

Supporting Information

Design of core-shell magnetic mesoporous silica hybrids for pH and UV-light stimuli-responsive cargo release

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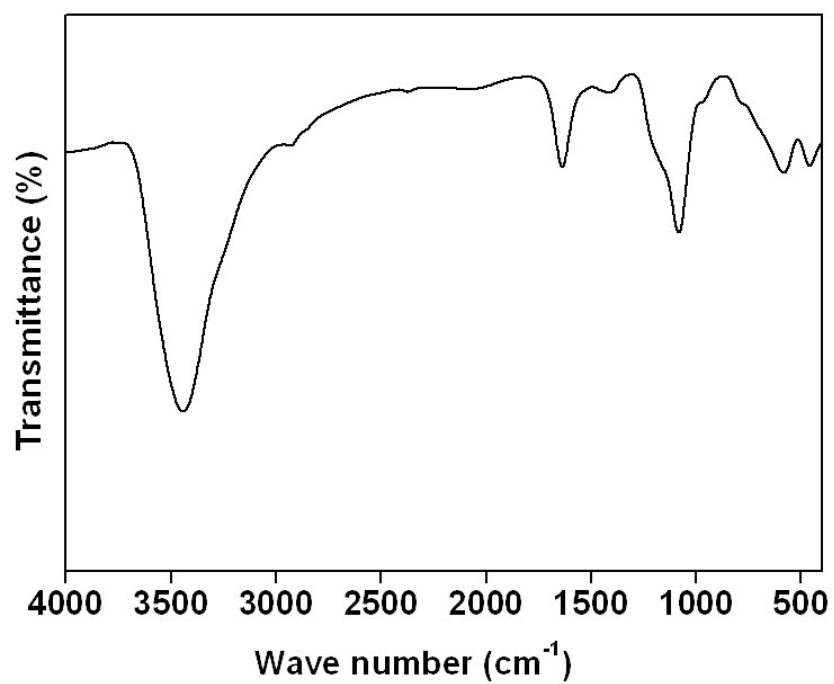


Figure S1. FTIR spectrum of control Fe₃O₄@MSN sample.

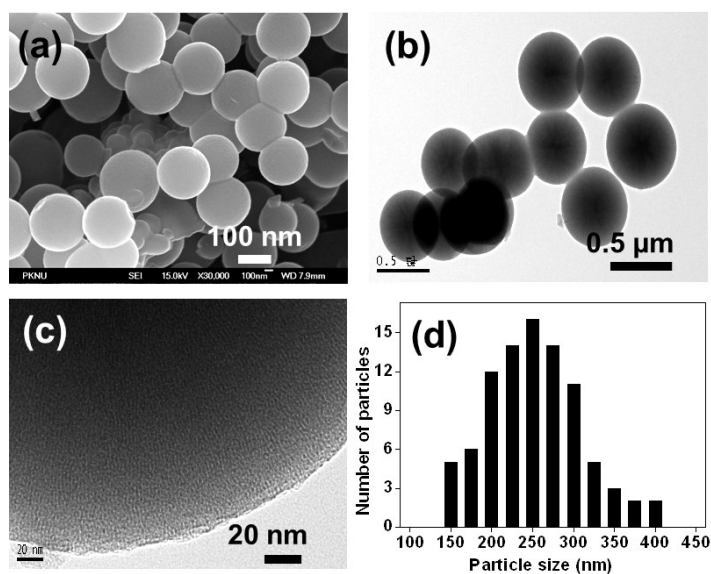


Figure S2. (a) SEM and (b,c) TEM of the MSH@Azo-CA nanospheres. (d) The particle size distributions of the MSH@Azo-CA nanospheres.

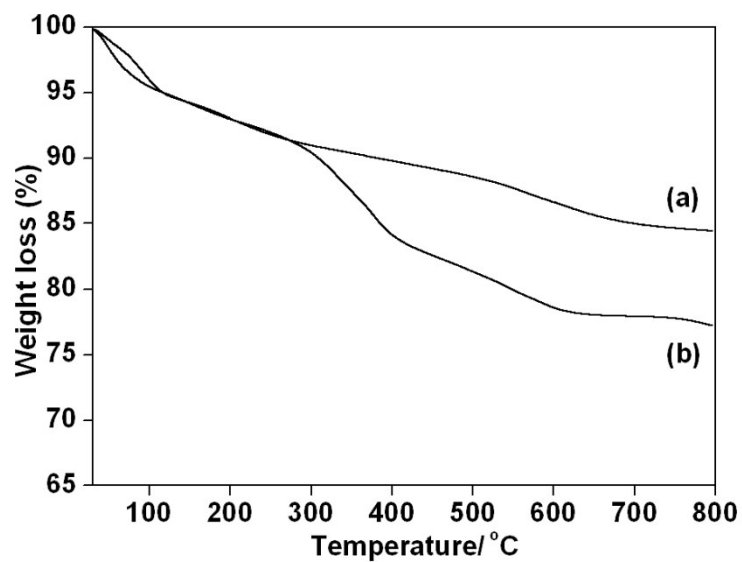


Figure S3. TGA curves of the (a) MSH@SAH and (b) MSH@Azo-CA nanospheres.

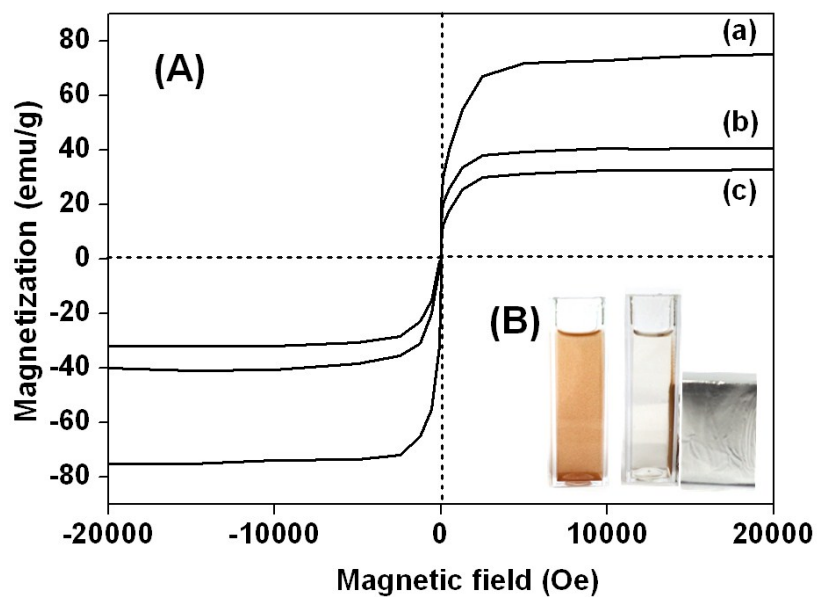


Figure S4. (A) Room temperature magnetization curves of (a) Fe₃O₄ nanoparticles and (b) MSH@SAH nanospheres and (c) MSH@Azo-CA nanospheres, and (B) photographs of aqueous suspensions of MSH@Azo-CA samples before (left) and after magnetic attraction within 30 s (right).

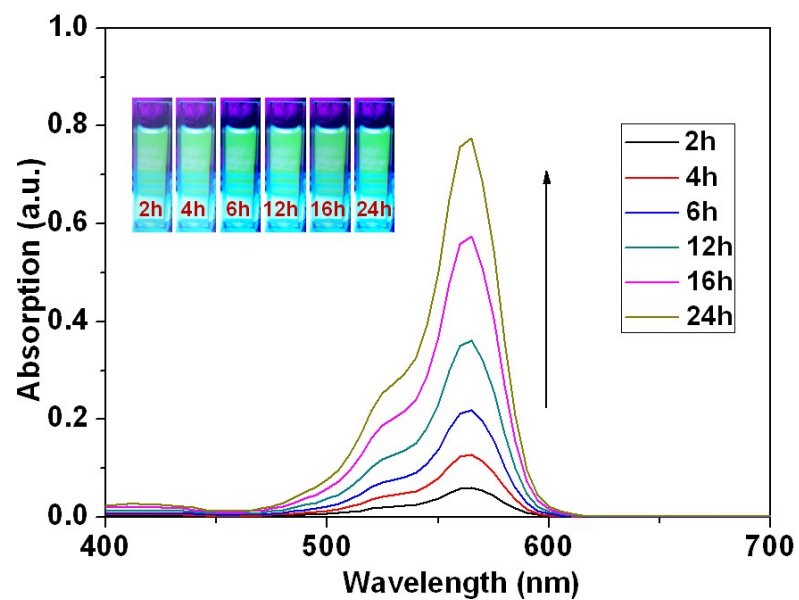


Figure S5. UV-vis spectra of Rh123 release when the Rh123-loaded MSH@Azo-CA nanospheres were exposed continuously to UV-light (365 nm) at pH 5.0. The inset photograph shows the green fluorescence intensity of the Rh123 at different times of UV-light exposure.