

## Supplementary Information for

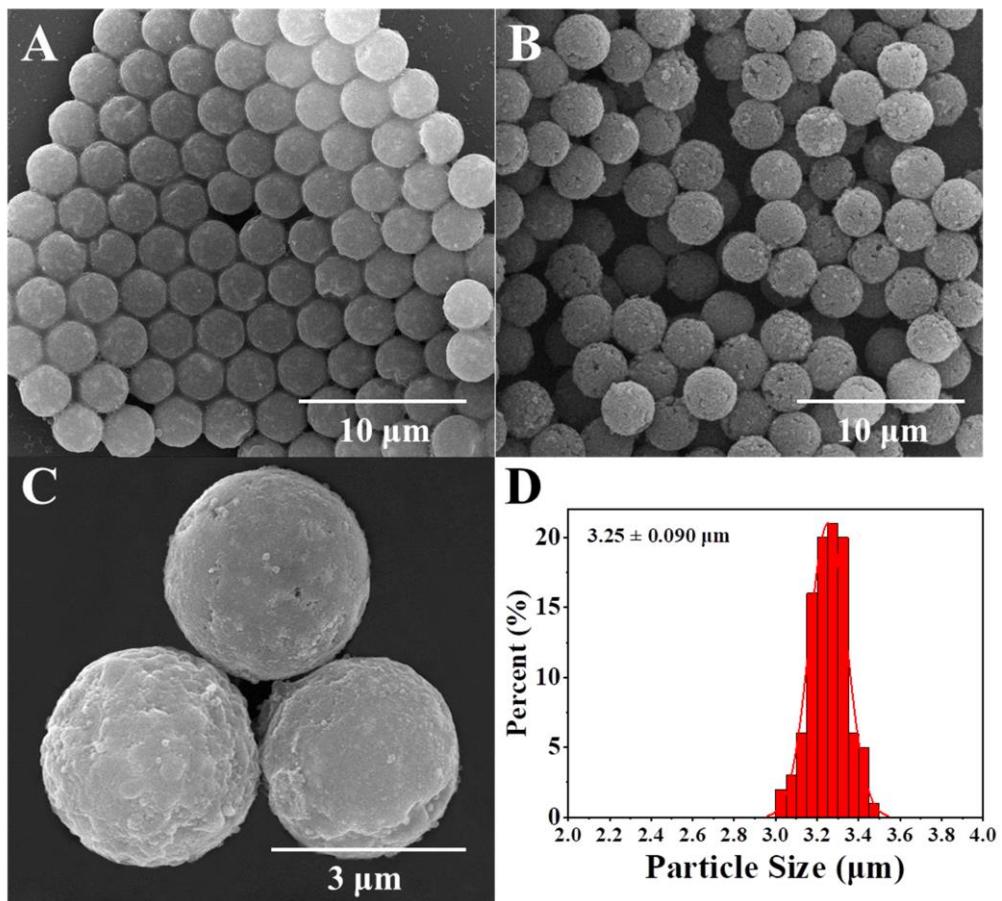
### Fabrication of $\text{Fe}_3\text{O}_4$ @poly(methyl methacrylate-co-glycidyl methacrylate) microspheres via miniemulsion polymerization using porous microspheres as templates for removal of cationic dyes

Hong Man<sup>a</sup>, Yingrui Nie<sup>a</sup>, Shimin Shao<sup>a</sup>, Yang Wang<sup>b</sup>, Zhifei Wang<sup>a</sup> and Yong Jiang\*<sup>a</sup>

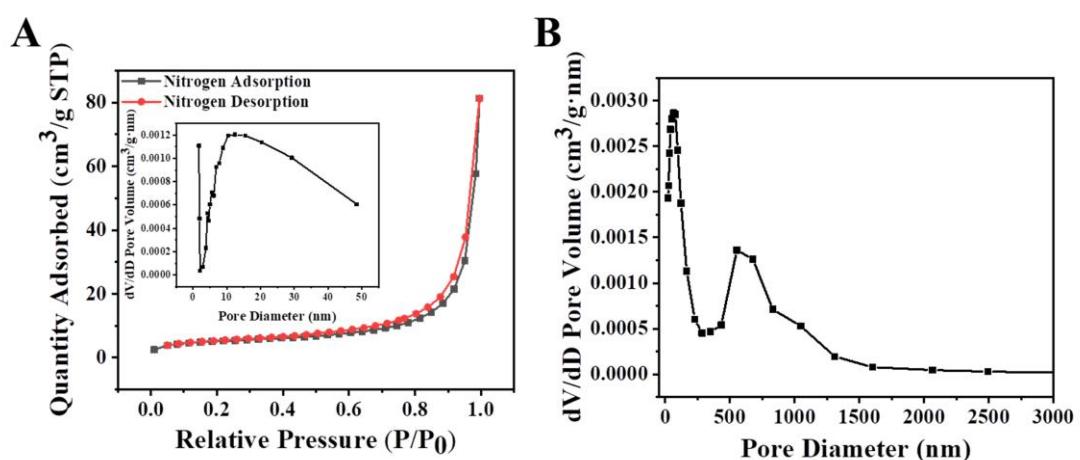
a School of Chemistry and Chemical Engineering, Southeast University, Nanjing 211189, P.R. China

b School of Material Science and Engineering, Jiangsu University of Science and Technology, Zhenjiang 212100, P. R. China

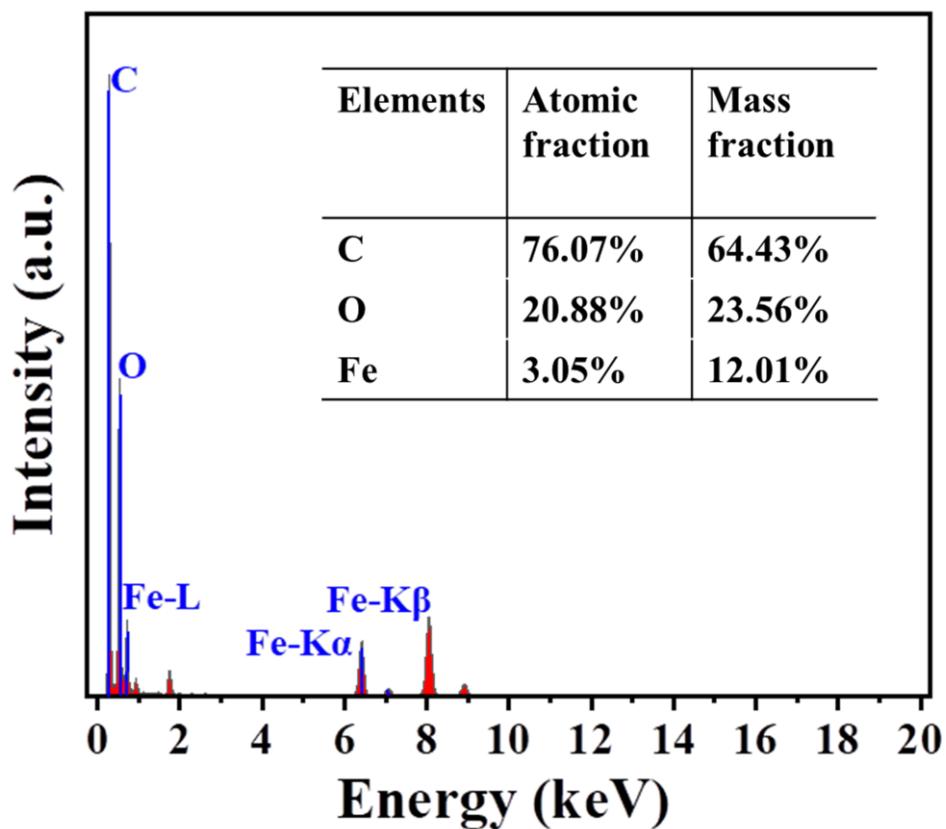
E-mail: yj@seu.edu.cn.



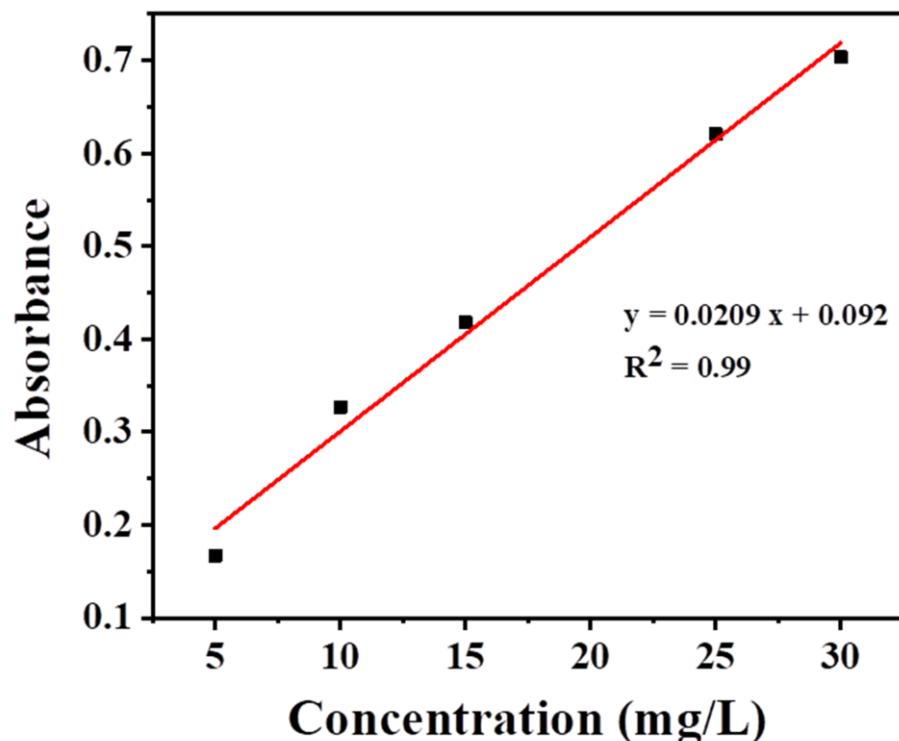
**Fig. S1** SEM images of (A) magnetic  $\text{Fe}_3\text{O}_4@\text{P}(\text{MMA}-\text{co}-\text{GMA})$  microspheres; (B) (C) magnetic  $\text{Fe}_3\text{O}_4@\text{P}(\text{MMA}-\text{co}-\text{GMA})$  microspheres with 3/4 monomer addition volume; (D) Particle size distribution of magnetic  $\text{Fe}_3\text{O}_4@\text{P}(\text{MMA}-\text{co}-\text{GMA})$  microspheres.



**Fig. S2** (A) Adsorption-desorption isotherms of  $\text{N}_2$  and the mesopore pore size distribution (inset) of porous  $\text{P}(\text{MMA}-\text{co}-\text{GMA})$  microspheres; (B) Macropore pore size distribution of porous  $\text{P}(\text{MMA}-\text{co}-\text{GMA})$  microspheres by MIP.



**Fig. S3** EDX analyses of magnetic Fe<sub>3</sub>O<sub>4</sub>@P(MMA-co-GMA) microspheres.



**Fig. S4** Standard curve of UV absorption of nile blue dyes.

**Table S1** Recycle performance of magnetic Fe<sub>3</sub>O<sub>4</sub>@P(MMA-co-GMA) microspheres in adsorption-desorption cycles.

Recycle time	Dye adsorption capacity (mg/g)	Dye adsorption efficiency (%)	Dye desorption capacity (mg/g)	Dye desorption efficiency (%)
1	99.5	99.5	91.0	91.5
2	97.4	97.4	87.3	89.6
3	97.1	97.1	85.2	87.7
4	95.2	95.2	82.1	86.2
5	94.3	94.3	79.7	84.6
6	95.0	95.0	79.3	83.5
7	93.3	93.3	75.3	80.7