

# Electronic Supplementary Information

## Engineering onion-like nanoporous $\text{CuCo}_2\text{O}_4$ hollow spheres derived from bimetal–organic frameworks for high-performance asymmetric supercapacitor

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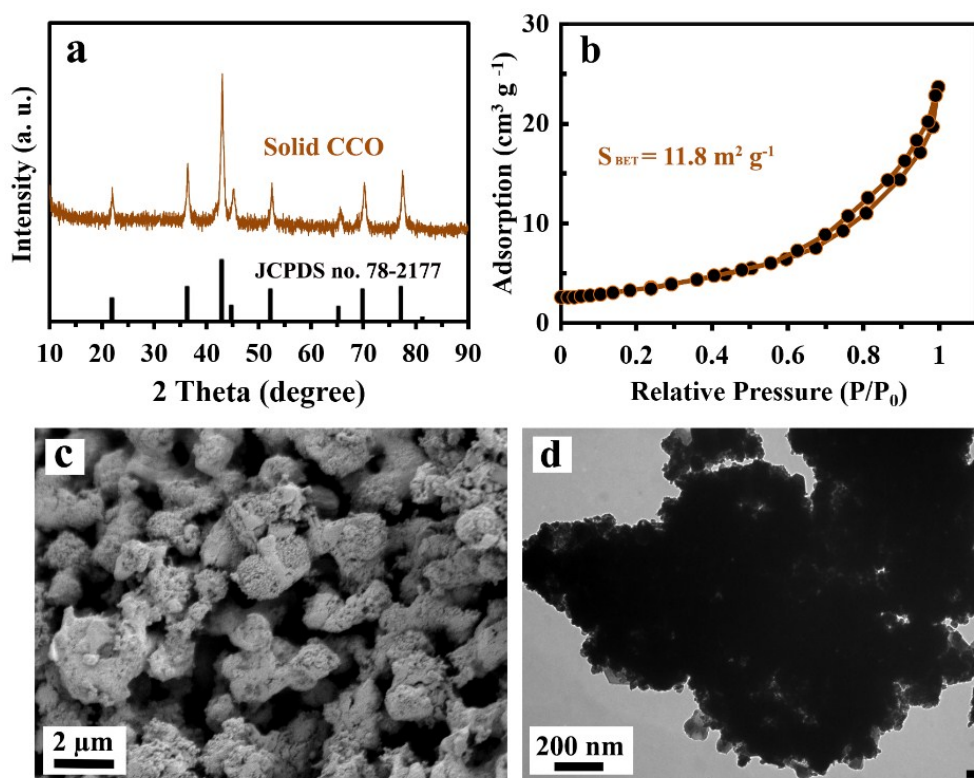


Fig. S1 Spectroscopic and microscopic characterization of the solid  $\text{CuCo}_2\text{O}_4$  sample. (a) XRD patterns of the S-CCO sample. The bottom line pattern is the standard pattern of  $\text{CuCo}_2\text{O}_4$ . (b)  $\text{N}_2$  physisorption isotherms of the S-CCO sample. (c and d) FESEM and TEM images of the S-CCO sample.

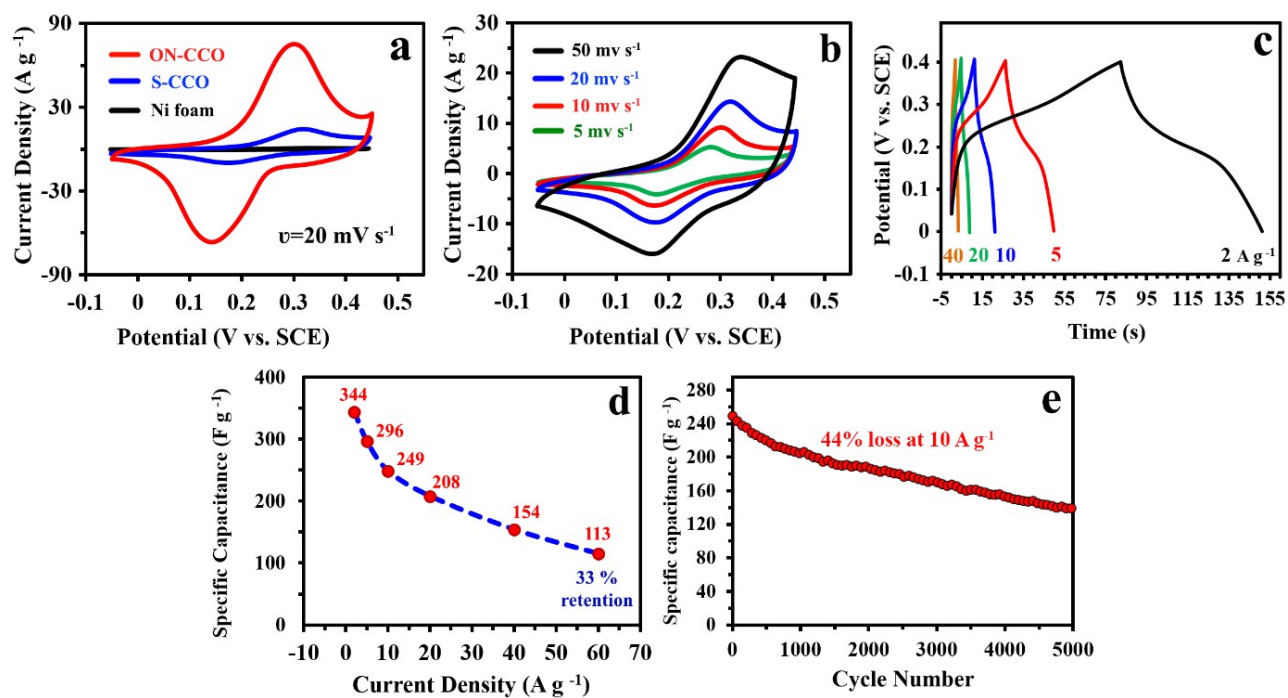


Fig. S2 Evaluation of the electrochemical performance of the S-CCO electrode. (a) CV of the Ni foam, solid  $\text{CuCo}_2\text{O}_4$  and onion-like  $\text{CuCo}_2\text{O}_4$  electrodes at a scan rate of  $20 \text{ mV s}^{-1}$ . (b) CV curves of the S-CCO electrode at various scan rates. (c) Galvanostatic charge/discharge curves of the S-CCO electrode at various current densities. (d) Rate capability of the S-CCO electrode. (e) Long-term cycling stability of the S-CCO electrode at a current density of  $10 \text{ A g}^{-1}$ .

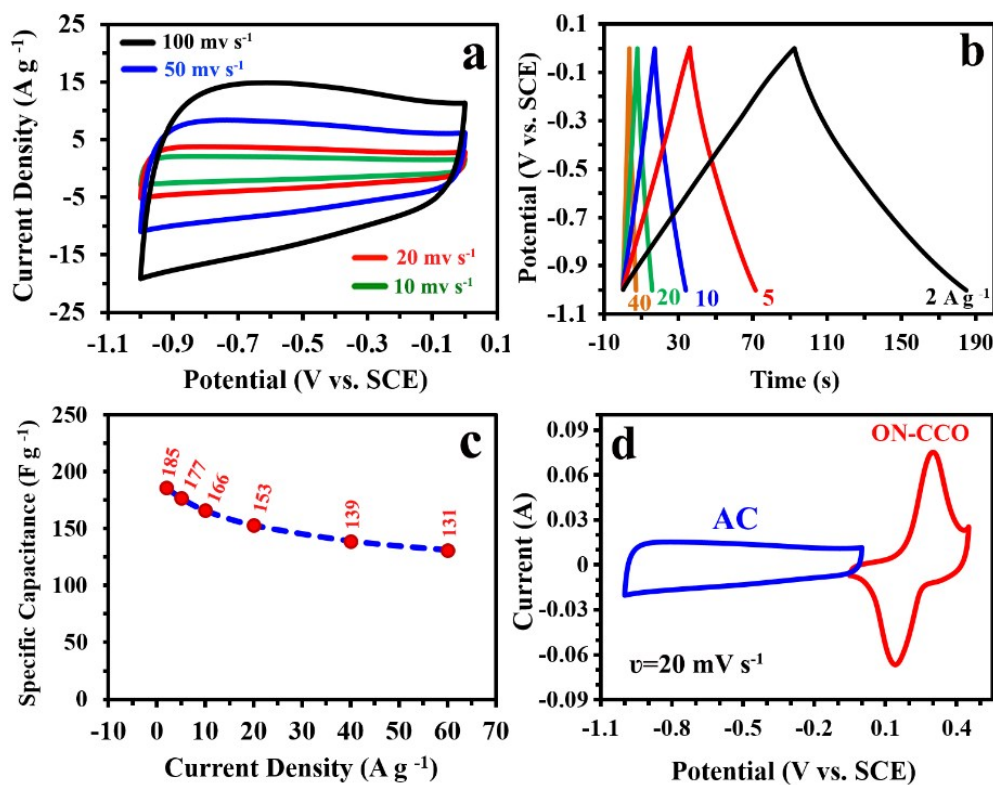


Fig. S3 Evaluation of the electrochemical performance of the AC electrode. (a) CV curves of the AC electrode at various scan rates. (b) CD curves of the AC electrode at different current densities. (c) Rate capability of the AC electrode. (d) CV curves of the AC and ON-CCO electrodes at a scan rate of  $20 \text{ mV s}^{-1}$  after charge balancing.