

## SUPPORTING INFORMATION

### Preparation of mechanically enhanced carbon nanofiber mats based on PAN blends using electrospinning and hot pressing methods for supercapacitor application

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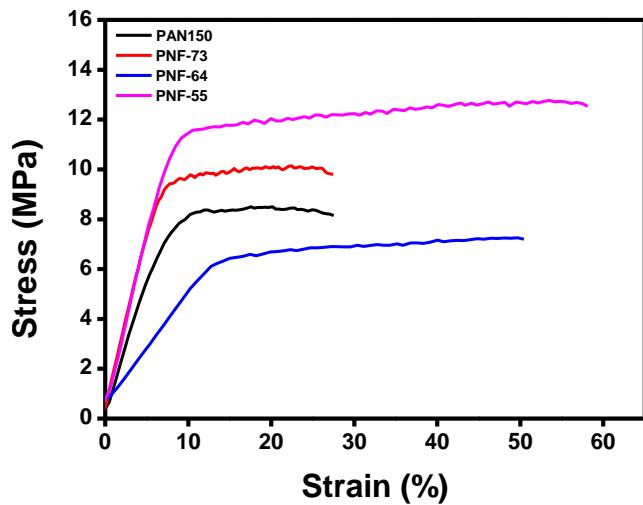


Figure S1. Stress-strain curves of the hot-pressed PAN and blended PAN150/PAN85 (PNF-73, PNF-64, and PNF-55) nanofibers.

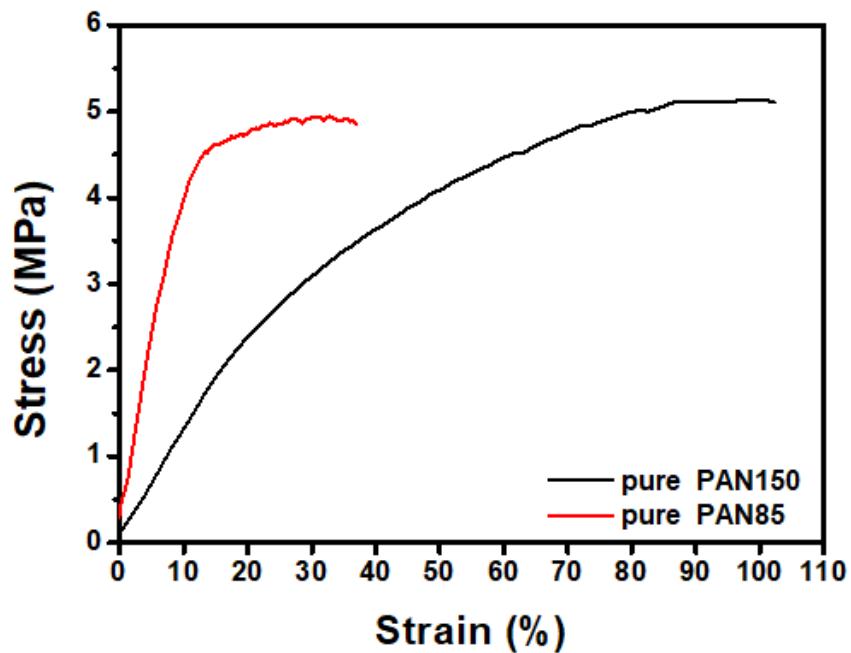


Figure S2. Stress-strain curves of as-spun pure PAN150 and PAN85 nanofibers

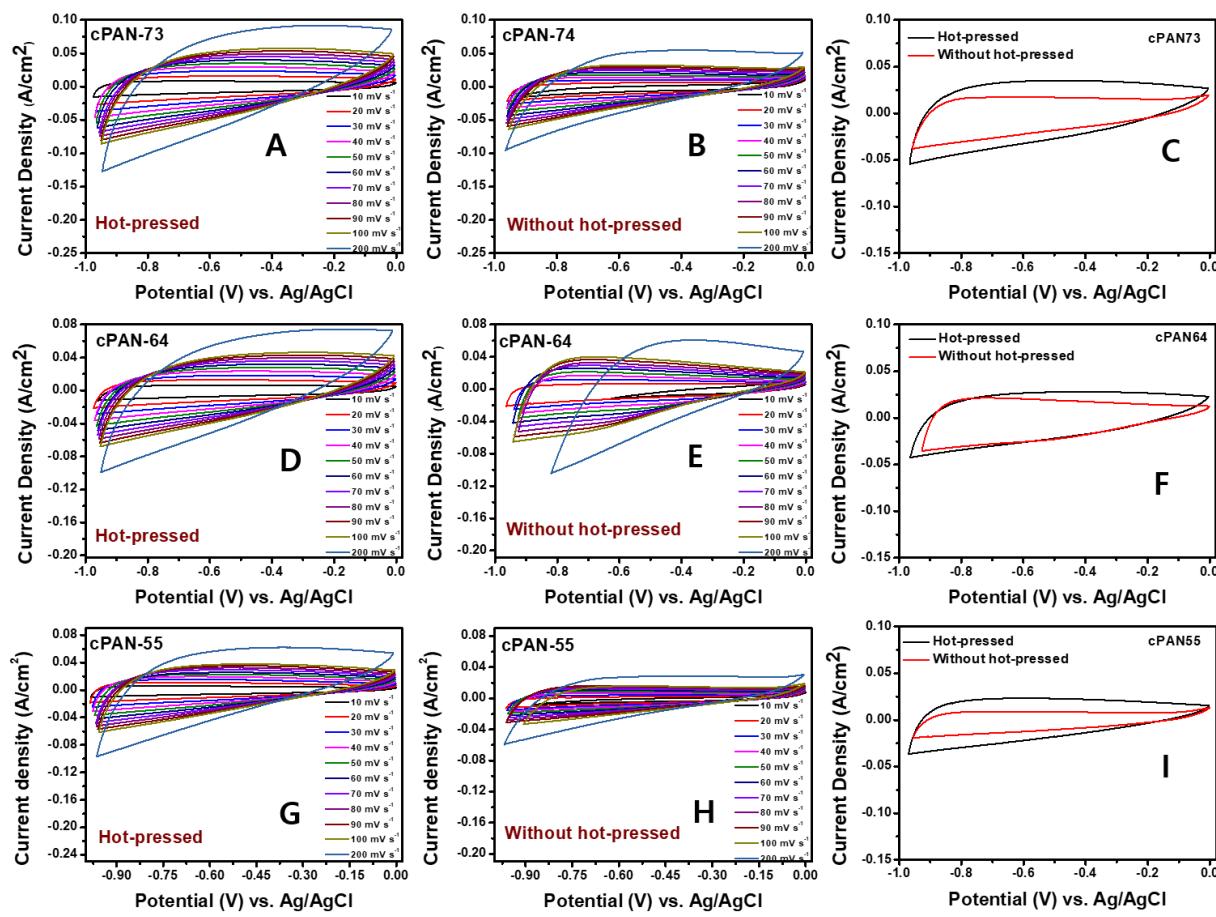


Figure S3. CV curves of cPNFs (cPAN-73, cPAN-64 and cPAN-55) with and without hot-pressed method in 3M KOH.

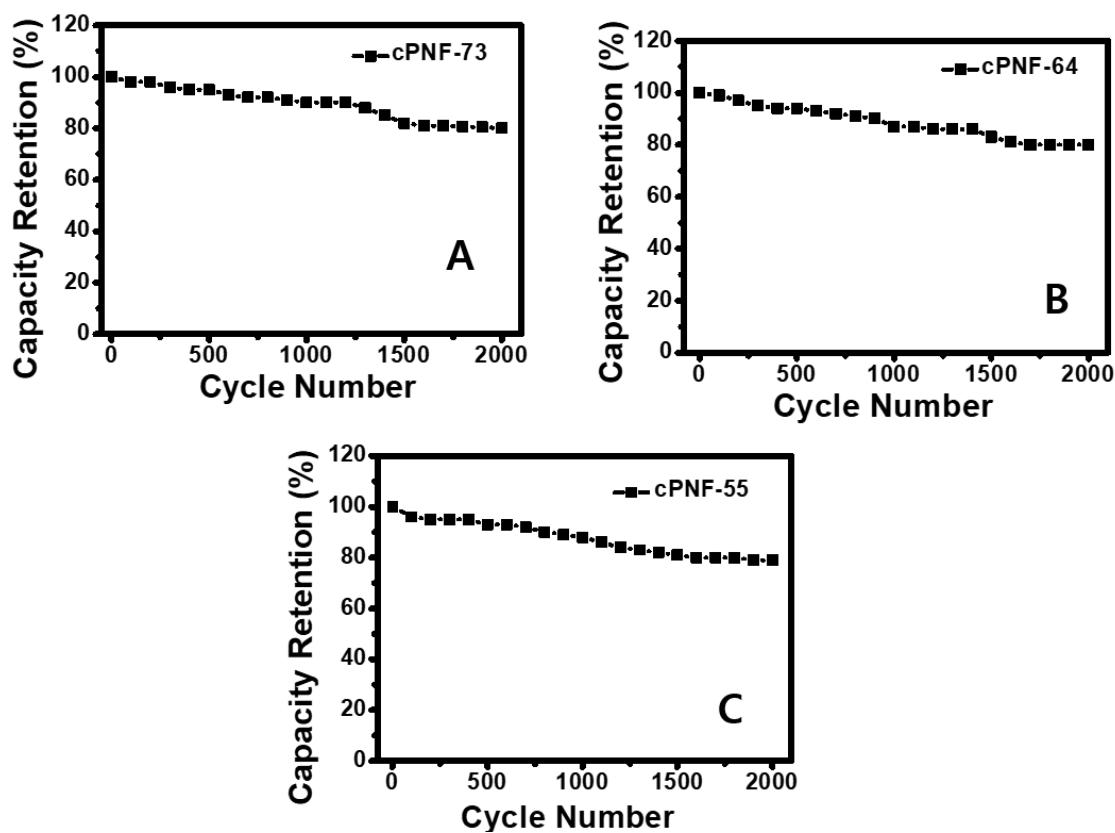


Figure S4. Cyclic stability of the fabricated cPNFs devices (A: cPNF-73, B: cPNF-64 and C: cPNF-55) at 2 A g<sup>-1</sup>.

Table S1. Electrochemical performances of various hybrid supercapacitors

Electrodes		Operating Voltage	Specific current	Specific capacitance ( $\text{F g}^{-1}$ )	Energy density ( $\text{W h kg}^{-1}$ )	Power density ( $\text{W kg}^{-1}$ )	Ref.
<b>Activated nanofiber</b>	<b>carbon</b>	0.8	1	172	~ 4.3	~ 3	[1]
<b>Cornhusk carbon</b>		1.3	0.5	132	7.4	6.3	[2]
<b>rGO</b>		1	3	618	2.62	37.5	[3]
<b>CNT@Mn-MOF</b>		1	0.25	50.3	6.9	2.24	[4]
<b>N-doped porous nanofibers</b>	<b>porous</b>	0.5	-	202	7.1	-	[5]
<b>cPAN-73</b>		1.45	1	428	1.74	0.38	This work

## References

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