Supporting Information

Enhanced Protein Imprinting over Nanoparticles Functionalized with Non-covalent Template Sorption Groups

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Table S-1. Comparison of zeta-potentials and Lys sorption on silica nanoparticles functionalized differently.[a]

Samples	Zeta-potential (mV)	Lys adsorbed (mg/g)
Silica	-39.43 ± 0.64	29.74 ± 0.67
Silica–NH_2	-11.70 ± 0.44	[b]
Silica–COOH	-34.90 ± 0.35	39.48 ± 0.16

[a] Lys adsorption: 7 mg of particles incubated with 1.5 mL of Lys solution (C_i = 0.4 mg/mL) using Tris buffer (10 mM, pH 7.0) at 25 °C for 1 h.

[b] too little to be detected.

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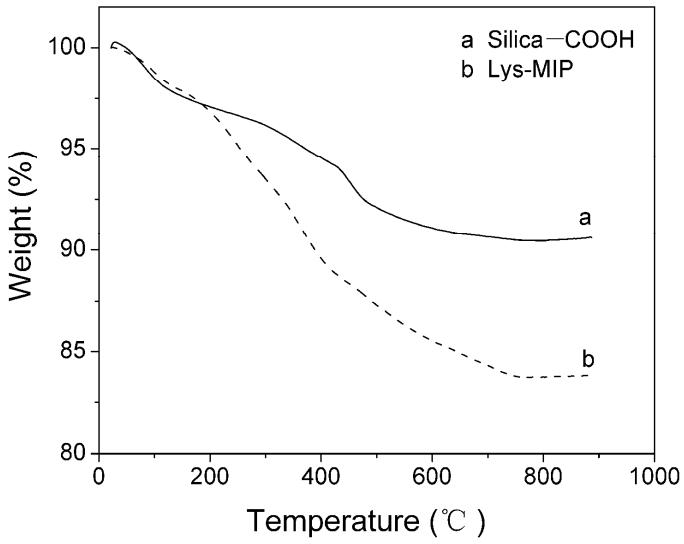

Figure S-1. TGA curves of (a) Silica–COOH particles, (b) Lys-imprinted particles.

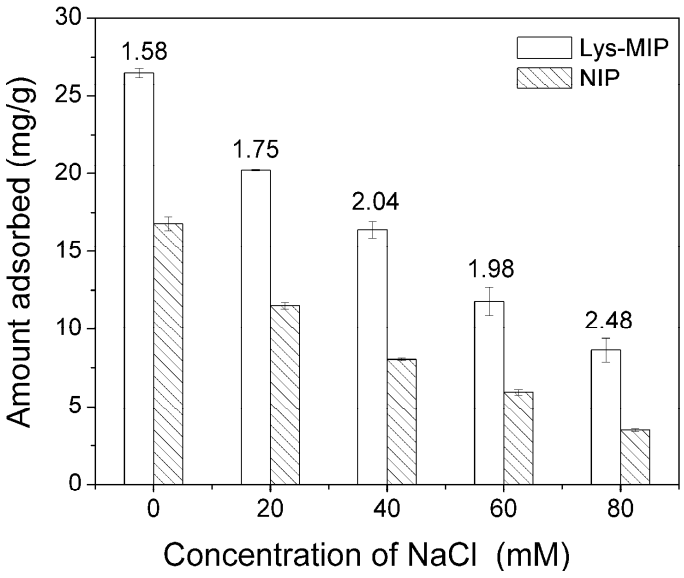

Figure S-2. The effects of NaCl concentration in the Lys solution on the rebinding capacity to the MIP and NIP particles. Adsorption conditions: V = 1.5 mL, m = 7.0 mg, C_0 = 0.4 mg/mL, time 1 h, temperature 25 °C, Tris buffer(10 mM, pH 7.0). The imprinting factors are indicated above the bars.

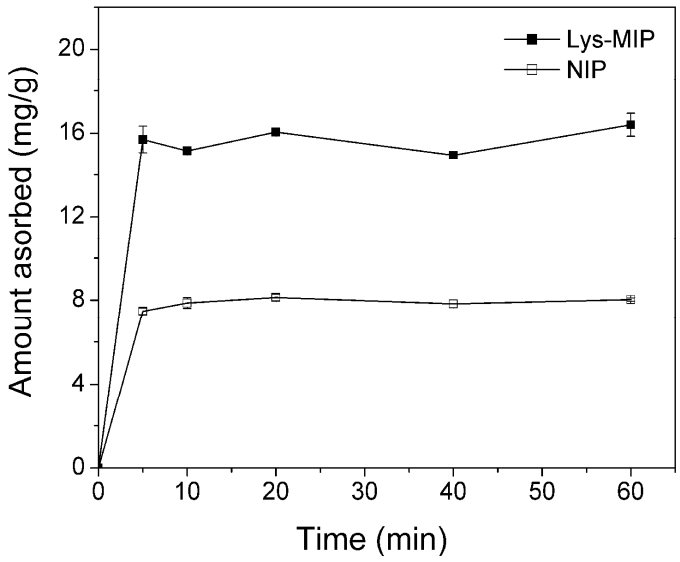

Figure S-3. Dynamic rebinding profiles of Lys on the imprinted and non-imprinted particles. Adsorption conditions: V = 1.5 mL, m = 7.0 mg, C_0 = 0.4 mg/g, C_{NaCl} = 40 mM, time 1 h, temperature 25 °C, Tris buffer(10 mM, pH 7.0).