Supporting Information

Three-dimensional Co-S-P Nanoflowers as Highly Stable Electrode Materials for Asymmetric Supercapacitors

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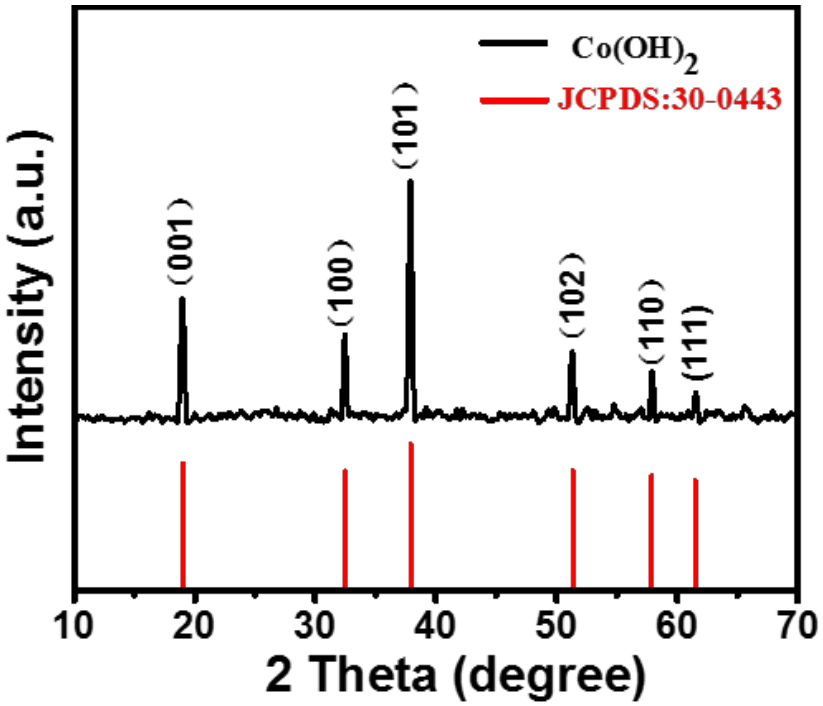

Figure S1. The XRD pattern of $Co(OH)_2$.

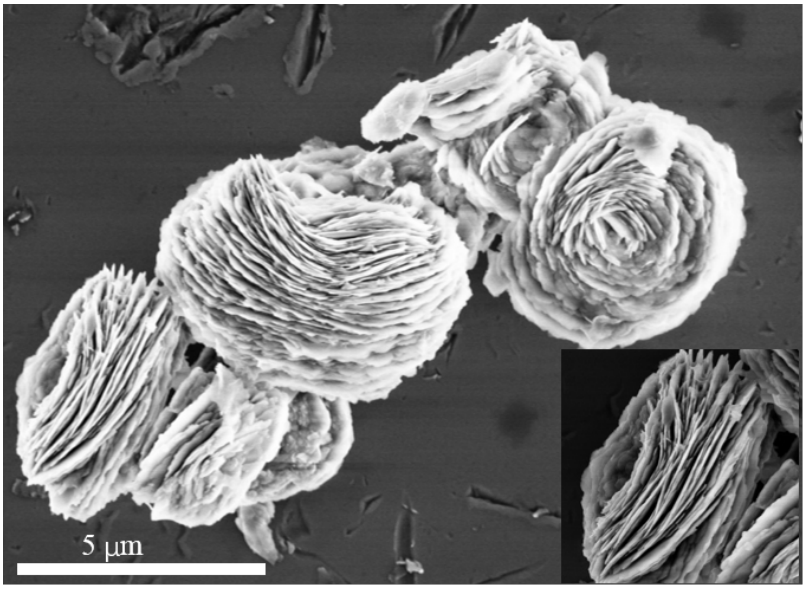

Figure S2. The SEM image of Co_9S_8/CoO.

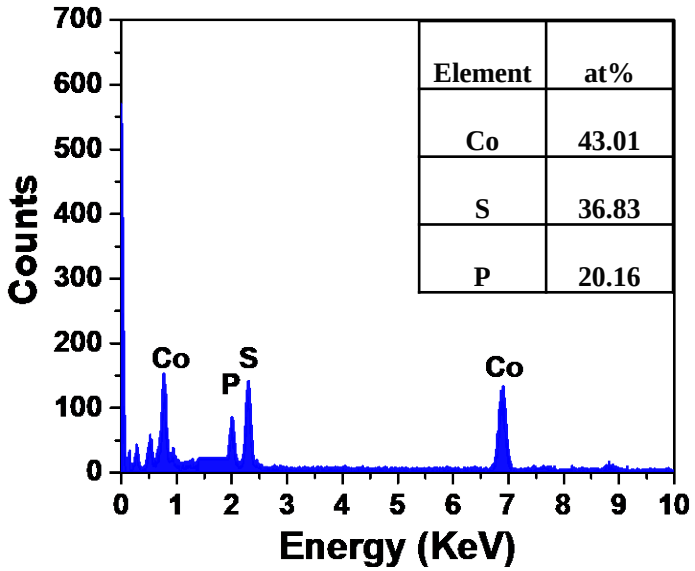

Figure S3. TEM EDS elemental mapping of Co-S-P.

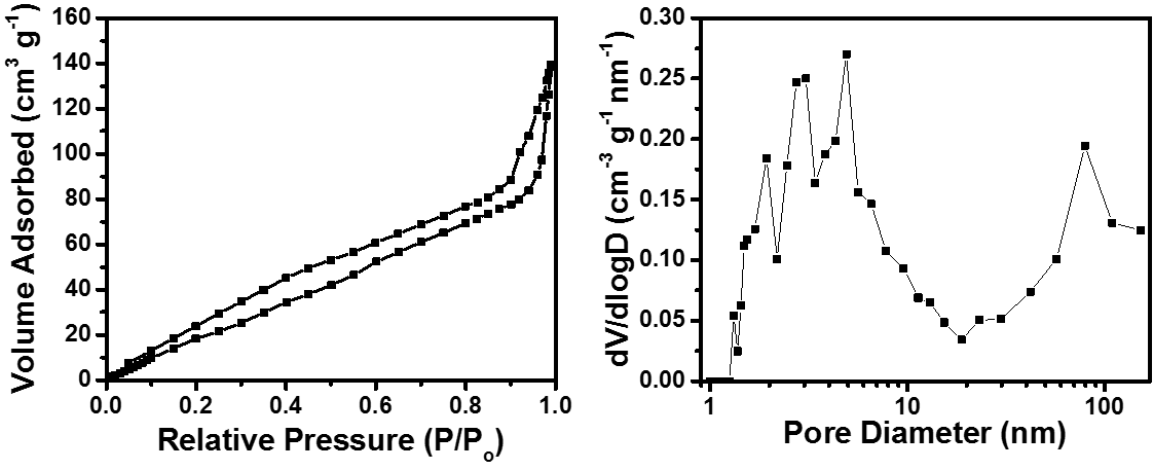

Figure S4. (a) Nitrogen adsorption and desorption curve of Co-S-P, and (b) pore size distribution.

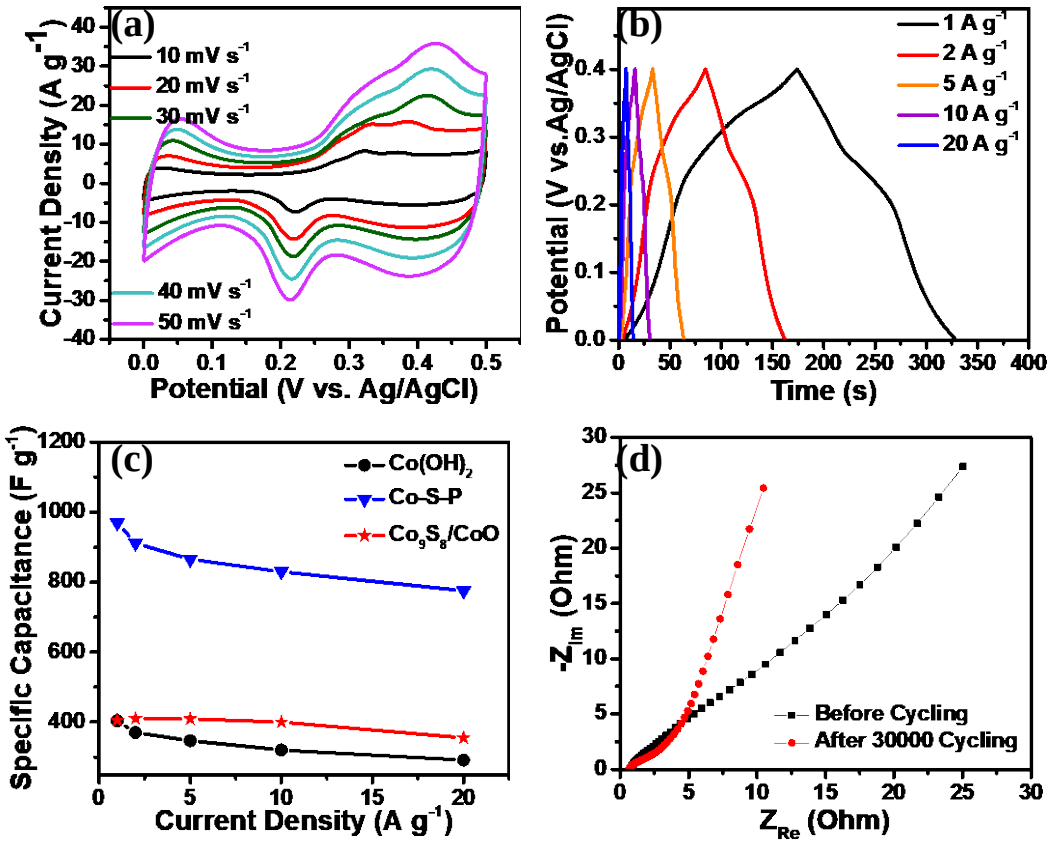

Figure S5. (a) CV curves of Co_9S_8/CoO at different scanning rates. (b) GCD curves of Co_9S_8/CoO at different current densities. (c) Specific capacities of the Co-S-P, Co_9S_8/CoO, and $Co(OH)_2$ electrodes as a function of current densities. (d) Nyquist plots of Co-S-P electrode before and after 30,000 cycles.

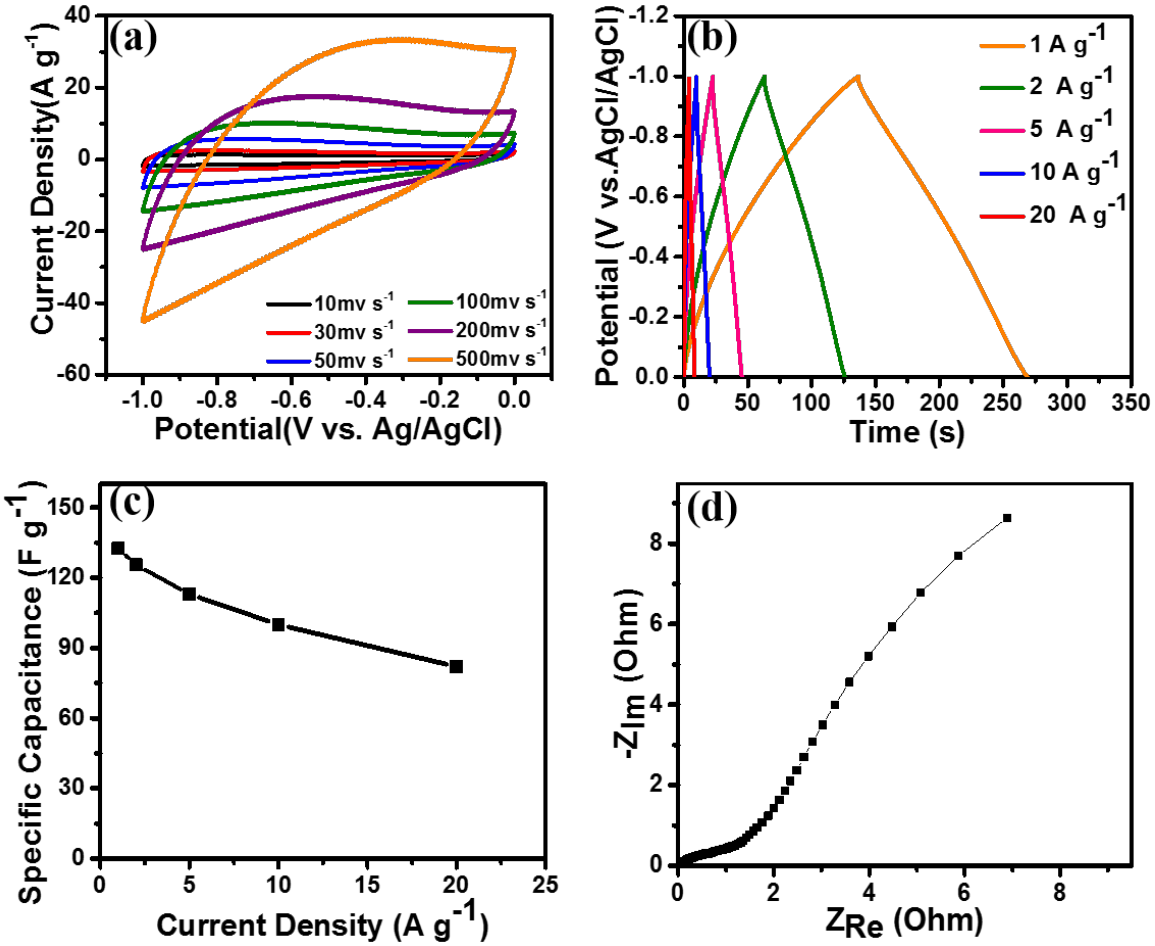

Figure S6. The electrochemical performances of AC electrode: (a) CV curves at different scanning rates. (b) GCD curves at different current densities. (c) Specific capacitance as a function of current density, and (d) Nyquist plots.

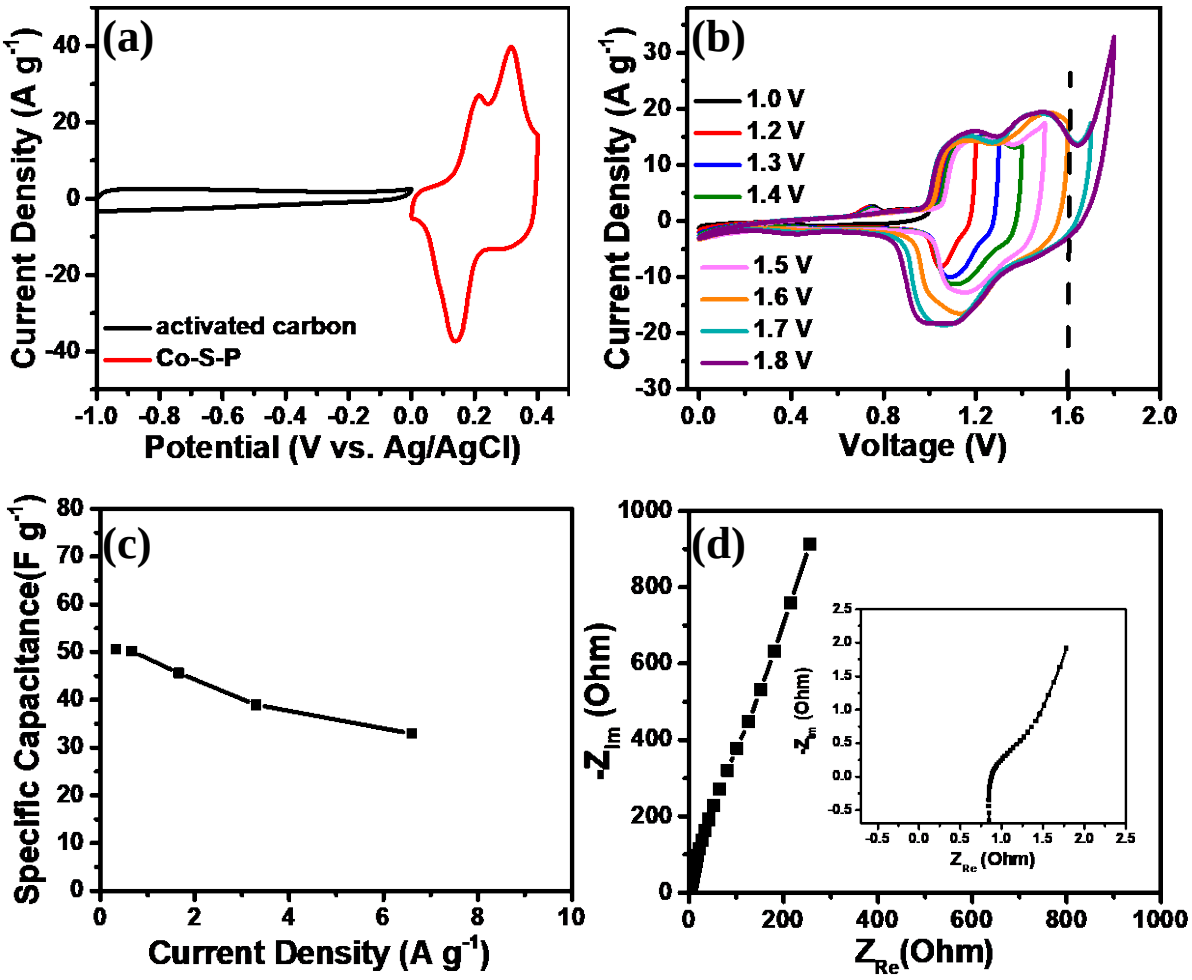

Figure S7. The electrochemical performance of the asymmetric device: Co-S-P//AC. (a) CV profiles of the two electrodes at the same scan rate of 50 mV s^{-1}. (b) CV curves of the device with different voltage windows at the scan rate of 50 mV s^{-1}. (c) Specific capacitance of asymmetric device at diffient current density. (d) Nyquist plots of asymmetric device.