**Supplementary Materials** 

## NiCo<sub>2</sub>O<sub>4</sub>/RGO hybrid nanostructures on surface-modified Ni core for flexible wire-shaped supercapacitor

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**Fig. S1.** Photographs of the experimental set-up for (a) single electrode characterization by the three-electrode configuration, (b) WSC characterization by the two-electrode configuration.



Fig. S2. EDS spectra of various Ni/NCO/RGO electrodes with different substrate etching durations.



**Fig. S3.** (a) FE-SEM image, (b) EDS layer image, and the EDS mapping of (c) Ni (d) Co, (e) O, (f) C elements of Ni<sub>10</sub>/NCO/RGO electrode.



Fig. S4. CV curves of Ni/NCO electrode at various scan rates under 0-0.5 V potential window.



Fig. S5. Specific capacity of Ni/NCO electrode at various scan rates.



**Fig. S6.** Electrochemical characterization of bare  $Ni_{10}$  wire electrode: (a) CV curves at various scan rates under 0-0.5 V potential window, and (b) specific capacity of bare  $Ni_{10}$  wire electrode at various scan rates.



Fig. S7. GCD curves of Ni/NCO electrode at different applied currents.



Fig. S8. GCD curves of bare Ni<sub>10</sub> wire electrode at different applied currents.



Fig. S9. EIS study (Nyquist plot) of the Ni/NCO electrode at 100 kHz-0.01 Hz under 0.01 V.