

Supplementary Information

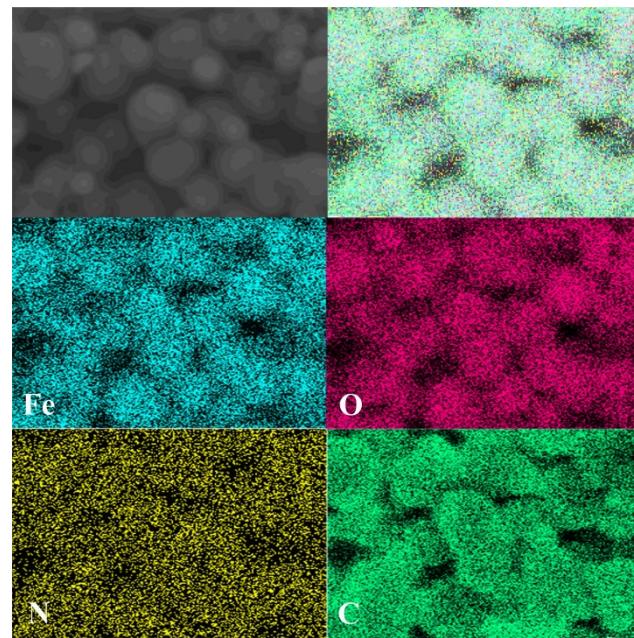


Fig. S1 EDS elemental mapping of $\text{Fe}_3\text{O}_4@\text{MON}-\text{NH}_2@\text{CM}-\beta\text{-CD}$.

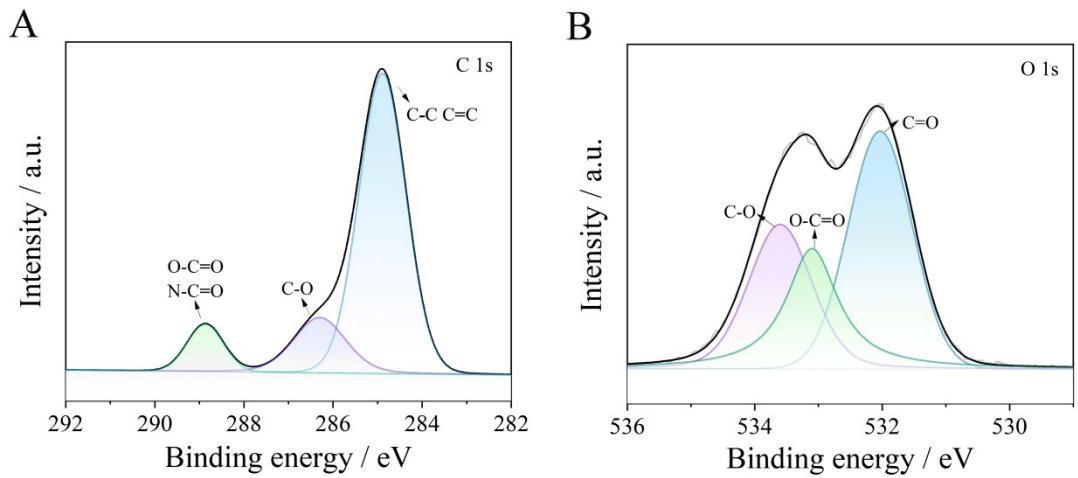


Fig. S2 XPS spectra of $\text{Fe}_3\text{O}_4@\text{MON-NH}_2@\text{CM-}\beta\text{-CD}$: (A) C 1s and (B) O 1s.

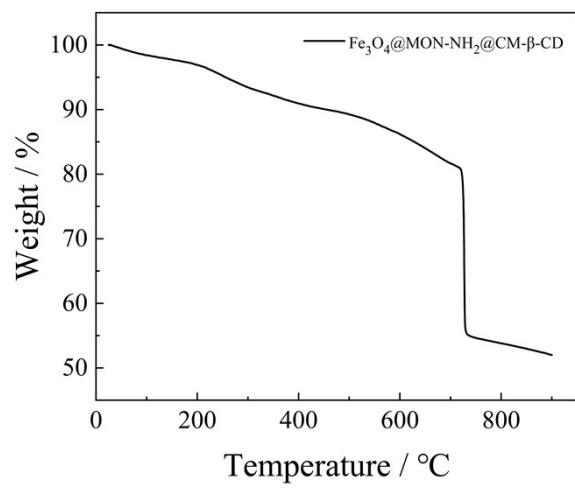


Fig. S3 TG curves of $\text{Fe}_3\text{O}_4@\text{MON}-\text{NH}_2@\text{CM}-\beta\text{-CD}$.

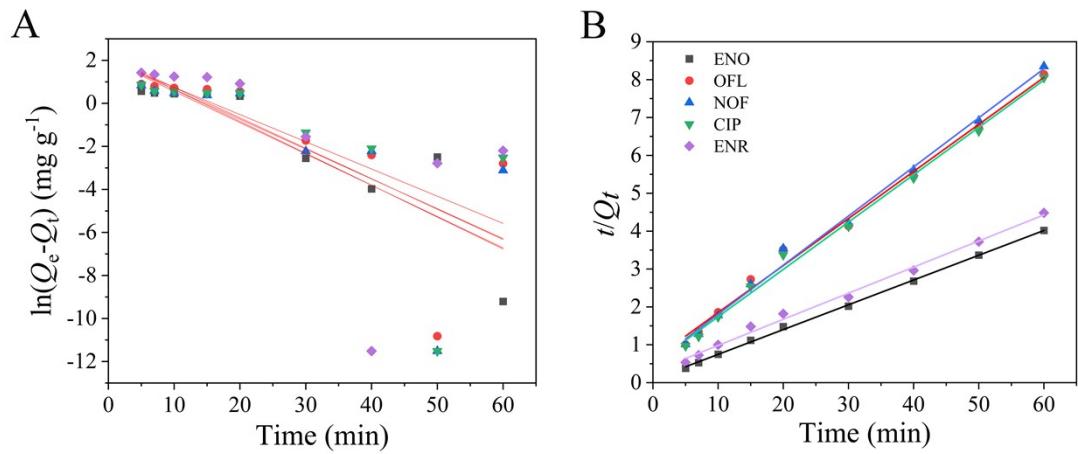


Fig. S4 The fitting curves of two models: quasi-first-order dynamics model (A); quasi-second-order kinetic model (B).

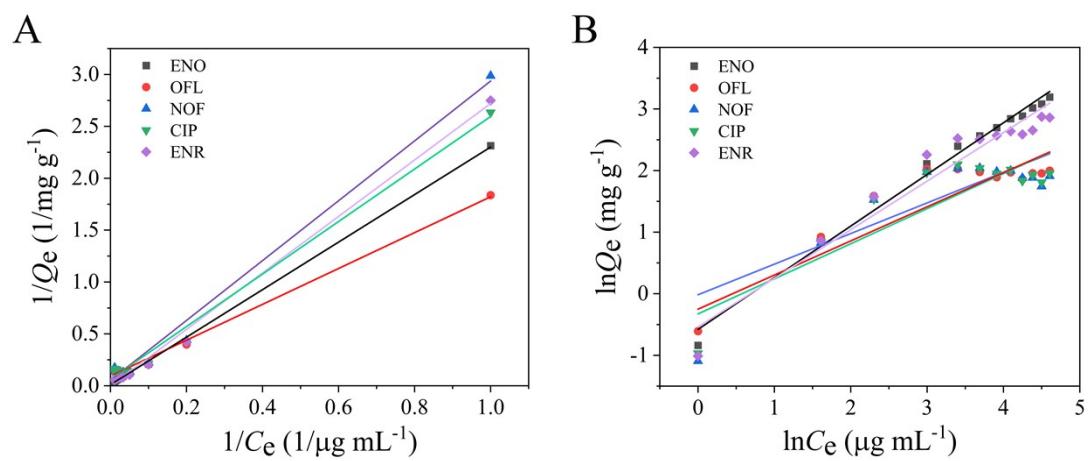


Fig. S5 The adsorption isotherm fitting curves: Langmuir model (A); Freundlich model (B).

Table S1 The fitted kinetic parameters of the pseudo-first-order and pseudo-second-order kinetic model.

FQs	Pseudo-first-order kinetic model			Pseudo-second-order kinetic model			R^2
	Q_e (mg g ⁻¹)	Q_e (mg g ⁻¹)	K_1 (min ⁻¹)	Q_e (mg g ⁻¹)	K_2 (g mg ⁻¹ min ⁻¹)		
ENO	14.84	8.43	0.148	0.8073	15.28	0.045	0.9991
OFL	7.30	8.62	0.141	0.5532	8.05	0.025	0.9922
NOF	7.20	7.53	0.145	0.5396	7.71	0.032	0.9943
CIP	7.42	7.67	0.138	0.4922	8.00	0.031	0.9948
ENR	13.47	7.45	0.126	0.3619	14.50	0.016	0.9946

Table S2 The fitted parameters of the Langmuir and Freundlich model.

FQs	Langmuir model			Freundlich model		
	Q_m (mg g ⁻¹)	K_L (L mg ⁻¹)	R^2	$1/n$	K_F (mg g ⁻¹)	R^2
ENO	94.51	0.0046	0.9990	0.8387	0.5606	0.9862
OFL	10.65	0.0543	0.9999	0.4972	0.9836	0.8030
NOF	18.84	0.0184	0.9999	0.5695	0.7210	0.7688
CIP	15.427	0.0256	0.9909	0.5541	0.7784	0.7784
ENR	29.15	0.0182	0.9959	0.7891	0.5836	0.9376

Table S3. Analytical results for the real samples.

Analytes	Spiked ($\mu\text{g mL}^{-1}$)	Found ($\mu\text{g mL}^{-1}$)	Recovery (%)	RSDs (%)
ENO	0.01	0.01162	116.2	7.12
	0.1	0.1017	101.7	4.02
	1	1.007	100.7	0.18
OFL	0.01	0.01156	115.6	7.14
	0.1	0.1023	102.3	2.31
	1	1.024	102.4	0.43
NOF	0.01	0.01014	101.4	8.39
	0.1	0.1010	101.0	4.91
	1	0.992	99.2	0.24
CIP	0.01	0.00979	97.9	8.08
	0.1	0.0964	96.4	3.78
	1	0.962	96.2	0.29
ENR	0.01	0.00931	93.1	5.50
	0.1	0.1029	102.9	4.13
	1	1.075	107.5	0.22

Table S4. Matrix effects of the developed method in water samples.

Analytes	ME (%)	RSDs(%)
ENO	19.4	1.98
OFL	18.7	1.01
NOF	15.2	1.24
CIP	20.1	1.74
ENR	12.3	0.80