High-performance Ni-Co sulfide nanosheet-nanotubes grown on Ni foam as a binder free electrode for supercapacitors

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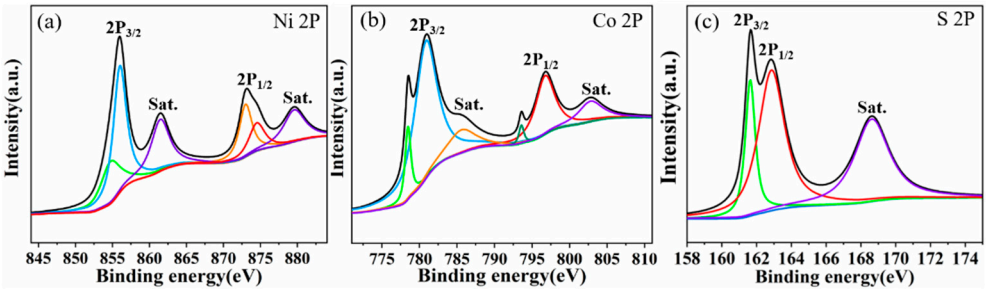

Figure S1. The XPS spectra of Ni-Co sulfide. (a) Ni 2p, (b) Co 2p, (c) S 2p

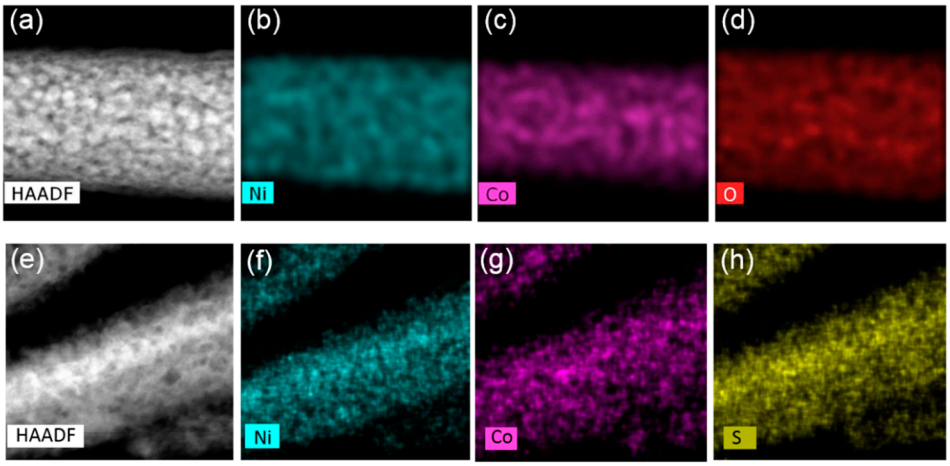

Figure S2. STEM–HAADF image and its corresponding EDS maps. (a-d) The sample of $NiCo_2O_4$, (e-h) the sample of Ni-Co sulfide.

Table S1 Reference survey of related active material electrodes for electrochemical capacitors

Material	Structure morphology	Specific capacitance	Cycle performance	references
$NiCo_2S_4$	nanoparticles	527.8 F g^{-1}	90.0% 3000 cycles	1
$NiCo_2S_4$	nanotubes	360 F g^{-1}	90.0% 2000 cycles	2
nickel–cobalt sulfide	nanosheets	1406.9 F g^{-1}	86.6% 1000 cycles	3
Mesoporous $NiCo_2S_4$	nanoparticles	1440.9 F g^{-1}	75.1% 1000 cycles	4
$NiCo_2S_4$/NiS	hollow nanospheres	1947.5 F g^{-1}	90.3% 1000 cycles	5
Ni-Co sulfide	nanosheet-nanotubes	2280 F g^{-1}	95.2% 3000 cycles	Our work (active mass is 1mg/cm^2)

References:

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