Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Molecularly imprinted polymers fabricated by Pickering emulsion polymerization for the selective adsorption and separation of quercetin from Spina Gleditsiae

Yanhua Sun[a], Yange Zhang[a], Zhiyu Ju[a], Liangfeng Niu[a], Zhaoxiang Gong[a], Zhihong Xu[ab]*

[a] Key Laboratory of Chemo/Biosensing and Detection, School of Chemistry and Chemical Engineering, Xuchang University, Xuchang, 461000, P. R. China

[b] College of Chemistry and Molecular Engineering, Zhengzhou University, Zhengzhou, 450052, P.R. China

*Correspondence: Prof. Zhihong Xu, School of Chemistry and Chemical Engineering, Xuchang University, Xuchang 461000, China

Email address: xuzhihong1980@xcu.edu.cn (Z. Xu)

Tel: +86 0374-4369297

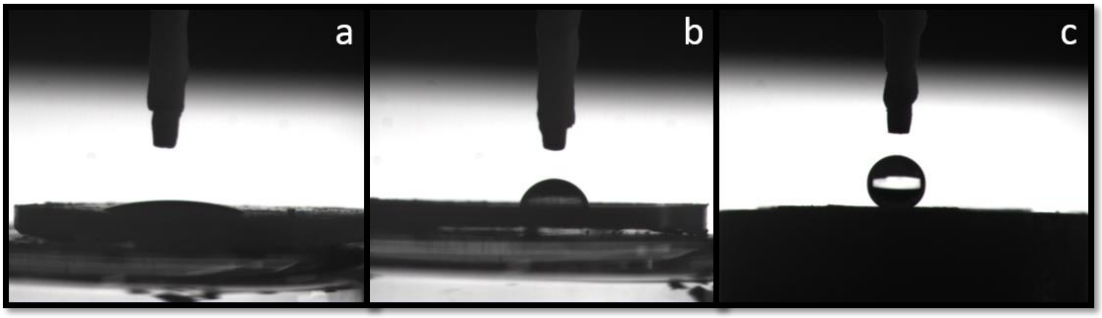

Fig. S1 The contact angle test of HAp (a), M_5-HAp (b), and M_{10}-HAp (c)

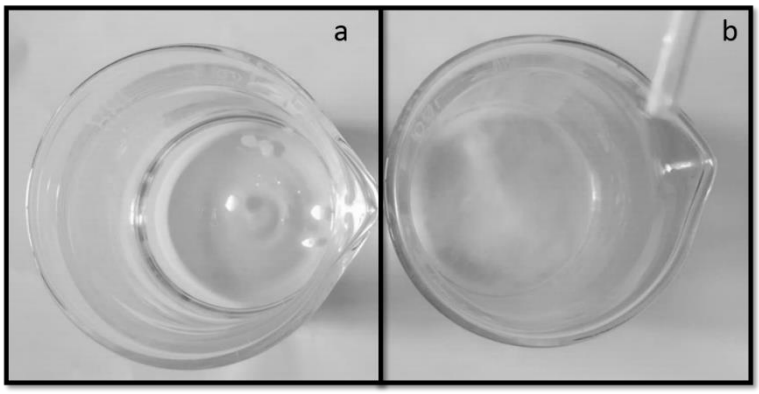

Fig. S2 The photograph of emulsion dropped into toluene (a) and pure water (b)

Table S1 The linear fitting results of pseudo-first-order and pseudo-second-order models for MIPs-X and NIPs-8

		Pseudo-first-order			Pseudo-second-order		
Adsorbents	$Q_{e,exp}$ (μg g^{-1})	$Q_{e,c}$ (μg g^{-1})	k_1	R^2	$Q_{e,c}$ (μg g^{-1})	k_2 (min^{-1})	R^2

MIPs-4	338	380	0.0727	0.9991	442	377×10^{-6}	0.9594
MIPs-6	451	501	0.06958	0.9993	592	118×10^{-6}	0.9618
MIPs-8	521	573	0.06864	0.9989	685	87×10^{-6}	0.9609
MIPs-10	465	395	0.04756	0.9907	606	74×10^{-6}	0.9701
MIPs-12	415	348	0.04303	0.9892	552	8×10^{-6}	0.9723
NIPs-8	119	98	0.04767	0.9910	150	8×10^{-6}	0.9844

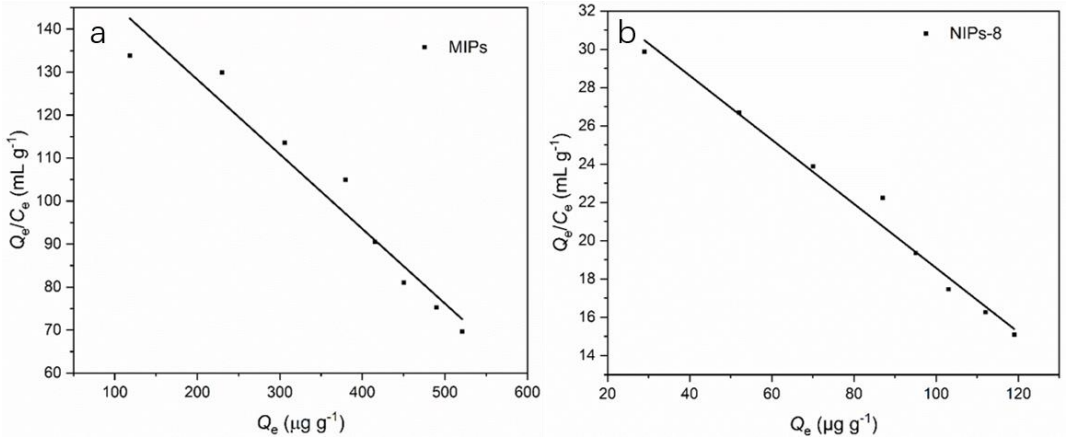

Fig. S3 The linear fitting curves of Scatchard model for MIPs-8 and NIPs-8 toward quercetin at 40 ºC

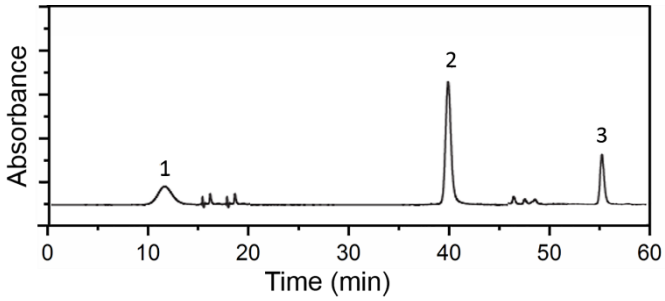

Fig. S4 Chromatograms of the eluate from MIPs-8 which immersed in Spina Gleditsiae extracting solution