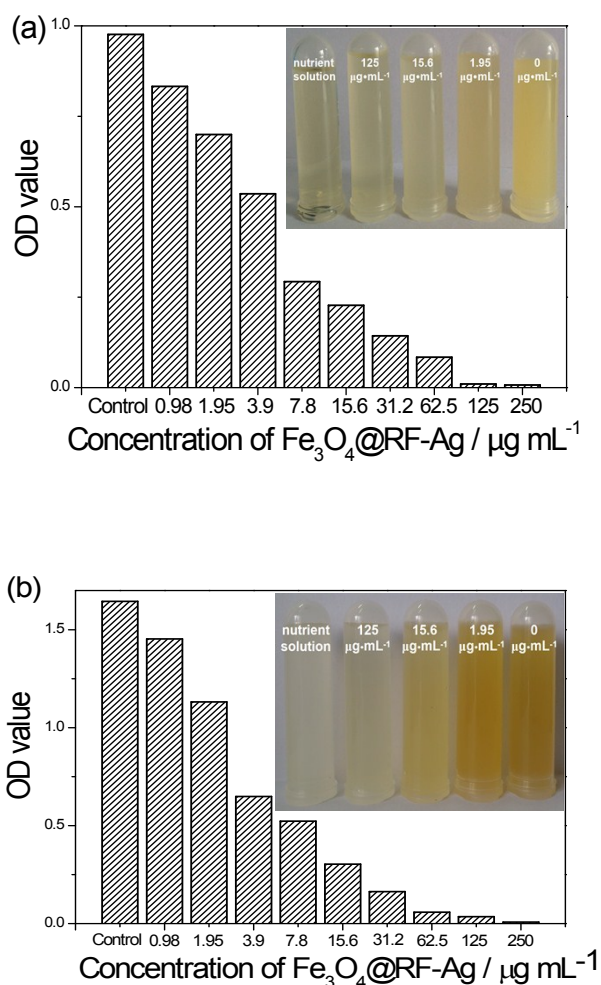


SUPPORTING INFORMATION

**Chain-like  $\text{Fe}_3\text{O}_4@$ Resorcinol-Formaldehyde resins-Ag composite microstructures: Facile construction and applications in antibacterial and catalytic Fields**

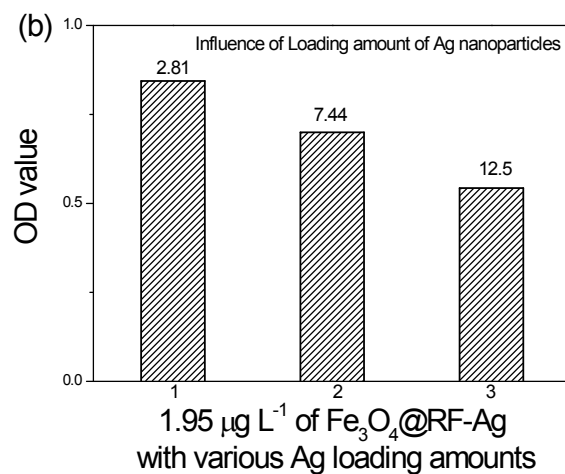
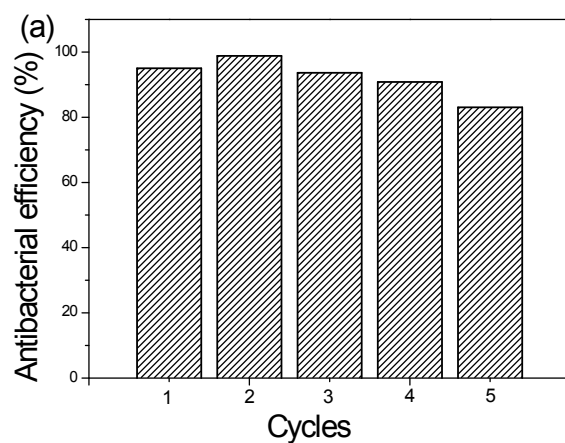
Yiman Zhong,<sup>a</sup> Yonghong Ni,<sup>\*a</sup> Shifeng Li,<sup>a</sup> and Meifang Wang<sup>a,b</sup>



**Figure S1.** The concentration influence of chain-like  $\text{Fe}_3\text{O}_4@$ RF-2 microstructures on the propagation of bacteria after incubation at 37 °C for 24 h: (a) *S. Aureus* and (b) *E. coli*.

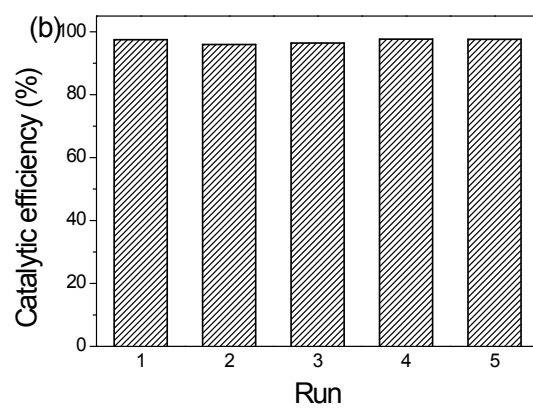
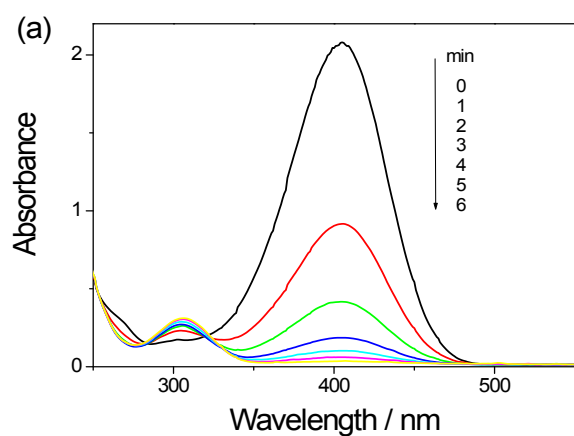
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<sup>b</sup> Wannan Medical College, Wuhu, 241000, PR China.

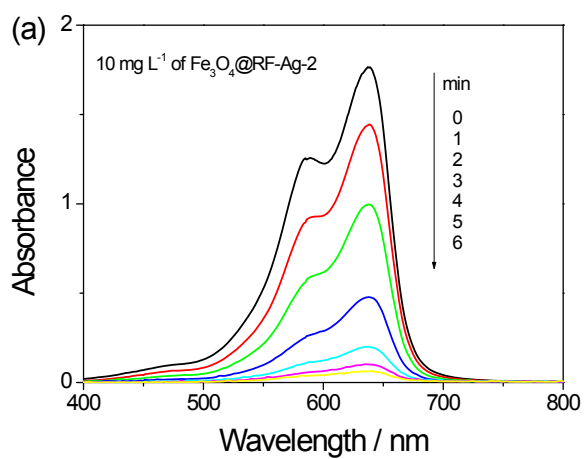


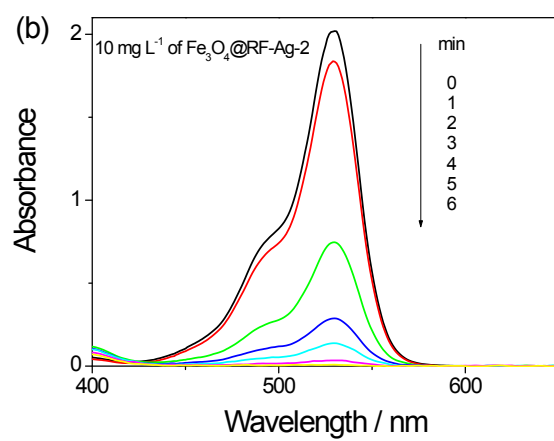
**Figure S2.** (a) The correlation between the antibacterial efficiency of chain-like  $\text{Fe}_3\text{O}_4\text{@RF-2}$  microstructures to *S. Aureus* and the regeneration cycle. (b) The influence of the loading amount of Ag nanoparticles on the propagation of *S. Aureus*.

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**Figure S3.** (a) UV-Vis absorption spectra of the 4-NP-NaBH<sub>4</sub> system in the presence of 10 mg L<sup>-1</sup> Fe<sub>3</sub>O<sub>4</sub>@RF-Ag-2 for various durations. (b) The correlation between the catalytic efficiency of Fe<sub>3</sub>O<sub>4</sub>@RF-Ag-2 and recycling times.





**Figure S4.** UV-Vis absorption spectra of the dye-NaBH<sub>4</sub> system in the presence of 10 mg L<sup>-1</sup> Fe<sub>3</sub>O<sub>4</sub>@RF-Ag-2 for various durations: (a) MB and (b) RdB.