

Electronic Supporting Information for

**New Hybrid Architecture Consisting of Highly
Mesoporous CNT/Carbon Nanofibers from Starch**

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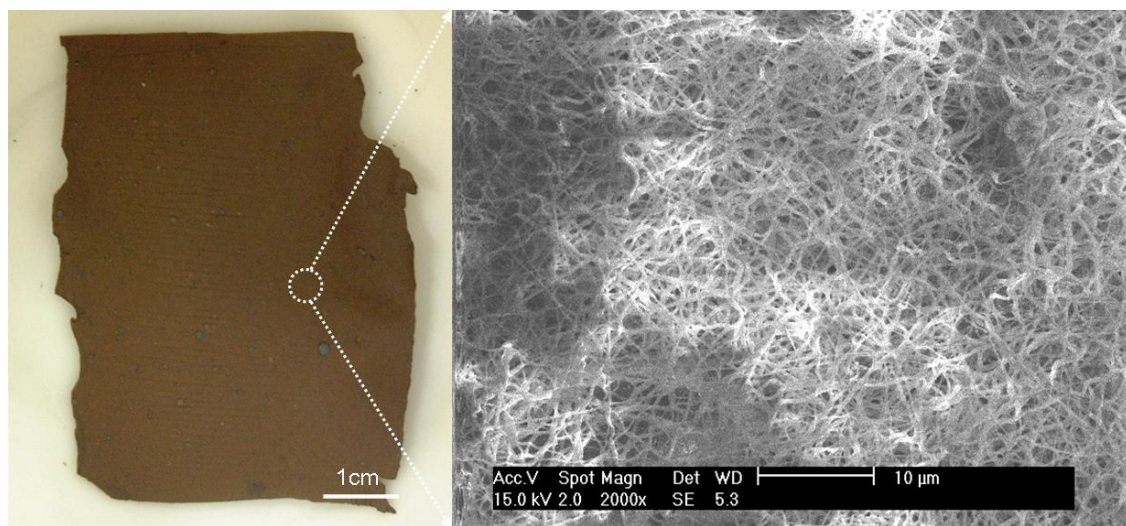


Figure S1. Optical image and SEM image of CNT/starch nanofiber web stabilized at 250°C for 1hr in air.

Table S1. Elemental analysis of the electrospun, air-stabilized, and carbonized nanofibers.

I.D.	Temp. [°C]	Carbon [%]	Nitrogen [%]	Hydrogen [%]	Sulfur [%]
Electrospinning	상온	51.61	0.213	8.3	1.533
Air-stabilization	250	62.54	0.328	2.04	0.785
	500	80.97	0.368	1.921	0.344
Carbonization	700	92.81	0.335	0.738	0.252
	1,000	92.41	0.417	0.989	0.000
	1,400	95.09	0.699	0.115	0.048

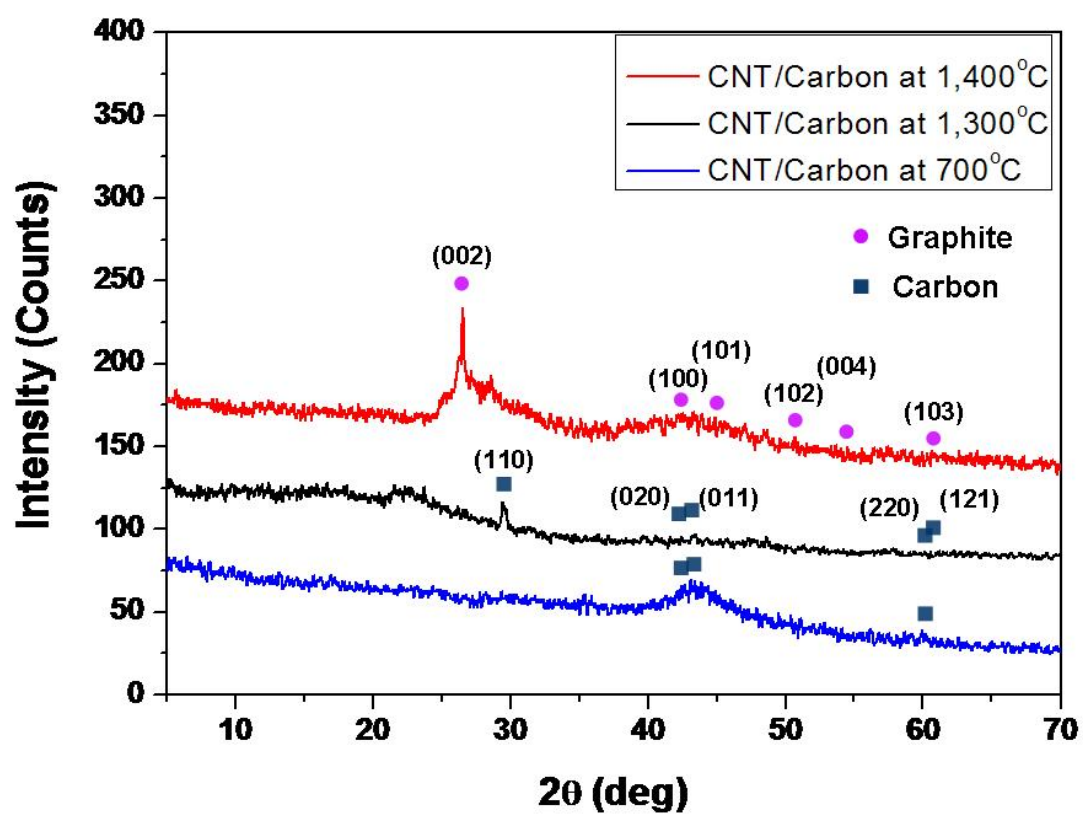


Figure S3. XRD analysis exhibiting that graphitization of CNT/carbon nanofibers occurs above 1400 °C.

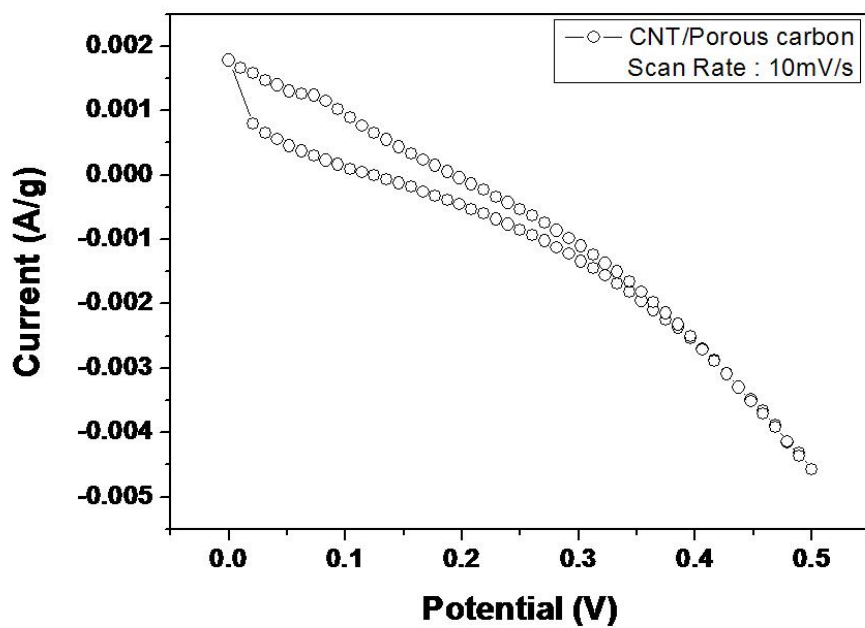


Figure S3. CV curve of porous CNT/carbon nanofibers heat-treated at 1400 °C.

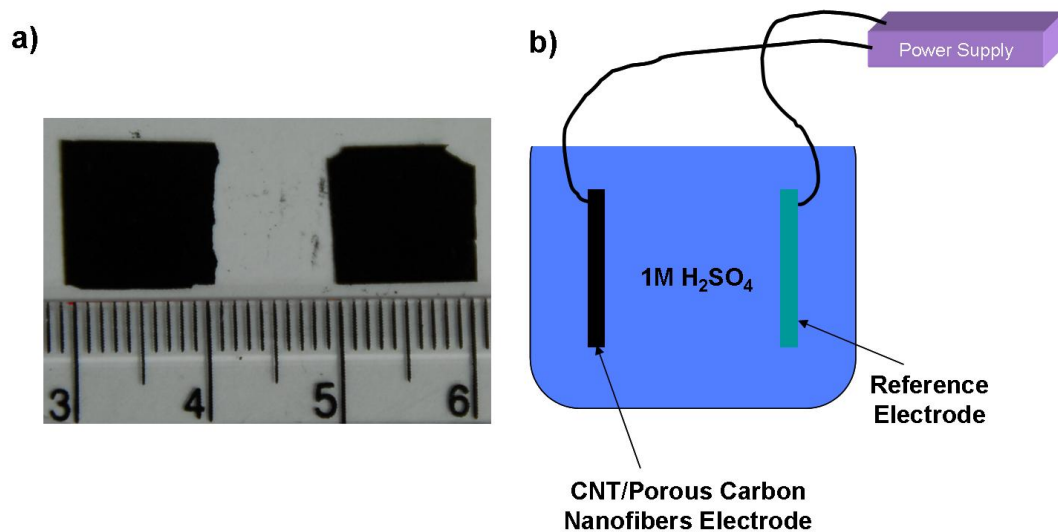


Figure S4. a) Optical image of CNT/carbon nanofibers electrode cut by 1×1 cm, b) A schematic of a cell test method.

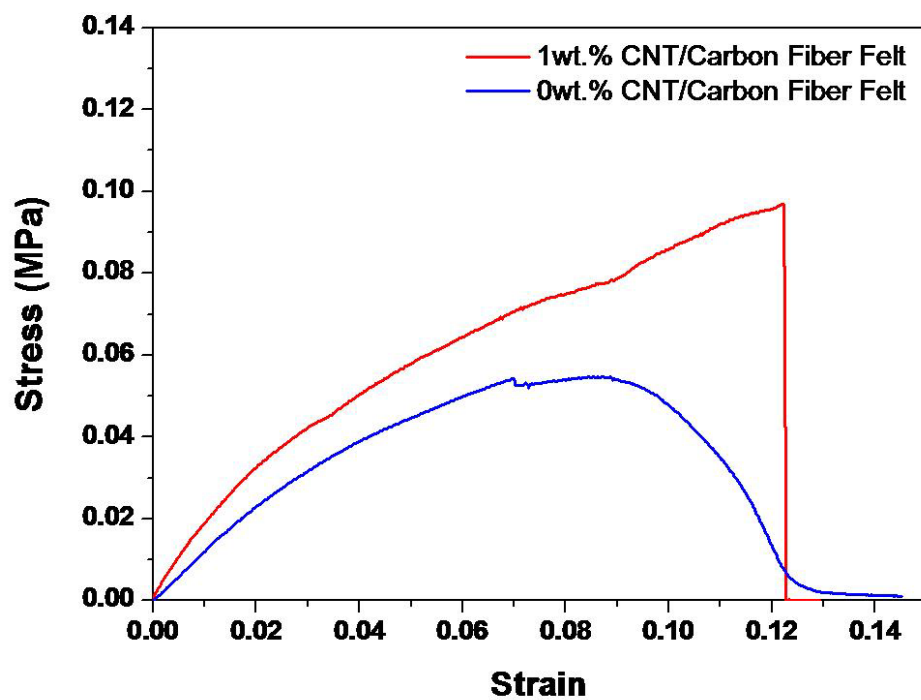


Figure S5. The microtensile test of starch nanofibers carbonized at 1400 °C and 1wt.% CNT/starch nanofibers carbonized at 1400 °C electrodes.