Electronic Supplementary Material

"Transformed" Fe₃S₄ Tetragonal Nanosheets: A High-efficient and Bodyclearance Agent for Magnetic Resonance Imaging Guided Photothermal and Chemodynamic Synergistic Therapy

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Supporting figures



Fig. S1 (a) TEM and (b) HRTEM images of the Fe_3S_4 tetragonal nanosheets.



Fig. S2 FTIR spectra of the Fe_3S_4 tetragonal nanosheets and PVP- Fe_3S_4 tetragonal nanosheets. The bands at 2850-2950 cm⁻¹ are corresponded to asymmetric and symmetric stretching vibrations of methylene (CH₂) of the long alkyl chain in OLA. The bands at 2850-2950 cm⁻¹ are due to the C-H stretching vibration in PVP and the band around 1400 cm⁻¹ is assigned to the C-H deformation vibration in PVP.



Fig. S3 A camera image of the PVP-Fe₃S₄ tetragonal nanosheets dispersed in PBS, Saline, RPMI1640, and FBS, respectively, for two days.



Fig. S4 The camera images of the PVP-Fe₃S₄ tetragonal nanosheets dispersed in PBS for different days under a magnet nearby.



Fig. S5 XRD pattern of the PVP-Fe $_3S_4$ tetragonal nanosheets after H_2O_2 treatment.



Fig. S6 S 2p regions for the PVP-Fe₃S₄ tetragonal nanosheets after H₂O₂ treatment.



Fig. S7 Excretion profiles at different periods of time post i.v. injection with PVP-Fe $_3S_4$ tetragonal nanosheets.