Thermodynamic Stabilization of Nanostructured Alpha-Ni$_{1-x}$Co$_x$(OH)$_2$ for High Efficiency Batteries and Devices

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SUPPORTING INFORMATION

Figure S1: EDX analyses of $\alpha$-Ni$_{1-x}$Co$_x$(OH)$_2$ suspension in glycerin and as powder samples.
Figure S2: XRD patterns of Ni(OH)$_2$, Co(OH)$_2$ and Ni$_{1-x}$Co$_x$(OH)$_2$ in the 5 to 20 degrees (2θ) showing the 003 peak of typical alpha phase materials.
Figure S3: Cyclic voltammograms of FTO electrodes modified with $\alpha$-Co(OH)$_2$ before and after heat treatment at 240 °C, and modified with heated $\alpha$-Ni(OH)$_2$ in 1.0 mol.L$^{-1}$ solution.
Figure S4: Cyclic voltammograms of FTO electrodes modified with (a) NiCo-80:20, (b) NiCo-60:40 and (c) NiCo-50:50 at different scan rates (5, 10, 15, 20 and 25 mV s\(^{-1}\)). Insert: Plots of current vs scan rate.