

Supporting Information

Hierarchical Urchin-like Cobalt-doped CuO for Enhanced Electrocatalytic Oxygen Evolution Reaction

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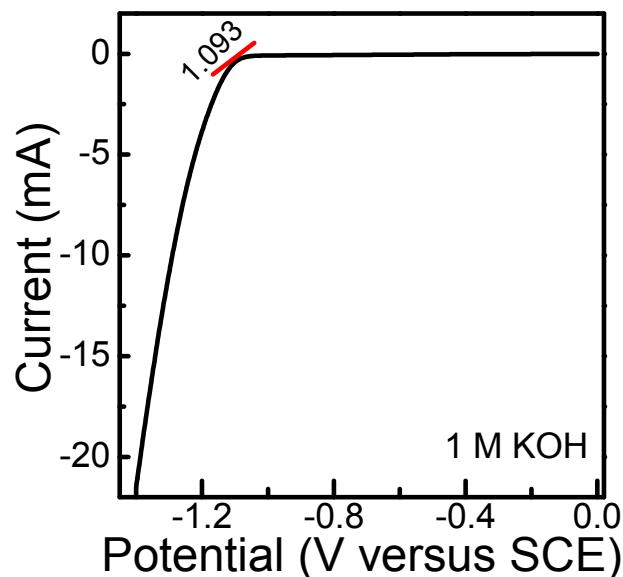


Figure S1. LSV curve in 1 M KOH for the calibration of SCE to RHE. Pt wire is used as the counter and working electrode while SEC as reference electrode.

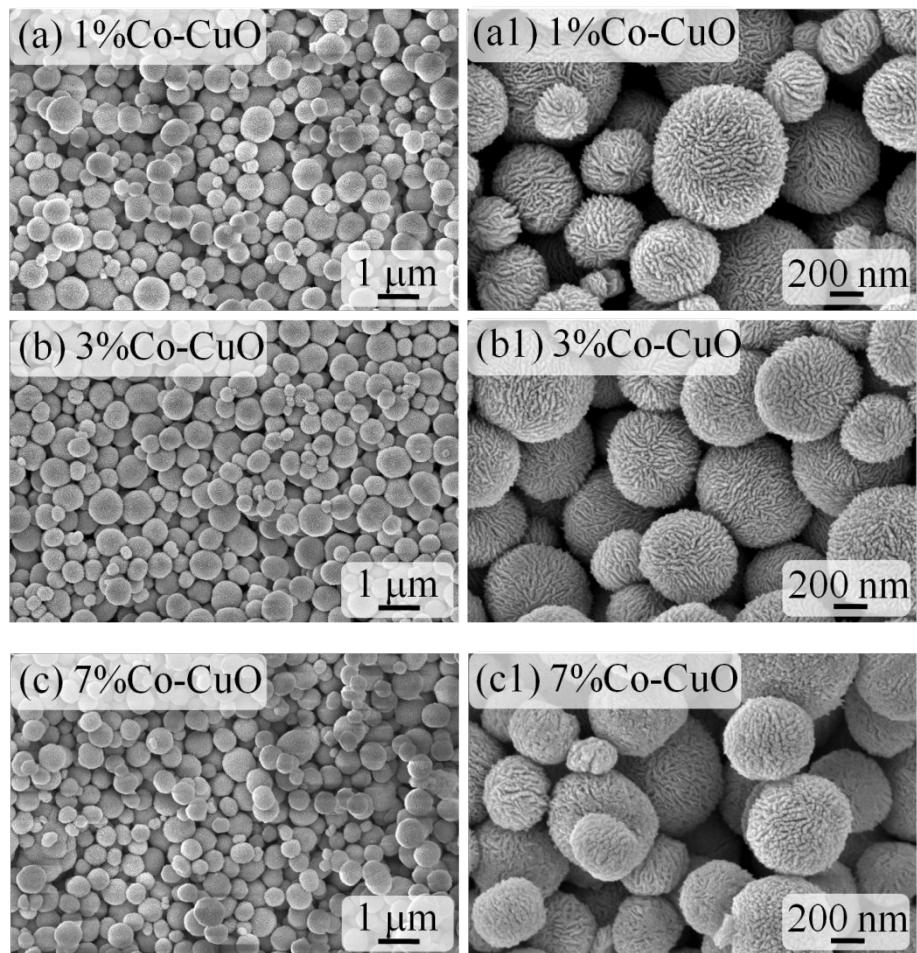


Figure S2. SEM images of (a,a1) 1% Co, (b,b1) 3% Co and (c,c1) 7% Co-doped CuO obtained through microwave-assisted synthesis route.

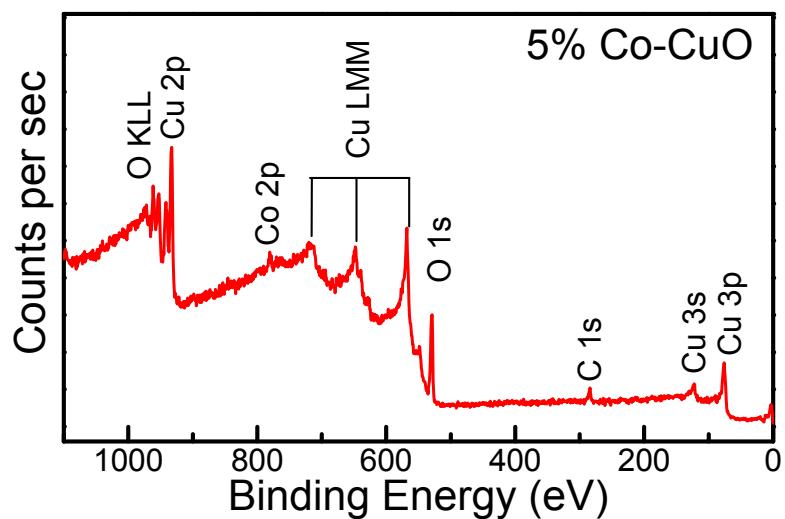


Figure S3. Survey XPS spectrum of 5% Co-doped CuO.

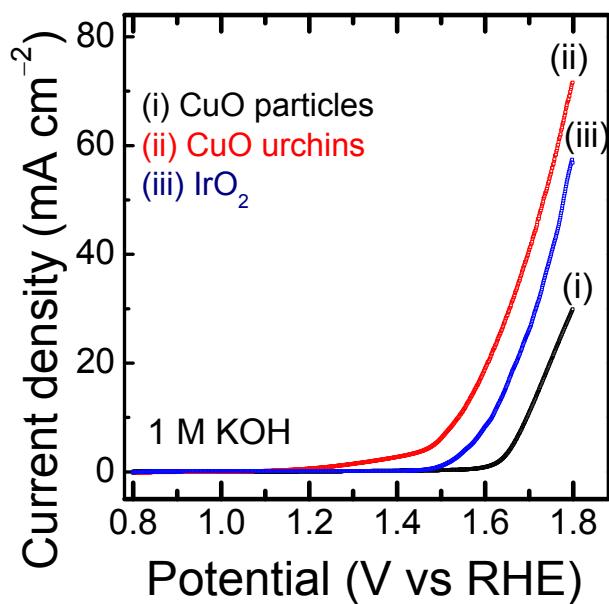


Figure S4. LSV plots of CuO particles, CuO urchin-like structure and IrO₂.

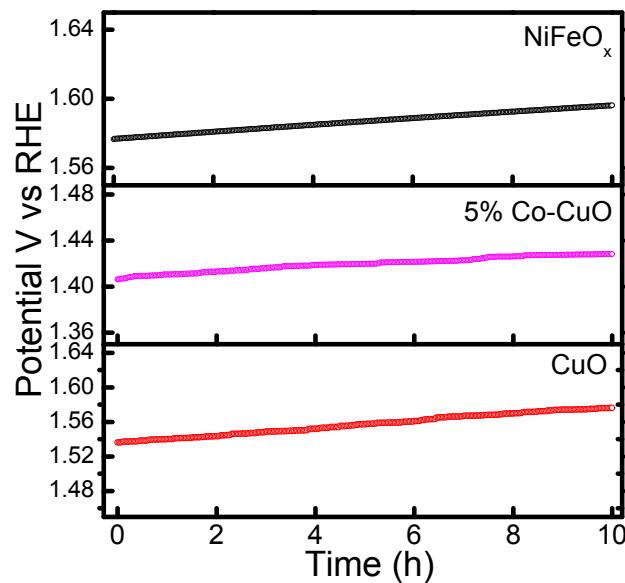


Figure S5. Chronopotentiometry plots for different electrocatalysts for OER performed at 10 mA cm^{-2} in 1 M KOH .

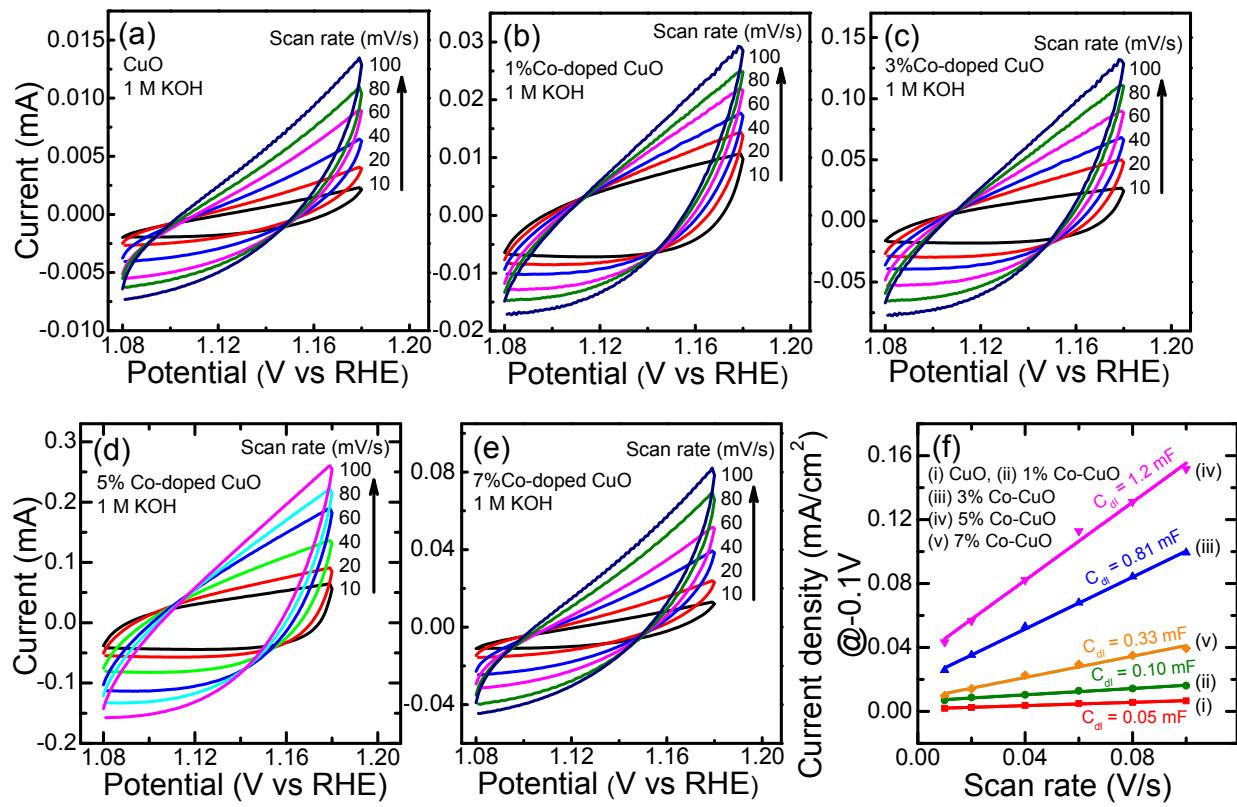


Figure S6. (a-e) Cyclic voltammograms of (a) undoped CuO, (b) 1% Co-doped CuO, (c) (b) 3% Co-doped CuO, (d) 5% Co-doped CuO, (e) 7% Co-doped CuO, and (f) corresponding plots of current (@-0.1 V) versus scan rates.

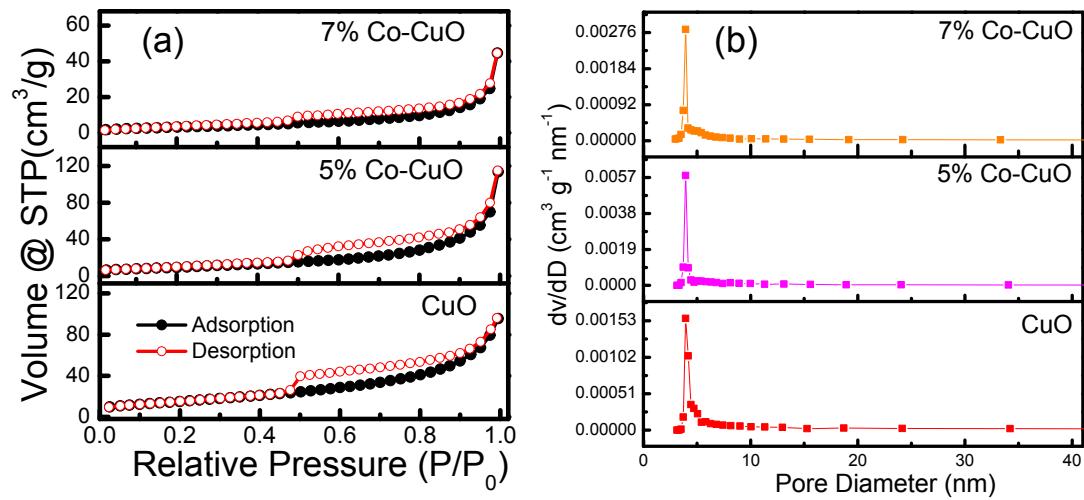


Figure S7. (a) N_2 adsorption and desorption isotherms of undoped CuO, 5% and 7% Co-doped CuO at 77 K and (b) corresponding pore diameters obtained from the desorption branch using BJH method.