Dodecyl Sulfate Induced Fast Faradic Process in Nickel Cobalt oxide/Reduced Graphite Oxide Composite Material and Its Application for Asymmetric Supercapacitor Device

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Raman spectrum of sample SG-2

Figure S1. Raman spectrum of sample SG-2.
Figure S2. (a) Micrograph of sample SG-2 (yellow line indicates the EDX line scan path); (b) EDX elements mapping of Co Kα, Ni Kα and S Kα; (c) EDX of sample SG-2.
Electrochemical characterizations of different samples

**Figure S3.** (a) Relationship between specific capacitance and discharge current of different SDS concentrations; (b) relationship between specific capacitance at 0.5 A g$^{-1}$ and GO concentration in the stating solutions.
SEM images of NiCo$_2$O$_4$/rGO composite prepared without SDS

**Figure S4.** SEM images of (a) low magnification and (b) high magnification NiCo$_2$O$_4$/rGO composite material prepared without SDS in starting solution.
Electrochemical characterization of activated carbon

Figure S5. (a) CV curves of activated carbon in 2 M KOH at different scan rates; (b) specific capacitance vs discharge current relationship of activated carbon.