

## Supporting Information

### **Fabrication of PEGylated Fe@Bi<sub>2</sub>S<sub>3</sub> Nanocomposites for Dual-mode Imaging and Synergistic Thermoradiotherapy**

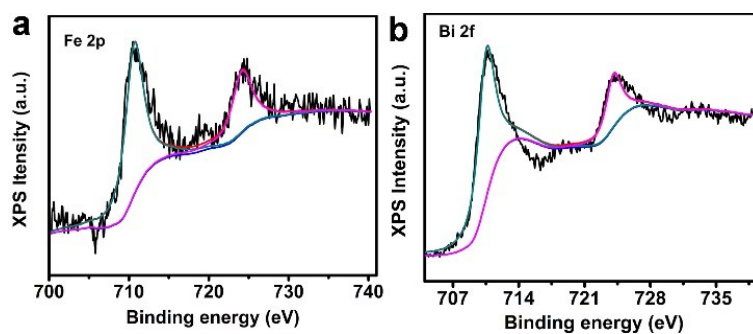
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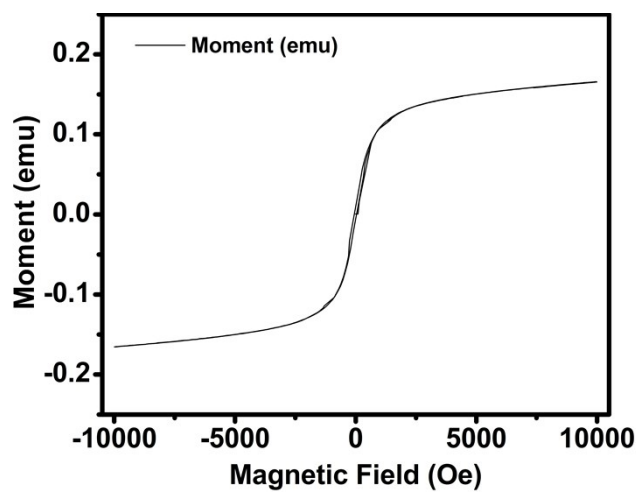
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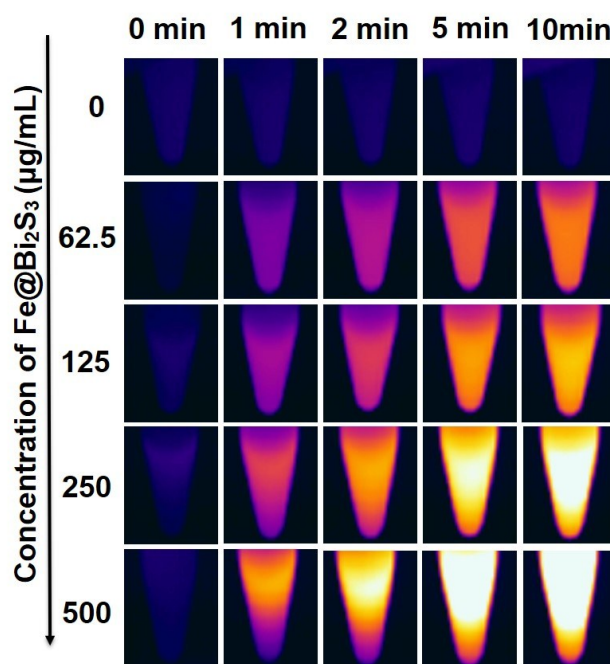
# Equal contribution



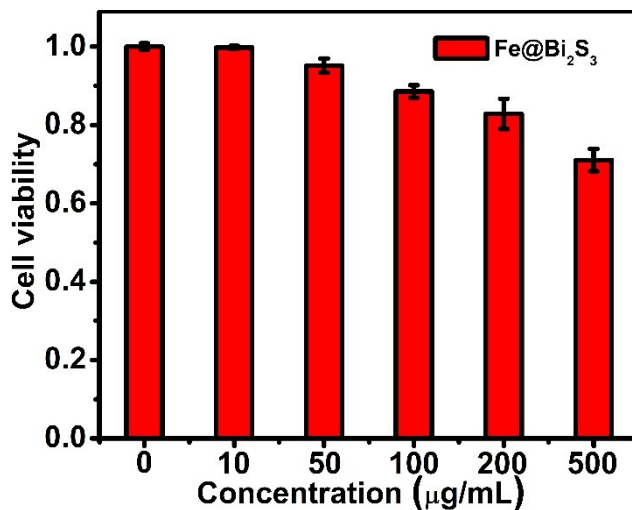
**Figure S1.** XPS spectrum overlaid with fitting curves for Fe 2p (a) and Bi 2f (b) of prepared Fe@Bi<sub>2</sub>S<sub>3</sub> nanocomposites.



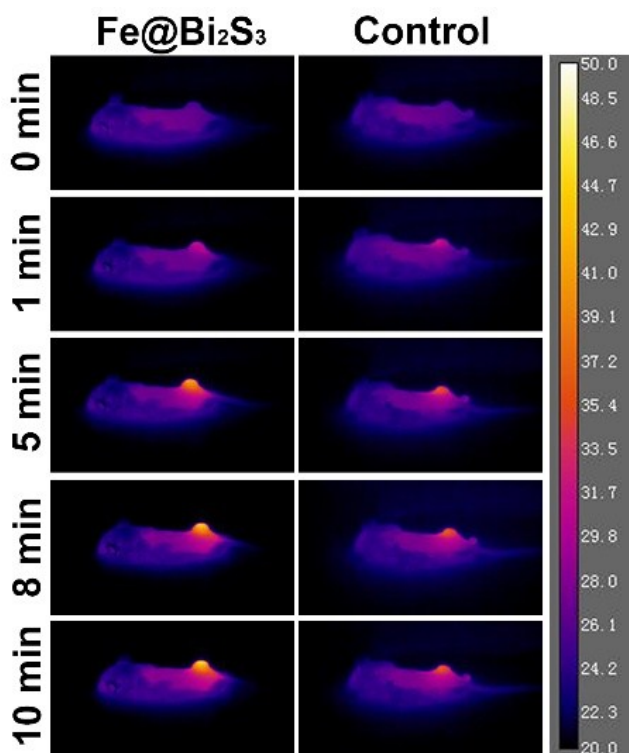
**Figure S2.** Magnetic hysteresis loop of as-prepared Fe@Bi<sub>2</sub>S<sub>3</sub> nanoparticles.



**Figure S3.** Thermal imaging photos of  $\text{Fe@Bi}_2\text{S}_3$  NPs with different concentration after irradiated by 808 nm laser for different time.



**Figure S4.** Cytotoxicity evaluated by the MTT assay in the range of 0-500 ppm of the water dispersed  $\text{Fe@Bi}_2\text{S}_3$  NPs.



**Figure S5.** Thermal imaging pictures of mice treated with  $\text{Fe@Bi}_2\text{S}_3$  NPs and PBS after irradiated by 808 nm laser for different time.