

Electronic Supplementary Information

Improved surface imprinting based on simplified mass transfer process for
the selective extraction of IgG

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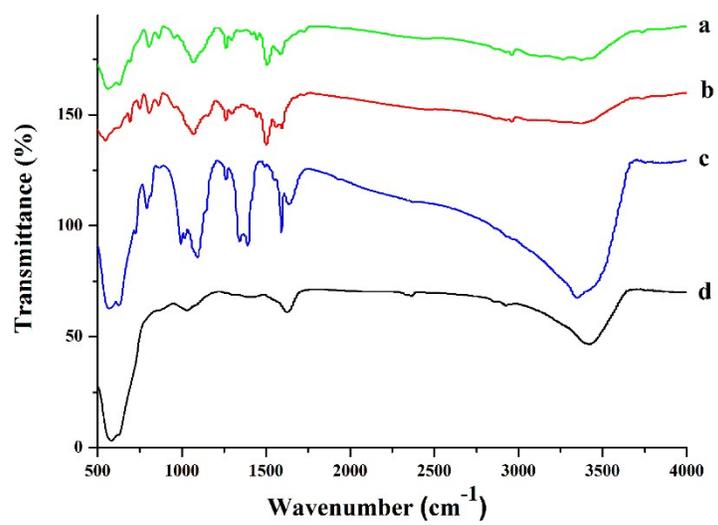


Fig. S1 FT-IR spectrums of the magnetic NPs (a) MNINs; (b) MMINs; (c) phenylboronic acid functionalized Fe₃O₄@Au NPs; (d) Fe₃O₄ NPs.

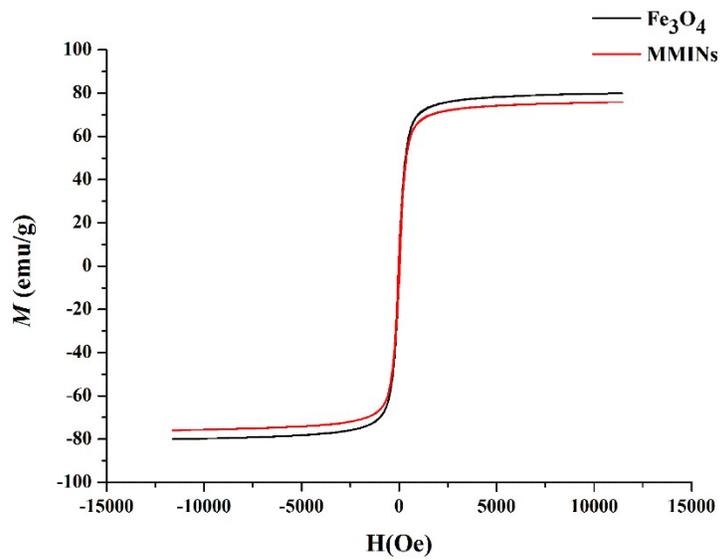


Fig. S2 Hysteresis loops of Fe_3O_4 NPs and MMINs

Table S1. Average sizes, PDI values and zeta potentials of the magnetic NPs prepared in this work.

Magnetic NPs	Average size (nm)	RSD ^a (%)	PDI	RSD ^b (%)	Zeta potential (mV)
Fe ₃ O ₄	359.06	5.99	0.167	3.41	-1.85 ± 1.62
Phenyloronic acid functionalized Fe ₃ O ₄ @Au	360.93	7.05	0.170	5.20	-42.73 ± 0.95
MMINs	383.61	9.12	0.207	7.59	-35.24 ± 1.20
MNINs	391.25	11.33	0.234	8.17	-32.24 ± 1.46
Reference MMIPs	389.35	8.58	0.289	9.65	-41.1 ± 1.52
Reference MNIPs	400.67	10.35	0.301	7.59	-43.68 ± 1.08

a: average sizes of the magnetic NPs; b: PDI values of the magnetic NPs

Table S2 Information of the tested proteins

Protein	IgG	HRP	OVA	α -Glu	BSA
<i>Mw</i> /kDa	150	40	45	68	66
pI	8.0	7.2	4.7	4.8	4.8