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Electronic Supplementary Information

Rapid extraction of trace bisphenol A in real water samples using hollow mesoporous silica surface dummy molecularly imprinted polymers

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1. Equations

The pseudo-first-order rate equation is listed as follows:

$$ln(Q_e - Q_t) = ln Q_e - k_1 t \tag{1}$$

where Q_e and Q_t (mg/g) are the amount of BPA adsorbed on HM-DMIPs at equilibrium and time t, respectively. k_I (cm⁻¹) is the rate constant of pseudo-first-order model.

The pseudo-second-order rate equation is listed as follows:

$$\frac{t}{Q_t} = \frac{1}{k_2 Q_e^2} + (\frac{1}{Q_e})t \tag{2}$$

where k_2 is the rate constant of pseudo-second-order model.

2. Supporting data

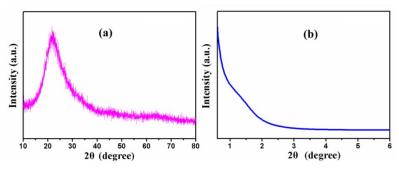


Fig.S1 Wide-angle (a) and low-angle (b) XRD spectra of HM-DMIPs

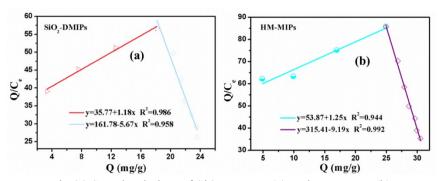


Fig.S2 Scatchard plots of SiO₂-DMIPs (a) and HM-MIPs (b)

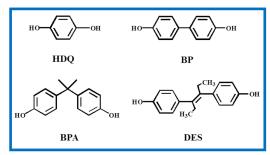


Fig.S3 Molecular structure of analogs used in this work

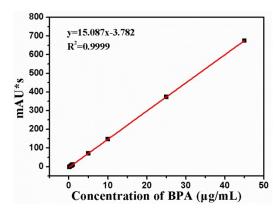


Fig.S4 Calibration curve for the determination of BPA by HPLC/UV