Supporting Information

Iron oxide and gold bimetallic radiosensitizers for synchronous tumor chemoradiationtherapy in 4T1 breast cancer murine model

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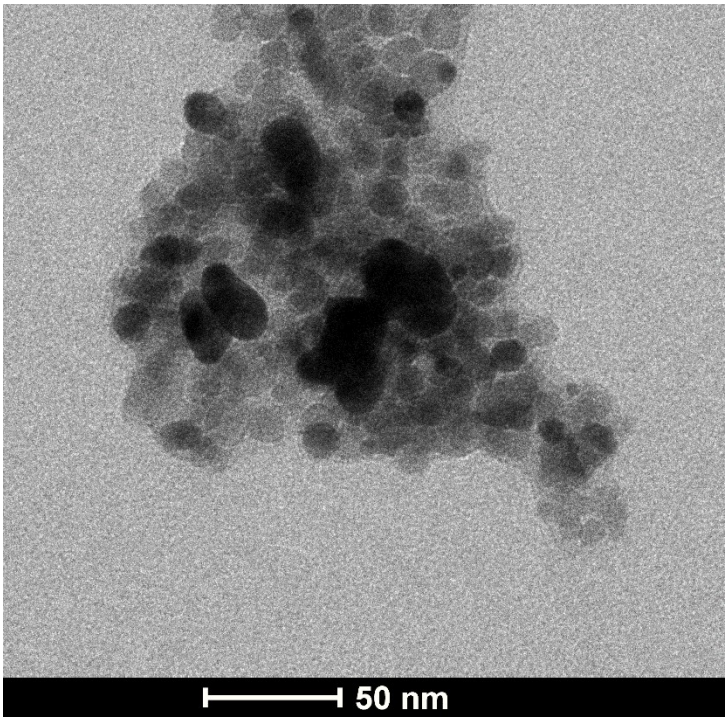

Fig. S1. The TEM image of Fe_3O_4-Au.

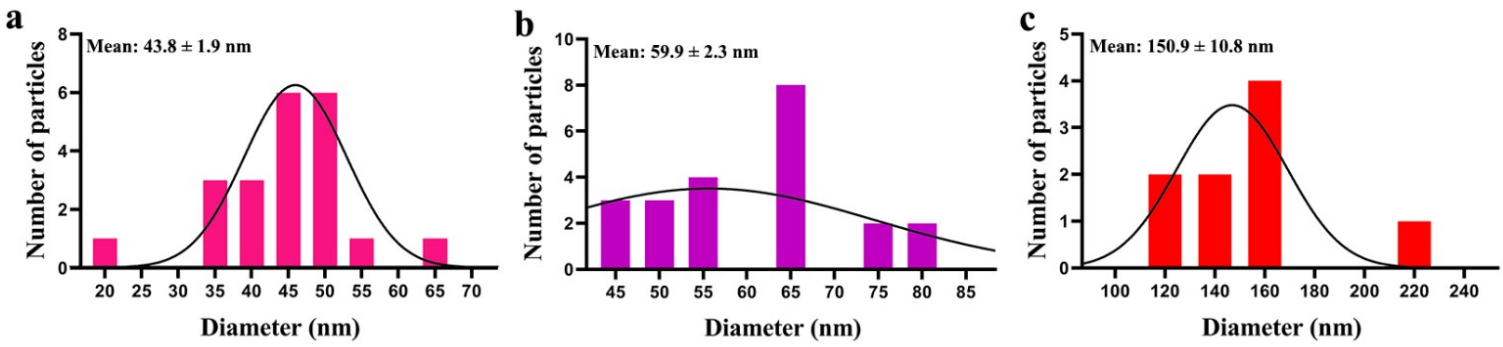

Fig. S2. Size distribution histograms of SEM images of (a) Fe_3O_4; (b) Fe_3O_4-Au; and (c) Fe_3O_4-Au-BSA-FA-CUR.

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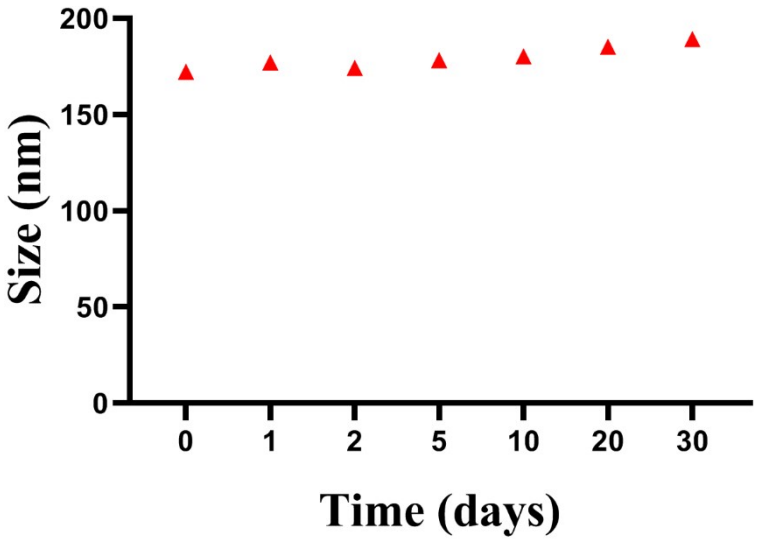

Fig. S3. Size monitoring of Fe_3O_4-Au-BSA-FA-CUR for 30 days to display relative stability.

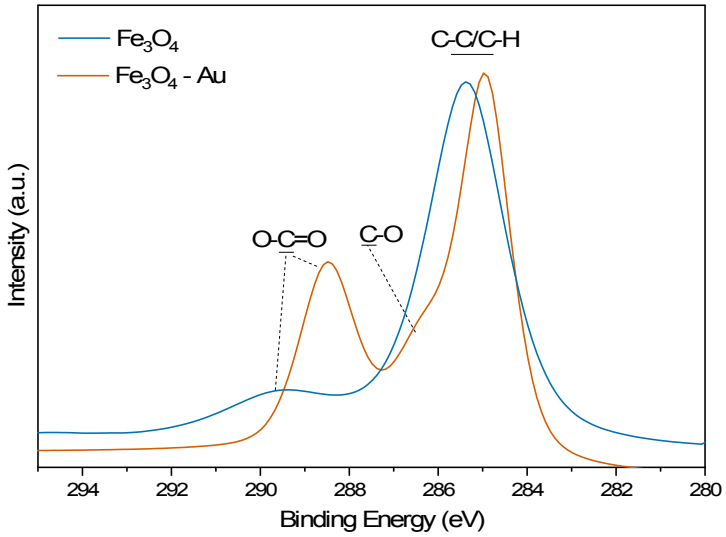

Fig. S4. C1s core-level spectra of Fe_3O_4 and Fe_3O_4-Au.

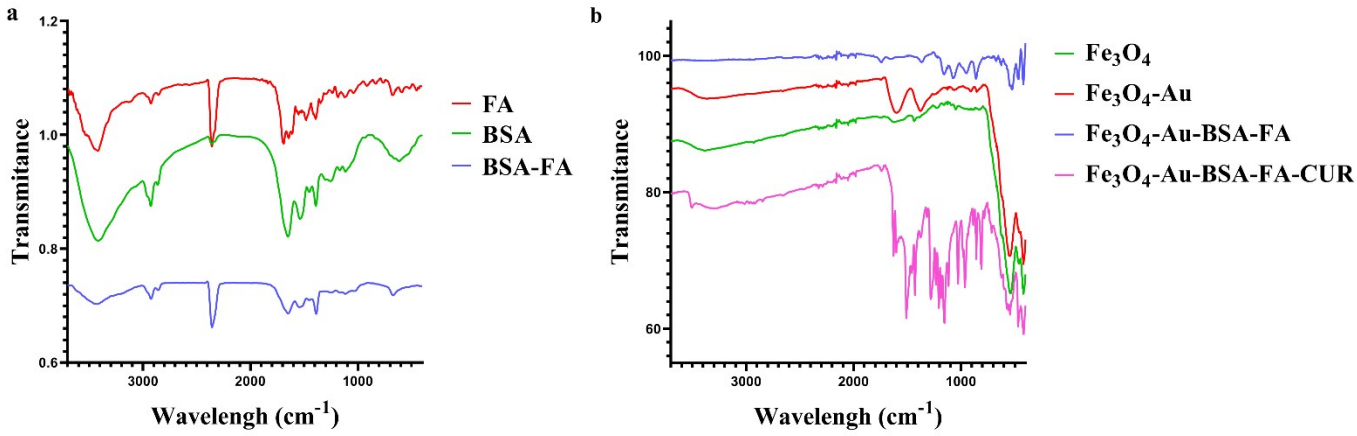

Fig. S5. (a, b) FTIR spectra of BSA, FA, BSA-FA, Fe_3O_4, Fe_3O_4-Au, Fe_3O_4-Au-BSA-FA, Fe_3O_4-Au-BSA-FA-CUR samples

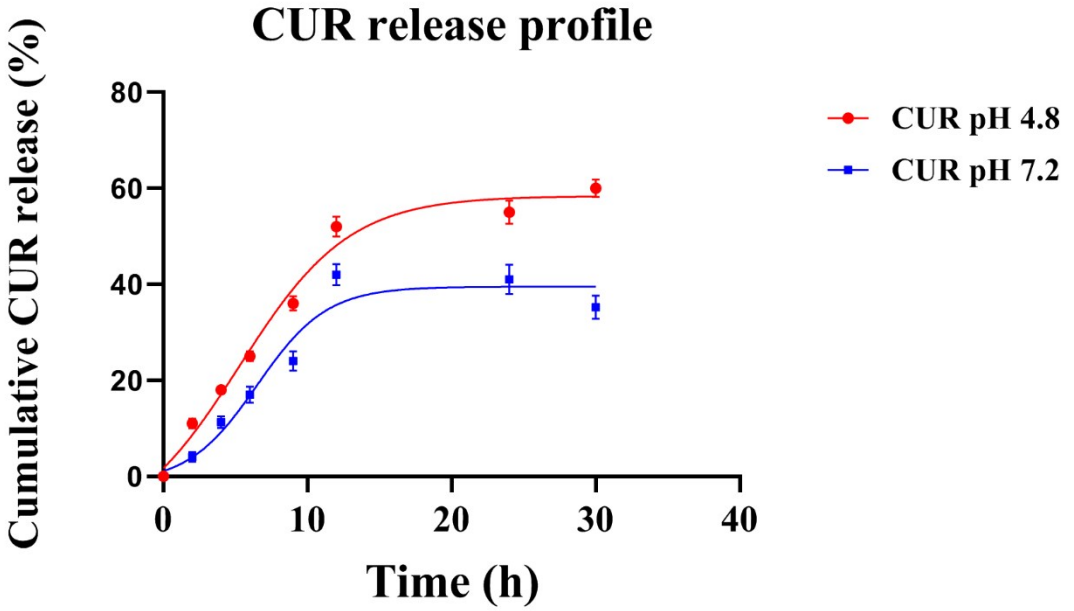

Fig. S6. (a) Release profile of CUR in neutral and acidic pH.

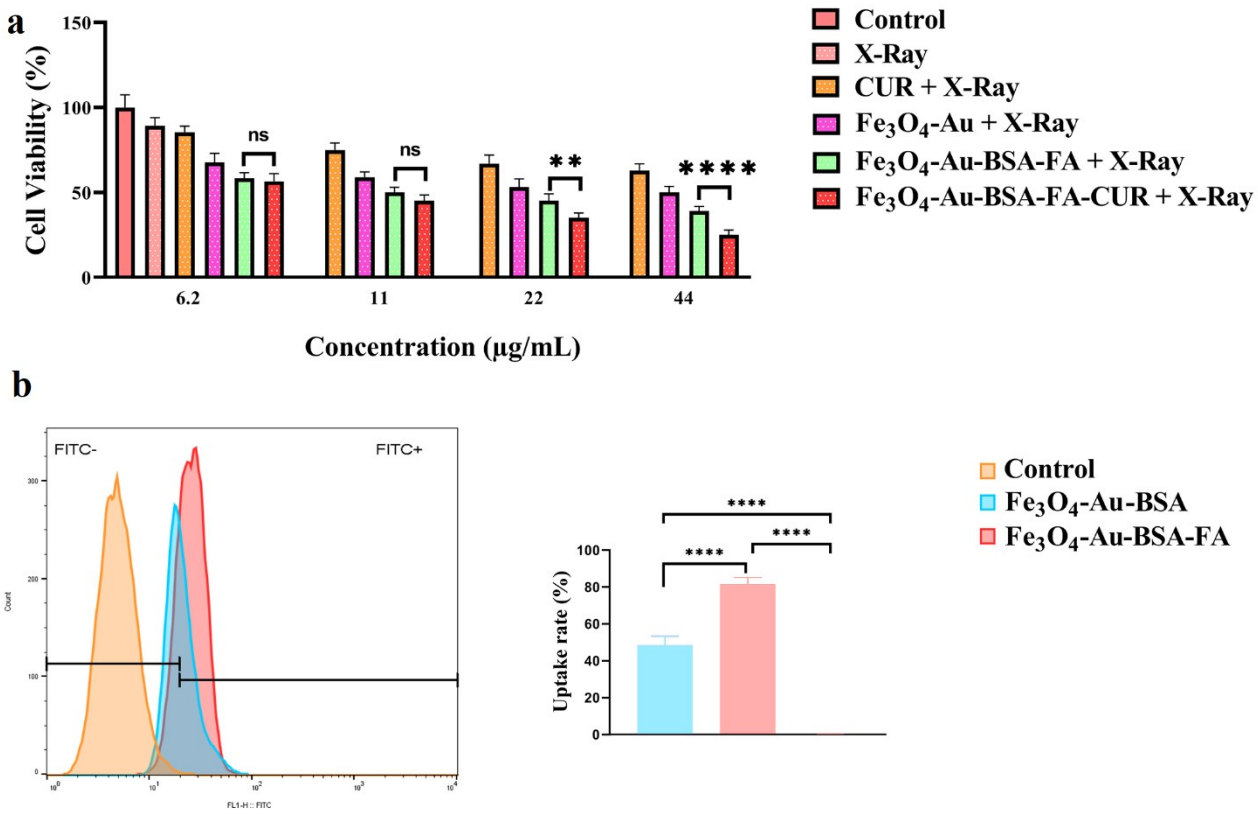

Fig. S7. (a) Cell growth inhibition in 4T1 cells co-incubated with various samples at different concentrations under X-ray irradiation. **P < 0.01, and ****P < 0.0001; (b) internalization rates of FITC labeled Fe_3O_4-Au-BSA and Fe_3O_4-Au-BSA-FA analyzed by flow cytometry

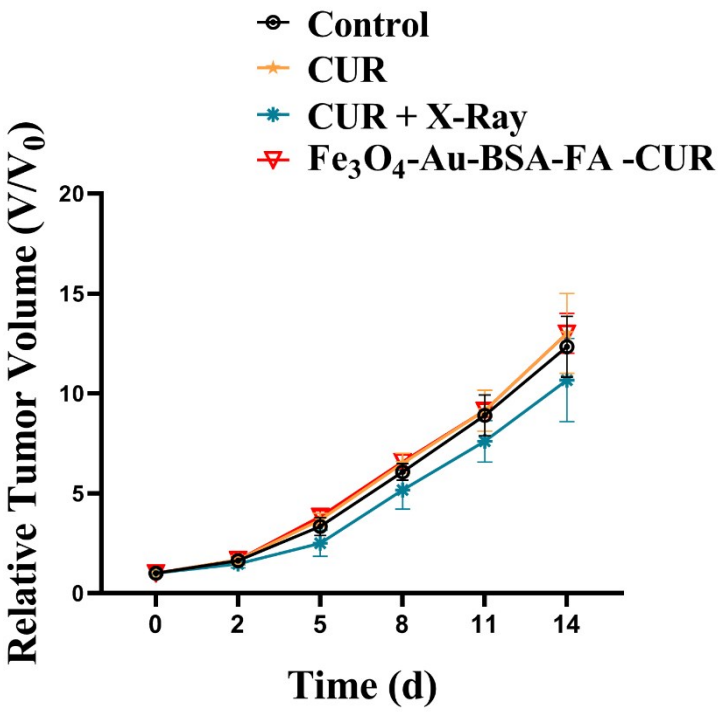

Fig. S8. Relative tumor volumes following different treatments in the presence and absence of X-ray irradiation

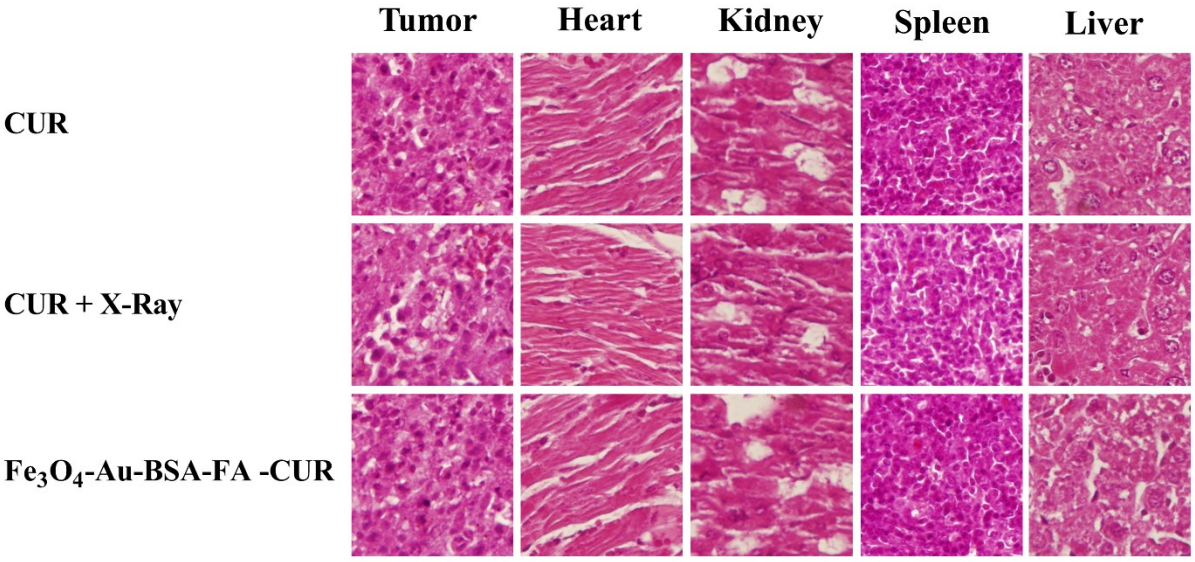

Fig. S9. H&E staining of the tumor and main organs after treatment with different nanoparticles in the presence and absence of X-ray.