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Supporting Information

for

Ultrathin $Ni_{1-x}Co_xS_2$ nanoflakes as high energy density electrode materials for asymmetric supercapacitors

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Additional figures

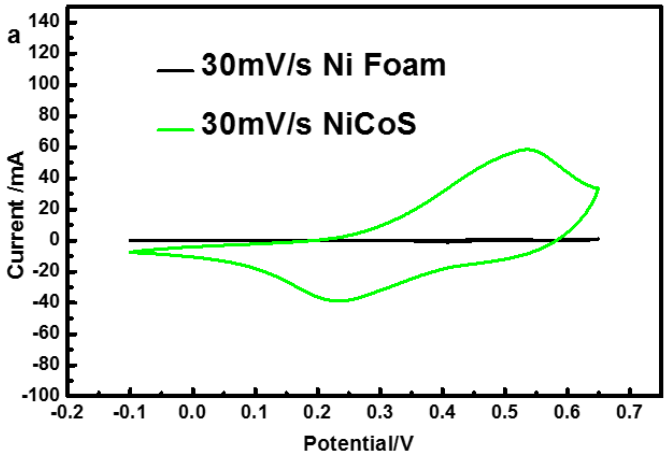

Figure S1: CV (vs Hg/HgO) comparison of bare Ni foam and $Ni_{1-x}Co_xS_2$.

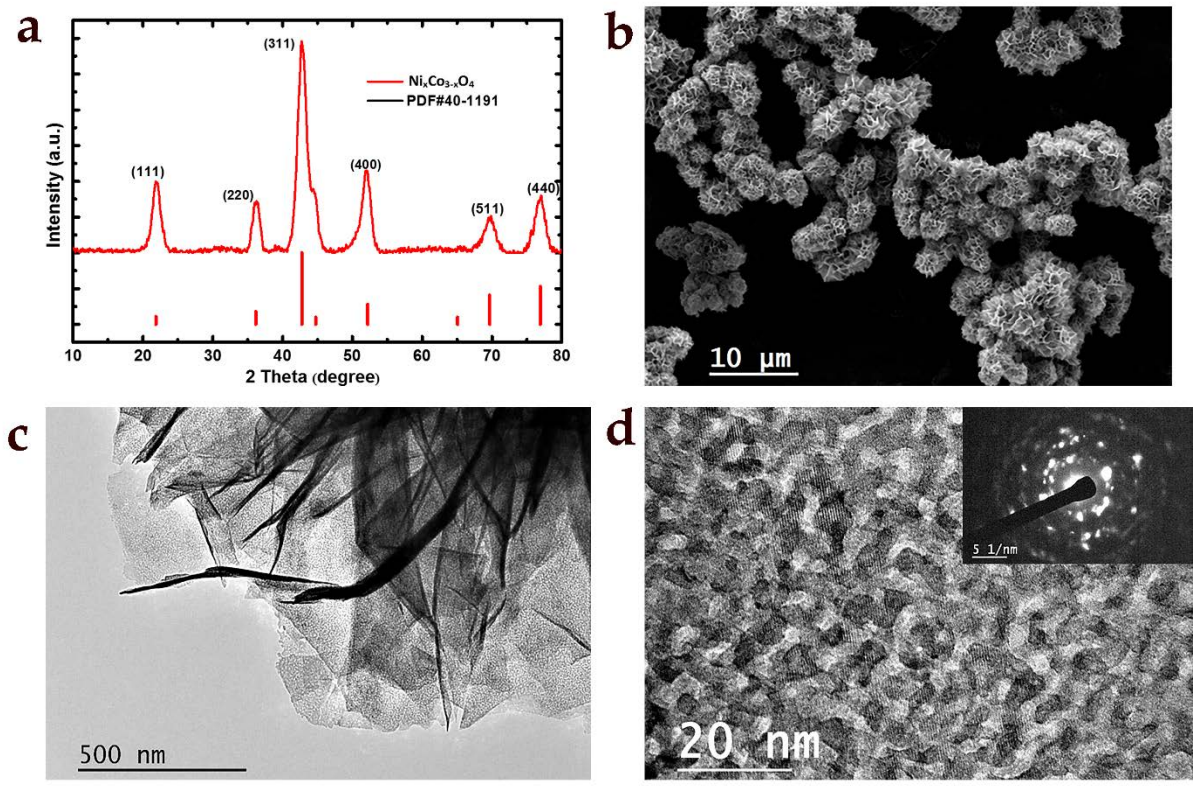

Figure S2: (a) XRD pattern of $Ni_{1.7}Co_{1.3}O_4$ materials; (b) FESEM images of $Ni_{1.7}Co_{1.3}O_4$; (c and d) Low magnification and enlarged TEM images of precursor $Ni_{1.7}Co_{1.3}O_4$, the inset shows the SAED pattern of the materials.

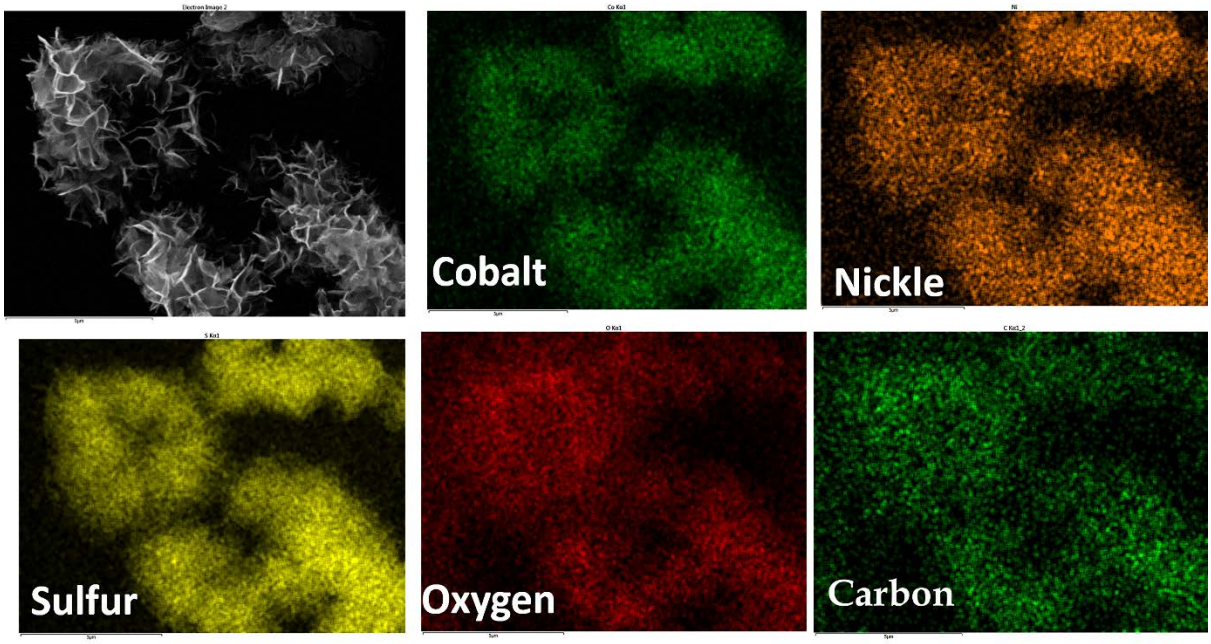

Figure S3: FESEM-EDS mapping of elements in $Ni_{1-x}Co_xS_2$ nano particles.

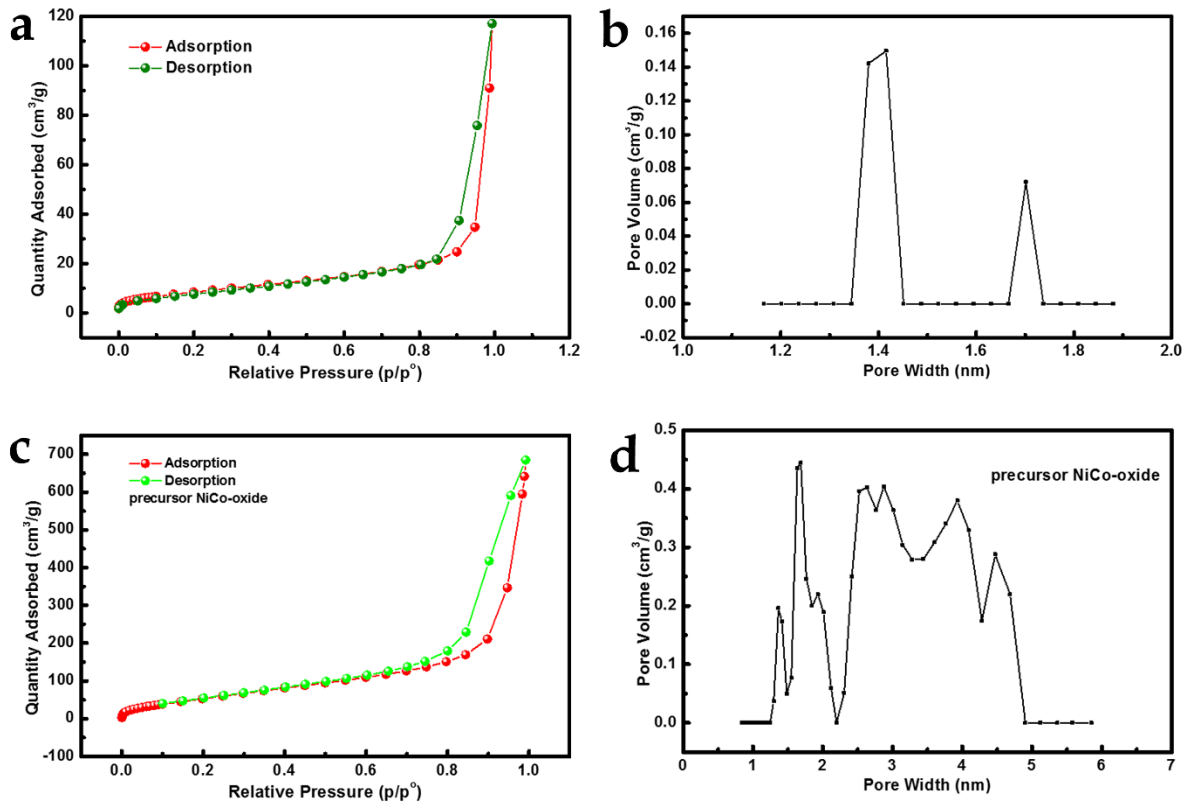

Figure S4: a) N2 adsorption/desorption isotherms and b) pore size distribution plot of $Ni_{1-x}Co_KS_2$ materials; c) N2 adsorption/desorption isotherms and d) pore size distribution plot of $Ni_{1.7}Co_{1.3}O_4$ materials.

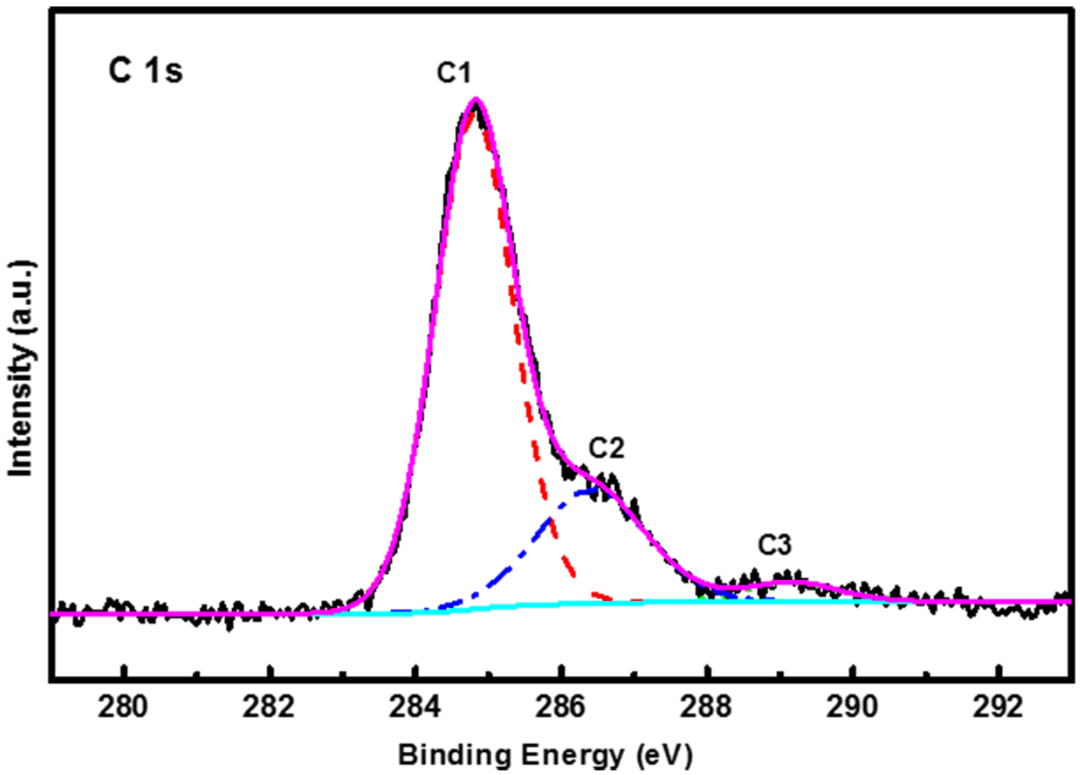

Figure S5: High-resolution XPS spectra C 1s of the $Ni_{1-x}Co_xS_2$ nanoflakes.

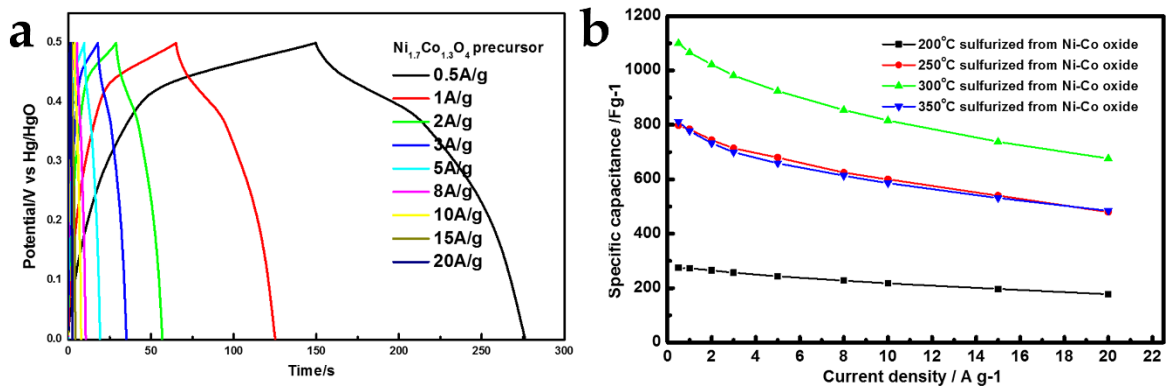

Figure S6: (a) GCD curves of $Ni_{1.7}Co_{1.3}O_4$ materials; (b) Specific capacitance comparison of different sulfurization temperature.

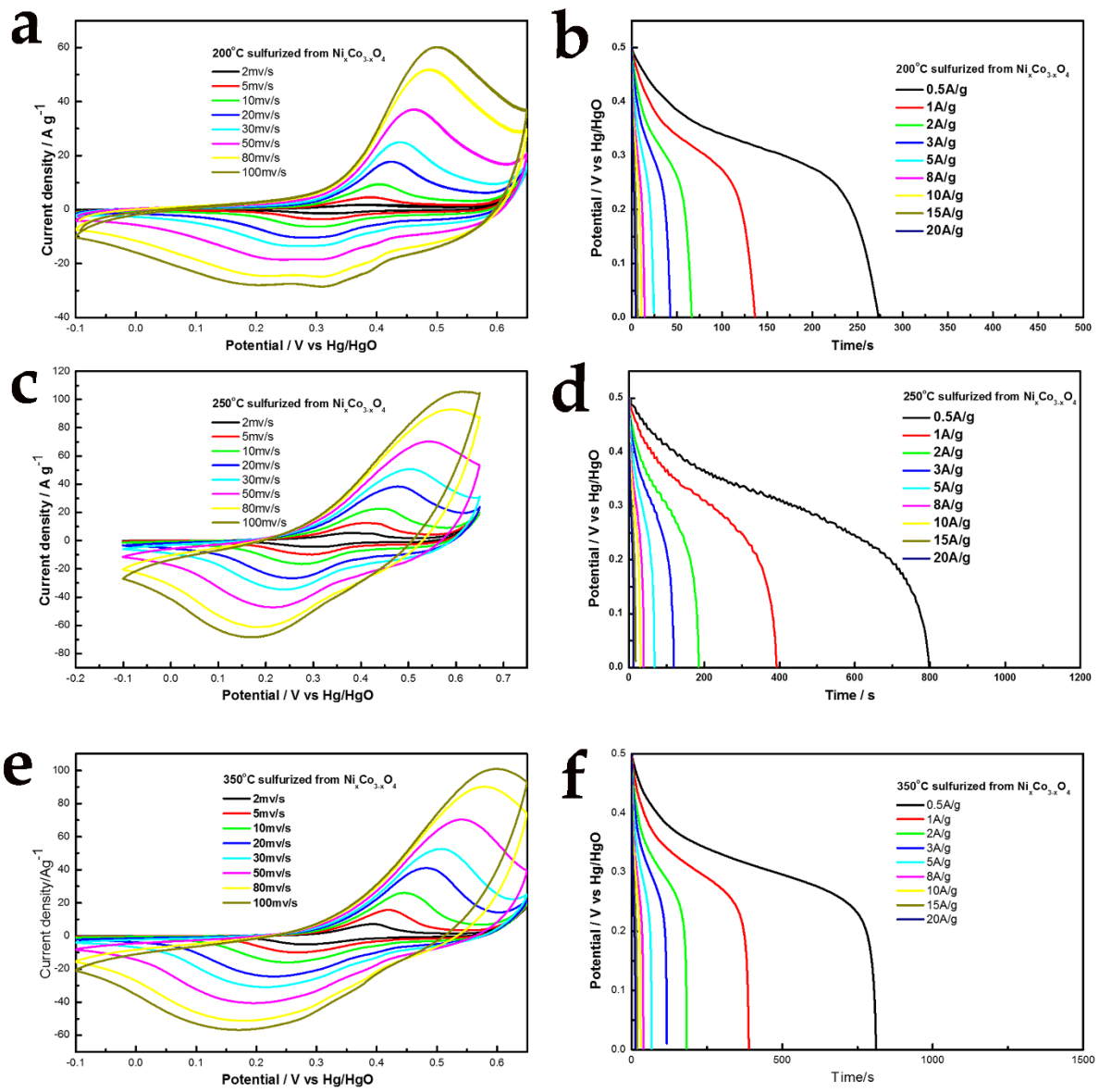

Figure S7: CV and GCD plots (vs Hg / HgO) of $Ni_{1-x}Co_xS_2$ sulfurized under different temperature of 200 °C (a,b); 250 °C (c,d) and 350 °C (e,f).

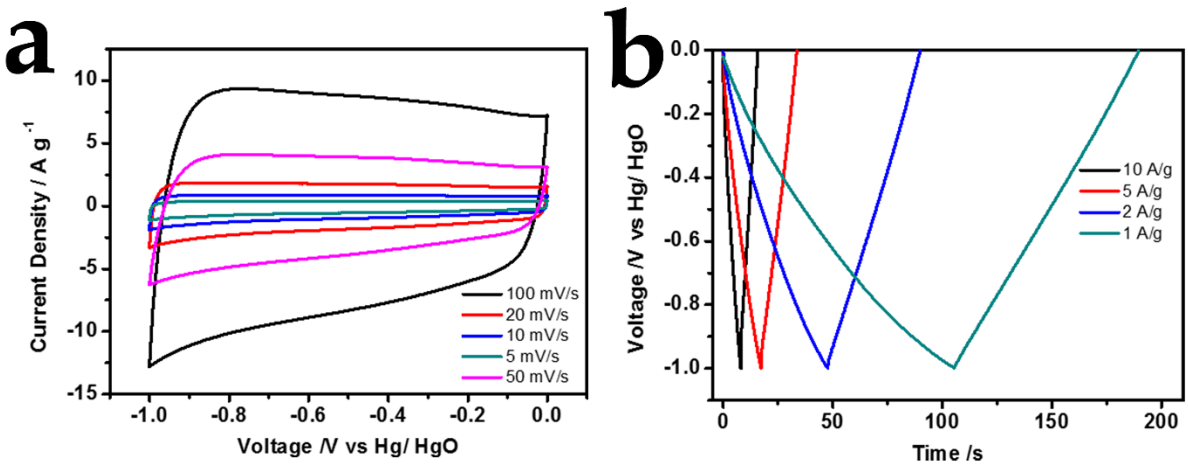

Figure S8: (a) CV and (b) GCD plots (vs Hg / HgO) of negative material YP-50F commercial carbon.