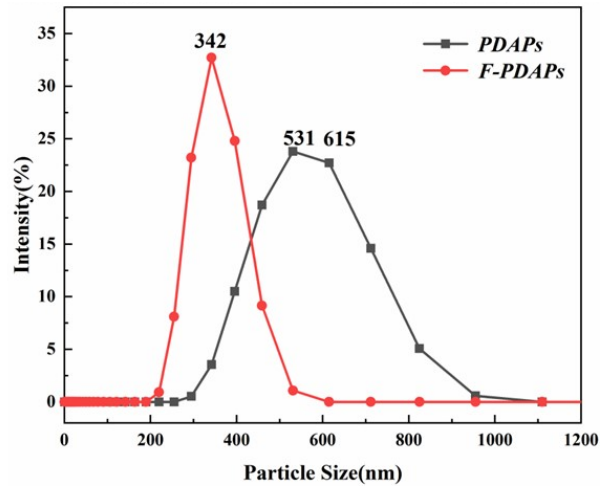


Fig. S2 DLS results of PDA and FPDA.

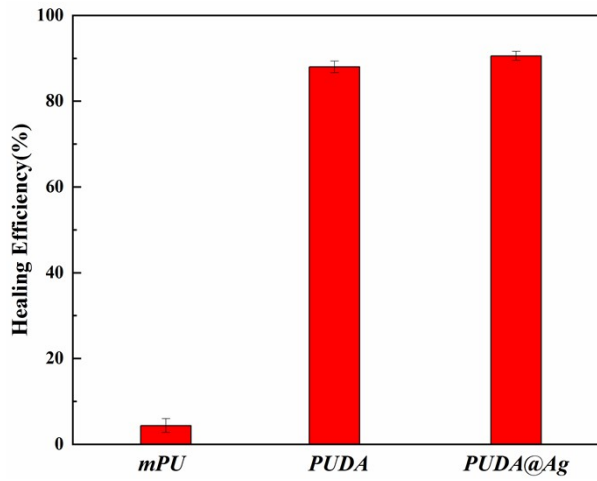


Fig. S3 Self-healing efficiency of PU composite films.

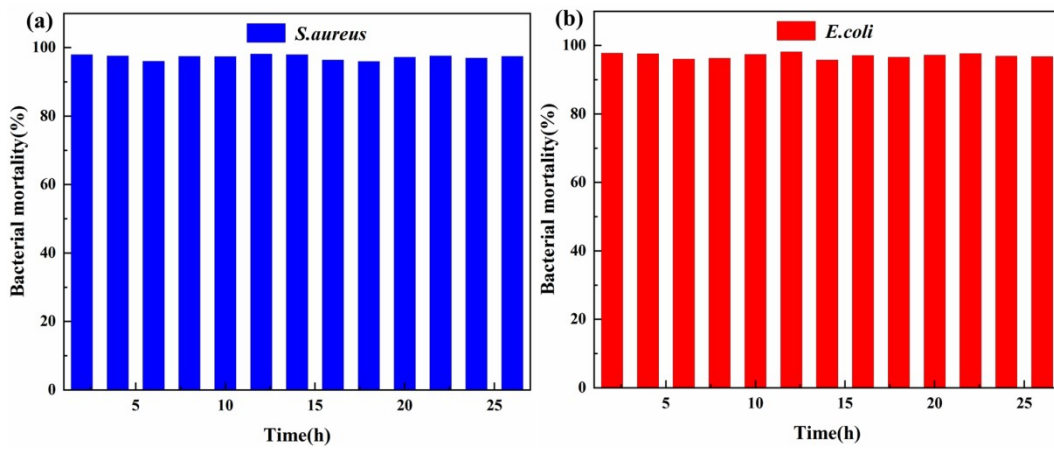


Fig. S4 The bacterial mortality (a) *S.aureus*, (b) *E.coli*.