Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Electronic Supplementary Information (ESI)

Covalent immobilization of doxorubicin in glycine functionalized hydroxyapatite nanoparticles for pH-responsive release

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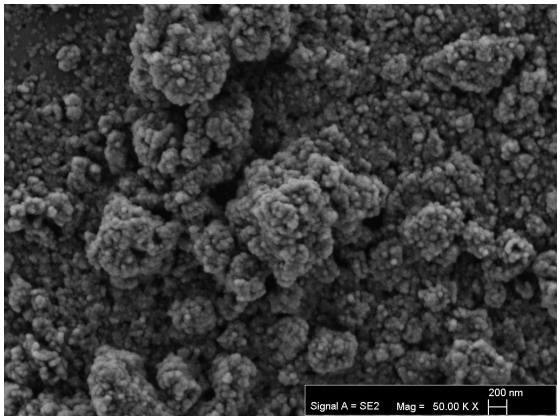

Fig. S1. FESEM micrograph of Gly-HANPs.

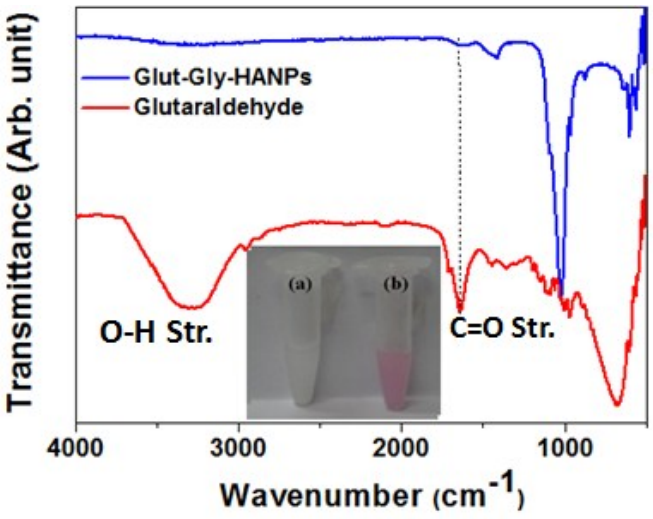

Fig. S2. FTIR spectra of Glut-Gly-HANPs and Glutaraldehyde. Inset shows photograph of Glut-Gly-HANPs nanoparticles (a) dispersed in water (b) after treating with Schiff's reagent.

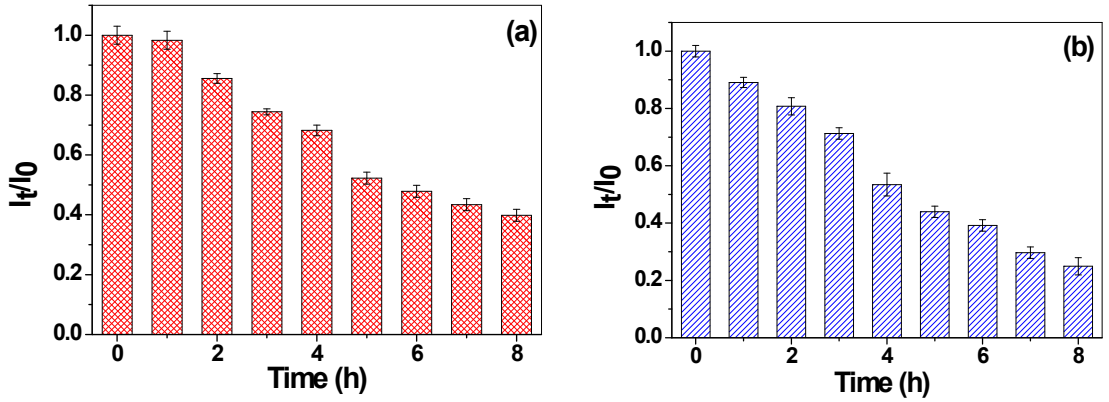

Fig. S3. Colloidal stability assay of Glut-Gly-HANPs in (a) 10% FCS and (b) 10% BSA with respect to time by measuring normalized intensity of scattered light (I_t/I_0, where I_t = Intensity at time 't' and I_0 = intensity at t = 0) at 90° using light scattering instrument.

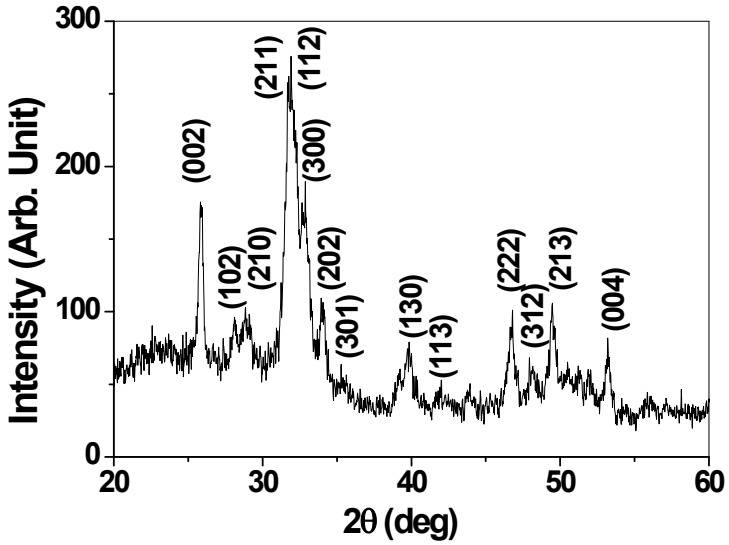

Fig. S4. PXRD pattern of DOX-Glut-Gly-HANPs after releasing the drug at pH-7.4.

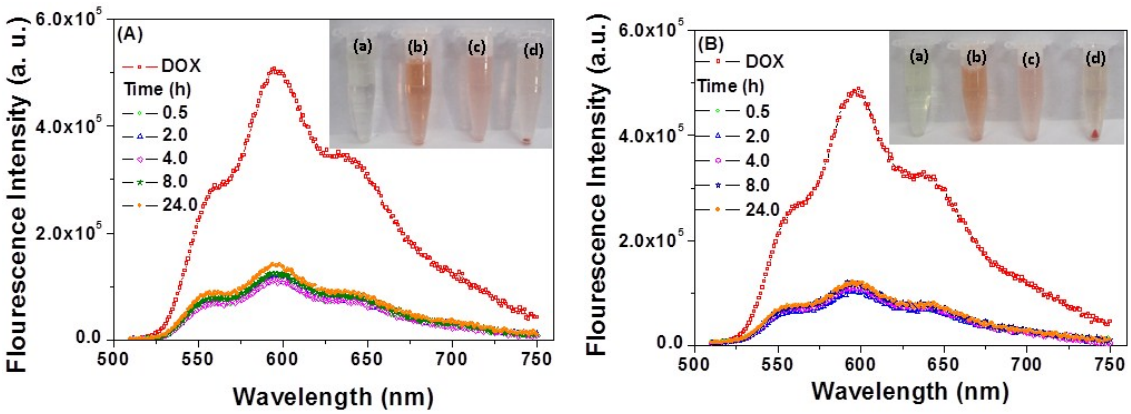

Fig. S5. Fluorescence spectra of pure DOX and DOX released in (A) FCS (10%) (B) BSA (10%) at different time intervals. Inset shows photographs of (a) FCS/BSA (10% solution in PBS), (b) DOX (30µg/mL) in FCS/BSA, (c) DOX-Glut-Gly-HANPs dispersed in FCS/BSA (10%) and (d) DOX released after incubating DOX-Glut-Gly-HANPs in FCS/BSA for 24h.