Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Supporting Information

Multiple gold nanorods@hierarchically porous silica nanospheres for efficient multi-drug delivery and photothermal therapy

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Supplementary figures

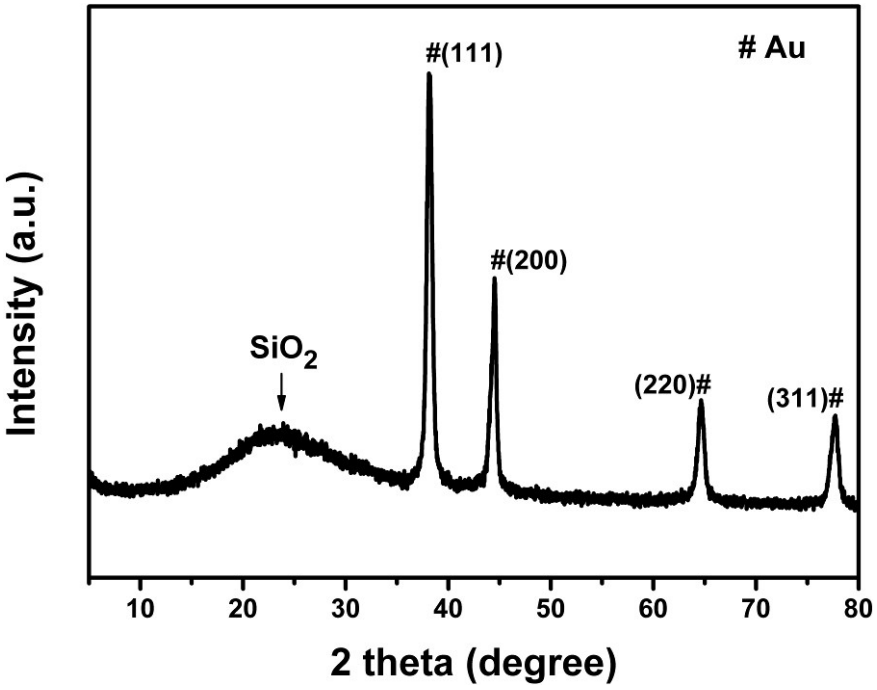

Fig. S1. Wide-angle XRD pattern of MGNRs@HPSNs.

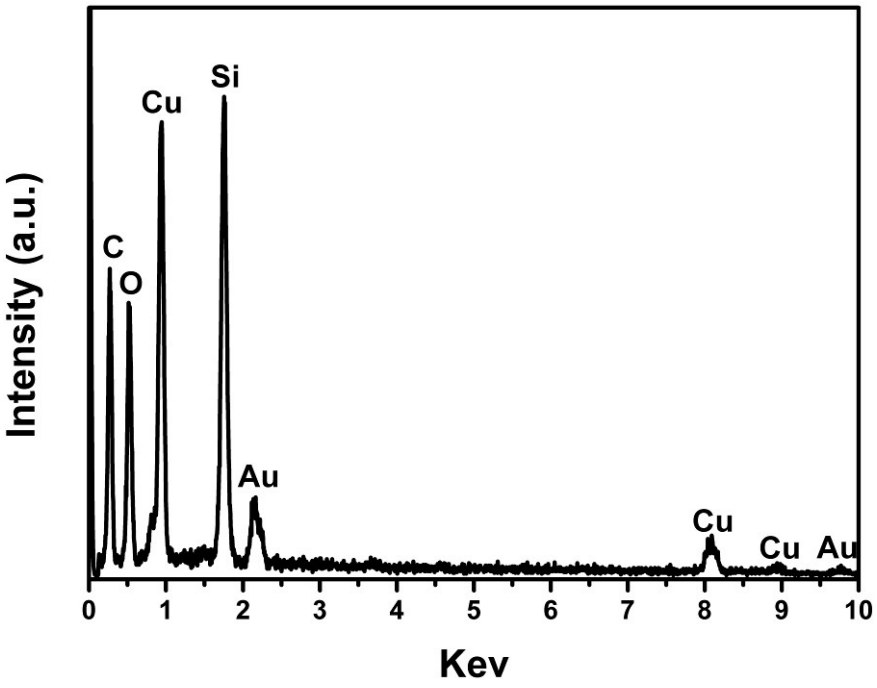

Fig. S2. Energy dispersive spectroscopy (EDS) image for MGNRs@HPSNs.

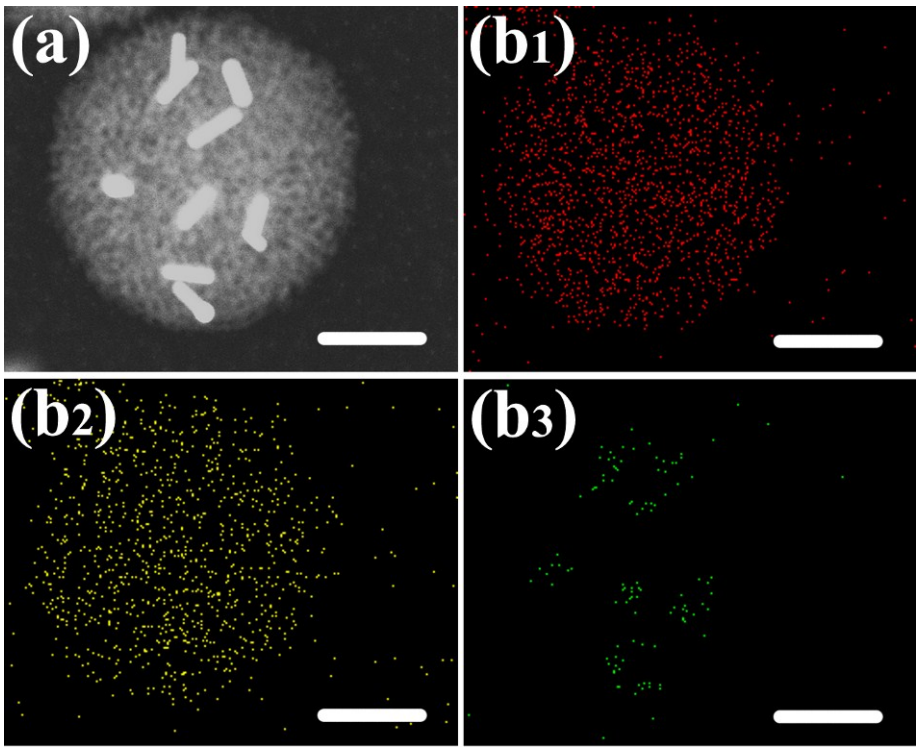

Fig. S3. High angle annular dark field scanning transmission electron microscopy (HAADF-STEM) image (a) and corresponding nanoscale elemental mapping of Si (b_1), O (b_2) and Au (b_3) (Scale bar: 100 nm).

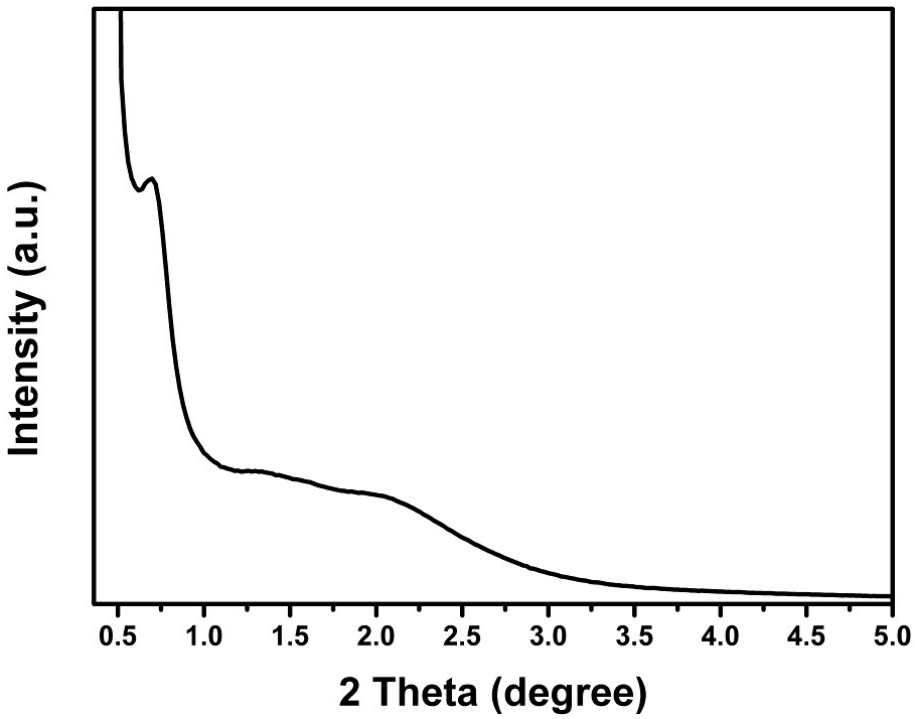

Fig. S4. Small-angle XRD pattern of MGNRs@HPSNs.

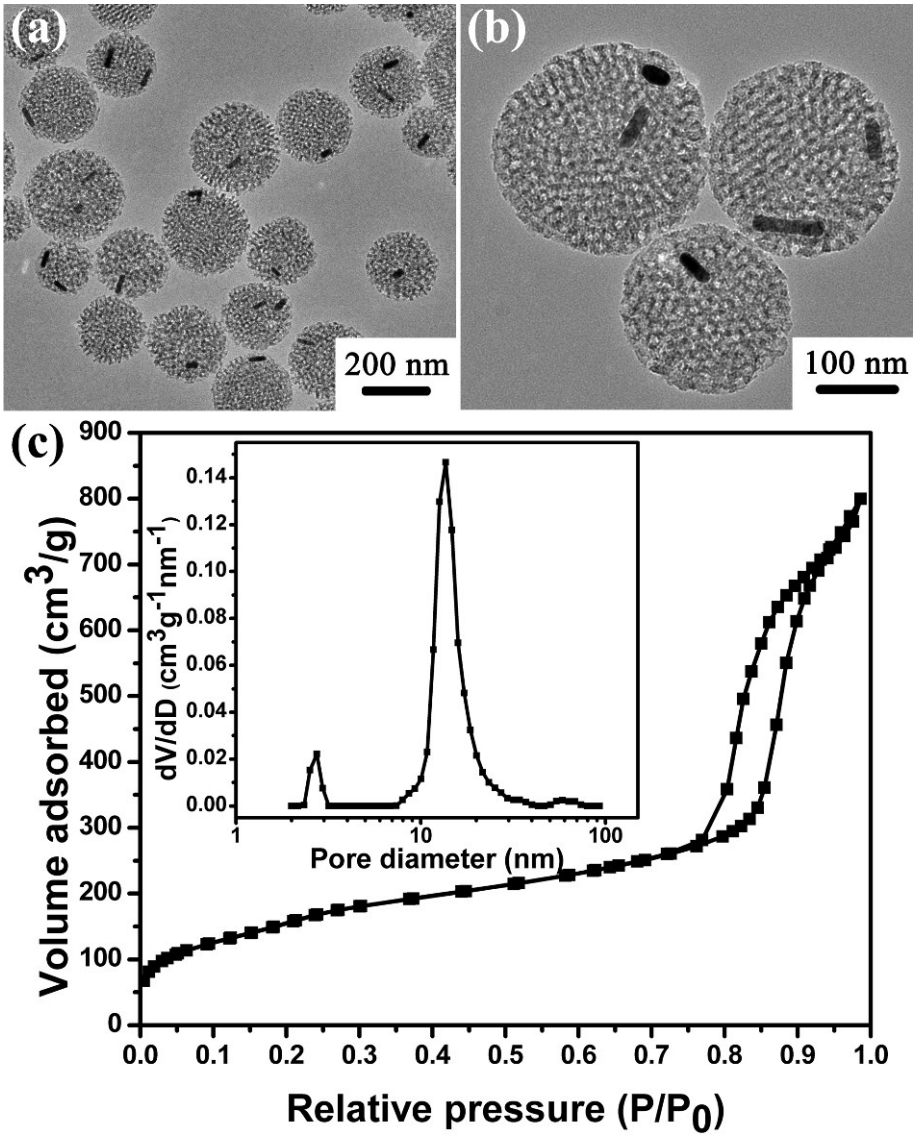

Fig. S5. TEM images of MGNRs@HPSNs-L at different magnifications (a,b) and the corresponding N_2 sorption isotherm (inset: NLDFT pore diameter distribution from the adsorption branch).

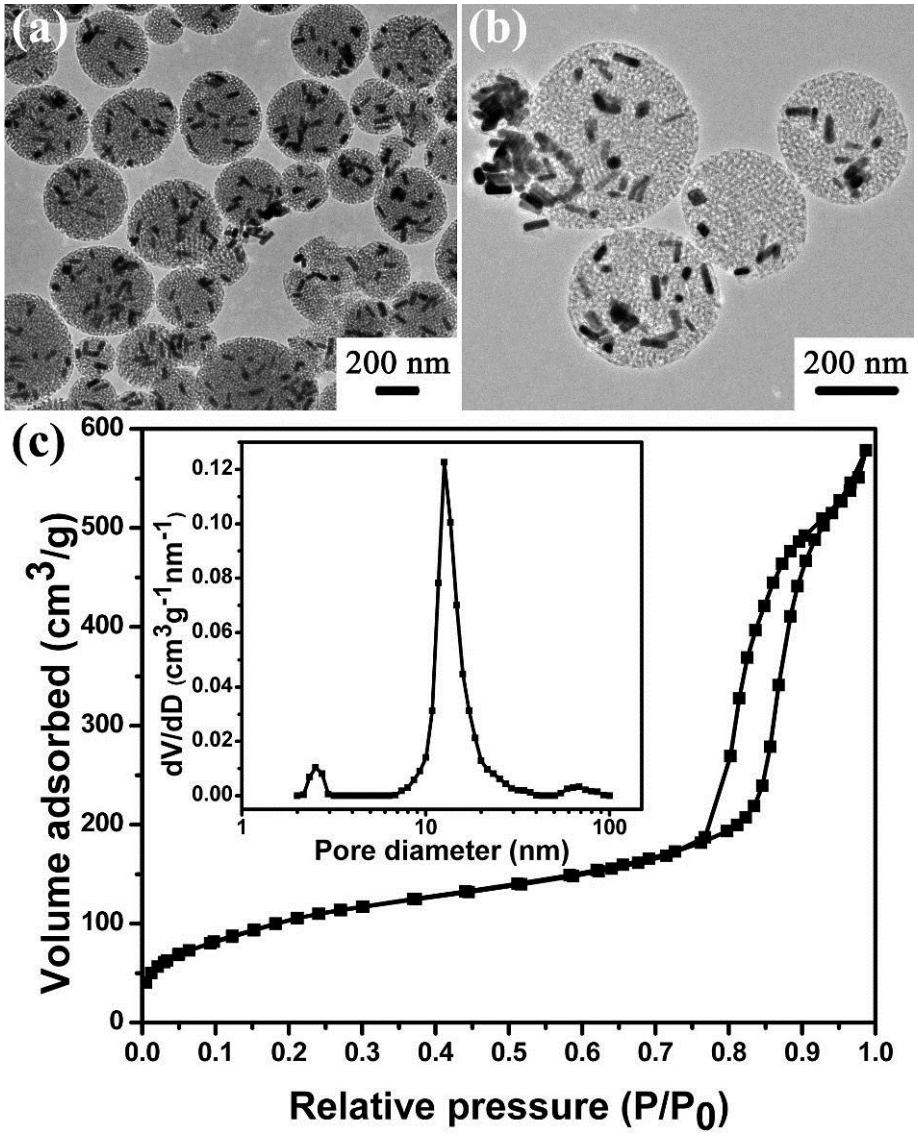

Fig. S6. TEM images of MGNRs@HPSNs-H at different magnifications (a,b) and the corresponding N_2 sorption isotherm (inset: NLDFT pore diameter distribution from the adsorption branch).

Table S1 Pore structural parameters of different samples.

Samples	Specific surface area (m^2g)	Total pore volume (cm^3/g)	Small-pore diameter* (nm)	Large-pore diameter* (nm)
MGNRs@HPSNs-L	564.6	1.24	2.7	13.6
MGNRs@HPSNs	504.9	1.11	2.7	13.2
MGNRs@HPSNs-H	372.2	0.89	2.6	12.8

*Pore diameter calculated by NLDFT method on the adsorption isotherm.

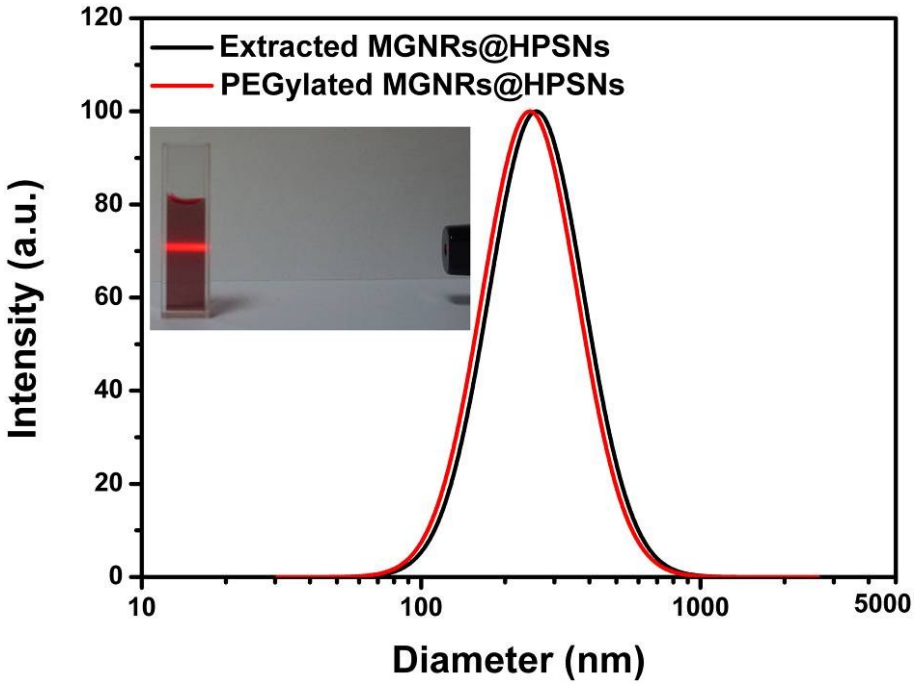

Fig. S7. Hydrodynamic diameter of different nanoparticles by DLS technique in water (inset: optical image for PEGylated MGNRs@HPSNs with laser).

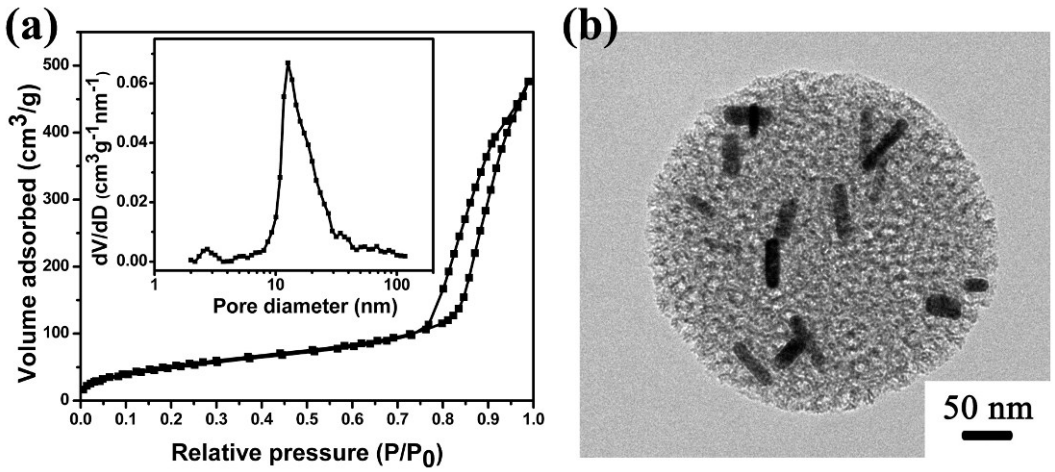

Fig. S8. N_2 sorption isotherm (a) and corresponding TEM image (b) of PEGylated MGNRs@HPSNs (inset: NLDFT pore diameter distribution from the adsorption branch).

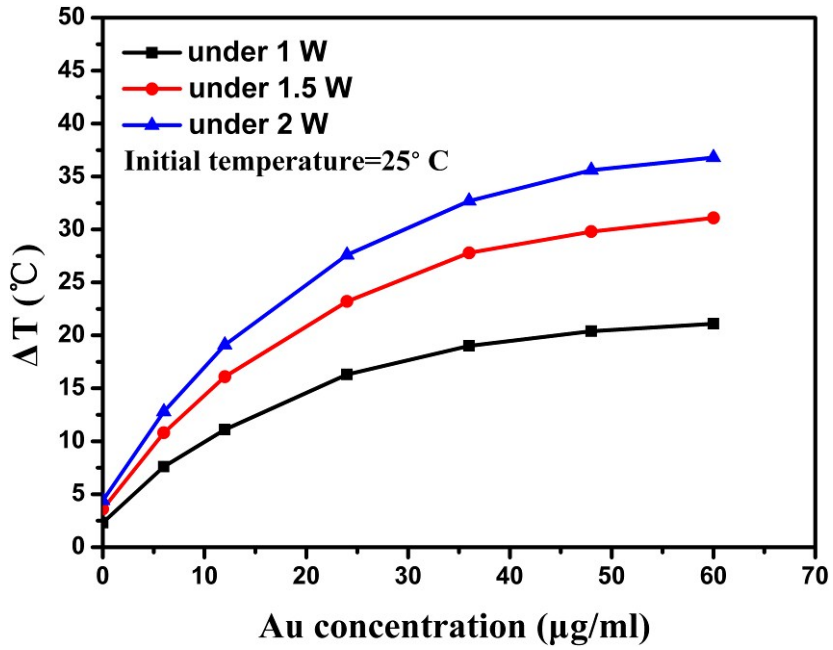

Fig. S9. Temperature profiles of the aqueous solutions of PEGylated MGNRs@HPSNs with laser irradiation of different powers for 5 min.

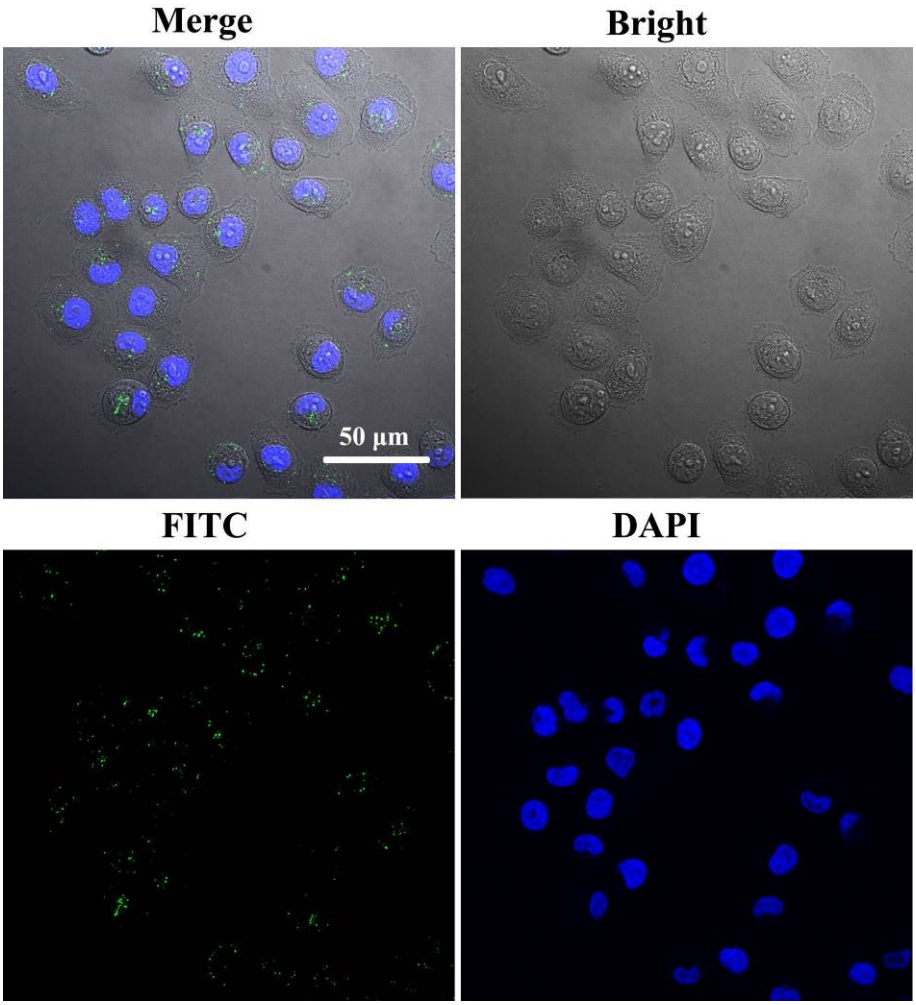

Fig. S10. The confocal laser scanning microscope (CLSM) images of SMMC-7721 cells after incubation for 4 h with the PEGylated MGNRs@HPSNs grafted with fluorescein isothiocyanate (FITC) groups.