Electronic Supplementary Information

Facile assembly of Fe_3O_4@Au nanocomposite particles for dual mode magnetic resonance and computed tomography imaging applications

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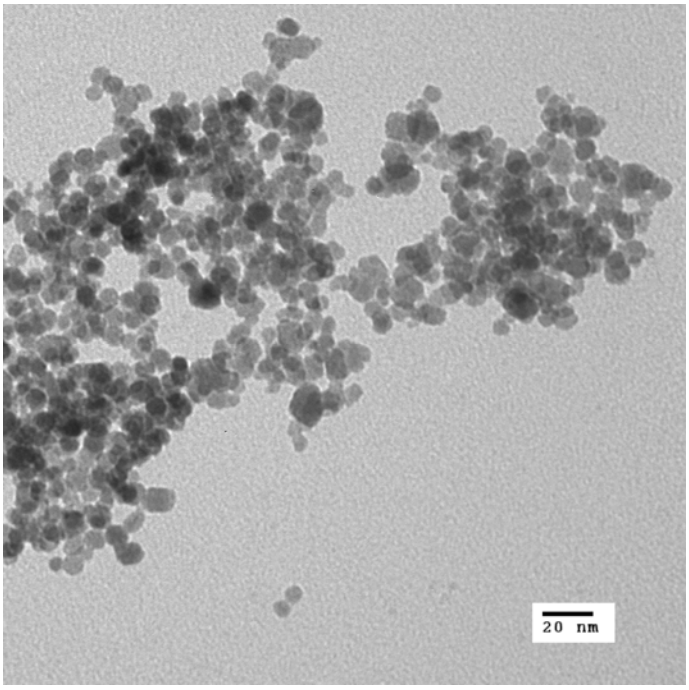

Figure S1. TEM image of the synthesized Fe_3O_4 NPs.

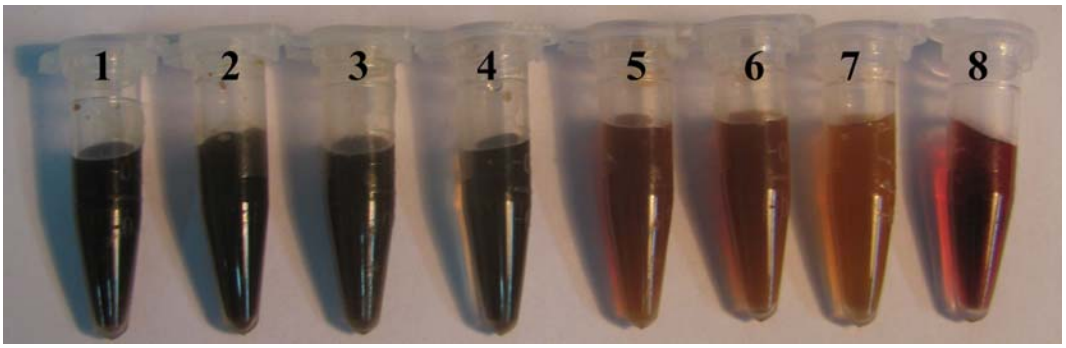

Figure S2. Photographs of particle dispersion of Fe_3O_4 (1), Fe_3O_4/PGA (2), Fe_3O_4/PGA/PLL (3), Fe_3O_4/PGA/PLL/PGA (4), Fe_3O_4/PGA/PLL/PGA/Au DENPs (5), Fe_3O_4/PGA/PLL/PGA/Au DENPs after EDC crosslinking (6), Fe_3O_4@Au NPs after acetylation (7), and $\{(Au^0)_{50}$-G5.$NH_2\}$ DENPs (8), respectively.

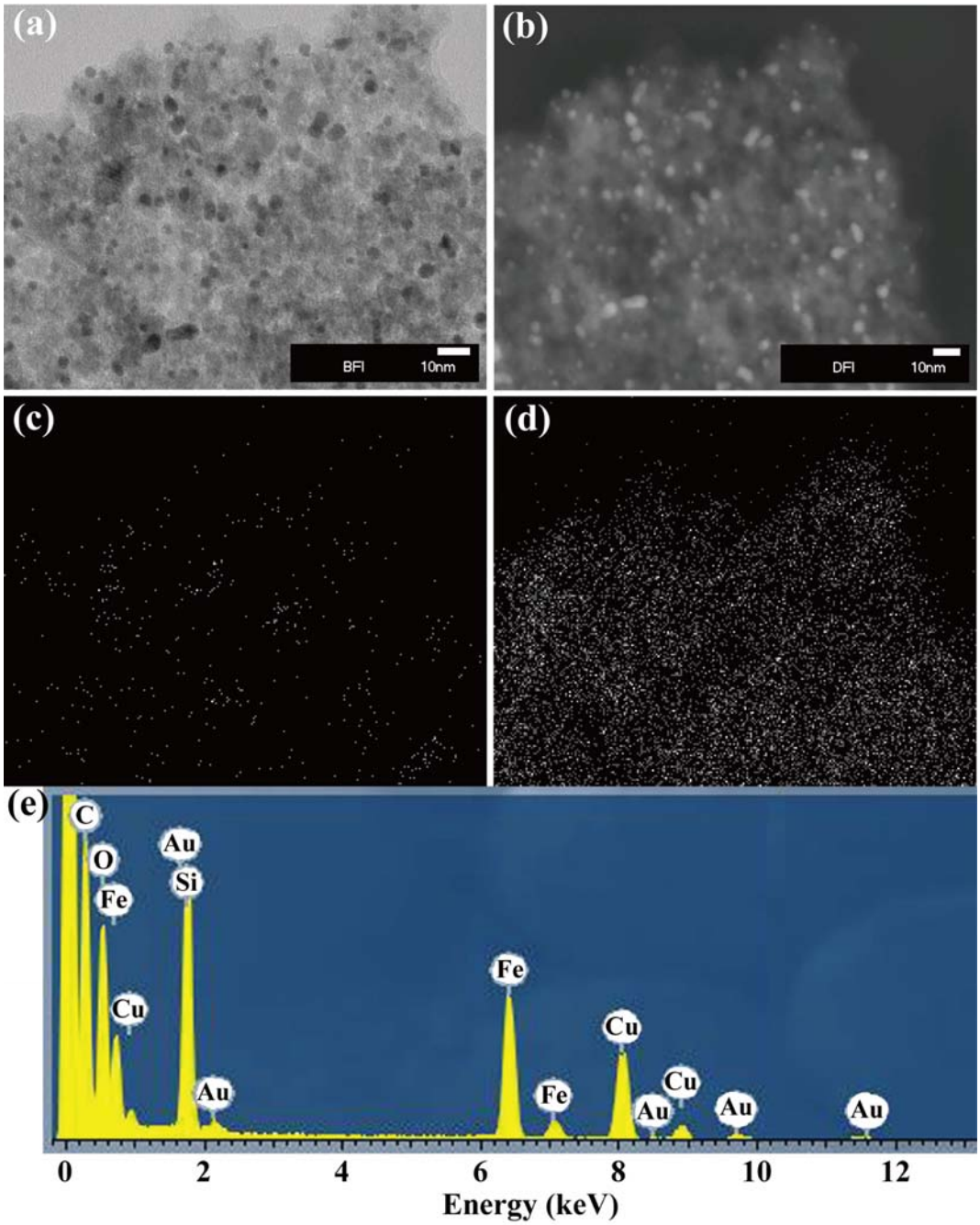

Figure S3. TEM images of Fe_3O_4@Au NCPs in bright field (a) and dark field (b), and EDS mapping of Au (c) and Fe (d) in Fe_3O_4@Au NPs. (e) shows the EDS spectrum of the formed Fe_3O_4@Au NCPs.

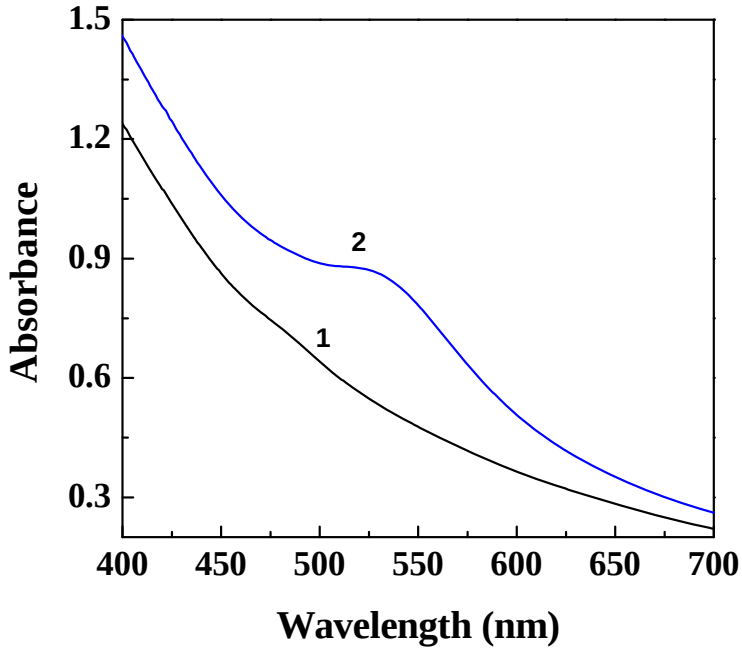

Figure S4. UV-vis spectra of the aqueous solution of Fe_3O_4 NPs assembled with PGA/PLL/PGA trilayers (1) and the formed Fe_3O_4@Au NCPs (2).

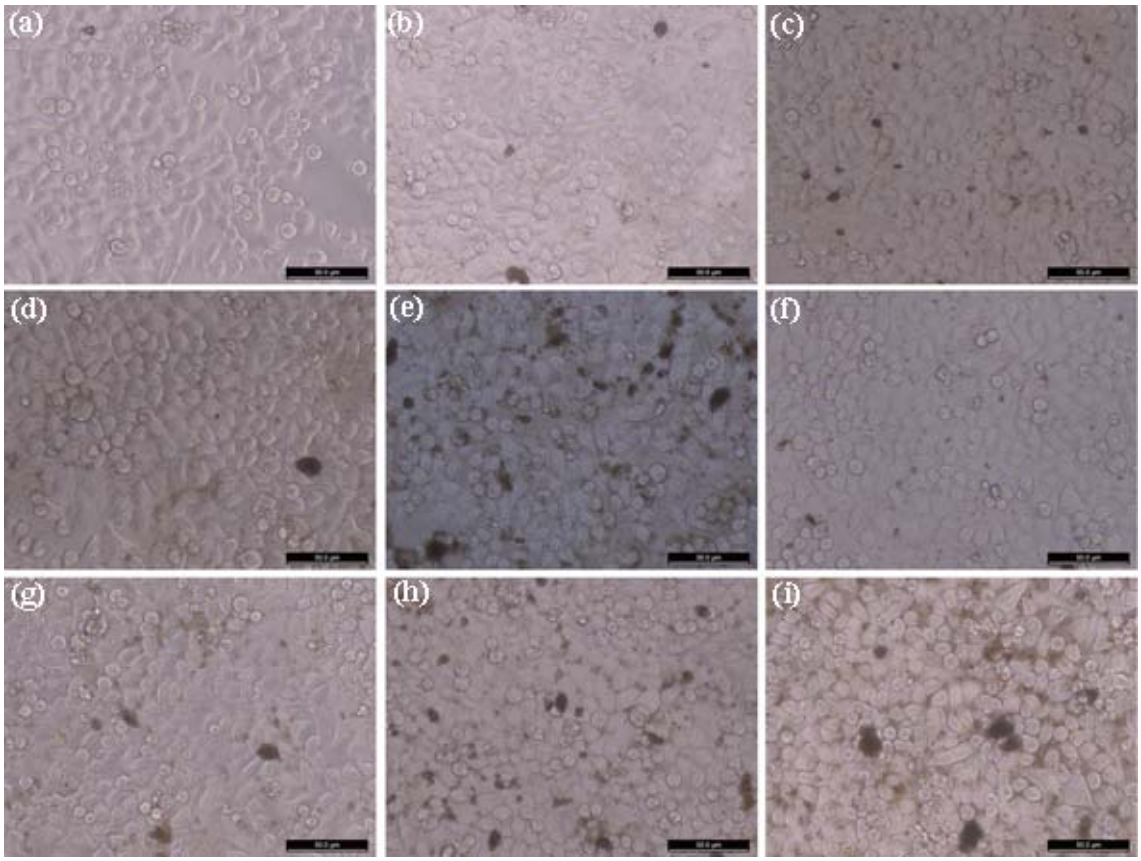

Figure S5. The phase contrast microscopic images of KB cells treated with PBS buffer (a), Fe_3O_4@Au NCPs (with a concentration of 10 (b), 25 (c), 50 (d), and 100 (e) μg/mL, respectively), and Fe_3O_4@G5 NPs (with a concentration of 10 (f), 25 (g), 50 (h), 100 (i) μg/mL, respectively) for

24 h.

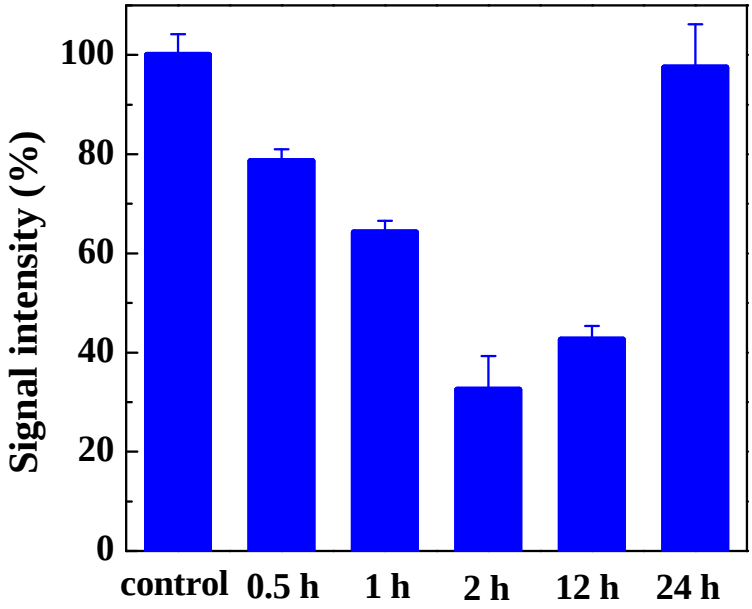

Figure S6. The change of the percentage of signal intensity of the mouse liver as a function of time post injection of the Fe_3O_4@Au NCPs.