Electronic Supplementary Material (ESI) for Biomaterials Science.

Supporting information

Ligand Free $FeSn_2$ Alloy Nanoparticles for Safe T2-weighted MR Imaging of *In vivo* Lung Tumors

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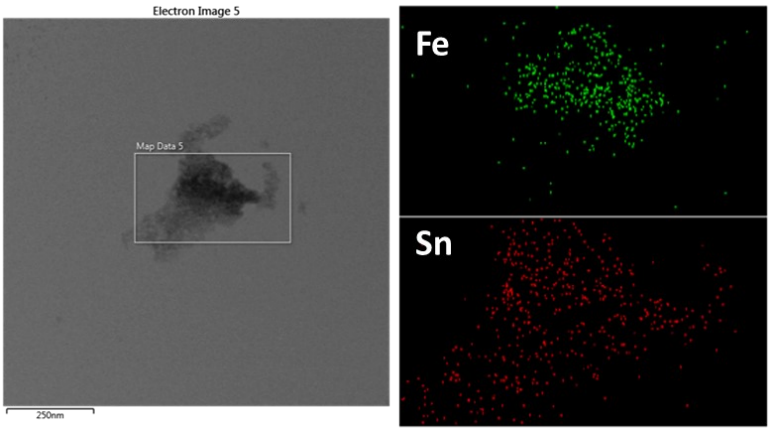

Figure S1. Energy Dispersive X-Ray Analysis (EDX) elemental analysis of $FeSn_2$ alloy NPs.

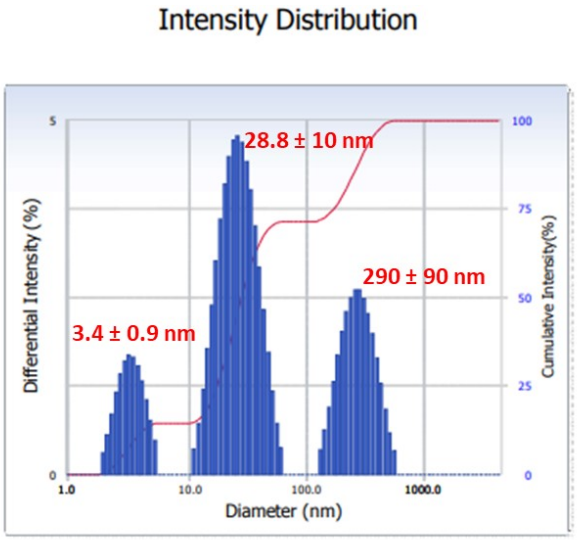

Figure S2. DLS spectra of $FeSn_2$ alloy NPs (PDI value 0.180).

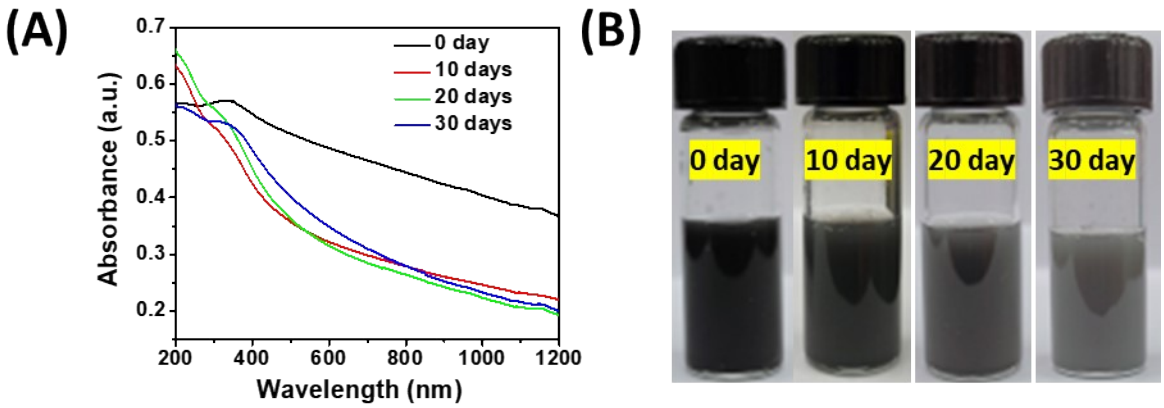

Figure S3. (A) and (B) UV-visible absorption spectra and corresponding optical images of $FeSn_2$ alloy NPs aqueous solutions at different incubation times.

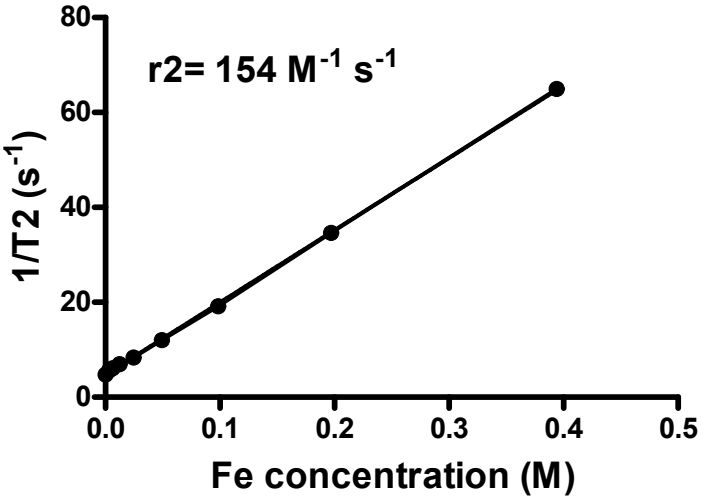

Figure S4. Transversal relaxation time (1/T2, s^{-1}) against the concentration of Fe in $FeSn_2$ alloy NPs.

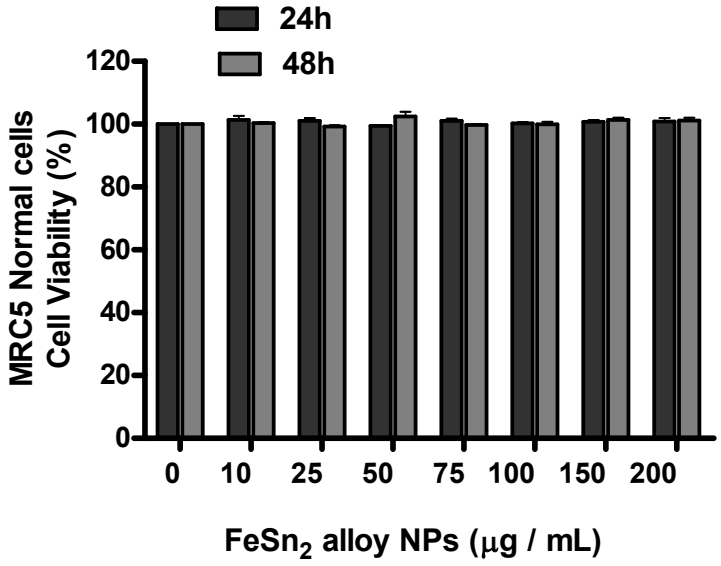

Figure S5. Cytotoxicity evaluation of different concentrations of $FeSn_2$ alloy NPs with the CCK-8 assay.

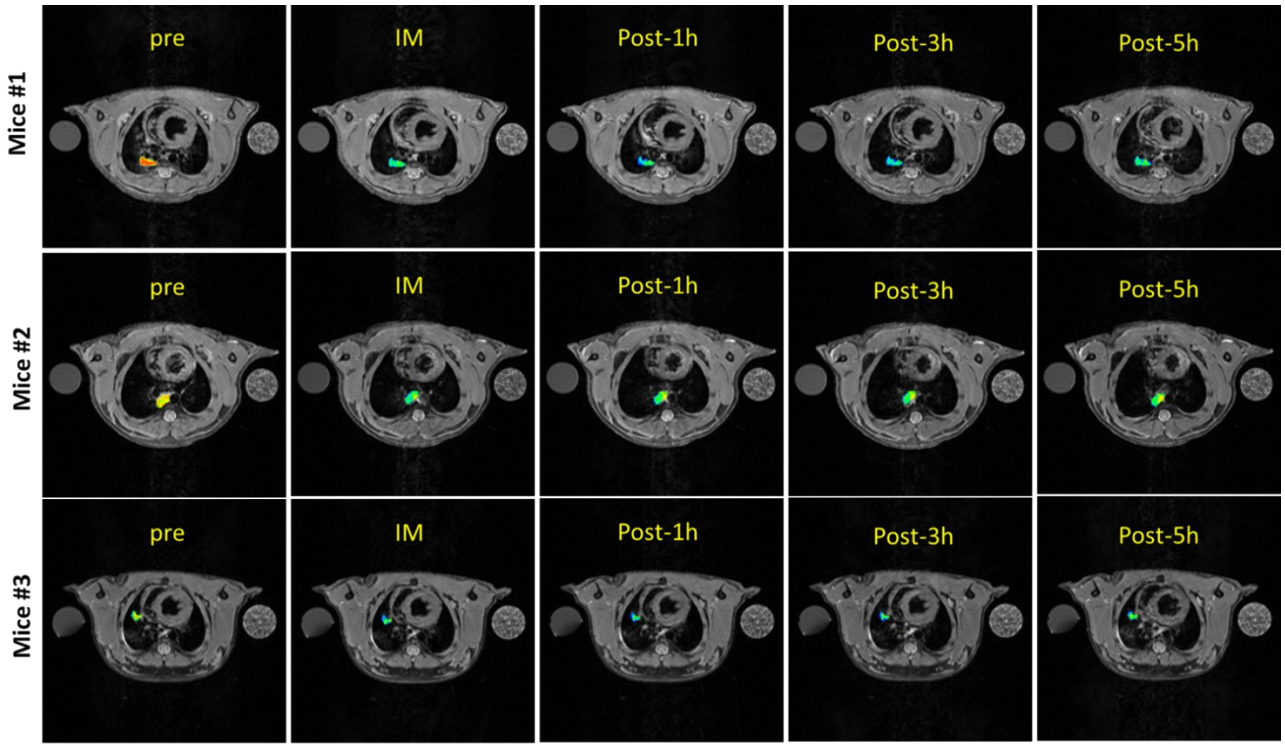

Figure S6. *In vivo* MR imaging of lung tumor mice models (n=3) on $FeSn_2$ alloy NPs (pre, post-injection of NPs-immediately, 1 h, 3 h, 5 h).