Supporting Information

In-situ K_2S Activated Electrospun Carbon Nanofibers with Hierarchical Meso/Microporous Structures for Supercapacitors

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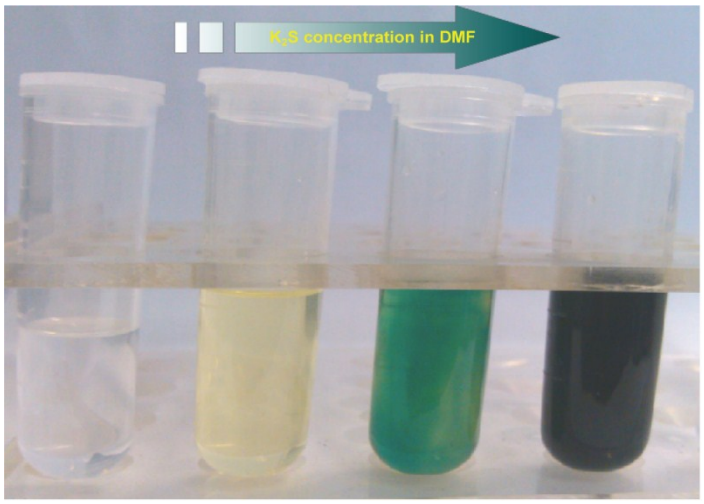

Fig. S1 Digital photograph of K_2S dissolving in DMF.

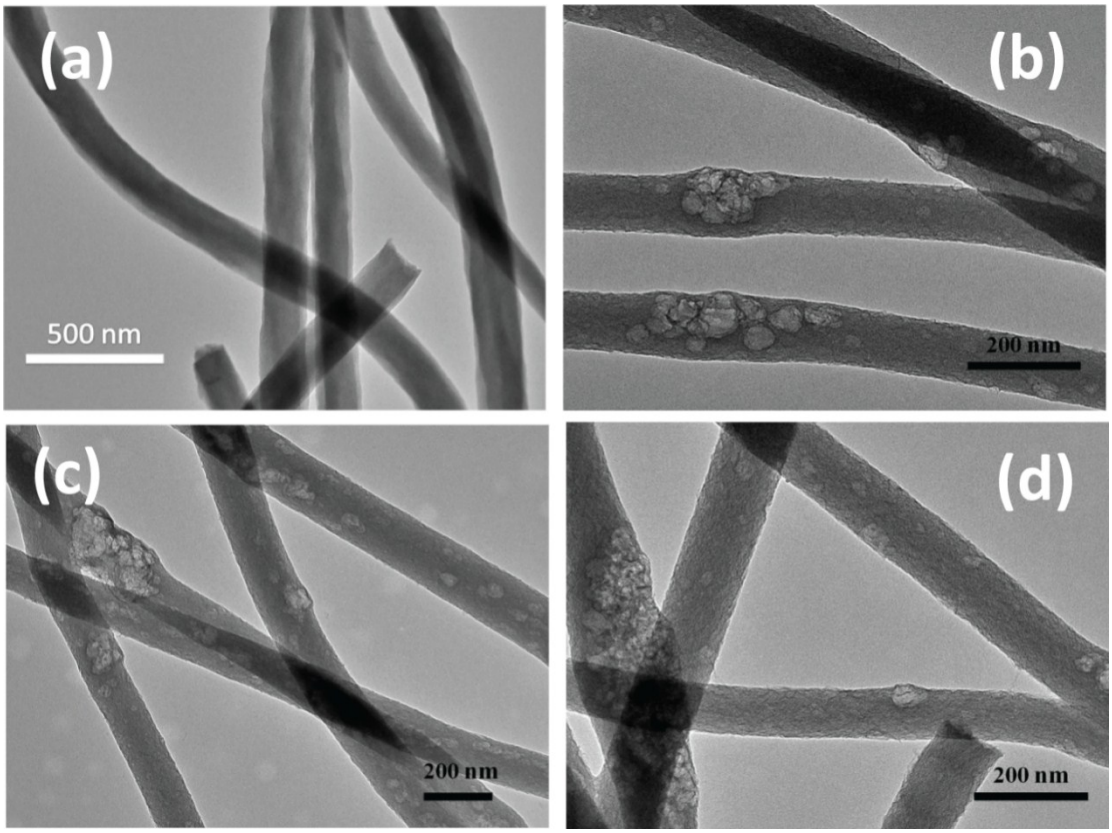

Fig. S2 TEM images of carbon nanofibers with different K_2S contents: (a) 0 wt% (pure carbon nanofibers), (b) 10 wt%, (c) 20 wt% and (d) 30 wt%.

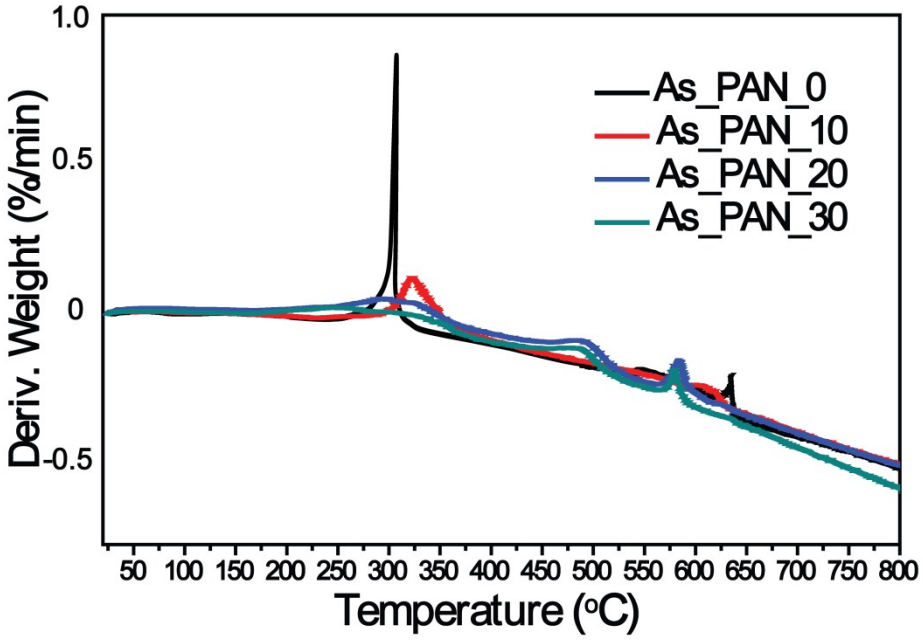

Fig. S3 DTG thermograms of as-prepared K_2S/PAN composite nanofibers with different K_2S contents.

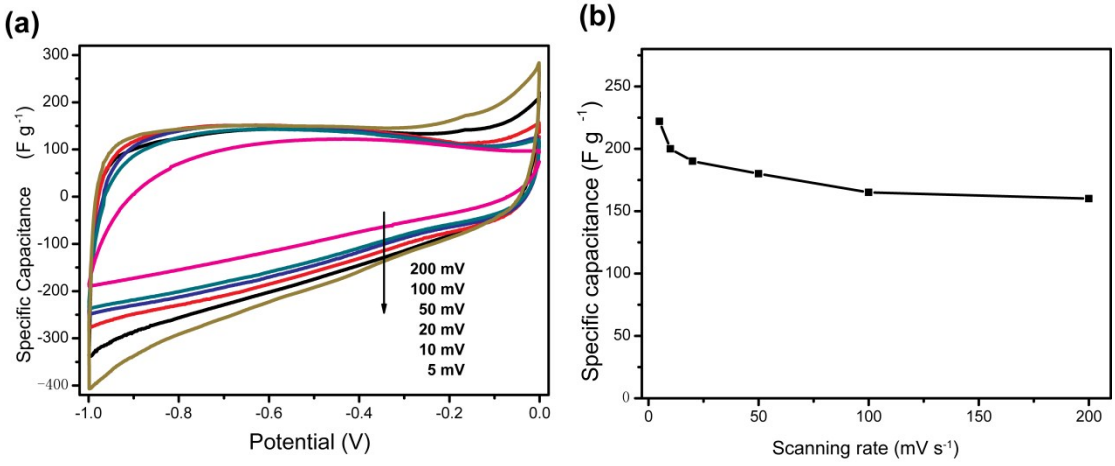

Fig. S4 CV curves (a) and the calculated specific capacitances at the scanning rate range of 5-200 mV s^{-1} in the three electrode system.

Table S1 Comparison of energy density and power density of Car[900]_CNF_30 for supercapacitors in the literature.

Materials	Electrolyte	Current density ($A\ g^{-1}$)	Energy density ($Wh\ kg^{-1}$)	Power density ($kW\ kg^{-1}$)	References
Car[900]_CNF_30	6 M NaOH	1	24.3	10.4	This work
hCNC	6 M NaOH	1	10.9	22.22	1
PNCNs	1 M H_2SO_4	0.1	17.7	1.1	2
N-CNFs-900	6 M NaOH	0.25	7.11	89.57	3
HP-CNF-10	1 M H_2SO_4	30	3.25	25.0	4
HPCNFs-N	2 M H2SO4	1	10.96	25	5

References

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