

## Supplementary Information

### Enhanced electrochemical performances based on ZnSnO<sub>3</sub> microcubes functionalized in-doped carbon nanofibers as free-standing anode materials

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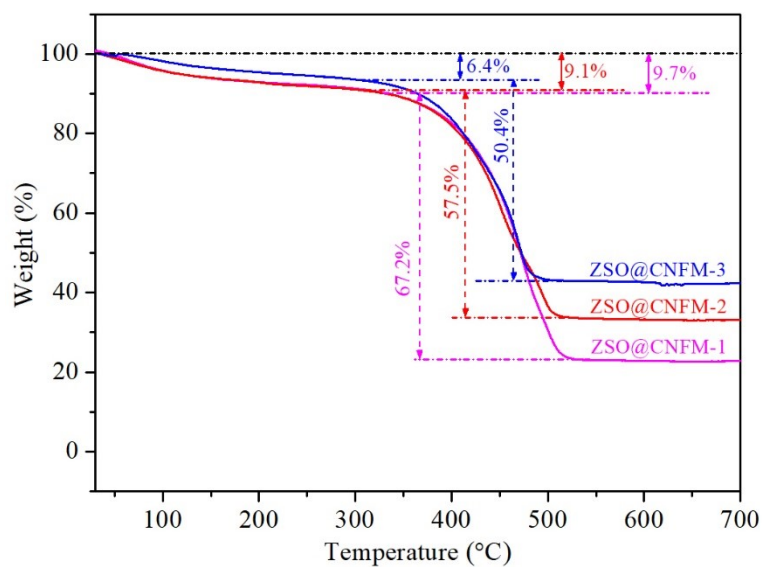
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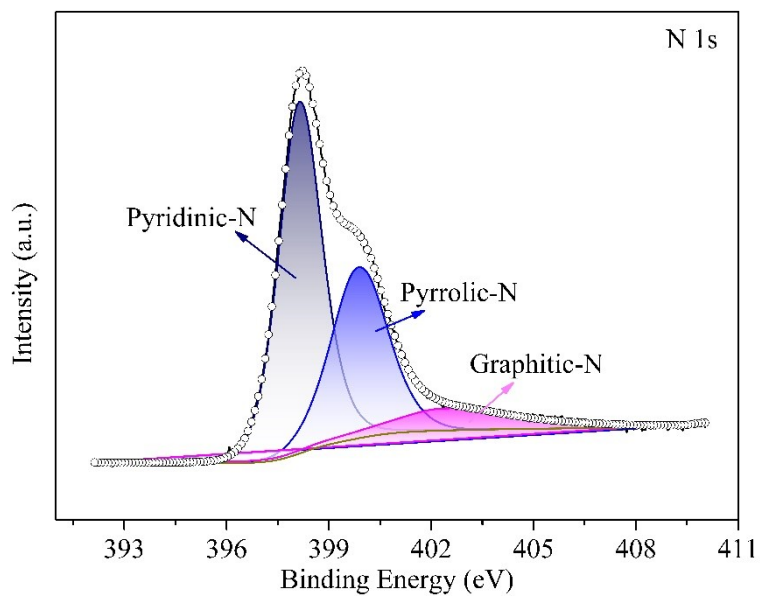
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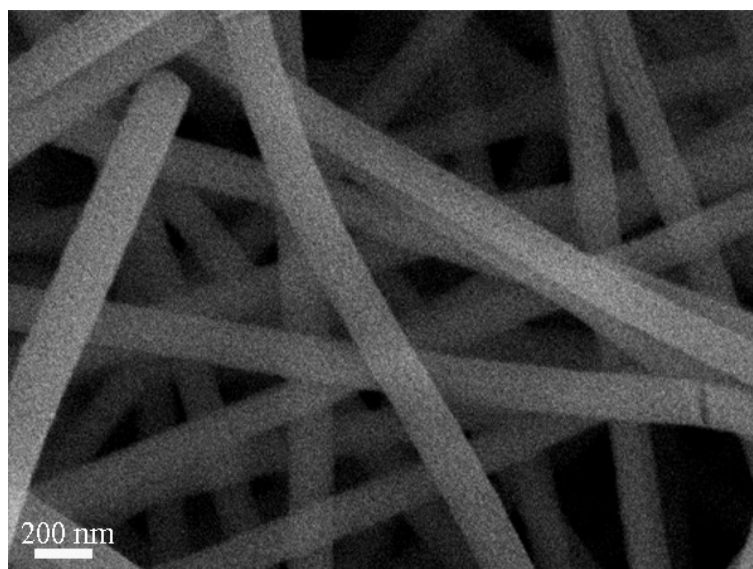
*E-mail address: jxiang@just.edu.cn (J. Xiang).*



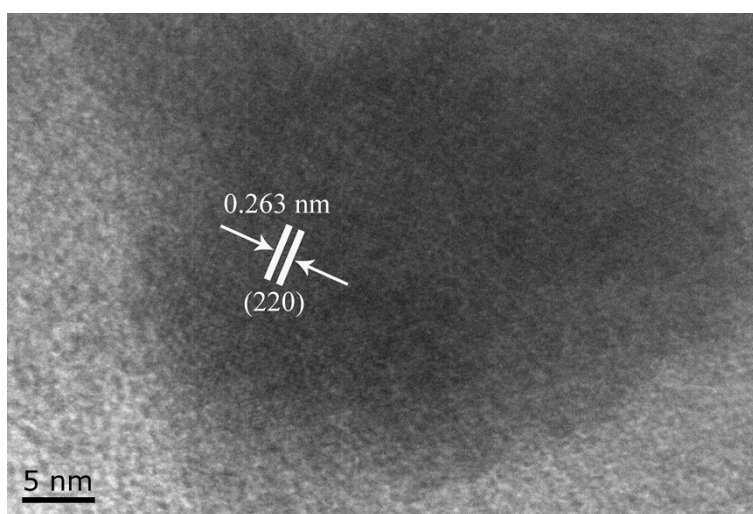
**Fig. S1.** TG curves of ZSO@CNFM-1, ZSO@CNFM-2 and ZSO@CNFM-3.



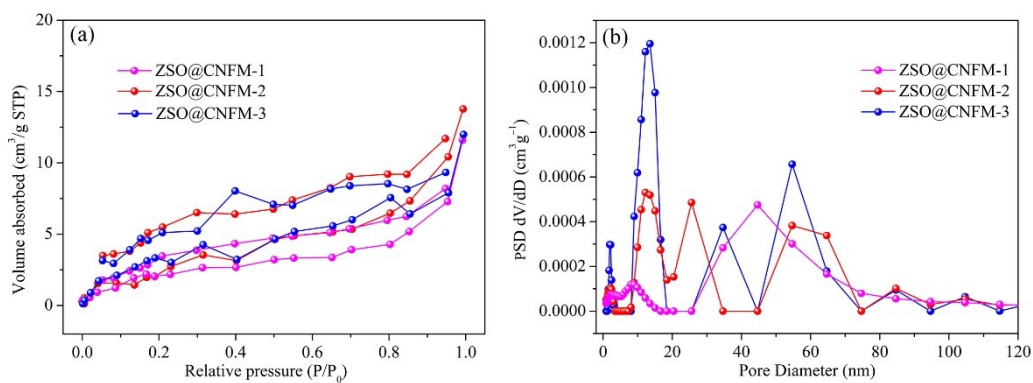
**Fig. S2.** High-resolution N 1s spectra of ZSO@CNFM-2.



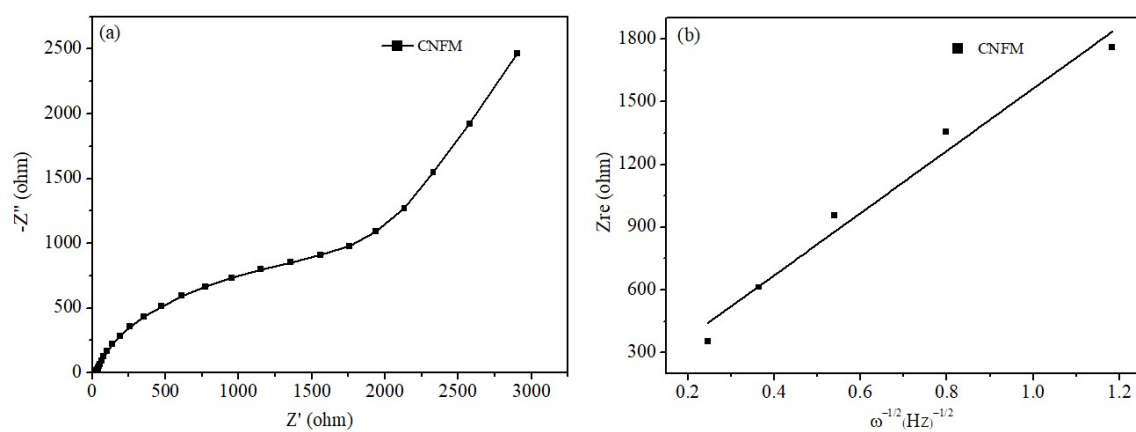
**Fig. S3.** SEM image of CNFM.



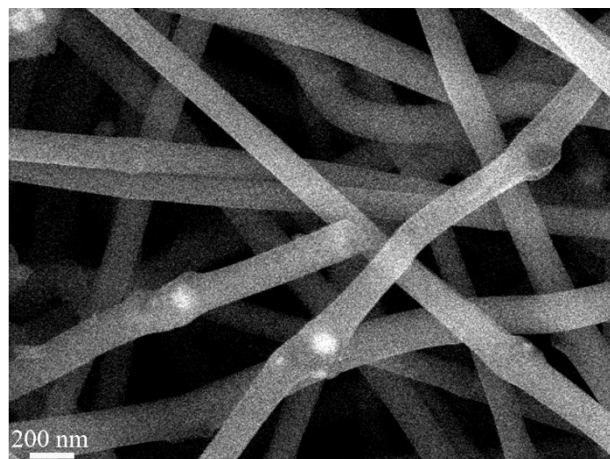
**Fig. S4.** HRTEM image of ZSO@CNFM-2



**Fig. S5.** (a) Nitrogen adsorption-desorption isotherms and (b) pore-size distributions of ZSO@CNFM-1, ZSO@CNFM-2 and ZSO@CNFM-3.



**Fig. S6.** (a) Nyquist plot and (b) corresponding  $Z_{re}$  vs.  $\omega^{-1/2}$  plot in the low-frequency range for the CNFM electrode.



**Fig. S7.** SEM image of ZSO@CNFM-2 after 100 cycles at  $100 \text{ mA g}^{-1}$ .