

Supporting Information

Enzyme-Sensitive Magnetic Core-Shell Nanocomposites for Triggered Drug Release

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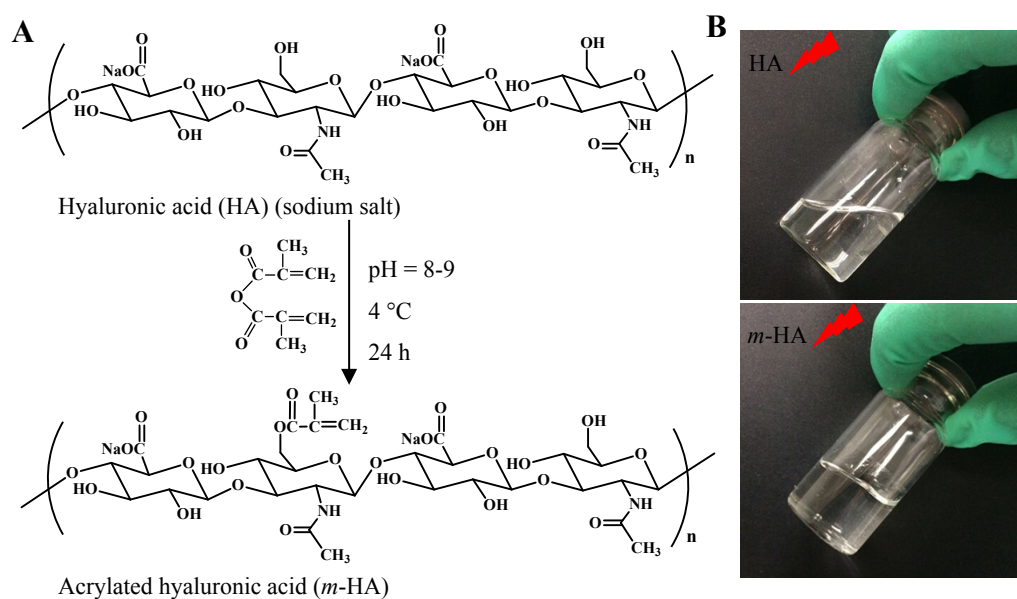
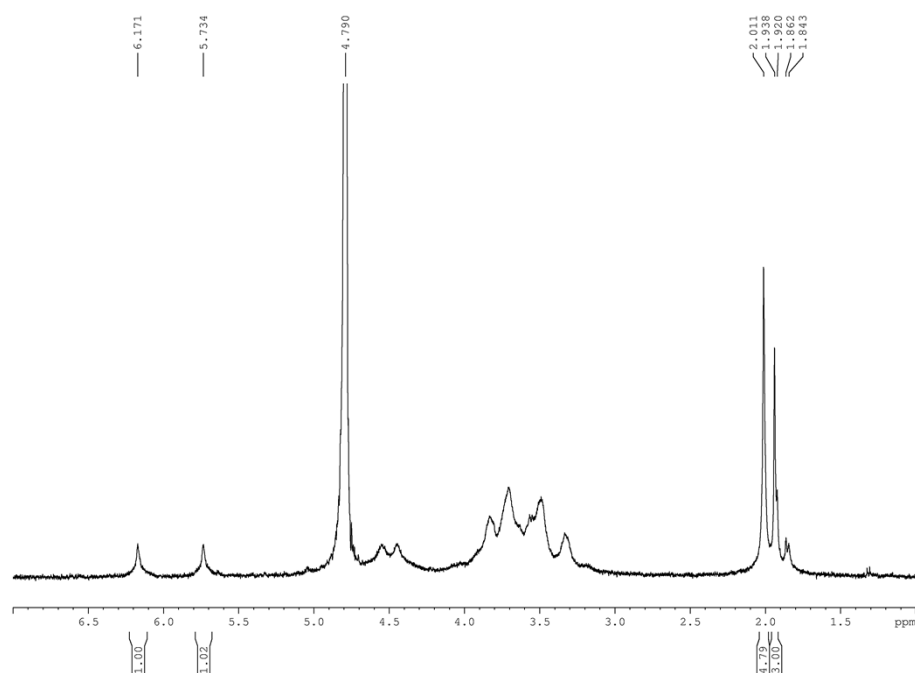


Fig. S1 (A) Synthesis of *m*-HA. (B) The hydrogel can be formed by *m*-HA (2 %, w:v) (bottom) by Irgacure 2959 (0.1 %, w:v) via UV irradiation for 30 s in contrast to HA with the same concentration (top).



m-HA: ^1H NMR (D_2O , 300 MHz, δ ppm): 1.85-1.96 (m, 3H, $\text{CH}_2=\text{C}(\text{CH}_3)\text{CO}$), 2.01 (s, 3H, NHCOCH_3), 5.73 (s, 1H, $\text{CH}^1\text{H}^2=\text{C}(\text{CH}_3)\text{CO}$), 6.17 (s, 2H, $\text{CH}^1\text{H}^2=\text{C}(\text{CH}_3)\text{CO}$).

Fig. S2 The NMR spectrum of as-synthesized *m*-HA in D_2O .

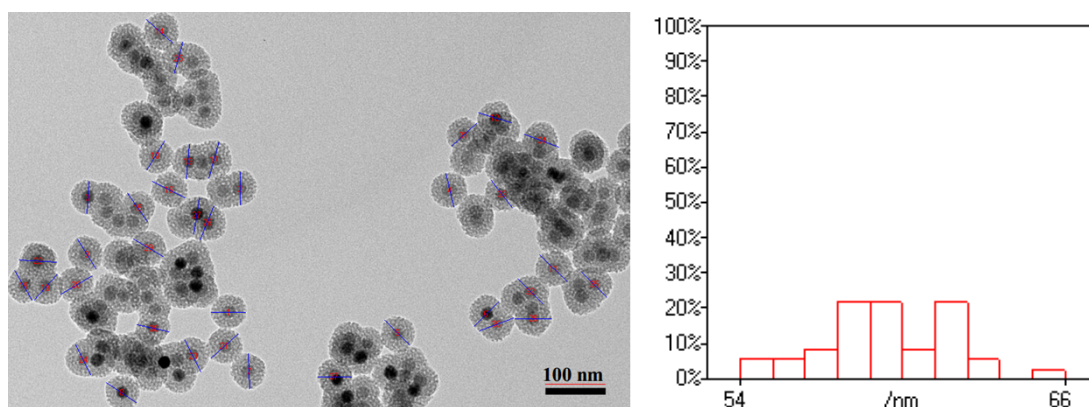


Fig. S3 The statistical average diameter of $\text{Fe}_3\text{O}_4@\text{mSiO}_2$ from TEM images by the Nano Measurer Soft (1.2).

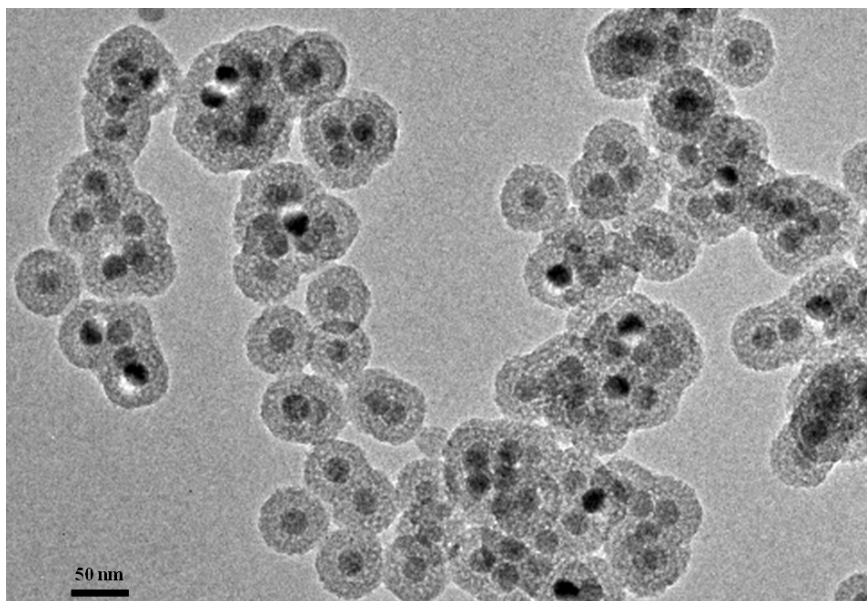


Fig. S4 TEM images of as prepared DOX-Fe₃O₄@mSiO₂-HA.

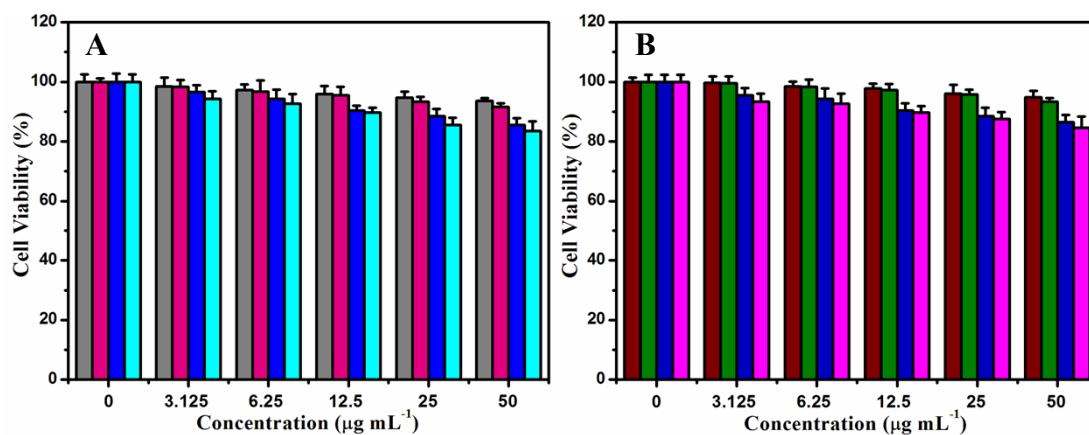


Fig. S5 In vitro cell viability incubated with different amounts of $\text{Fe}_3\text{O}_4@\text{mSiO}_2$ (gray and wine), $\text{Fe}_3\text{O}_4@\text{mSiO}_2\text{-HA-2}$ (pink and olive), $\text{Chl-Fe}_3\text{O}_4@\text{mSiO}_2\text{-HA-2}$ (blue and royal), and $\text{DOX-Fe}_3\text{O}_4@\text{mSiO}_2\text{-HA-2}$ (cyan and magenta) toward two different normal cells lines (A) L02 human hepatocytes, and (B) HUVEC for 24 h.