

## **Supporting Information**

### **Sulfur doped carbon nanofiber as stable and high performance anode materials for sodium-ion batteries**

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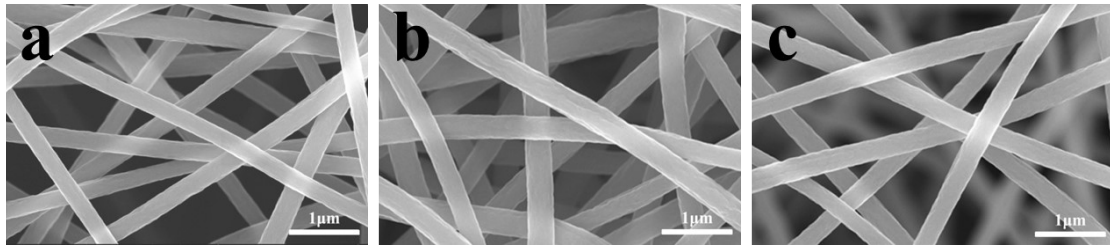


Fig.S1. SEM images of (a)CNF-0.5S, (b)CNF-1S and (c)CNF-3S.

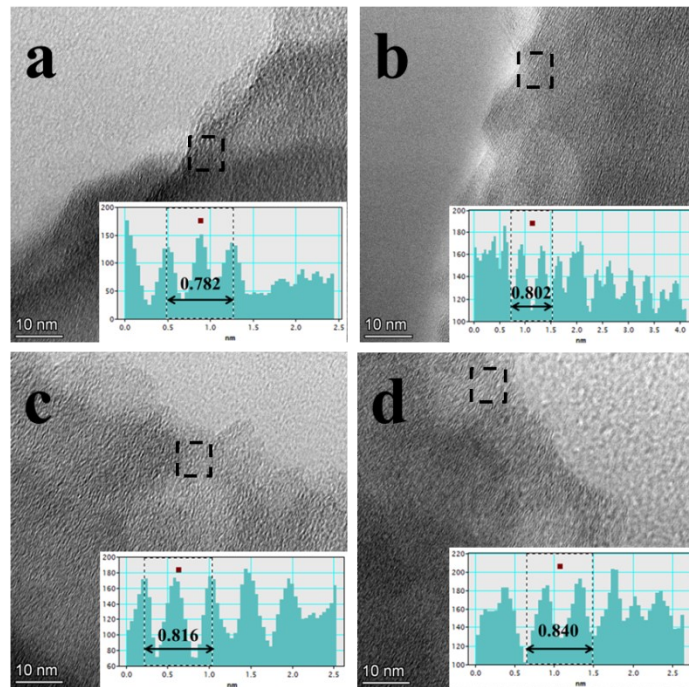


Fig.S2. TEM images of (a)CNF, (b)CNF-0.5S, (c)CNF-1S and (d)CNF-3S.

**Table S1.** Element content of CNF, CNF-0.5S, CNF-1S, CNF-2S and CNF-3S.

Element content (%)	C	N	O	S
CNF	78.02	5.12	16.86	
CNF-0.5S	74.9	5.1	11.1	8.9
CNF-1S	72.75	5.07	11.75	10.43
CNF-2S	72.82	4.3	10.15	12.71
CNF-3S	71.85	4.16	10.9	13.09

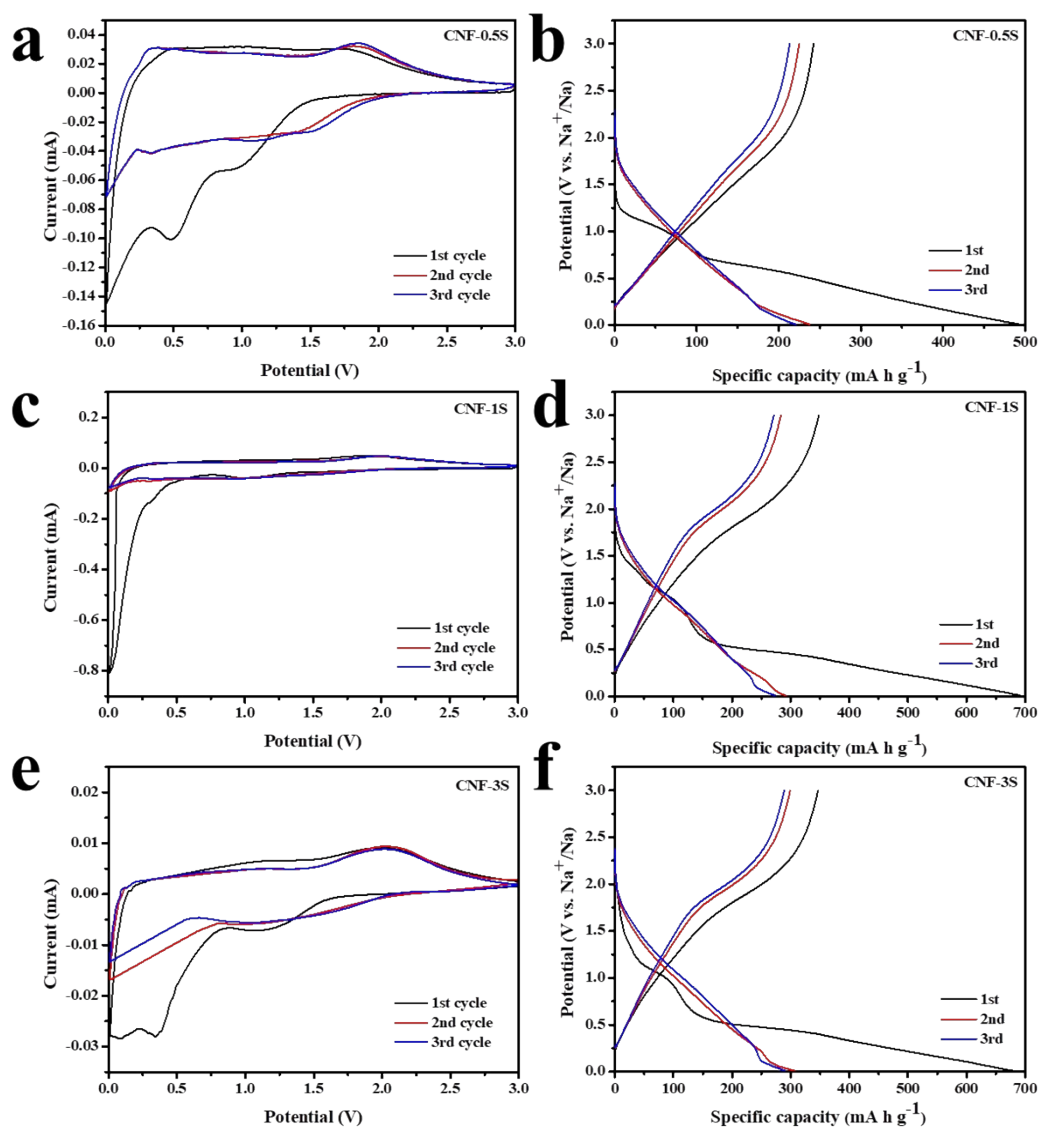


Fig.S3. CV curves of (a) CNF-0.5S, (c) CNF-1S and (e) CNF-3S at a scan rate of 0.1 mV/s; The charge/discharge curves of (b) CNF-0.5S, (d) CNF-1S and (f) CNF-3S at a current density of 0.1 A/g.

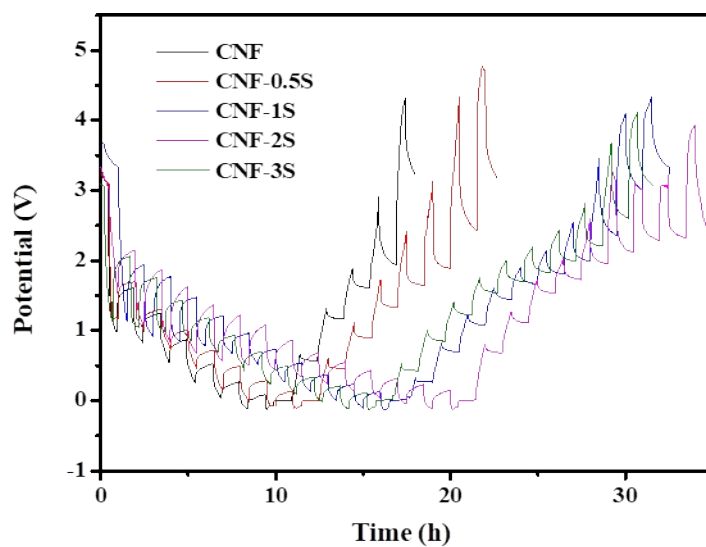


Fig.S4. GITT curves of (a)CNF, (b)CNF-0.5S, (c)CNF-1S, (c)CNF-2S and (d)CNF-3S.

**Table S2.** Comparison of the electrochemical performance of CNF-2S with those of reported carbonized anodic materials in SIBs

Materials	Cycling capacity (mA h g <sup>-1</sup> /A g <sup>-1</sup> )	Rate capability	
		(mA h g <sup>-1</sup> /A g <sup>-1</sup> /n	Reference
NSPCNNs	336.2/0.05	214.9/0.5/2000	[26]
WSC-1000	305/0.1	182/1/1500	[27]
S-Cmph-700	372.3/0.04	145.6/2/500	[30]
CNT/SCNF	315.9/0.1	100.1/5/5000	[49]
SCNNF	290.3/0.1	170.5/5/6000	[50]
S-NCNF	251/0.2	204/2/3000	[51]
S-NCNFs	336.2/0.05	187/2/2000	[52]
CNF-2S	368.2/0.1	122/10/1000	This work

