Table S1 Kinetic parameters of Pb^{2+}, Cu^{2+}, Cd^{2+}, and Ni^{2+} sorption onto DMB3 and DMB8 obtained from the pseudo-first-order and pseudo-second-order models

System		PFOD $Q_t=Q_{e1}\times\exp(k_1\times t)$				PSOD $Q_t=(k_2\times Q_{e2}^2\times t)/(1+k_2\times Q_{e2}\times t)$		
		Q_{max} ($mg\cdot g^{-1}$)	k_1 (h^{-1})	Q_{e1} ($mg\cdot g^{-1}$)	R^2	k_2 ($g\ mg^{-1}\cdot h^{-1}$)	Q_{e2} ($mg\cdot g^{-1}$)	R^2
Pb	DMB3	21.30	0.142±0.021	19.30±0.55	0.899	0.010±0.001	20.30±0.21	0.988
	DMB8	22.30	0.212±0.037	20.80±0.62	0.804	0.016±0.002	21.60±0.31	0.961
Cu	DMB3	9.94	0.051±0.009	7.90±0.34	0.907	0.008±0.001	8.50±0.19	0.978
	DMB8	19.60	0.780±0.131	18.20±0.31	0.583	0.008±0.011	18.60±0.16	0.903
Cd	DMB3	4.82	0.012±0.002	4.00±0.20	0.953	0.003±0.001	4.50±0.16	0.983
	DMB8	9.53	0.002±0.000	10.00±0.23	0.997	0.0002±0.0001	13.40±0.53	0.995
Ni	DMB3	2.39	0.021±0.006	1.80±0.12	0.833	0.016±0.005	2.00±0.12	0.902
	DMB8	6.01	0.003±0.001	5.70±0.53	0.907	0.0006±0.0002	7.0±0.82	0.918

Table S2 Parameters of Pb^{2+}, Cu^{2+}, Cd^{2+}, and Ni^{2+} on DMB3 and DMB8 obtained from the Langmuir and Freundlich models

System		Langmuir $Q_e=Q_{max}\times K_L\times C_e/(1+K_L\times C_e)$			Freundlich $Q_e=K_F\times C_e^n$		
		Q_{max} ($mg\cdot g^{-1}$)	K_L ($L\cdot mg^{-1}$)	R^2	K_F ($mg\cdot g^{-1}$)	N	R^2
Pb	DMB3	63.0±2.37	0.12±0.01	0.982	15.3±2.35	0.29±0.03	0.931
	DMB5	22.7±0.60	0.03±0.00	0.99	4.0±0.73	0.29±0.03	0.952
	DMB8	39.7±1.29	0.92±0.20	0.958	18.4±2.04	0.16±0.02	0.923
Cu	DMB3	15.3±0.41	0.08±0.012	0.967	4.7±0.56	0.21±0.02	0.930
	DMB5	11.0±0.21	0.07±0.009	0.974	3.7±0.40	0.19±0.02	0.935
	DMB8	31.9±1.07	3.14±0.78	0.944	18.3±1.56	0.12±0.02	0.915
Cd	DMB3	7.5±0.08	0.32±0.037	0.946	4.8±0.26	0.08±0.01	0.886
	DMB5	5.7±0.30	0.01±0.002	0.954	0.7±0.12	0.33±0.03	0.969
	DMB8	12.9±0.09	0.06±0.003	0.997	3.9±0.77	0.20±0.04	0.875
Ni	DMB3	7.6±0.33	0.01±0.0006	0.990	0.3±0.04	0.49±0.03	0.984
	DMB5	7.4±0.73	0.003±0.0006	0.985	0.1±0.04	0.63±0.07	0.952
	DMB8	6.2±0.15	0.01±0.001	0.992	0.7±0.12	0.34±0.03	0.966