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A theranostic nanoplatform: magneto-gold@fluorescence polymer nanoparticles for tumor targeting T_1&T_2-MRI/CT/NIR fluorescence imaging and induction of genuine autophagy mediated chemotherapy

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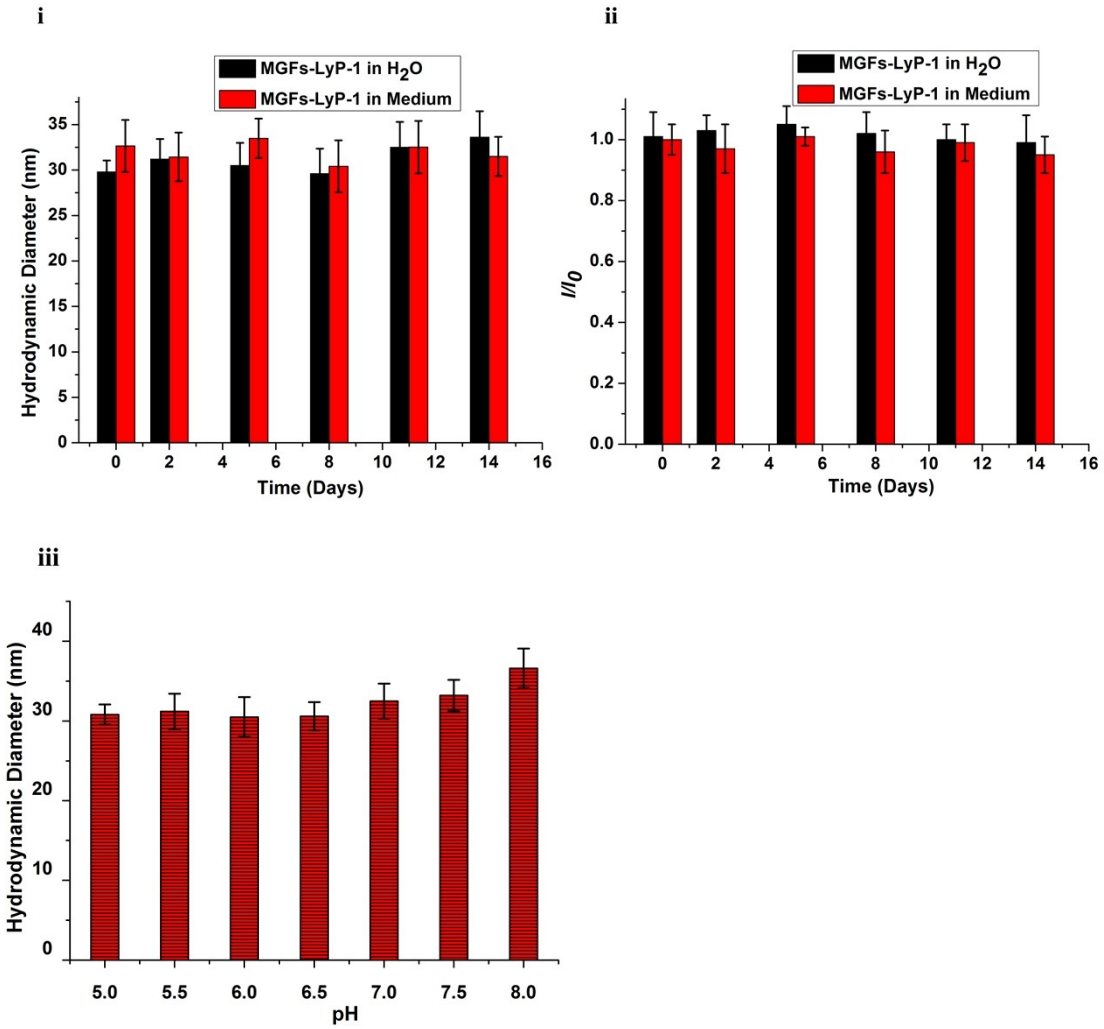

Fig. S1. Hydrodynamic diameter (i)and fluorescence stability of the MGFs-LyP-1 nanoparticles(ii) in water and cell culture medium during two weeks. The stability of MGFs-LyP-1 nanoparticles in different pH (iii).

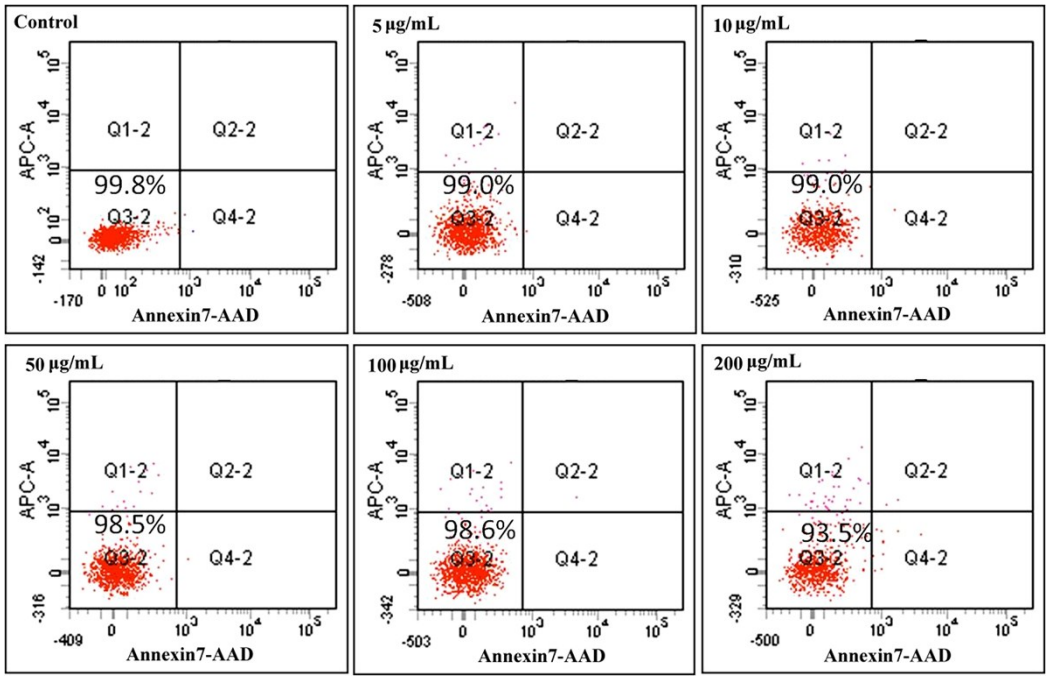

Fig. S2. Flow cytometry plots for cellular apoptosis after treatment with different concentration of as-synthesized MGFs-LyP-1 nanoparticles

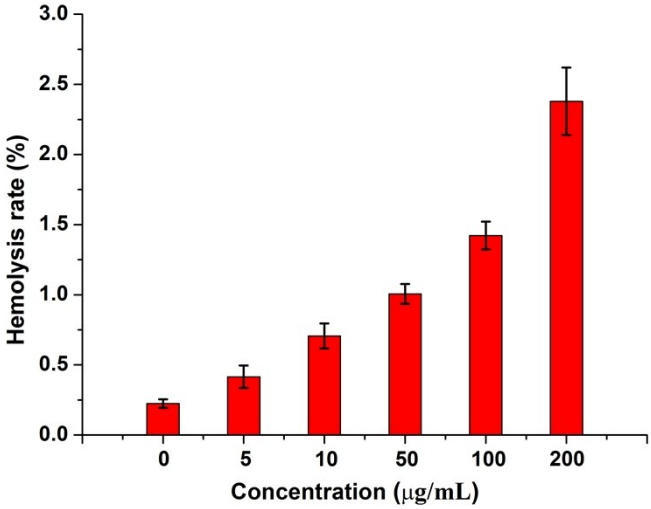

Fig. S3. Hemolysis assay of MGFs-LyP-1 nanoparticles by incubating red blood cells with different concentration of MGFs-LyP-1 nanoparticles.

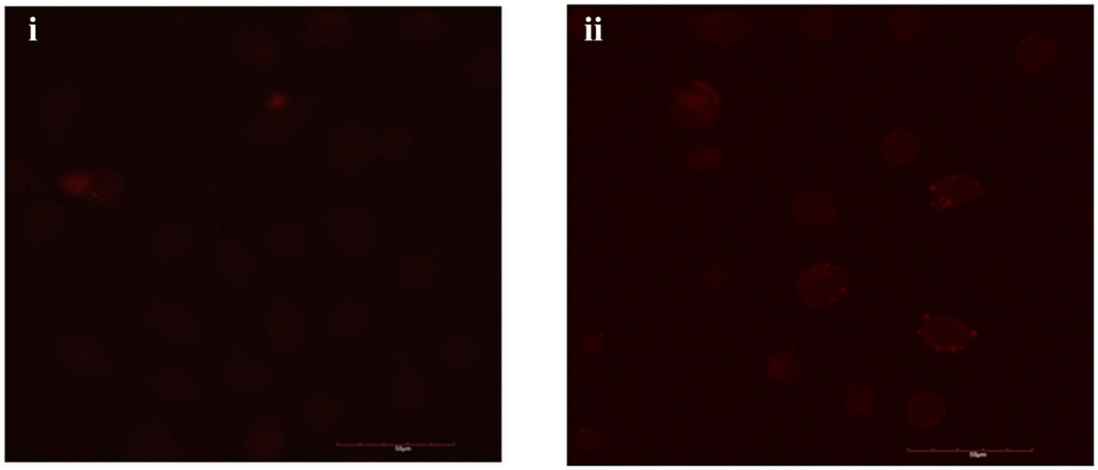

Fig. S4. Fluorescence microscopy images of Magic Red CTSB substrates in 100μg/mL of MGFs-LyP-1 nanoparticles treated HepG2 cell. (Figure S3i is control, and scale bar is 50 μm)

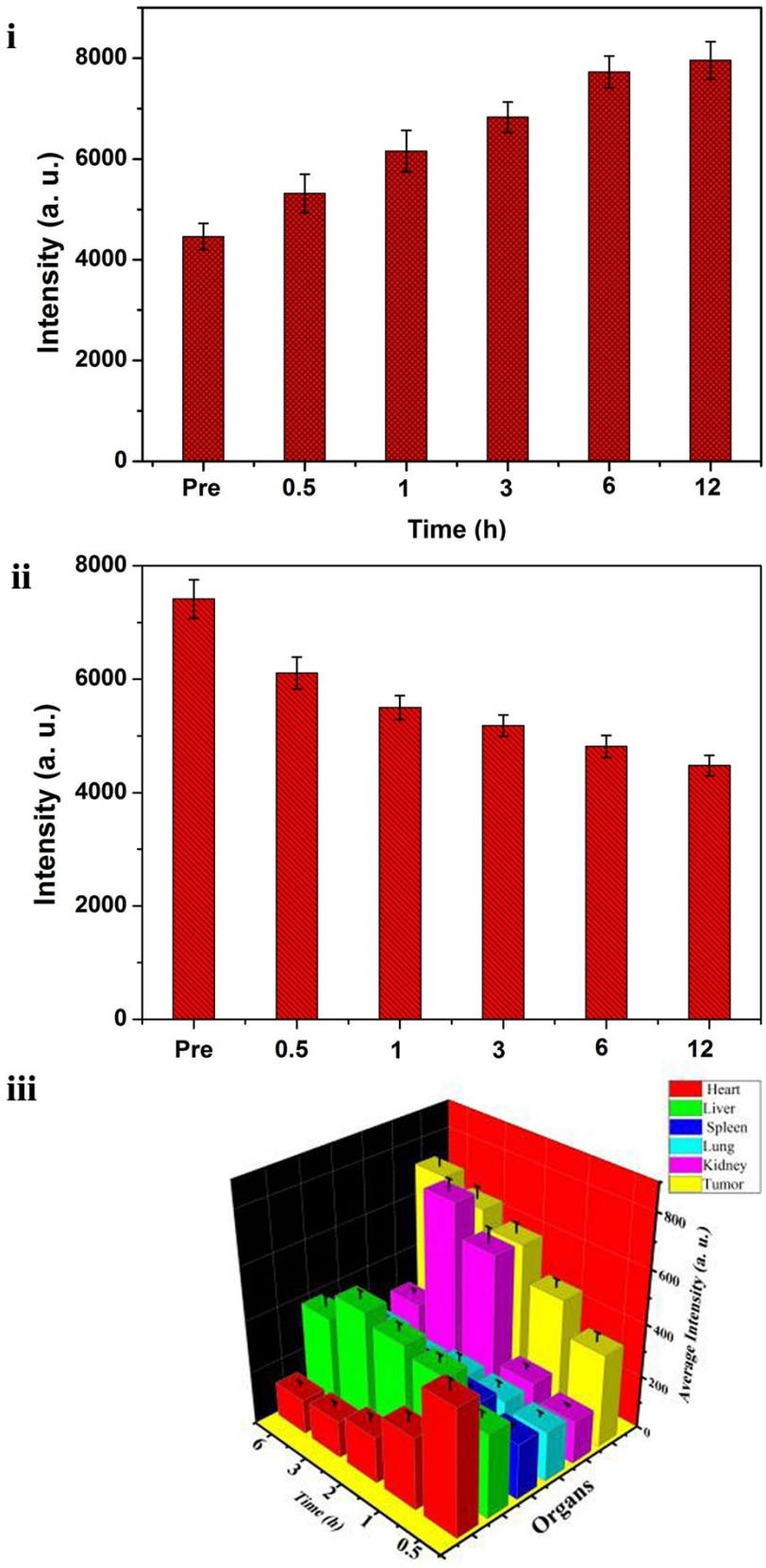

Fig. S5. The signal intensity changes in the tumor region of (a) T_1- and (b) T_2-weighted images after administration (n = 3). *In vivo* distribution of MGFs-LyP-1 nanoparticles after post-injection at different time in HepG2 tumor bearing mice model in CT imaging(c)

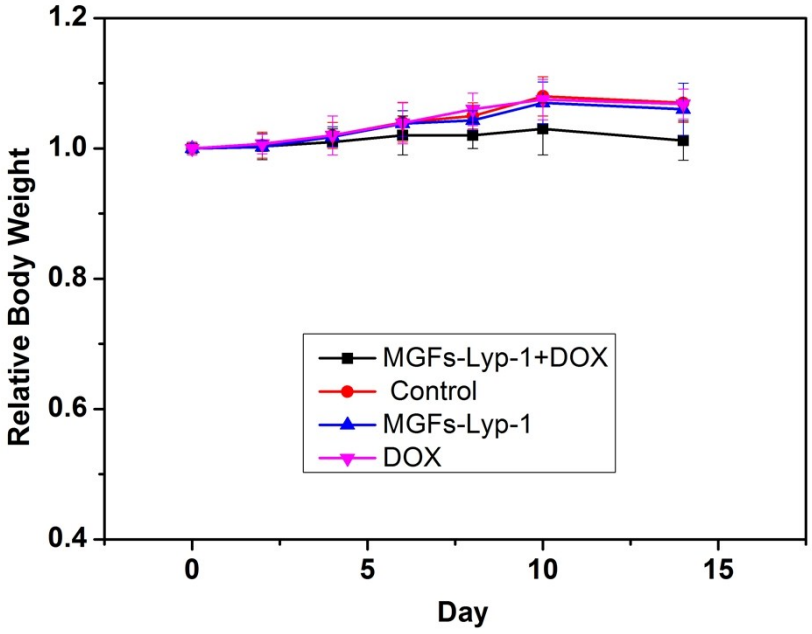

Fig. S6. Body weight changes of excised tumors of HepG2 tumor bearing mice after different treatments

Table S1. Serum biochemistry assay for renal function on the levels of BUN, Crea, Cysc, UA and CO_2 in pre-injection and at 24 post-injection of MGFs-LyP-1 nanoparticles .(n=5)

	Pre-injection	**Post- injection**
Bun（mmol/L)	9.89 ±0.055	10.18 ±0.041
Crea（umol/L)	28.00 ±0.213	29.00 ±0.355
CysC（mg/L)	0.06 ±0.010	0.05 ±0.010
UA（umol/L)	74.00 ±0.115	68.00 ±0.275
CO_2（mmol/L)	22.10 ±0.055	23.20 ±0.050