Electronic Supporting Information to:

Synthesis of graphene/Ni-Al layered double hydroxide nanowires and their application as electrode material for supercapacitors

Jamil Memon,[a,b,†] Jinhua Sun,[a,†] Dongli Meng,[a] Wenzhu Ouyang,[a] Mushtaque A. Memon,[a,b] Yong Huang,[a] Shouke Yan,[b] Jianxin Geng[a,*]

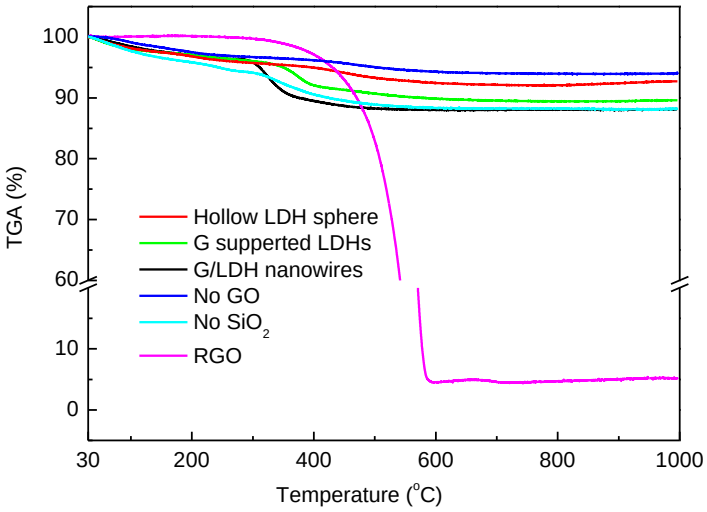

Figure S1. TGA curves of hollow Ni-Al LDH spheres, graphene supported Ni-Al LDHs, graphene/Ni-Al LDH nanowires, graphene/Ni-Al LDH composite synthesized without using GO, graphene/Ni-Al LDH composite synthesized without using SiO_2, and RGO.

Table S1. The electrical conductivity of the different forms of Ni-Al LDH materials.

Materials	Hollow Ni-Al LDH spheres	Graphene supported Ni-Al LDHs	Graphene/ Ni-Al LDH nanowires	No GO	No SiO_2	RGO
Electrical conductivity (S/m)	2.98×10^{-8}	1.26×10^{-4}	1.84	1.13×10^{-5}	1.46×10^{-2}	0.38

Table S2. The surface area of the different forms of Ni-Al LDH materials.

Materials	Hollow Ni-Al LDH spheres	Graphene supported Ni-Al LDHs	Graphene/ Ni-Al LDH nanowires	No GO	No SiO_2	RGO
Surface area (m^2/g)	201	77	230	127	242	212

Table S3. The specific capacitance for graphene/Ni-Al LDH nanowires at different current densities.

Current density (A/g)	0.43	0.7	2.1	3.6	7.1
Specific capacitance (F/g)	268	120	112	114	117