

## Supporting Information

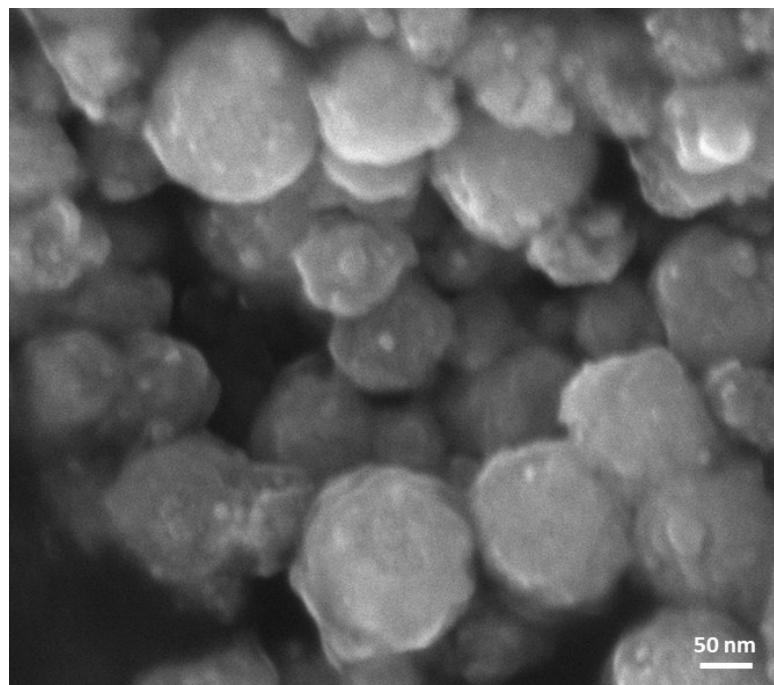
### Preparation of magnetic mesoporous $\text{Fe}_3\text{O}_4\text{-Pd@TiO}_2$

### photocatalyst for efficient selective reduction of aromatic cyanide

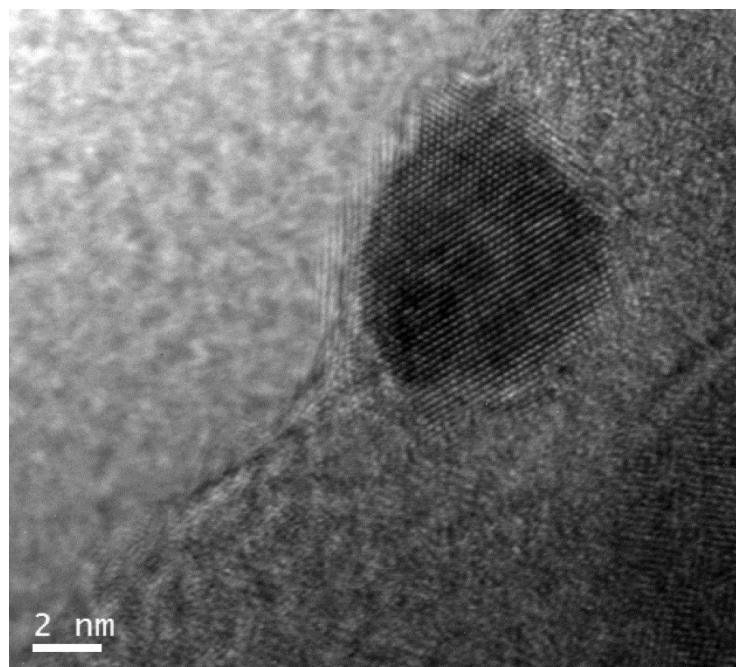
Ziming Zhao<sup>a</sup>, Yu long<sup>\*a</sup>, Sha Luo<sup>a</sup>, Wei Wu<sup>a</sup> and Jiantai Ma<sup>\*a</sup>

<sup>a</sup> State Key Laboratory of Applied Organic Chemistry (SKLAOC), The Key Laboratory of Catalytic Engineering of Gansu Province, College of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou, Gansu, 730000, P. R. China

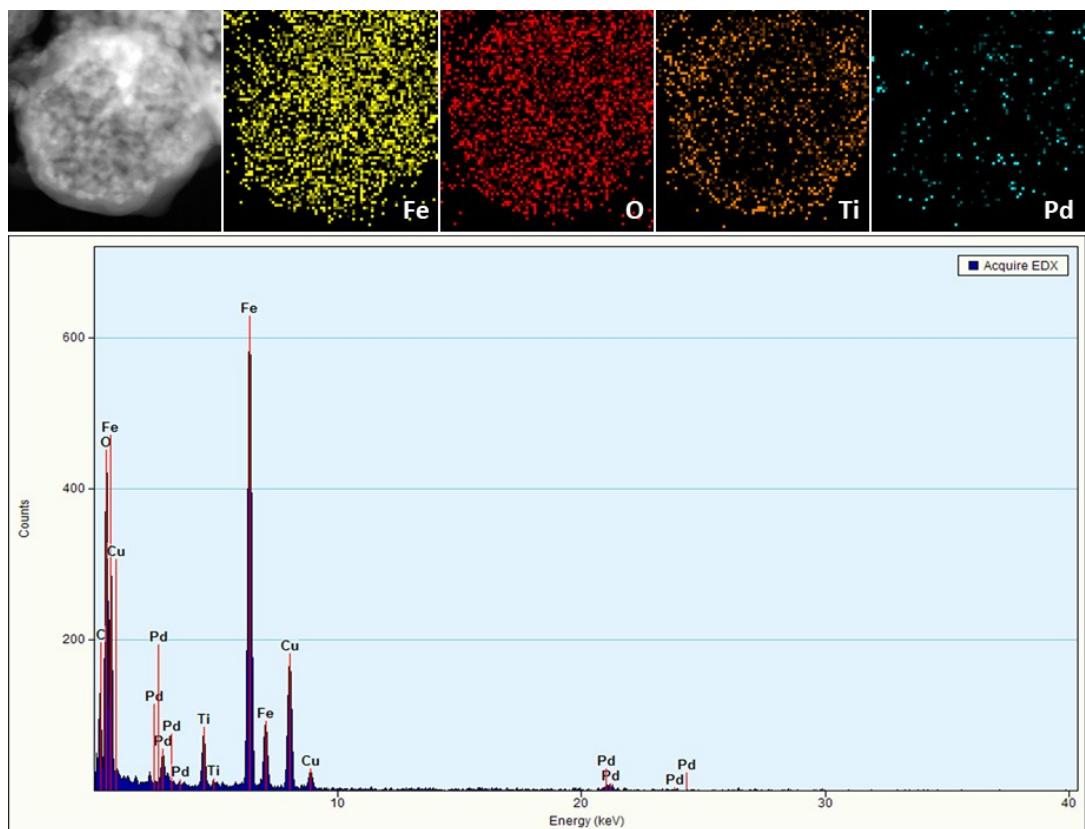
E-mail: majiantai@lzu.edu.cn; longyu@lzu.edu.cn



**Figure S1.** SEM images of  $\text{Fe}_3\text{O}_4\text{-Pd@TiO}_2(\text{anatase})$ .



**Figure S2.** HRTEM images of  $\text{Fe}_3\text{O}_4\text{-Pd@TiO}_2(\text{anatase})$ .



**Figure S3.** EDX spectra of  $\text{Fe}_3\text{O}_4$ -Pd@ $\text{TiO}_2$ (anatase) and the elemental mapping images of  $\text{Fe}_3\text{O}_4$ -Pd@ $\text{TiO}_2$  (anatase) microspheres.