

## SUPPLEMENTARY MATERIAL

## Responsive P(NIPAM-co-AA) Particles Functionalized Magnetic Microspheres

Yiheng Wang, Mengge Xia, Yongtao Wu, Meifang Zhu\*

(\*Corresponding author: zmf@dhu.edu.cn)

State Key Laboratory for Modification of Chemical Fibers and Polymer Materials,  
College of Material Science and Engineering, Donghua University, Shanghai, P. R. China

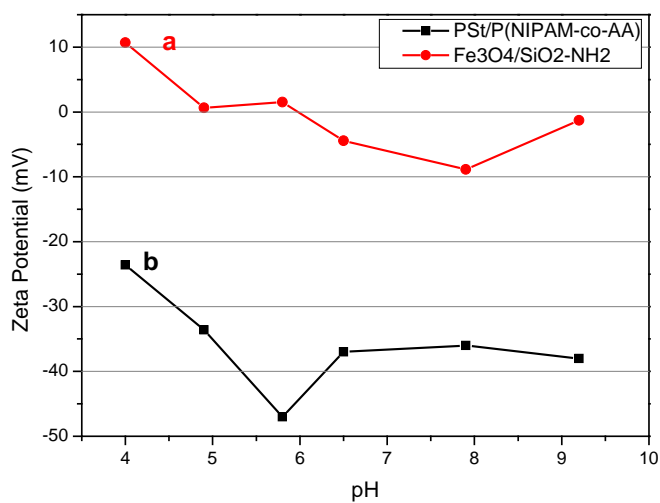


Figure S1. pH dependence of the  $\zeta$ -potential of (a) amino-modified Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> particles and (b) PSt/P(NIPAM-AA) nano particles.

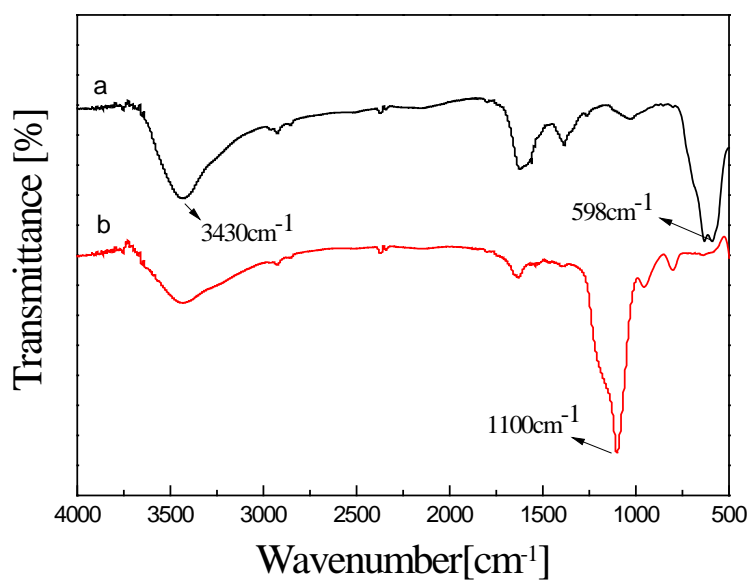


Figure S2. FTIR spectrums of (a) citrate-modified Fe<sub>3</sub>O<sub>4</sub> and (b) amino-modified Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> particles

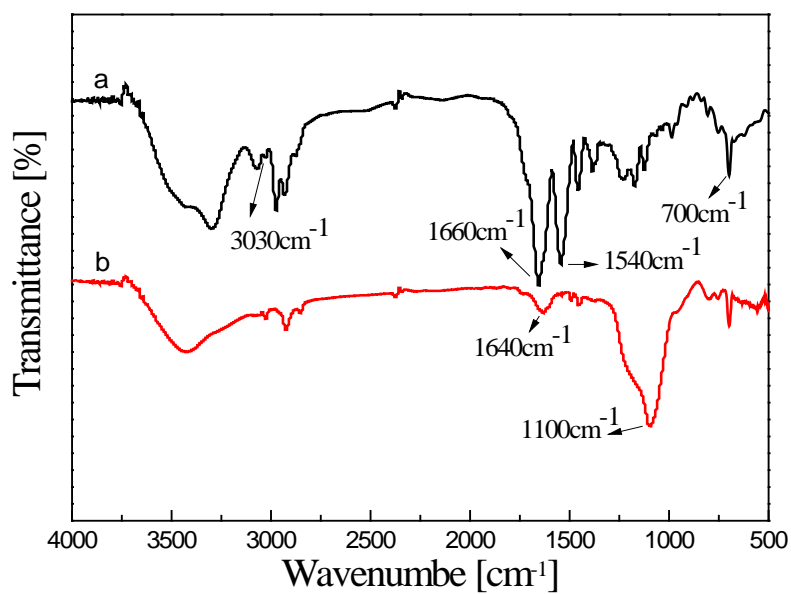


Figure S3. FTIR spectrum of (a) PSt/P(NIPAM-co-AA) nano particles and (b) PSt/P(NIPAM-co-AA)/Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> microspheres

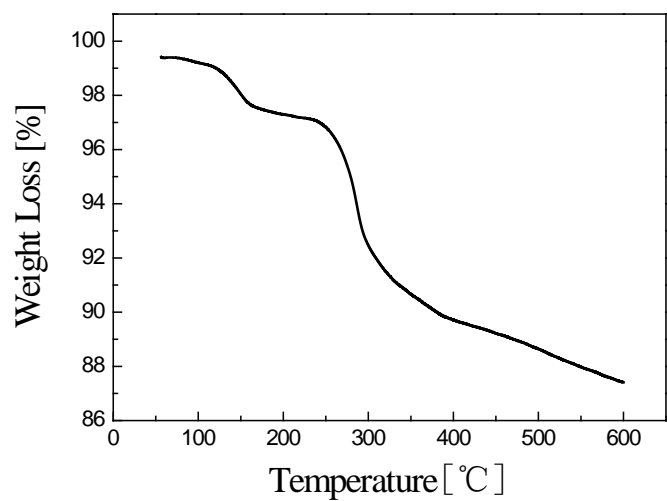


Figure S4. TGA curve of citrate-modified Fe<sub>3</sub>O<sub>4</sub> nano particles.

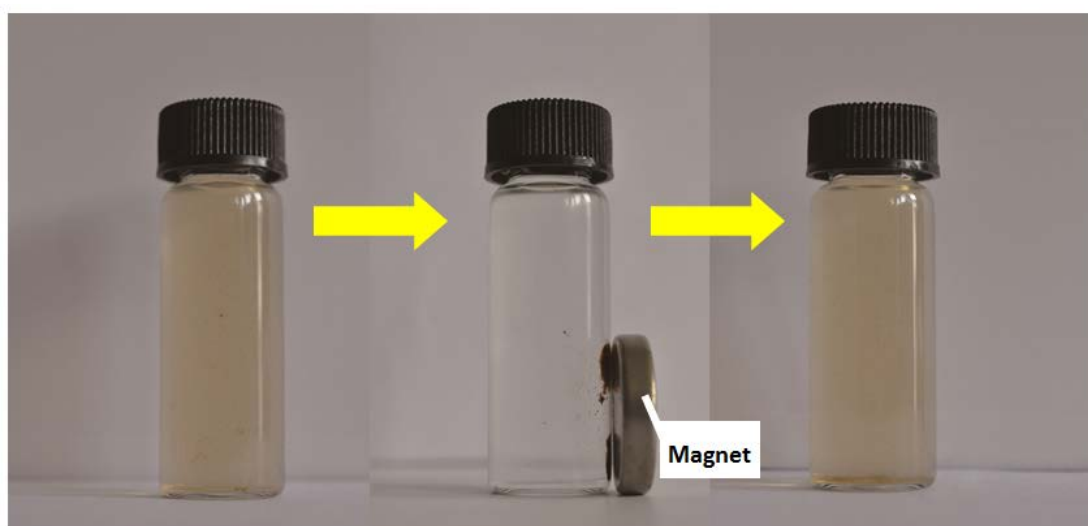


Figure S5. Separation and redispersion of magnetic PSt/P(NIPAM-co-AA)/Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> microspheres in the presence of an external magnetic field.