

Supplementary Materials

Synthesis of CNT@CoS/NiCo Layered Double Hydroxides with Hollow Nanocages to Enhance Supercapacitors Performance

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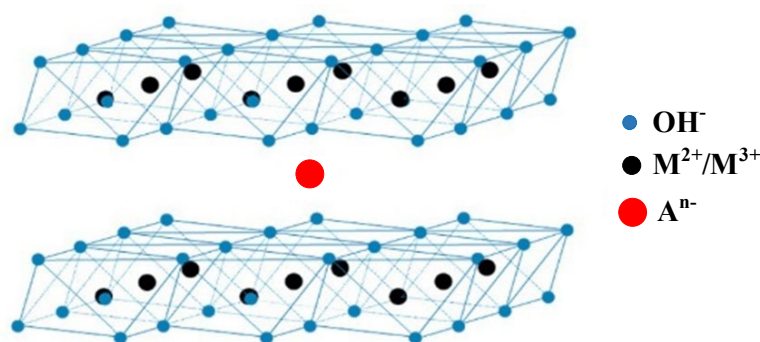


Figure S1. The structure model of NiCo-LDH.

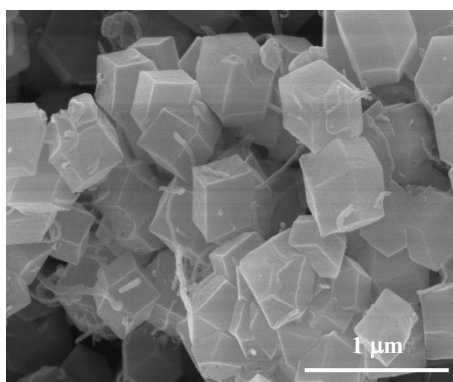


Figure S2. SEM image of CNT/ZIF-67.

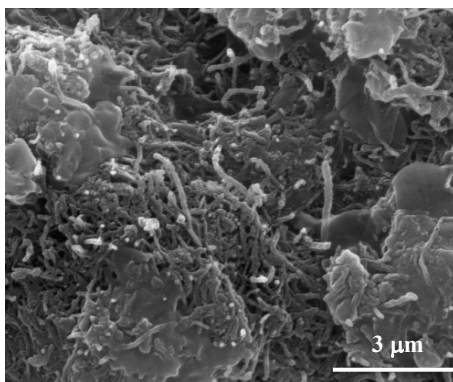


Figure S3. SEM image of CNT/NiCo-LDH.

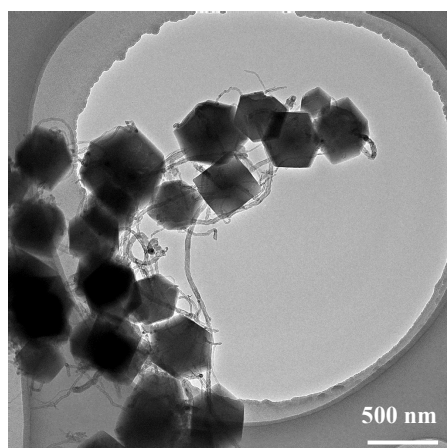


Figure S4. TEM image of CNT/ZIF-67.

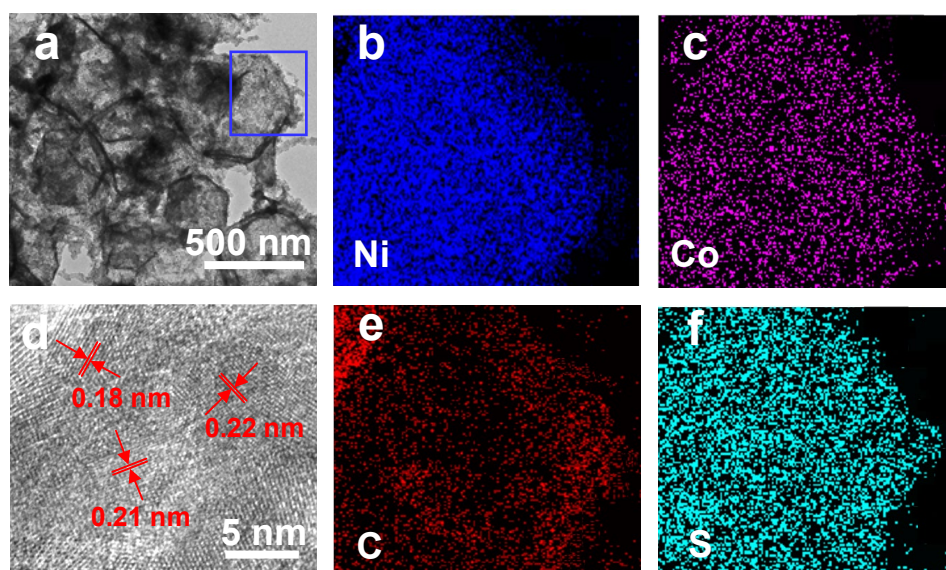


Figure S5. (a) TEM image of C@CS/NCL-100, (b, c, e, f) TEM-EDS element mapping images of C@CS/NCL-100, (d) HRTEM image of C@CS/NCL-100.

Table S1. A list of NiCo-LDH materials in the application of supercapacitors, compared to that obtained in this work.

Materials (three-electrode system)	Electrolyte	Specific capacitance (Potential range vs. Hg/HgO)	Electrodes (asymmetric supercapacitors)	Energy density (Wh kg ⁻¹)/Power density (W kg ⁻¹)	Ref.
Ni _{0.28} Co _{0.72} (OH) ₂	6 M KOH	1255.0 F g ⁻¹ (0.05–0.55 V, 1 A g ⁻¹)	Ni _{0.28} Co _{0.72} (OH) ₂ //AC	20.6/3930	[1]
NiCo-LDH (ZIF-67 derived)	2 M KOH	2369.0 F g ⁻¹ (0–0.5 V, 0.5 A g ⁻¹)	NiCo-LDH//AC	21.28/3741.0	[2]
PNT@NiCo-LDH (ZIF-67 derived)	6 M KOH	1448.2 F g ⁻¹ (0–0.5 V, 1 A g ⁻¹)	PNT@NiCo-LDH//AC	64.4/800	[3]
CoSx/NiCo-LDH (ZIF-67 derived)	2 M KOH	1562 F g ⁻¹ (0–0.45 V, 1 A g ⁻¹)	CoSx/NiCo-LDH//AC	35.8/800	[4]
CNT@NiCo-LDH (MOF derived)	6 M KOH	1159.2 F g ⁻¹ (0–0.5 V, 1 A g ⁻¹)	CNT@NiCo-LDH//CNT@NC	37.4/750	[5]
CNT@CoS/NiCo-LDH	6 M KOH	2794.6 F g ⁻¹ (0–0.5 V, 1 A g ⁻¹)	CNT@CoS/NiCo-LDH//AC	31.38/3750	This work

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