Supporting Information for

Superparamagnetic Core-Shell Polymer Particles for Efficient Purification of His-Tagged Proteins**

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Figure S1. The XRD pattern of the as-prepared Fe₃O₄ spheres. The pattern matches that of inverse spinel magnetite (Fe₃O₄) (JCPDS 82-1533) shown at the bottom.
Figure S2. Zeta potentials of Fe₃O₄@SiO₂ spheres, Fe₃O₄@SiO₂-NH₂ spheres and Fe₃O₄@SiO₂/NTA spheres in ultra-pure water.

Figure S3. TGA curves of a) Fe₃O₄@SiO₂/MA spheres and b) Fe₃O₄@SiO₂/P(St-alt-MAn) spheres.
Figure S4. The hysteresis loops of a) Fe₃O₄ spheres, b) Fe₃O₄@SiO₂/ P(St-alt-MAA)/ Ni-NTA spheres.

Figure S5. The fluorescence spectra showing the charge of emission intensity in the GFP capturing experiments with different amount of magnetic spheres. a) 6.0 µg of His-tagged GFP was mixed with 10µg, 20µg, 30µg, 40µg and 48µg of Fe₃O₄@SiO₂/ Ni-NTA spheres in PBS buffer. b) 6.0 µg of His-tagged GFP was mixed with 5µg, 8µg, 10µg and 12µg of Fe₃O₄@SiO₂/P(St-alt-MAA)/ Ni-NTA spheres in PBS buffer. The spectra were measured from the supernatants after the separation of magnetic spheres.