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## **Electronic Supplementary Information**



Fig. S1. Molecular structures of poly (4-styrenesulfonic acid-co-maleic acid) sodium salt(PSSMA) (A) and three cationic dyes: basic fuchsin (BF) (B), crystal violet (CV) (C) andmethyleneblue(MB)(D).



Fig. S2. UV-vis spectra of GO (a), M-rGO (b), M-rGO-060 (c) and PSSMA (d) dispersed in

water.



Fig. S3. Digital photographs of M-rGO-060 (a-f) and M-rGO (a'-f') aqueous dispersions upon

storing	different	time	at	room	temperature.
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Fig. S4. Adsorption capacities (A) and removal efficiencies (B) of BF, CV and MB onto Fe<sub>3</sub>O<sub>4</sub>-060, M-rGO-060 and rGO-060. Condition:  $C_{BF} = C_{CV} = C_{MB} = 250 \text{ mg/L}, \text{ m/V} = 10 \text{ mg/20} \text{ mL}, T = 25 \text{ °C} \text{ and contact time} = 30 \text{ min}.$ 



Fig. S5. FT-IR spectrum of rGO-060.