Supporting Information for

Ordered Mesoporous Nickel Cobaltite Spinel with Ultra-high Supercapacitance

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Supplementary Figures:



Figure S1. TEM images for mesoporous $NiCo_2O_4$ prepared at a) 200 °C, b) 250 °C, and c) 300 °C.



Figure S2. N_2 adsorption-desorption isotherms for mesoporous NiCo₂O₄ synthesized at different temperatures.



Figure S3. Slow-charge and fast-discharge characterizations. a) Cyclicchronopotentiometric curves with a density of charge currents of 2.86 A g^{-1} and various densities of discharge currents (ratio of the chargeto the discharge current density: solid lines in red 2.86/8 Ag⁻¹, in blue 2.86/14 Ag⁻¹, and in black 2.86/20 Ag⁻¹; dotted lines in red 8/8 Ag⁻¹, in blue 14/14 Ag⁻¹, and in black 20/20 Ag⁻¹).



Figure S4. Comparison of sample signal from mesoporous NiO electrode material to background signal from the Ni foil. a) Cyclic voltammometric curves of 300 °C electrodes (wine) and bare Ni foil (violet) at potential scanning rate of 5 mV s⁻¹. b) Capacitnace of electrode material prepared at different temperatures and bare Ni foil calculated from corresponding cyclic voltammometric curves at 5 mV s⁻¹.

FWHM	170 °C	200 °C	250 °C	300 °C
(220)	1.17522	0.59047	0.54149	0.46353
[degree]				
(311)	0.99873	0.84038	0.76151	0.64369
[degree]				

Table S1. The corrected full width at half maximum (FWHM) of the PXRD peaks used for sample grain size estimation.