

Table S3.

Fitting parameters of the pseudo-first-order, pseudo-second-order kinetics, and Weber–Morris kinetic adsorption models

pH	Adsorbents	Pseudo-first-order			Pseudo-second-order			Weber–Morris kinetic								
		$K_1$ (h)	$q_e$ (mg P/g)	$R^2$	$K_2$ (g/mg P/h)	$q_e$ (mg P/g)	$R^2$	$K_{p1}$ ( $\text{g}\cdot\text{mg}^{-1}$ $\text{min}^{1/2}$ )	$C_1$ (mg P/g)	$R_1^2$	$K_{p2}$ ( $\text{g}\cdot\text{mg}^{-1}$ $\text{min}^{1/2}$ )	$C_2$ (mg P/g)	$R_2^2$	$K_{p3}$ ( $\text{g}\cdot\text{mg}^{-1}$ $\text{min}^{1/2}$ )	$C_3$ (mg P/g)	$R_3^2$
3	LMO	0.07 2	50.33	0.97	0.786	8.28	0.99	-0.91	8.69	0.98	31.12	1.53	0.93	53.18	-0.01	0.95
	CLMO	0.06 2	77.57	0.92	0.96	9.303	0.98	4.39	10.21	0.97	45.21	2.49	0.92	78.33	0.21	0.99
	CaO-LMO	0.04	32.62	0.89	0.12	16.98	0.96	2.80	3.02	0.95	15.62	1.15	1	32.81	0.12	0.97
7	LMO	0.11	12.18	0.93	1.47	2.94	0.95	0.08	2.91	0.98	-3.02	2.88	1	—	—	—
	CLMO	0.03	32.37	0.85	0.08	20.8	0.92	3.42	2.40	0.91	24.16	0.53	1	43.37	-0.34	1
	CaO-LMO	59.2 8	0.07	0.99	0.74	9.24	0.99	3.09	7.39	0.95	50.35	0.69	0.83	59.39	0.06	0.97
10	LMO	0.13	8.19	0.91	1.29	2.58	0.93	0.68	1.45	0.88	7.69	0.04	0.84	7.29	0.05	0.91
	CLMO	0.01 5	35.52	0.97	0.014	52.93	0.98	1.35	1.78	0.89	1.22	2.24	0.89	31.94	0.16	0.94
	CaO-LMO	0.08	77.84	0.98	2.76	5.5	0.99	1.04	12.72	0.96	56.28	2.09	0.94	76.75	0.15	0.99