

Supplementary materials

The quick removal of toxic dye molecules by an efficient adsorptive BiOI/Bi₂MoO₆ heterostructure

Authors

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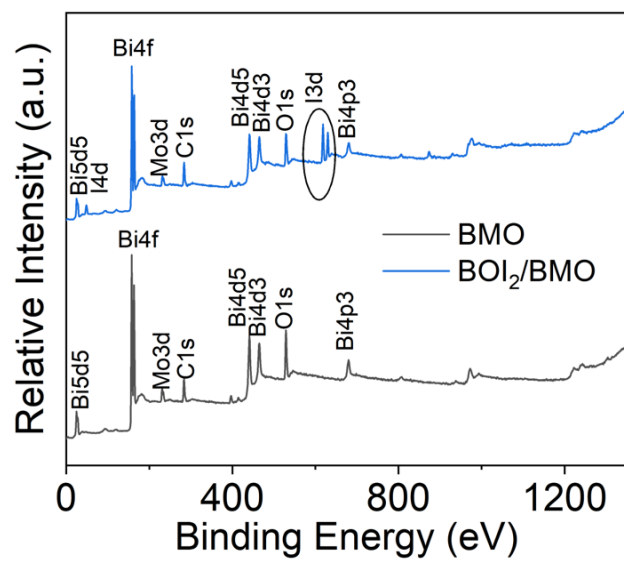


Figure S1. XPS survey spectra for BMO and BOI₂/BMO.

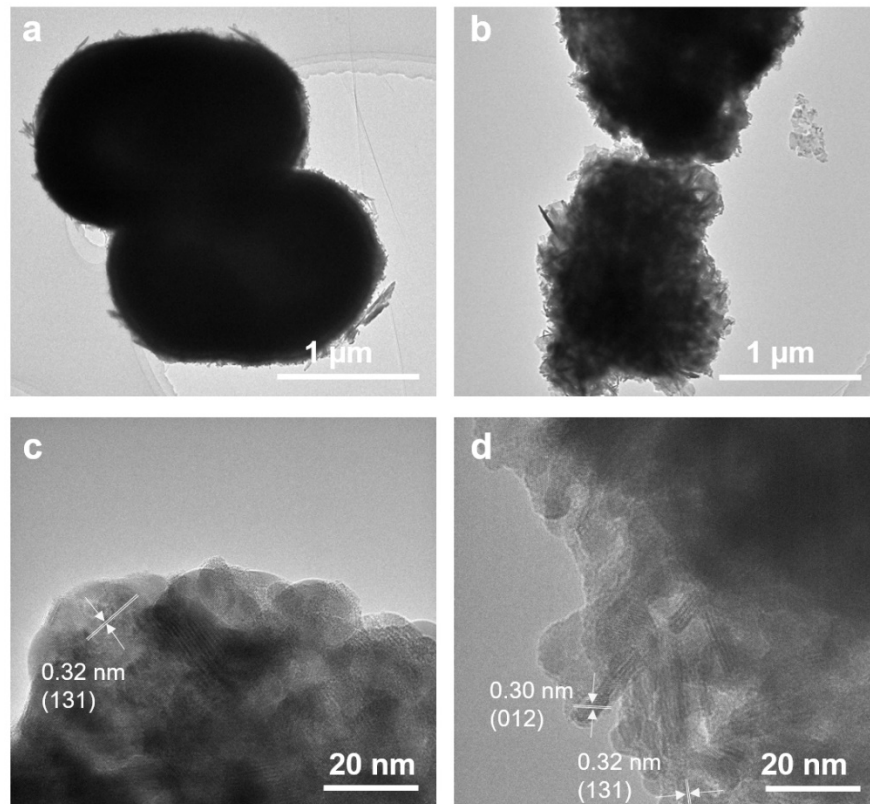


Figure S2. TEM micrographs of (a) BMO and (b) BOI₂/BMO. HRTEM micrographs of (c) BMO and (d) BOI₂/BMO.

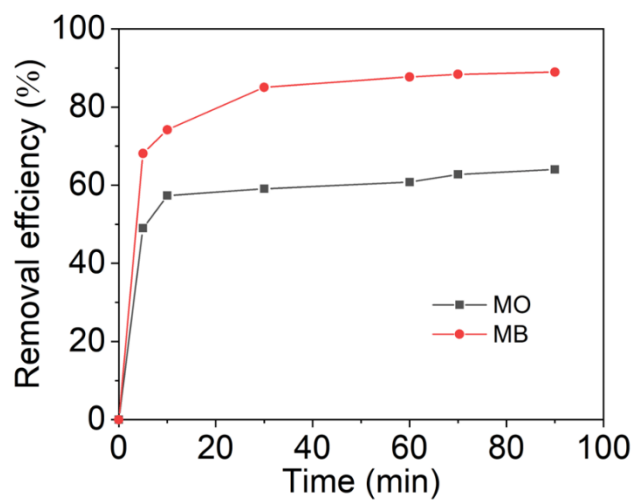


Figure S3. Dark adsorption by BOI₂/BMO (50 mg) of MO (10 mg/L) and MB (10 mg/L).

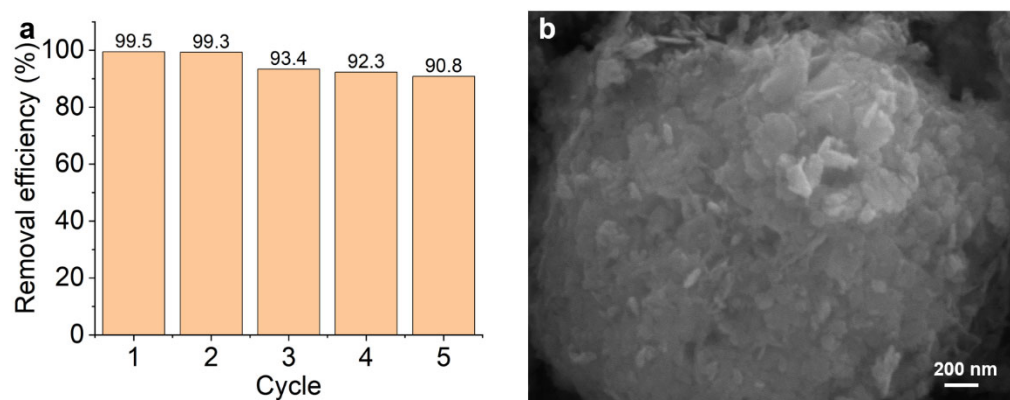


Figure S4. (a) Cycling experiment for the dark adsorption of RhB by BOI₂/BMO. (b) SEM micrograph of BOI₂/BMO after 5 cycles of RhB adsorption.

Table S1. Parameters for kinetic models of RhB adsorption by BOI₂/BMO.

Model	Parameter	
pseudo-first-order	k_1 (min ⁻¹)	0.090
	q_e (mg/g)	13.42
	R^2	0.781
pseudo-second-order	k_2 (g/mg/min)	0.022
	q_e (mg/g)	24.58
	R^2	0.999

Table S2. Parameters for isotherms models of RhB adsorption by BOI₂/BMO.

	Langmuir				Freundlich		
T (K)	K_L (L/mg)	q_m (mg/g)	R²	R_L	K_F (L/mg)	1/n	R²
298	0.249	72.72	0.990	0.039	28.29	0.21	0.988
308	0.341	53.53	0.997	0.028	24.07	0.181	0.997
318	0.336	48.57	0.998	0.029	21.73	0.179	0.984