

**Electronic supplementary information (ESI) for “*Facile Synthesis of Yolk-Shell Structured  $\text{ZnFe}_2\text{O}_4$  Microspheres for Enhanced Electrocatalytic Oxygen Evolution Reaction*”**

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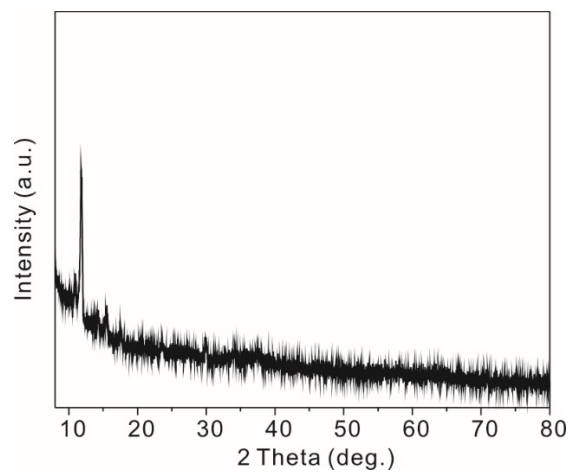
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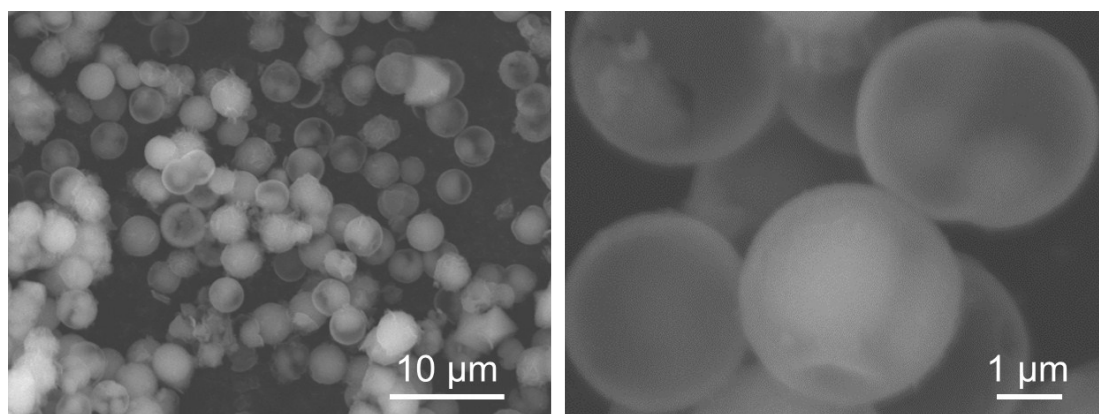
E-mail: zyx07157@mail.ustc.edu.cn; E-mail: lixh32@nwpu.edu.cn



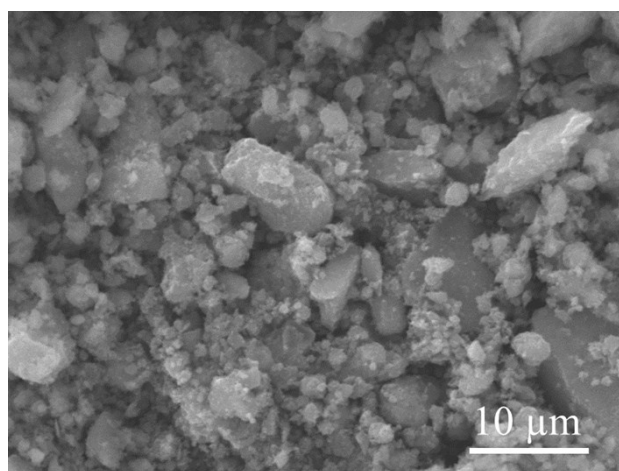
**Figure S1.** Optical photographs of NF (left) and YS- $\text{ZnFe}_2\text{O}_4$ /NF (right).



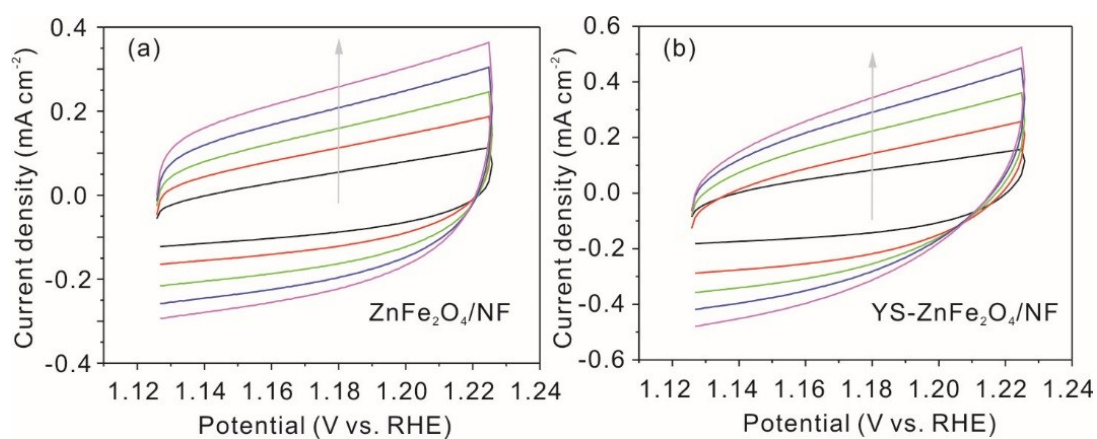
**Figure S2.** XRD pattern of the YS-ZnFe<sub>2</sub>O<sub>4</sub> precursors.



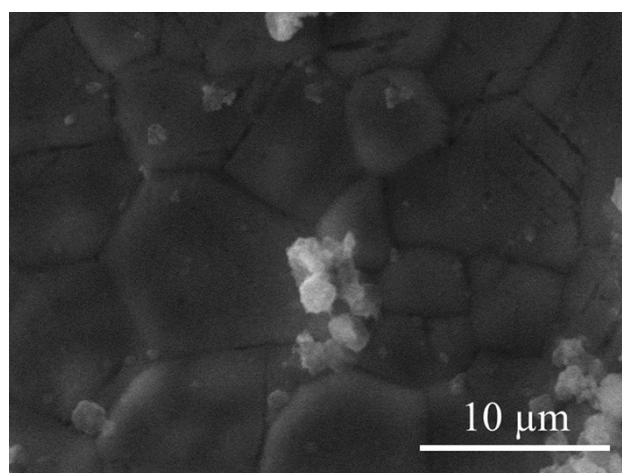
**Figure S3.** SEM images of the YS-ZnFe<sub>2</sub>O<sub>4</sub> precursors: (a) overall morphology; (b) low-magnification.



**Figure S4.** SEM image of ZnFe<sub>2</sub>O<sub>4</sub> without SDS.



**Figure S5.** CVs of the various catalysts at the different scan rates from  $10 \text{ mV} \cdot \text{s}^{-1}$  to  $100 \text{ mV} \cdot \text{s}^{-1}$  measured in the potential range of 1.125 V to 1.225 V vs. RHE.



**Figure S6.** The SEM image of YS-ZnFe<sub>2</sub>O<sub>4</sub>/NF after i-t test.