

Supporting Information

**Nanocavity-enriched  $\text{Co}_3\text{O}_4@\text{ZnCo}_2\text{O}_4@\text{NC}$  porous nanowires  
derived from 1D metal coordination polymers for super  $\text{Li}^+$  storage**

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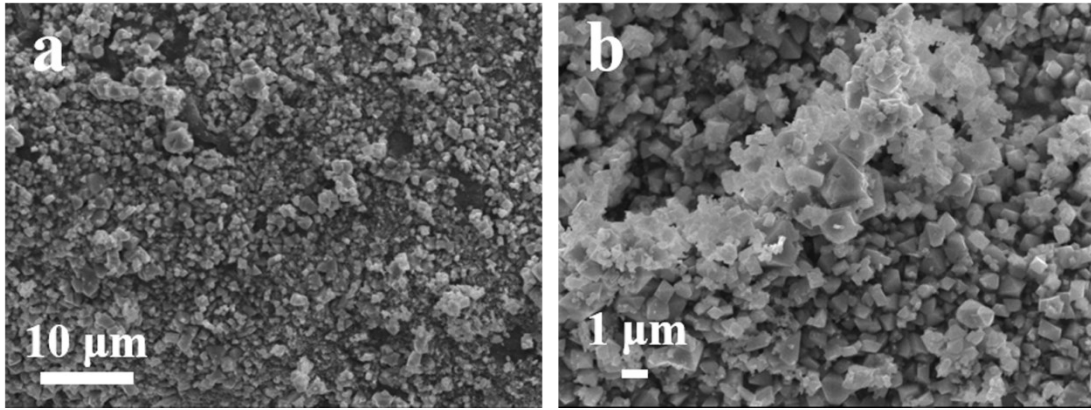


Fig. S1 (a and b) SEM images of ZnCo<sub>2</sub>O<sub>4</sub>.

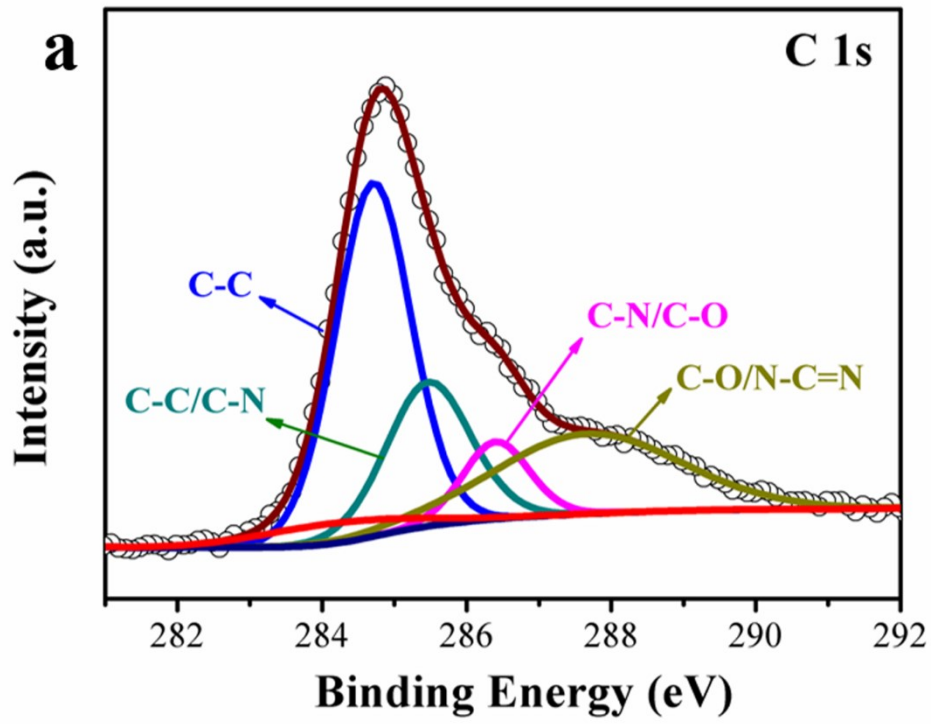
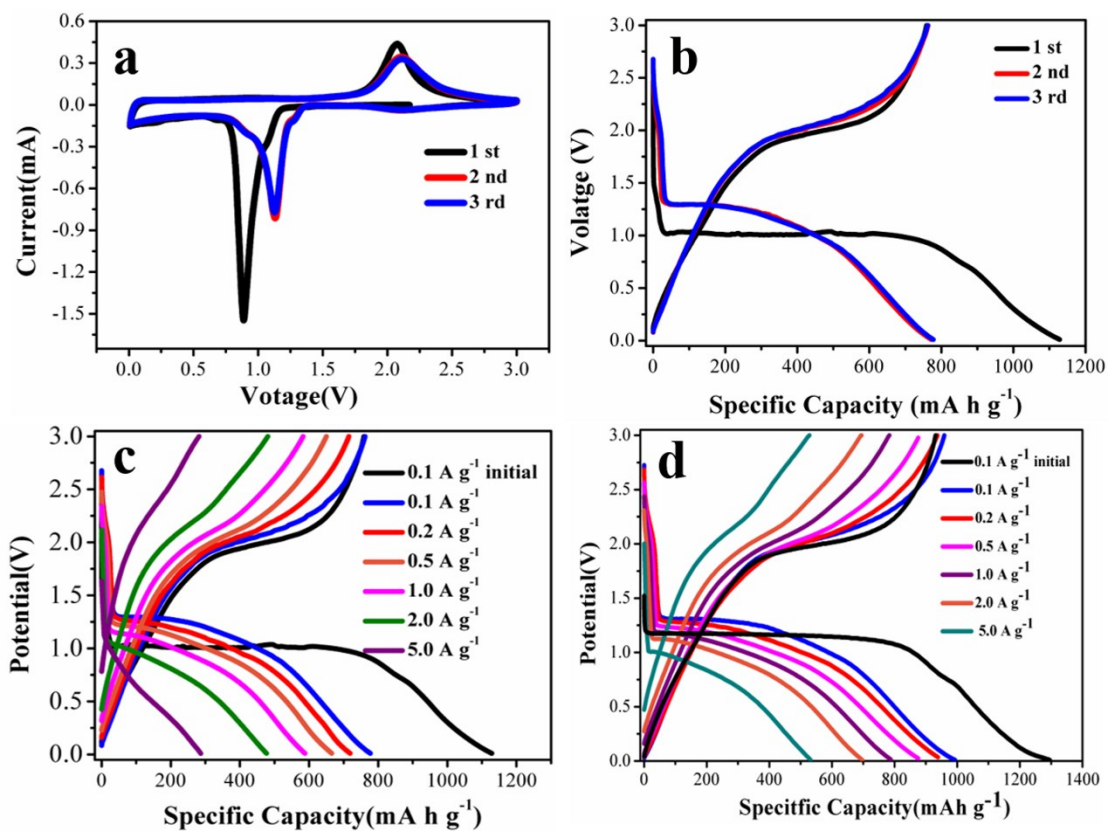
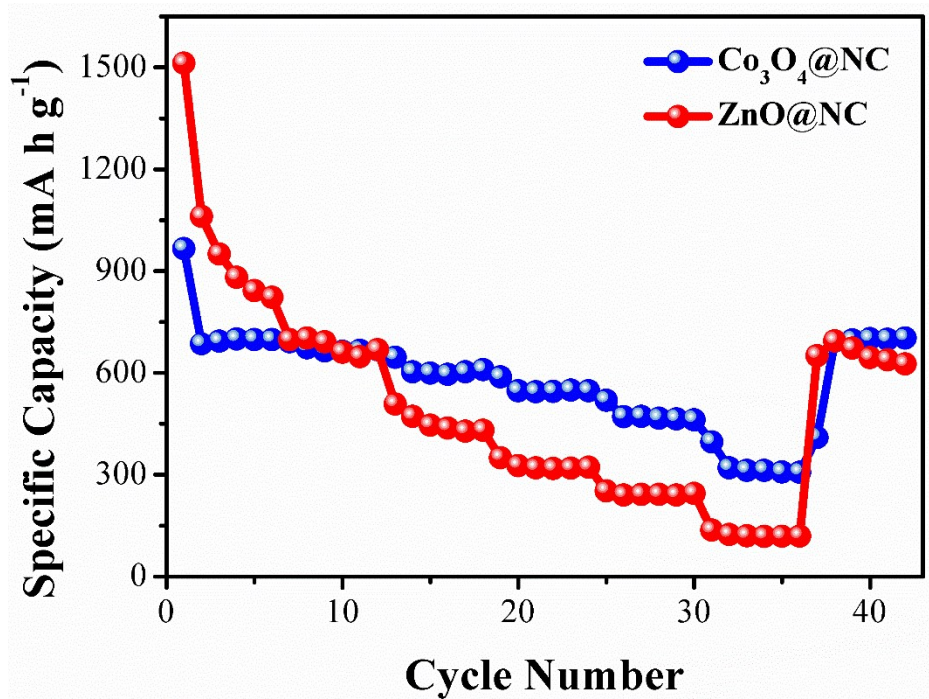


Fig. S2 C 1s the ZnCo<sub>2</sub>O<sub>4</sub>@NC nanowire.



**Fig. S3** (a) CV curves of  $\text{ZnCo}_2\text{O}_4$  nanowires at the scan rate of  $0.1 \text{ mV s}^{-1}$ . (b) Charge/discharge curves of  $\text{ZnCo}_2\text{O}_4$  nanowires at the current density of  $0.1 \text{ A g}^{-1}$ . (c) Charge/Discharge profile of  $\text{ZnCo}_2\text{O}_4$  at various current densities. (d) Charge/Discharge profile of  $\text{ZnCo}_2\text{O}_4/\text{NC}$  at various current densities.



**Figure. S4** the rate performance of  $\text{Co}_3\text{O}_4@\text{NC}$  and  $\text{ZnO}@\text{NC}$  electrode.