Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary information:

Highly Stretchable Strain Sensor Based on Electrospun Carbon Nanofibers for Human Motion Monitoring

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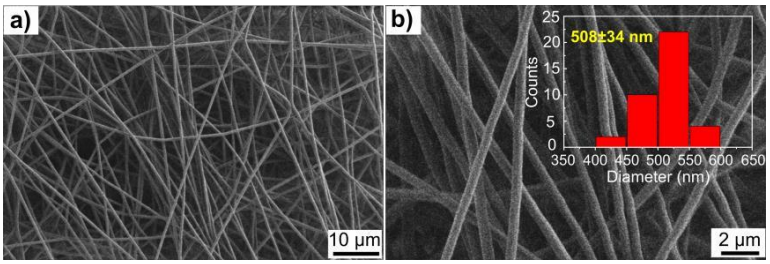

Fig. S1 SEM images of the electrospun PAN nanofibers.

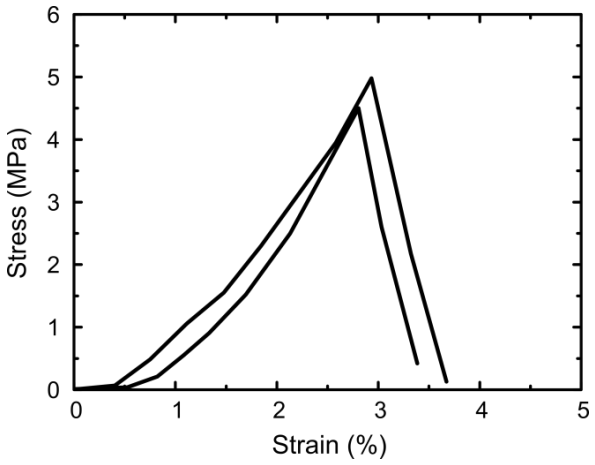

Fig.S2 Stress-strain curves of CNFs mat.

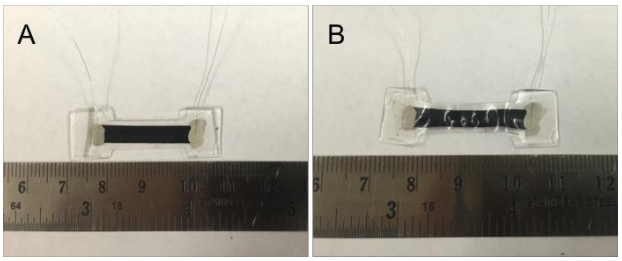

Fig.S3 Optical images of strain sensor when unstretched (A) and after stretched for 350% strain (B).

Table.S1. Comparison of the performance of strain sensors in this work and in other reported works. The references are selected based on the materials and/or processes for strain sensors reported in recent years.

Materials	Prepare/assembly method	Stretchability	Gauge factor	Cycles	Reference
Ag nanoparticles	transfer ink patterning	20%	2.05	1000	1
Ag nanowires	drop casting	70%	2-14	-	2
PANI/Au nanowire	Chinese penbrush writing	100%	13	10000	3
Si nanowires	vapor-liquid-solid process	50%	350	~500	4
Carbon nanotubes	dry-spun	900%	64	10000	5
	layer-by-layer drop casting	100%	62.7	1000	6
	drop at surface	530%	12-25	1000	7
graphene	soaking	800%	35	1000	8
	layer-by-layer assembly	150%	-	-	9
	embedding	100%	7.1	-	10
Electrospun carbon nanofibers	**Electrospinning & sandwiching**	**300%**	**72**	**8000**	**This work**

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