

## Supporting information

### Flowerlike $\gamma$ - $\text{Fe}_2\text{O}_3$ @NiO hierarchical core-shell nanostructures as superb capability and magnetically separable adsorbents for water treatment

Shunrui Luo,<sup>a</sup> Fang Chai,<sup>b</sup> Tingting Wang,<sup>\*c</sup> Lu Li,<sup>a</sup> Lingyu Zhang,<sup>a</sup> Chungang Wang,<sup>\*a</sup> Zhongmin Su<sup>a</sup>

<sup>a</sup> Faculty of Chemistry, Northeast Normal University, Changchun 130024, P. R. China

<sup>b</sup> College of Chemistry & Chemical Engineering, Harbin Normal University, Harbin 150025, P. R. China

<sup>c</sup> School of Chemistry & Environmental Engineering, Changchun University of Science and Technology, Changchun, 130022, P. R. China

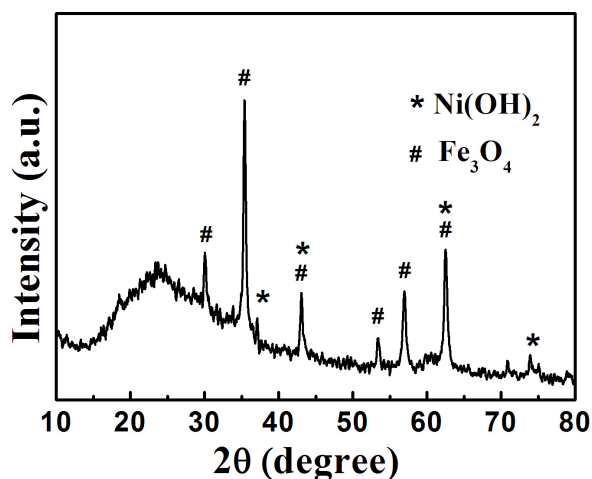


Fig. S1 XRD pattern of the obtained  $\text{Fe}_3\text{O}_4$ @ $\text{Ni}(\text{OH})_2$  core-shell hierarchical nanostructures.

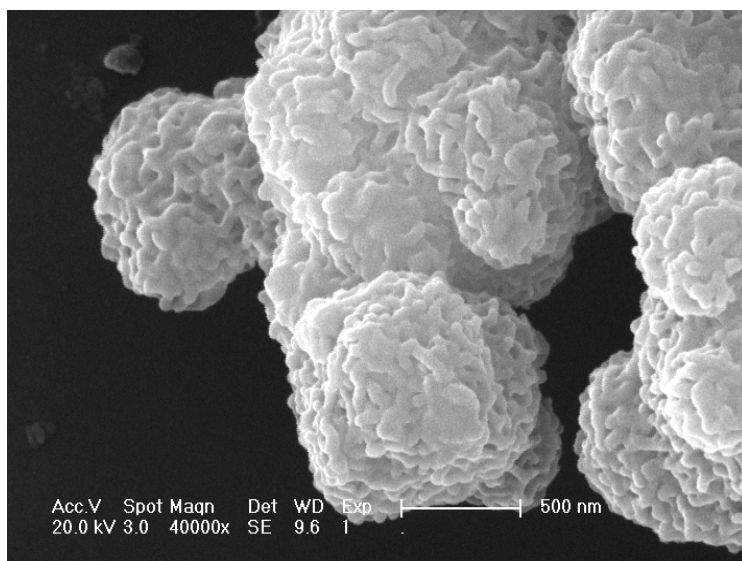


Fig. S2 SEM images of the NiO microspheres.

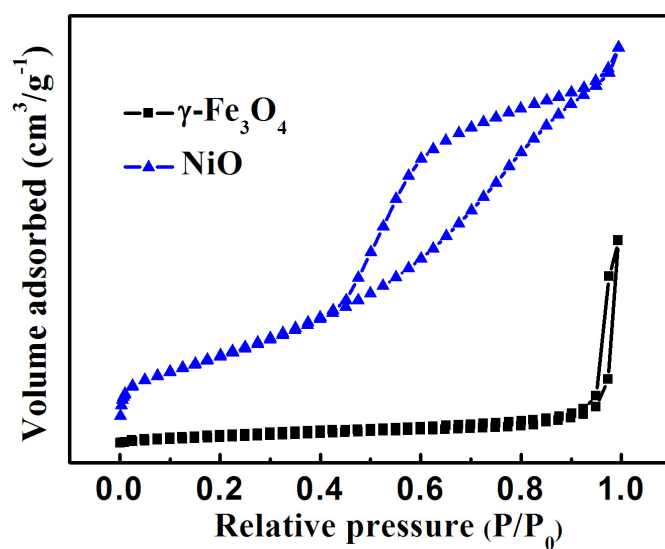


Fig. S3 Typical N<sub>2</sub> adsorption-desorption isotherms of the  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> and NiO microspheres.

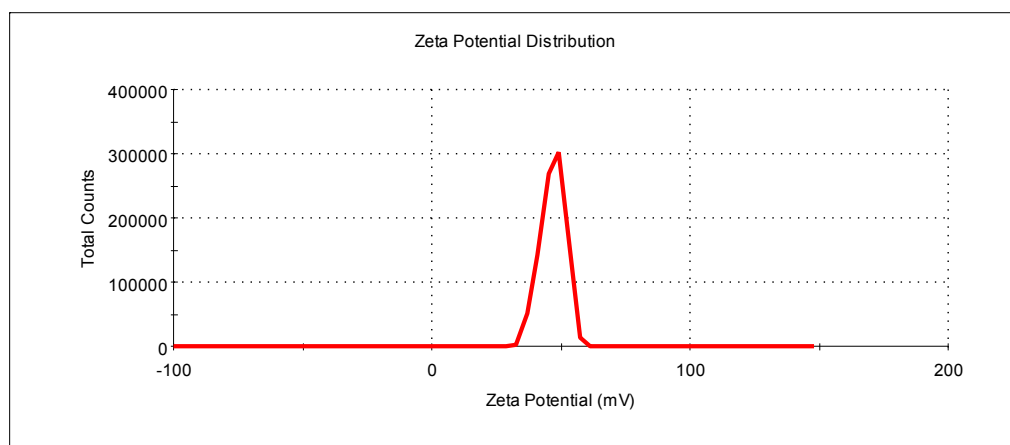


Fig. S4 Zeta potential distribution of the flowerlike  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>@NiO core-shell hierarchical nanostructures in neutral solution.