Supporting Information

Pseudocapacitive Behaviors of Mesoporous Nickel-Cobalt Oxide Nanoplate Electrodes in Different Electrolyte Systems

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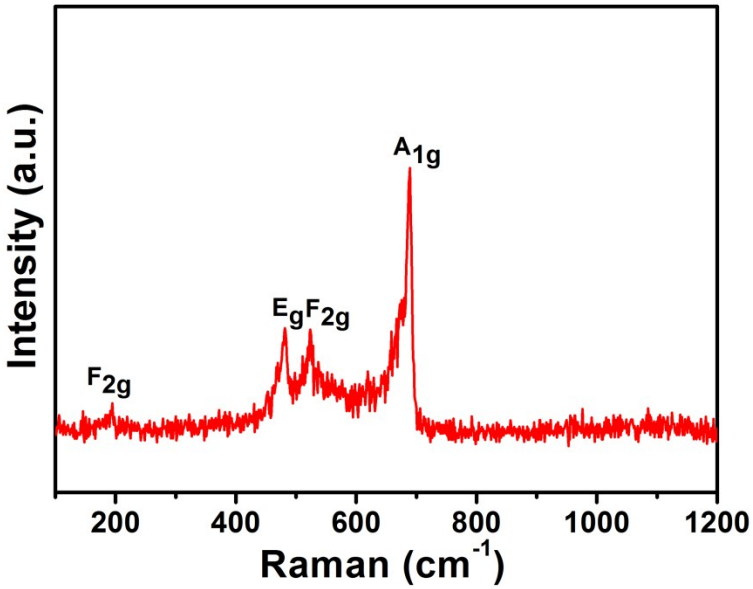

Fig. S1 Raman spectrum of $NiCo_2O_4$ nanoplate.

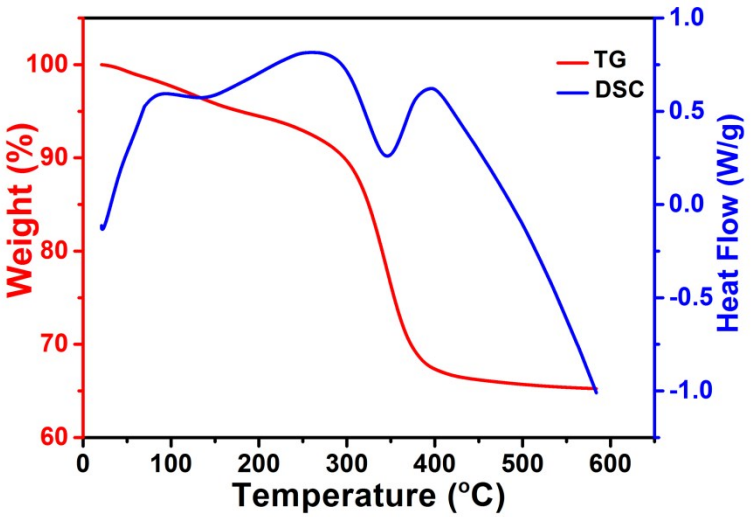

Fig. S2 TG and DSC curves of Ni-Co hydroxide precursor before calcination.

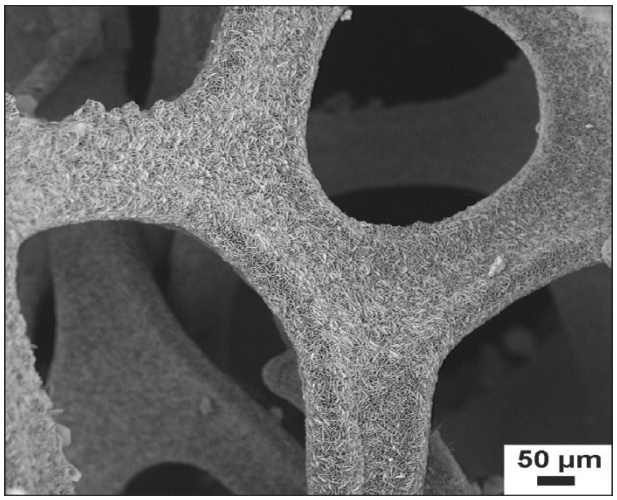

Fig. S3 SEM image of $NiCo_2O_4$ nanoplates covered on Ni foam.

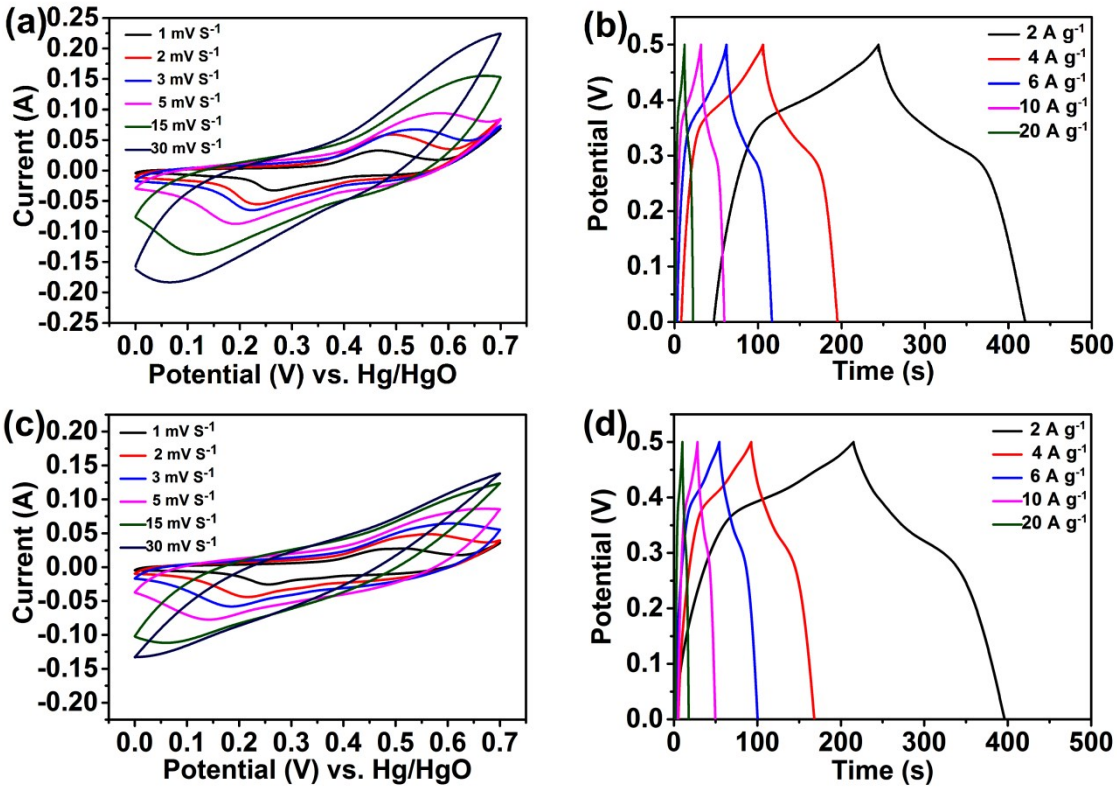

Fig. S4 (a, b) CV and GCD curves of the $NiCo_2O_4$ electrode in 2 M NaOH electrolyte; and (c, d) in 2 M LiOH electrolyte at different scan rates and current densities.

Table S1 Comparison of specific capacitances of $NiCo_2O_4$ nanoplate electrodes with other Co_2O_4-based electrodes reported in literature.

Electrode material	Current density	Specific capacitance	Reference
$NiCo_2O_4$ nanoplate	2 A g^{-1}	1210 F g^{-1}	Current study
$MnCo_2O_4$ nanowire	2 A g^{-1}	350 F g^{-1}	42
$CuCo_2O_4$ nanoparticle	2 A g^{-1}	280 F g^{-1}	43
$NiCo_2O_4$ nanosphere	2 A g^{-1}	660 F g^{-1}	44
$NiCo_2O_4$ nanounchin	1 A g^{-1}	658 F g^{-1}	45
NiO nanosheet	1 A g^{-1}	674 F g^{-1}	46
Co_3O_4 nanowire	2 A g^{-1}	599 F g^{-1}	47
$MnMoO_4$@$CoMoO_4$ nanowire	2 A g^{-1}	163 F g^{-1}	48

Table S2 Impedance parameters calculated from the equivalent circuits for different electrolytes.

Different Electrolytes	R_s (Ω)	R_{ct} (Ω)
KOH	0.81	2.92
NaOH	0.94	3.43
LiOH	1.15	3.75