

Supporting Information

CNT/rGO Hydrogel Integrated Fabric Composite Synthesized *via* Interfacial Gelation Process for Wearable Supercapacitor Electrodes

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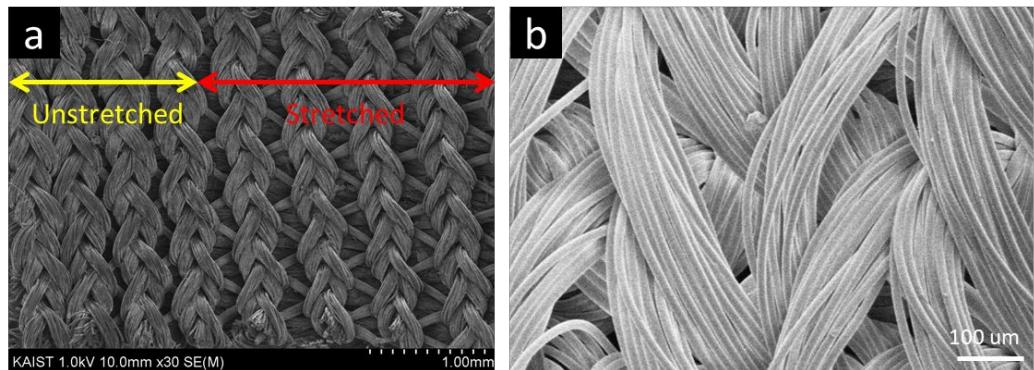


Figure S1. SEM images of the used spandex fabric with low (a) and high (b) magnification.

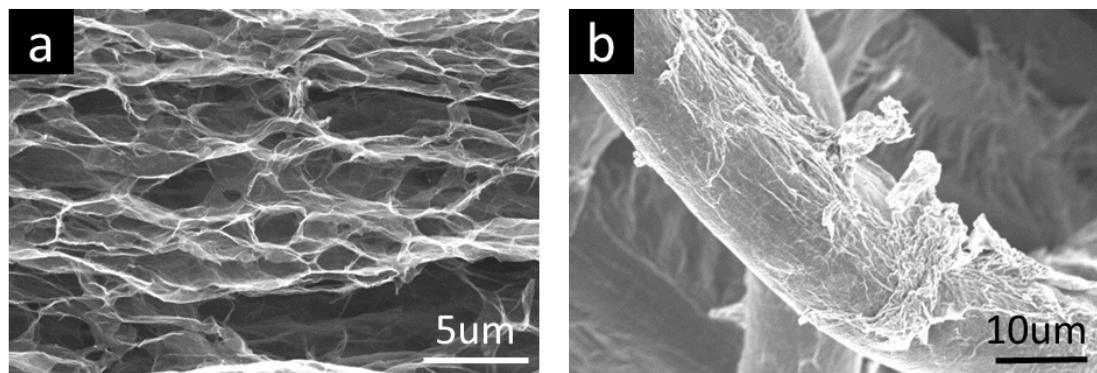


Figure S2. SEM image of rGO aerogel. (a) SEM image of cross section of rGO aerogel. (b) rGO-coated fiber strands.

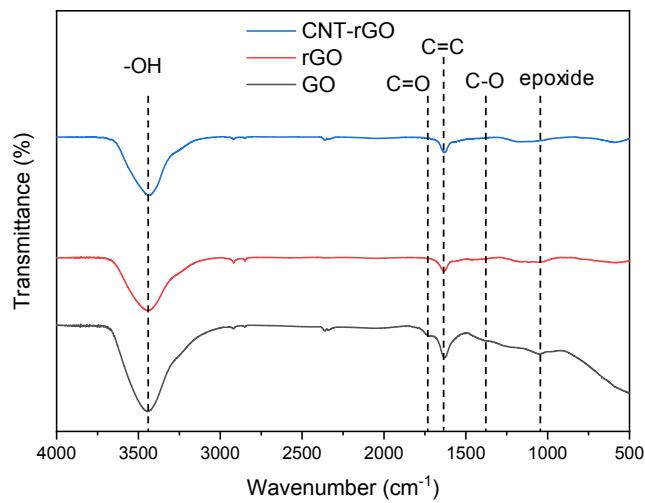


Figure S3. FT-IR spectra of GO, rGO and CNT-rGO. The GO samples shows several characteristic FT-IR peaks, including O-H stretching of C-OH at 3440 cm^{-2} , C=O ($-\text{COOH}$) stretching vibration at 1730 cm^{-1} , C=C stretching vibration at 1625 cm^{-1} , C–O vibration of the C–OH at 1384 cm^{-1} (phenolic-OH stretching vibration), and epoxy vibration at 1051 cm^{-1} .^{6,7}

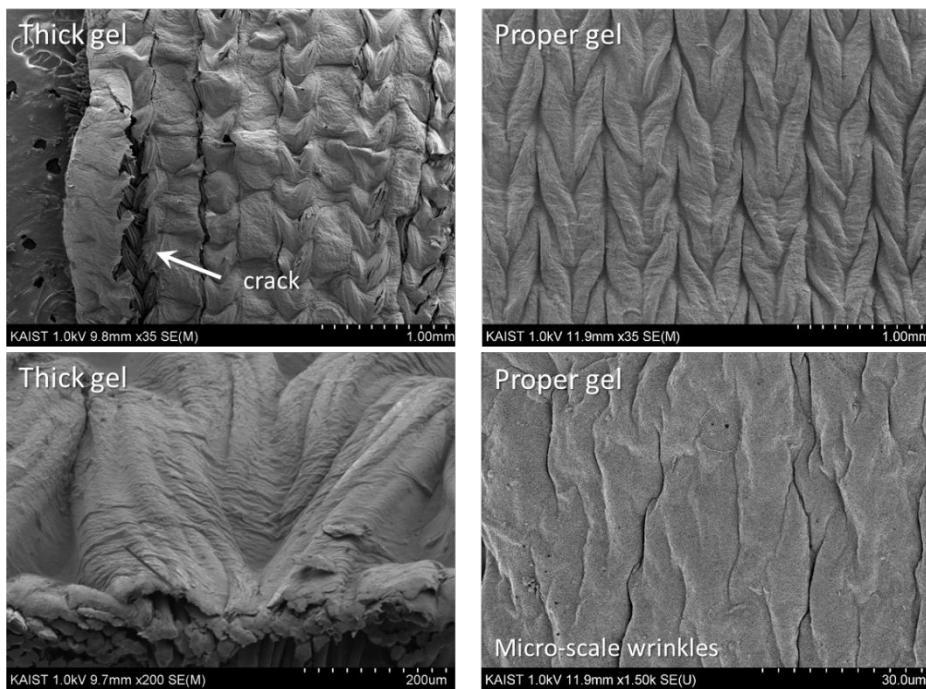


Figure S4. SEM images CNT-rGO@F with different thickness. Proper gel structures have micro-scale wrinkles.

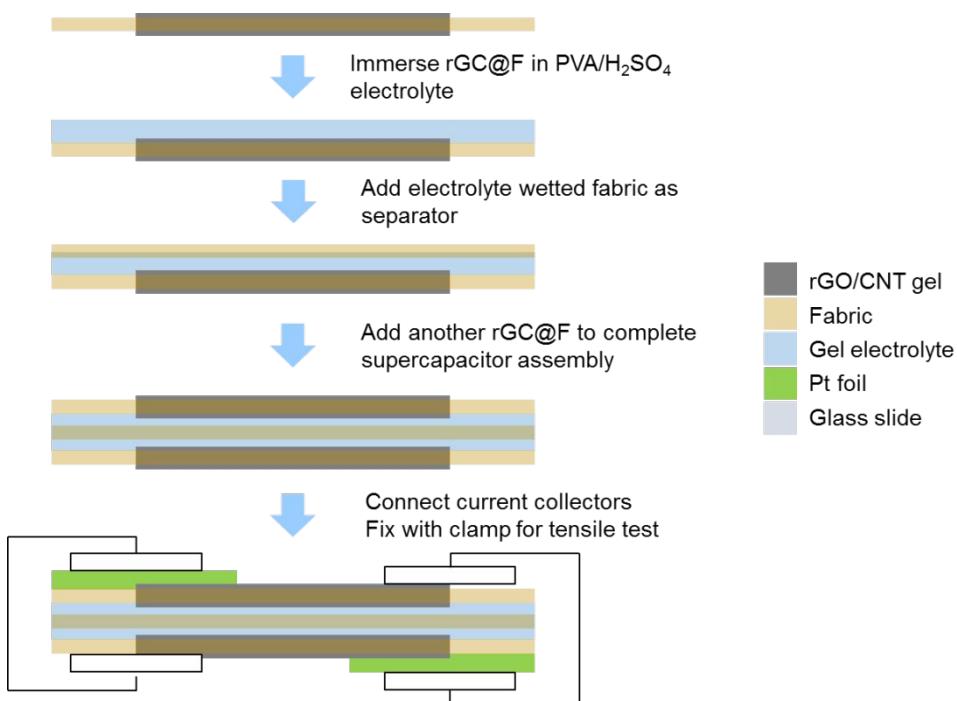


Figure S5. Schematic diagram of supercapacitor assembly using two CNT-rGC@F as electrodes.

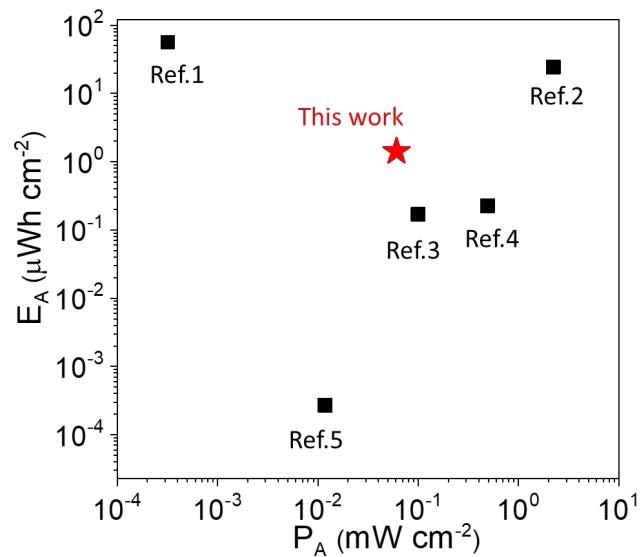


Figure S6. Ragone plot with previously reported stretchable electrochemical capacitors.

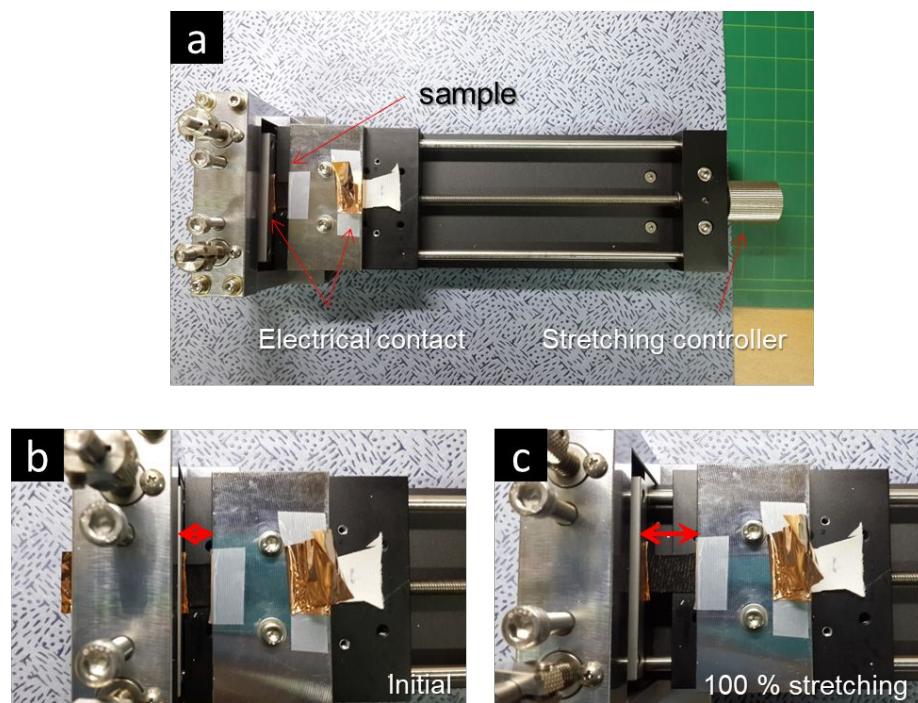


Figure S7. (a) Experimental set-up for stretching test of CNT-rGO@F. (b) Initial state for stretching test (0% stretching). (c) 100% stretching state.

References

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