nanomaterials

MDPI

Supplementary Materials

Rational Constructed Ultra-Small Iron Oxide Nanoprobes Manifesting High Performance for T_1-weighted Magnetic Resonance Imaging of Glioblastoma

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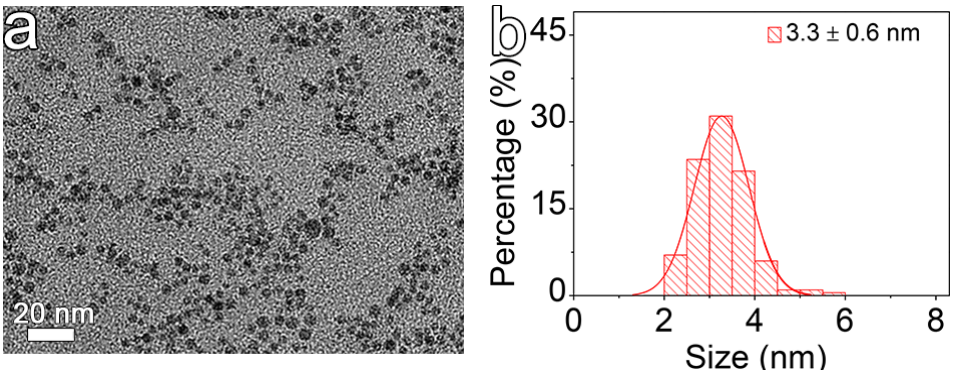


Figure S1. TEM (**a**) and graphical representation (**b**) of Fe_3O_4-Mal NPs.

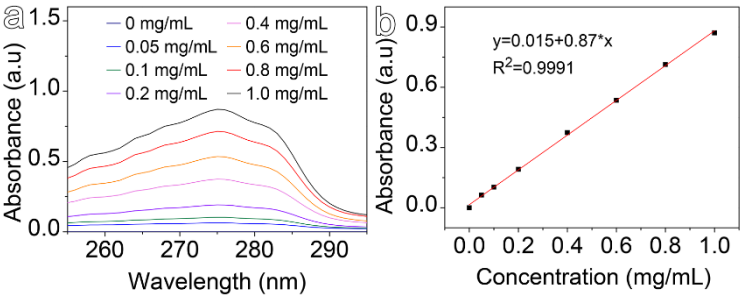


Figure S2. Standard curve of ANG. (**a**) The absorption curve of ANG at different concentrations of 0, 0.05, 0.1, 0.2, 0.4, 0.6, 0.8, 1.0 mg mL^{-1}. (**b**) According to the absorbance of different concentrations of ANG at 275 nm, the standard curve is obtained by fitting a linear equation.

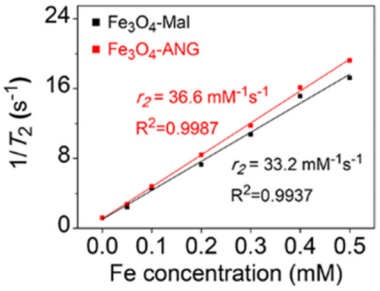


Figure S3. Linear regression fitting of the relaxivity of Fe_3O_4-Mal and Fe_3O_4-ANG NPs for extracting the transverse relaxivity r_2.

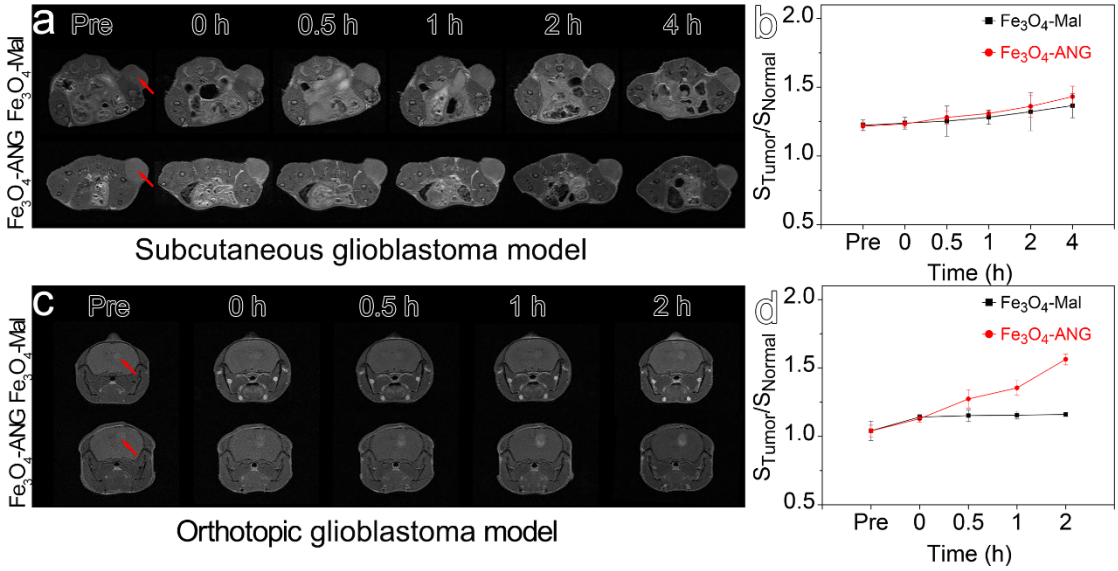


Figure S4. (**a**) MRI of the subcutaneous glioblastoma model within 4 h after injection of Fe_3O_4-Mal or Fe_3O_4-ANG NPs. (**b**) Tumor signal trends for the subcutaneous glioblastoma model after injection of Fe_3O_4-Mal or Fe_3O_4-ANG NPs. (**c**) MRI of the orthotopic glioblastoma model within 2 h after injection of Fe_3O_4-Mal or Fe_3O_4-ANG NPs. (**d**) Tumor signal trends for the orthotopic glioblastoma model after injection of Fe_3O_4-Mal or Fe_3O_4-ANG NPs.