Supplementary Materials



Figure S1. Linear fit of experimental data using pseudo-second-order kinetic model on EDA-MPMs and MPMs. (Volume, 100 mL; absorbent dose, 0.1 g; initial concentration, 200 mg/L; Temperature, 298 K).



Figure S2. Linear fit of experimental data using Langmuir adsorption isotherm model on EDA-MPMs and MPMs. (Volume, 50 mL; absorbent dose, 0.05 g; pH value, 2.0; Temperature, 298 K).

Table S1. Parameters of kinetic models for Cr(VI) adsorption onto the EDA-MPMs. (Volume, 100 mL; absorbent dose, 0.1 g; initial concentration, 200 mg/L; Temperature, 298 K).

Adsorbent	q _{е,ехр} (mg/g)	Pseudo-First Order Model			Pseudo-Second Order Model			
		<i>q</i> e,cal (mg/g)	k_1	R^2	ge,cal (mg/g)	k₂ (g/mg/min) × 10-4	R^2	
MPMs	26.4	21.624	0.0201	0.953	27.129	20.539	0.996	
EDA-MPMs	73.9	56.179	0.0321	0.968	80.451	8.718	0.999	

Table S2. Isotherm constants for the adsorption of Cr(VI) onto the EDA-MPMs at 298 K (Volume, 50 mL; absorbent dose 0.05 g; pH value, 2.0; Temperature, 298 K).

$T(\mathbf{V})$	Langm	Freundich Equation				
<i>I</i> (K)	q _{max} (mg/g)	<i>b</i> (L/mg)	R^2	KF	п	R^2
MPMs	66.88	0.0041	0.995	9.242	2.224	0.952
EDA-MPMs	236.9	0.0752	0.999	110.132	7.512	0.901