

# Supporting Information

## Layer-by-Layer Decorated Nanoscale ZIF-8 with High Curcumin Loading Effectively Inactivate Gram-Negative and Gram-Positive Bacteria

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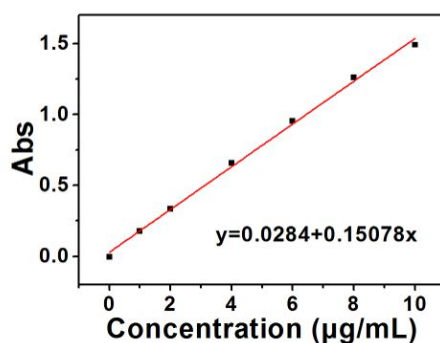


Figure S1. The linear relationship between the concentration of CCM and absorption intensity in ethanol.

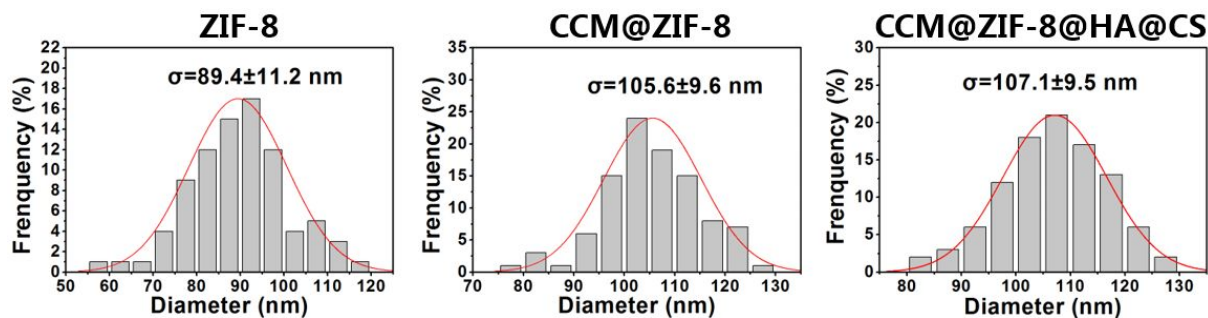


Figure S2. Size distribution histograms of TEM images of ZIF-8, CCM@ZIF-8 and CCM@ZIF-8@HA@CS.

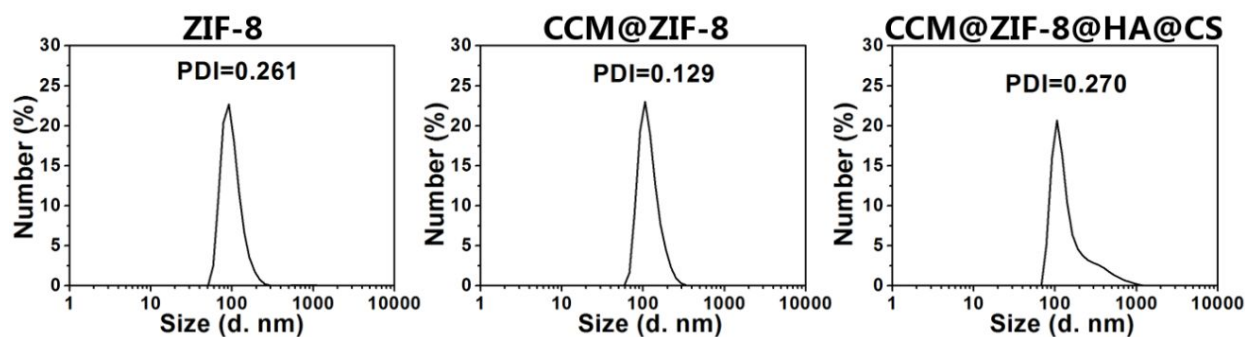


Figure S3. Hydrodynamic size distribution of the as-prepared ZIF-8, CCM@ZIF-8 and CCM@ZIF-8@HA@CS in water.

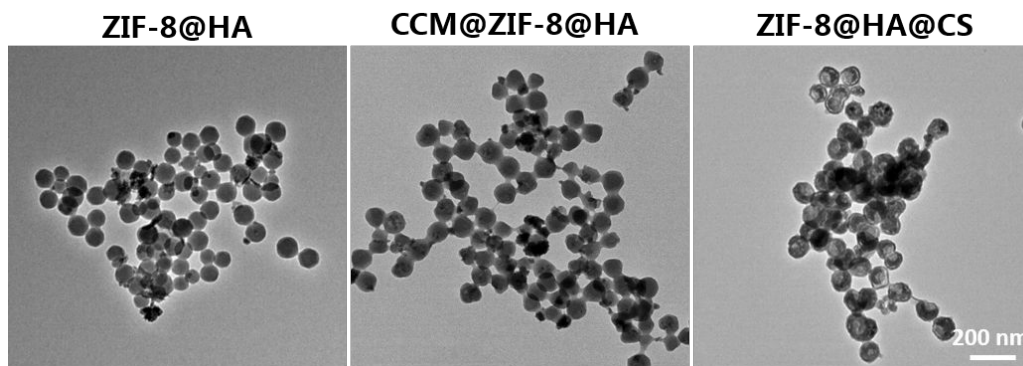


Figure S4. TEM images of ZIF-8@HA NPs, CCM@ZIF-8@HA NPs and ZIF-8@HA@CS NPs.

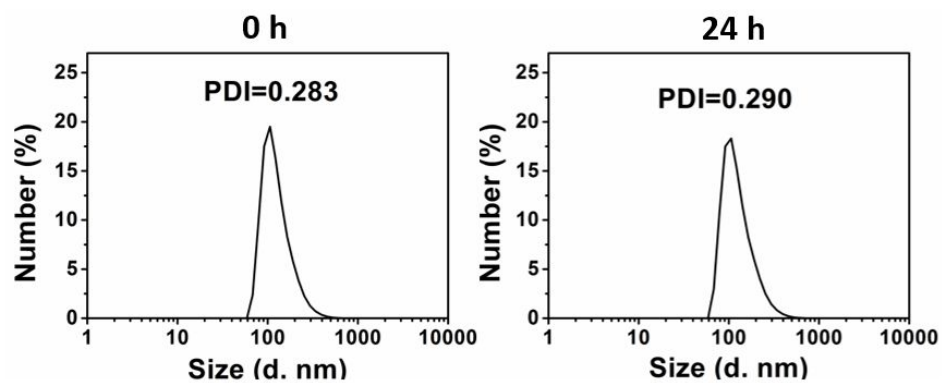


Figure S5. Hydrodynamic size distribution of the as-prepared CCM@ZIF-8@HA@CS stored in LB at different times.

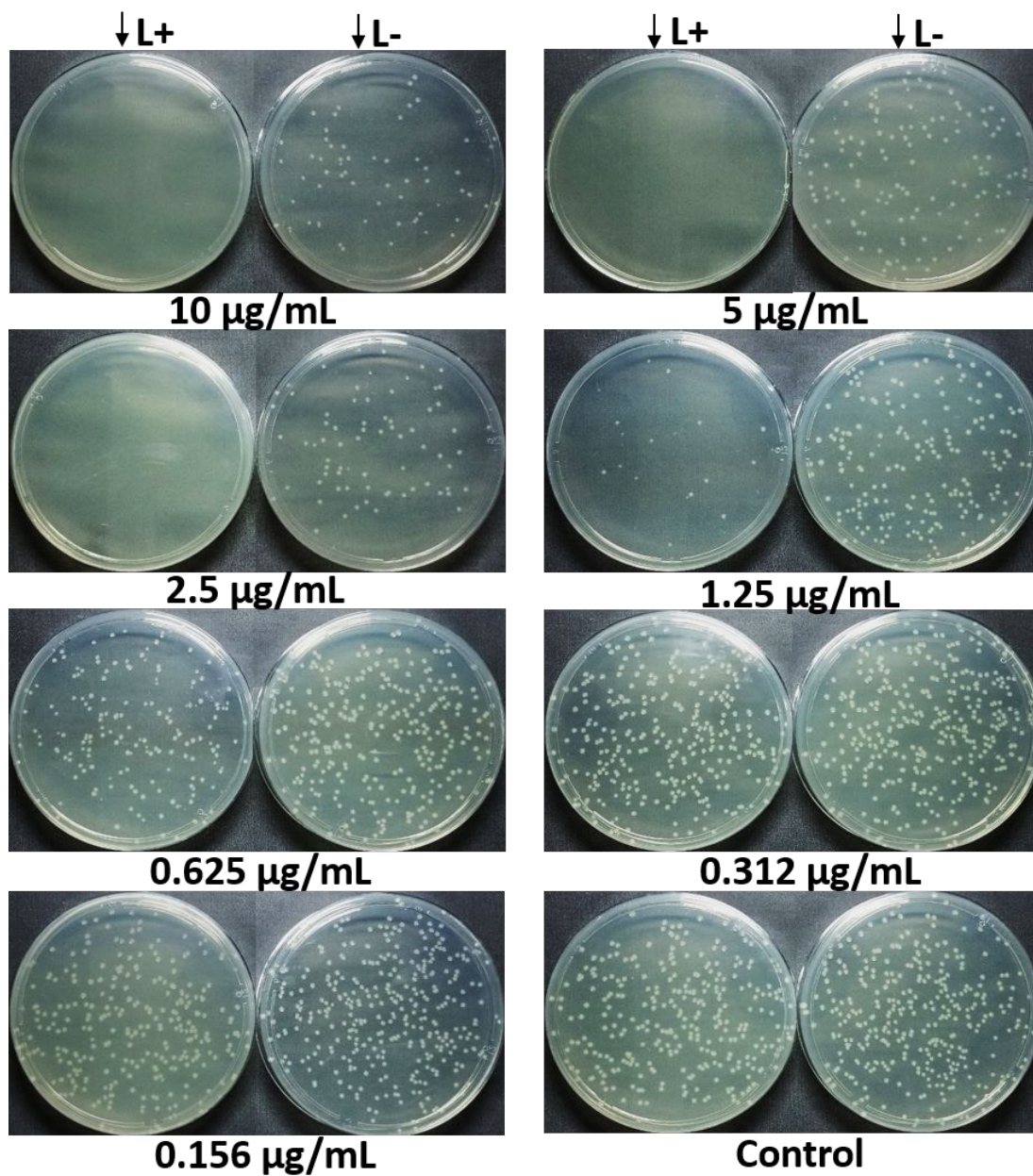


Figure S6. Toxicity of CCM@ZIF-8@HA@CS of different concentrations against *E. coli*. (L-) and (L+) indicate that the bacteria were tested in the dark or 10 min blue light irradiation.



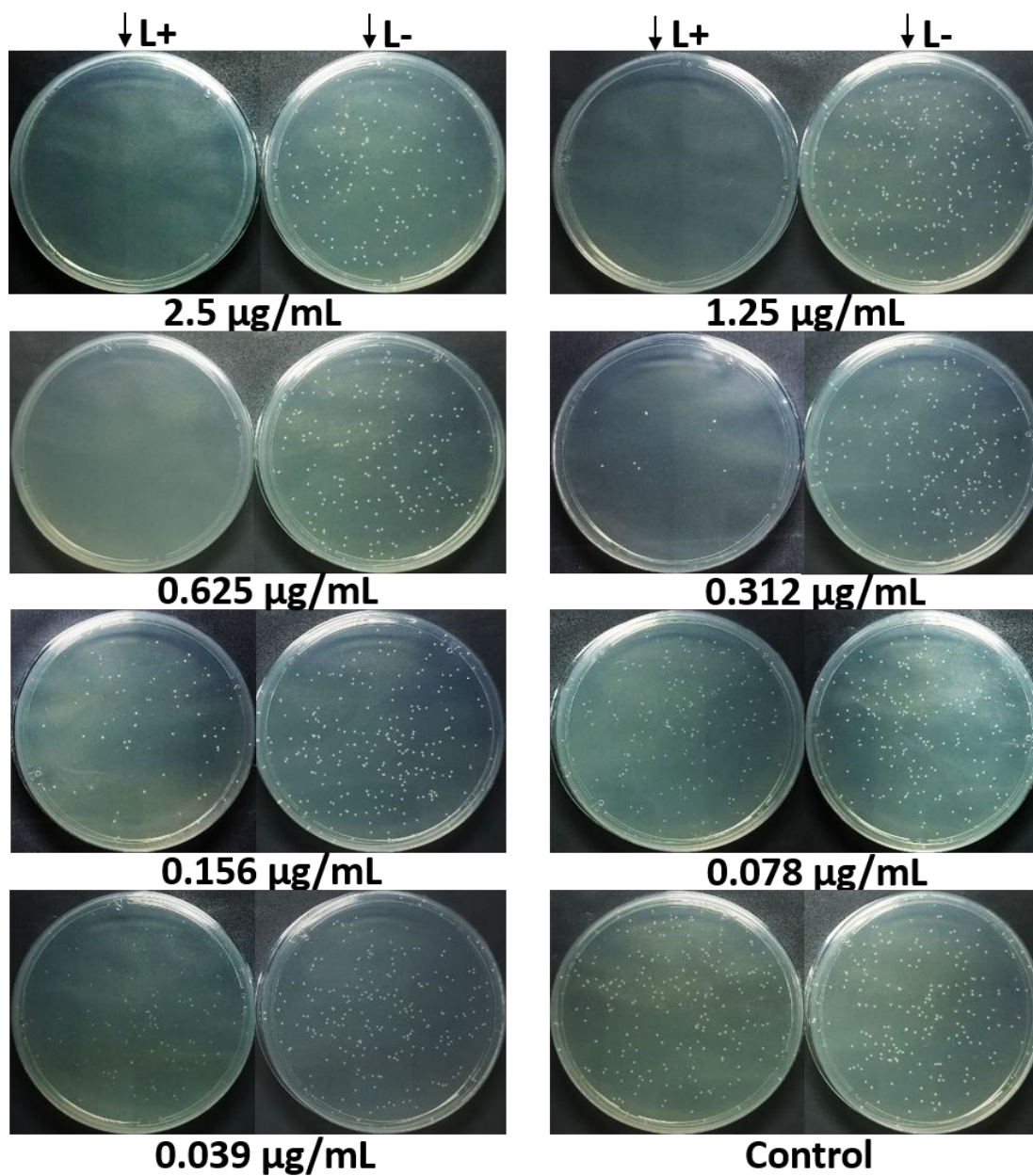


Figure S7. Toxicity of CCM@ZIF-8@HA@CS of different concentrations against *S. aureus*. (L-) and (L+) indicate that the bacteria were tested in the dark or 10 min blue light irradiation.

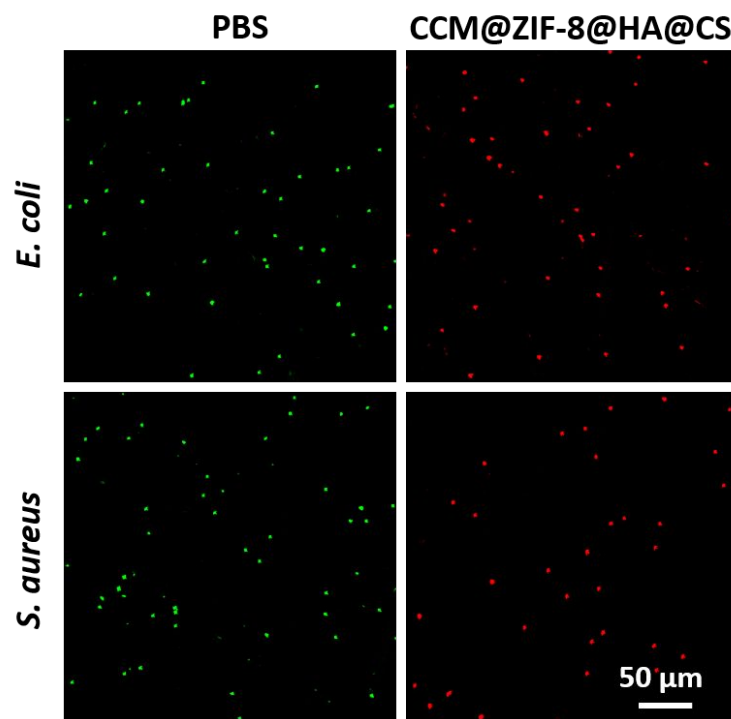


Figure S8. Confocal fluorescence images of SYTO 9- and PI-stained *E. coli* and *S. aureus* treated with PBS (control) or CCM@ZIF-8@HA@CS at MIC (2.5  $\mu\text{g/mL}$ , 0.625  $\mu\text{g/mL}$ ), respectively.

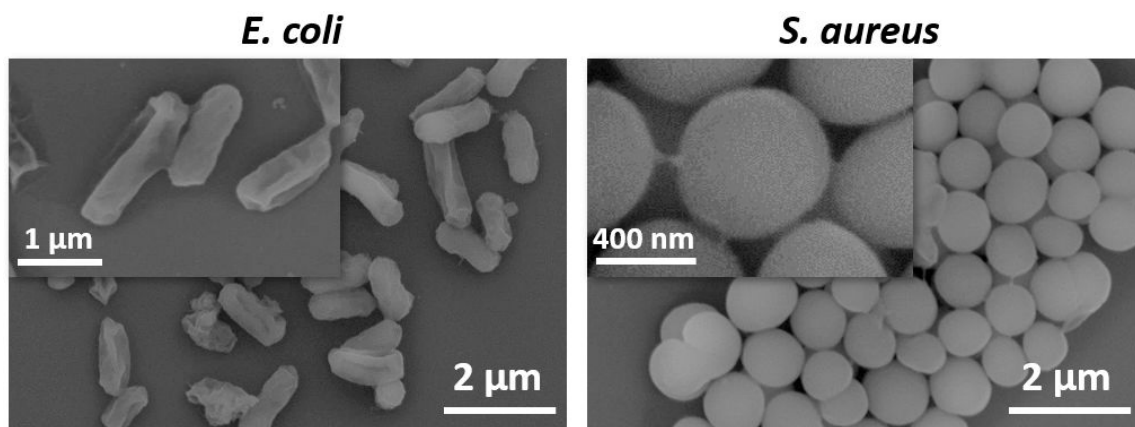


Figure S9. SEM images of *E. coli* and *S. aureus* treated with ciprofloxacin (0.1 mg/L). The insets are enlarged images of the bacteria.