Article

Cyclodextrin-Based Magnetic Nanoparticles for Cancer Therapy

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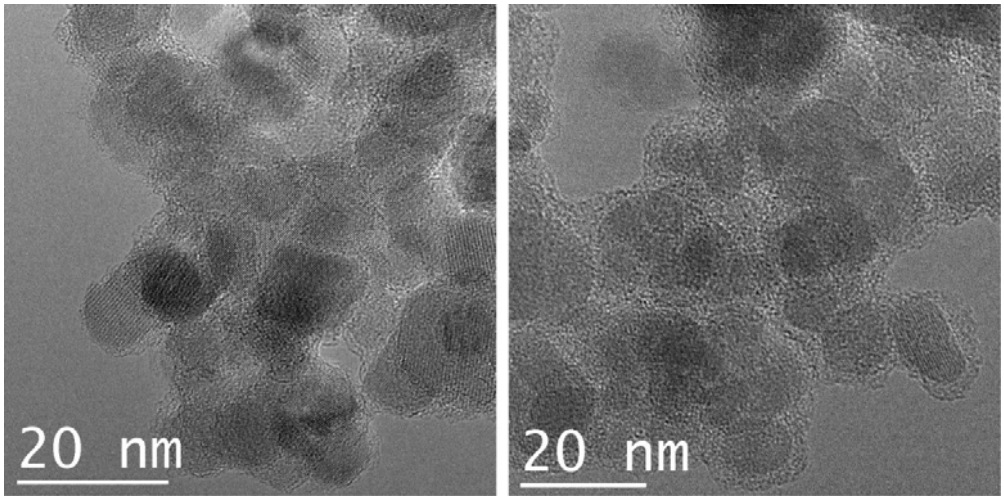


Figure S1. HR-TEM pictures of nanomaterial B with visible crystalline lattice.

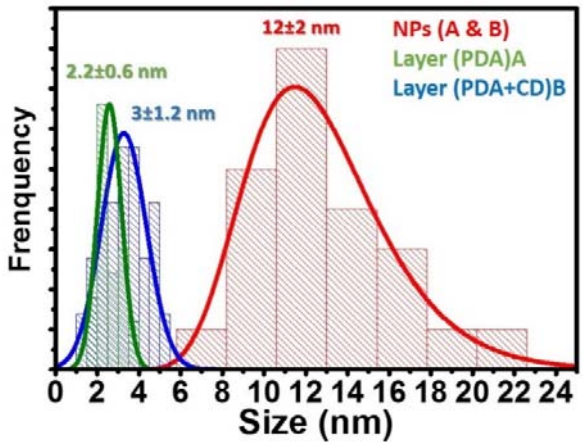


Figure S2. PDA layer thickness distribution in sample A (Green color) and B (Blue color) and size distribution of magnetic core in both samples (Red color). Individual particles were measured using DigitalMicrograph software from HR-TEM images. A collection of 200 individual measurements was collected and presented in histogram form.

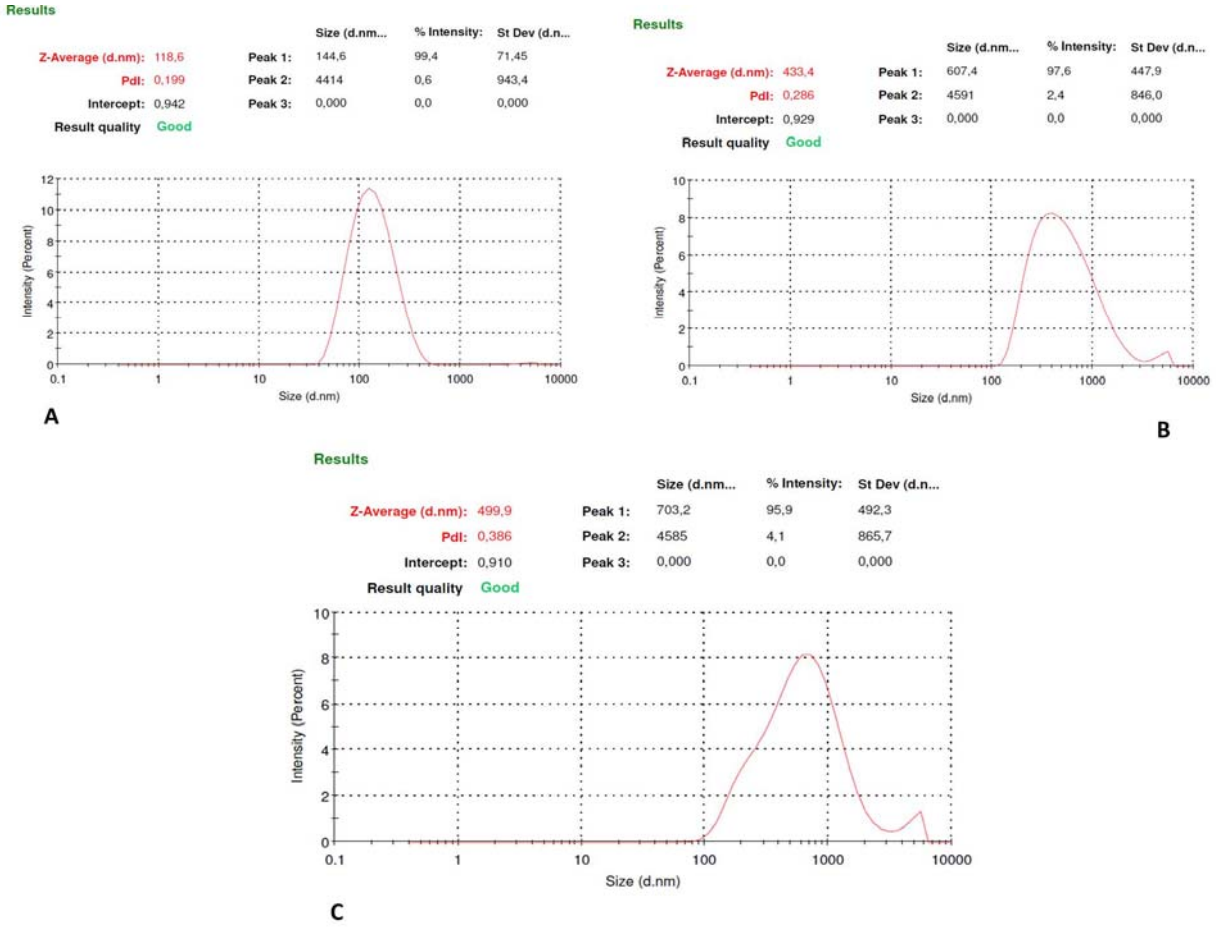


Figure S3. Hydrodynamic diameter recorder for bare magnetite nanoparticles (**A**); Fe_3O_4@PDA (**B**) and Fe_3O_4@PDA@SH-βCD (**C**).

Table S1. Changes of hydrodynamic diameter in time recorder for Fe_3O_4@PDA@SH-βCD

Day	Hydrodynamic diameter (nm)
0	500
3	683
6	684
7	684

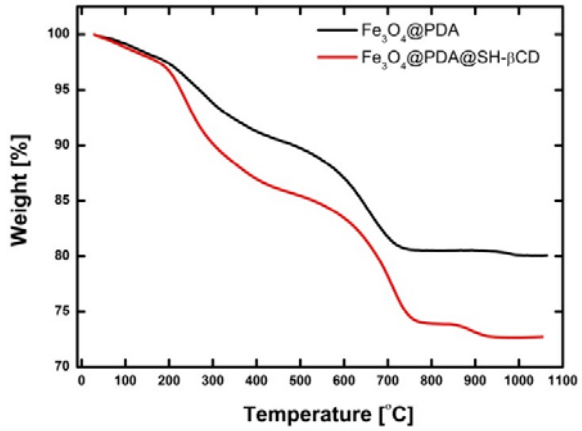


Figure S4. TGA curves for Fe_3O_4@PDA and Fe_3O_4@PDA@SH-βCD.

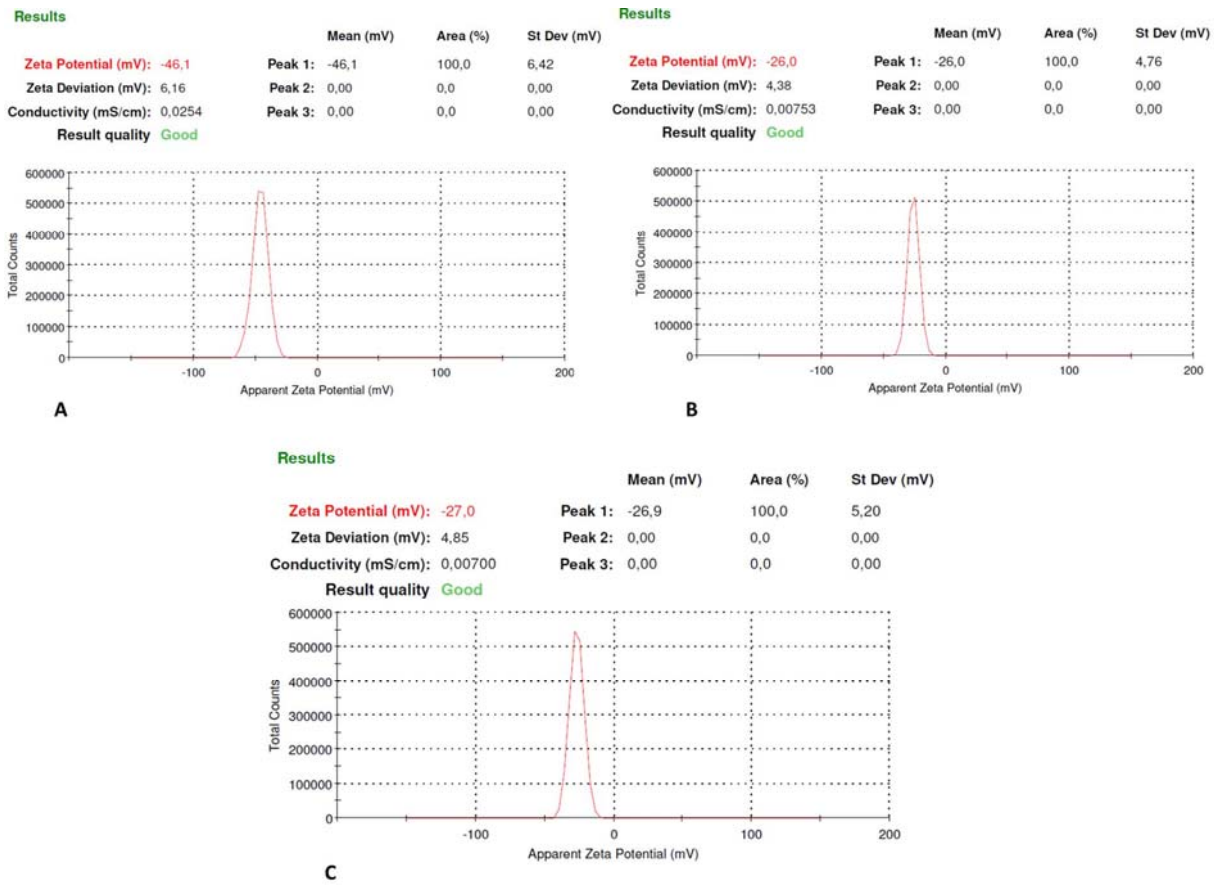


Figure S5. Zeta potential values recorder for bare magnetite nanoparticles (**A**); Fe_3O_4@PDA (**B**) and Fe_3O_4@PDA@SH-βCD (**C**).

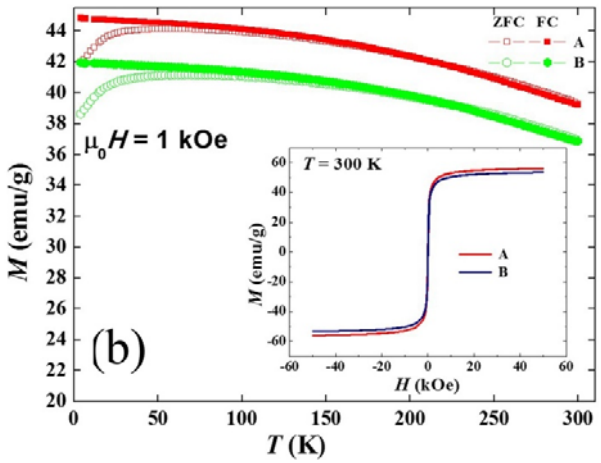


Figure S6. Magnetic properties of sample A and B.

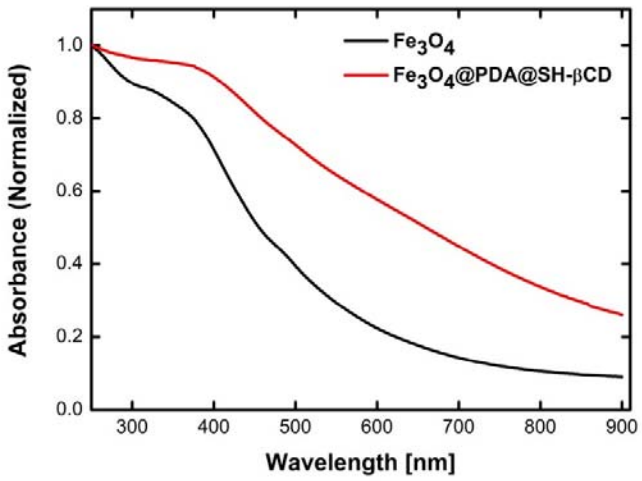


Figure S7. Absorption spectra of magnetic nanoparticles and nanomaterial B in range from 250 to 900 nm.

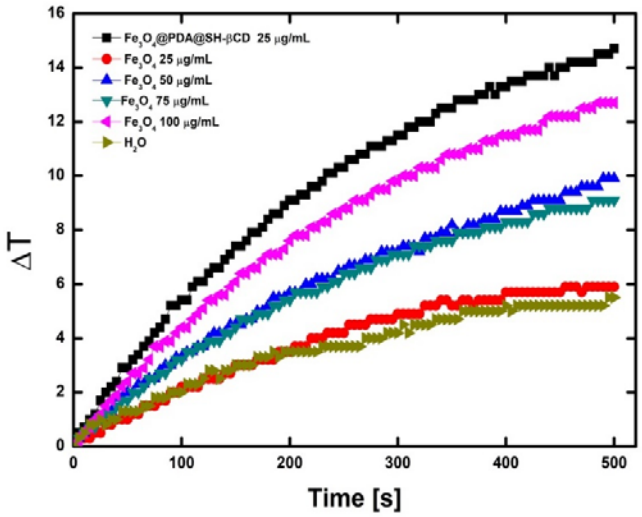


Figure S8. Temperature changes vs. time caused by bare magnetite at different concertation and nanomaterial B at concertation of 25 μg/mL.

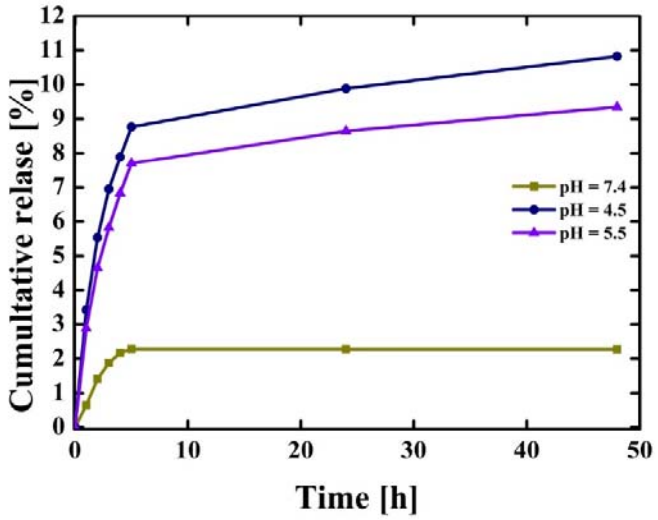
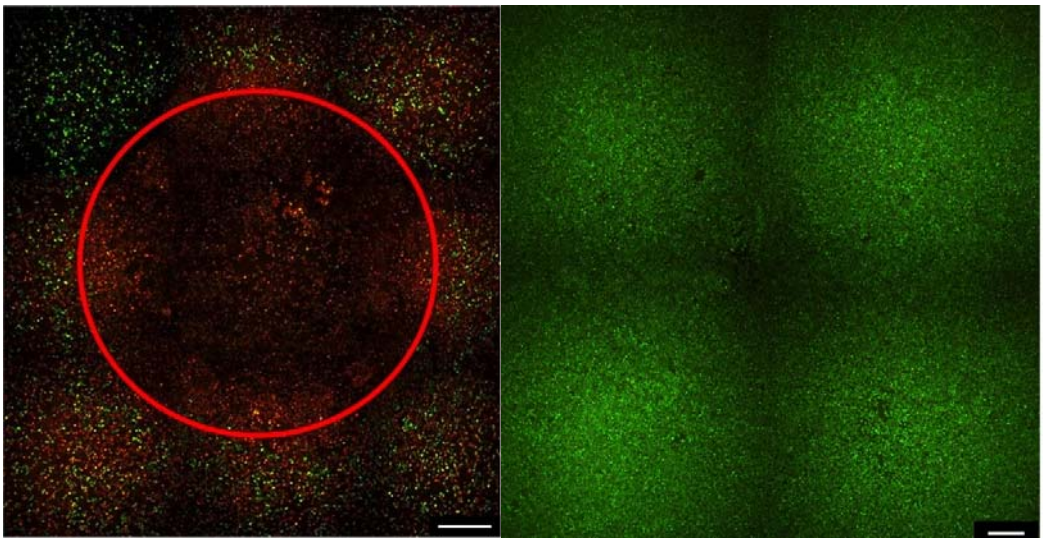


Figure S9. DOX release profile under various pH from sample B + DOX.



(a) (b)

Figure S10. Figure (**a**) The results of LIVE/DEAD after irradiation of HepG2 cell priori incubated with nanomaterials B at concertation 40 μg/mL. Red-death cell, Green-live cells; Figure (**b**) HepG2 cells irradiated with laser beam without nanomaterial B. Green-live cells. Scale bar 500 μm.