

One-step synthesis of polyethyleneimine grafted styrene-maleic anhydride copolymer adsorbents for effective adsorption of anionic dyes

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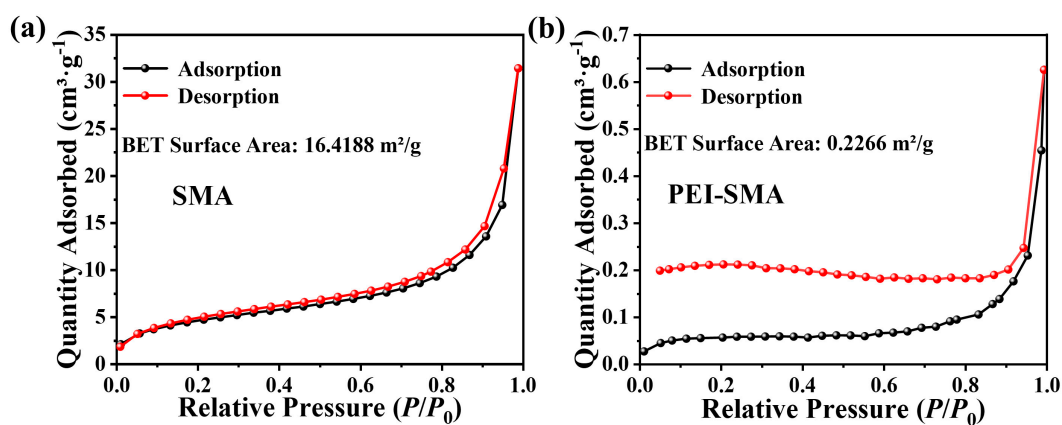


Figure S1. Characterization of N_2 adsorption–desorption isotherms: (a) SMA, (b) PEI-SMA.

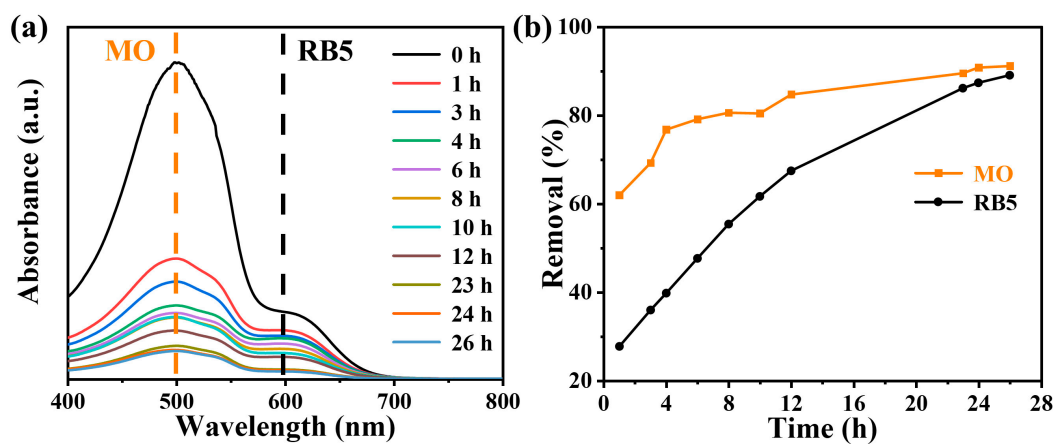


Figure S2. UV-vis spectra of (a) RB5/MO mixed solution with different contact time (RB5 and MO concentration = 600 mg L^{-1} , respectively; $V = 200 \text{ mL}$, dosage = 35 mg, contact time = 1560 min, temperature = 308 K, and pH = 2.0); (b) The relationship between the removal percentage of RB5 and MO in the mixed dye solutions and time.

Table S1. The BET specific surface area, pore volume, average pore diameter, meso- and micropore volume data of SMA and PEI-SMA.

Parameters	SMA	PEI-SMA
surface area	16.4188 m ² /g	0.2266 m ² /g
pore volume	0.014067 cm ³ /g	0.000928 cm ³ /g
average pore diameter	43.084 Å	30.8479 nm
mesopore volume	0.005105 cm ³ /g	0.000605 cm ³ /g
micropore volume	0.001723 cm ³ /g	0.000004 cm ³ /g