Nitrogen-doped graphitic hierarchically porous carbon nanofibers from bimetallic-coordination organic frameworks modification and their application in supercapacitors

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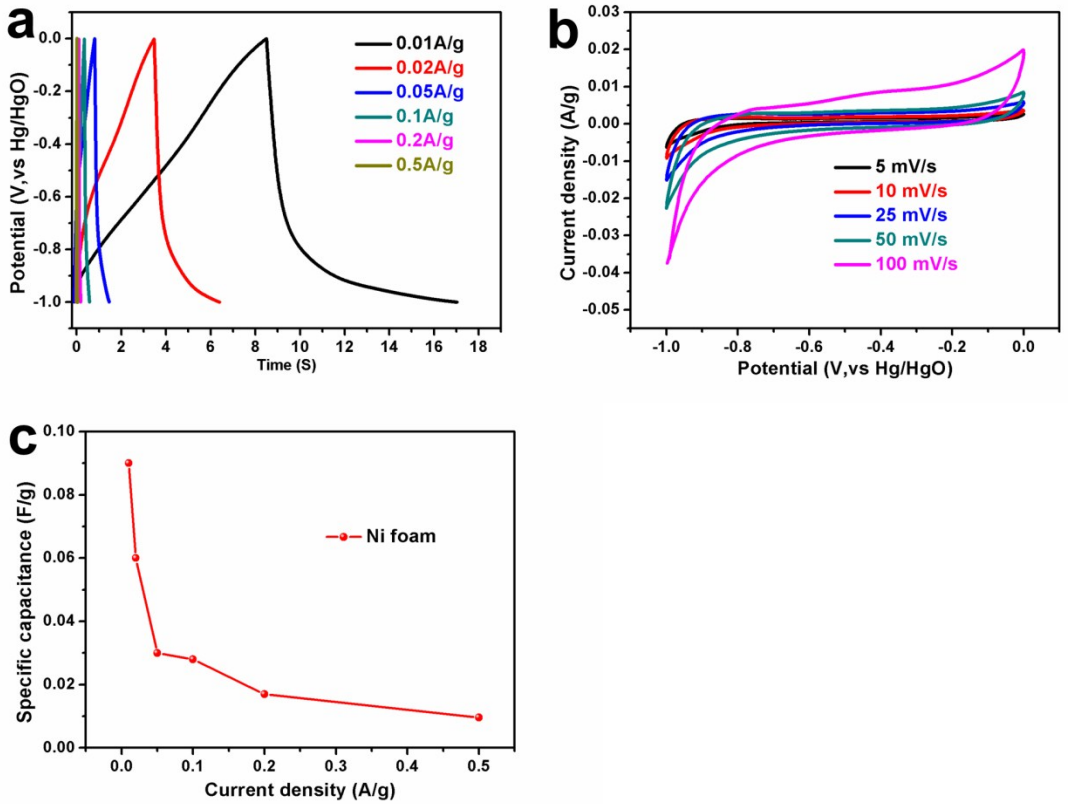

Fig. S1 (a) GCD curves of Ni foam at different current density. (b) CV curves of curves of Ni foam at different scan rates. (c) The rate performance of Ni foam at different current density.

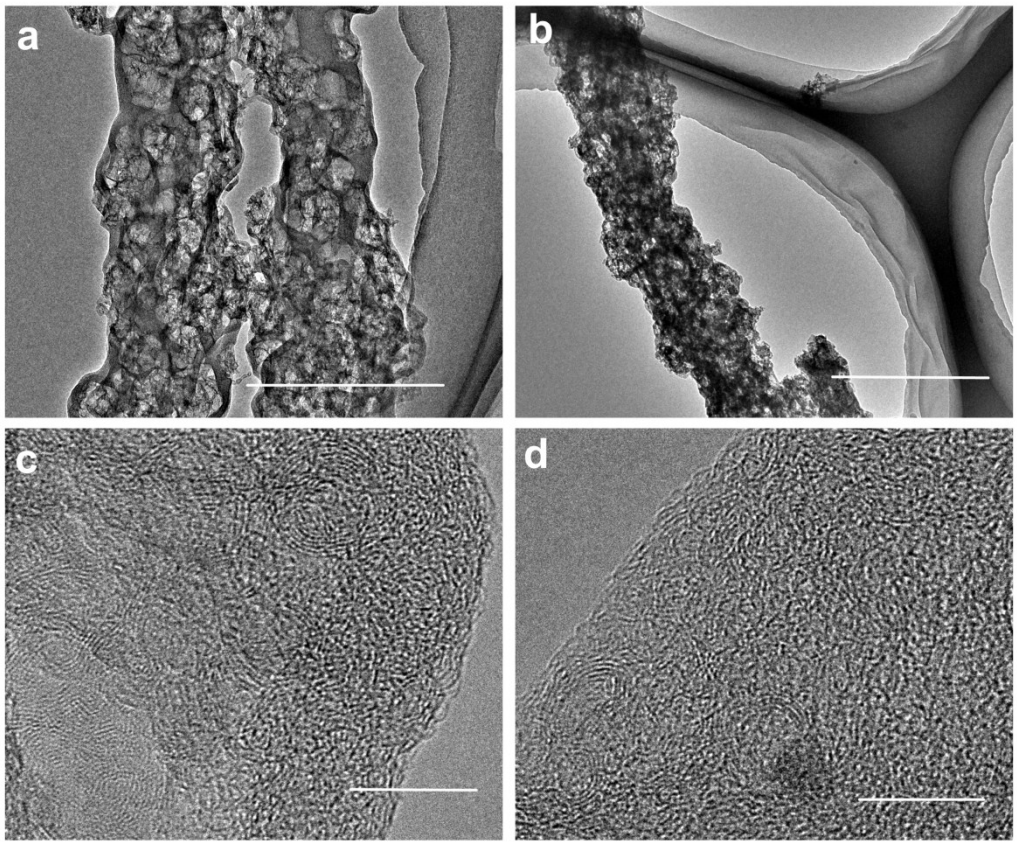

Fig. S2 (a-b) TEM patterns of NGHPCF0.1 and NGHPCF0.2; (c-d) High Resolution TEM patterns of NGHPCF0 .1and NGHPCF0.2. The scale bars in a, b and c-d are 0.5μm ,1μm and 10 nm ,respectively.

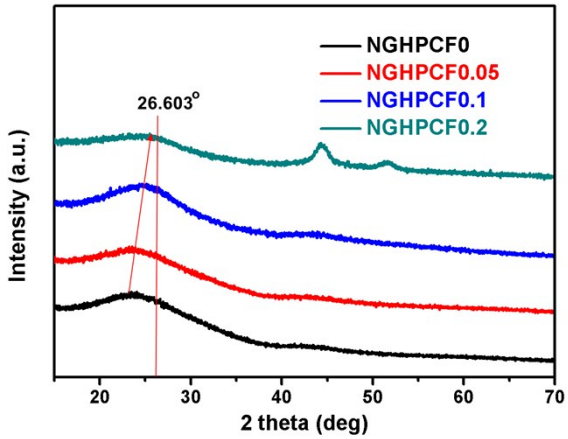

Fig. S3 the XRD patterns of NGHPCF0, 0.05, 0.1 and 0.2.

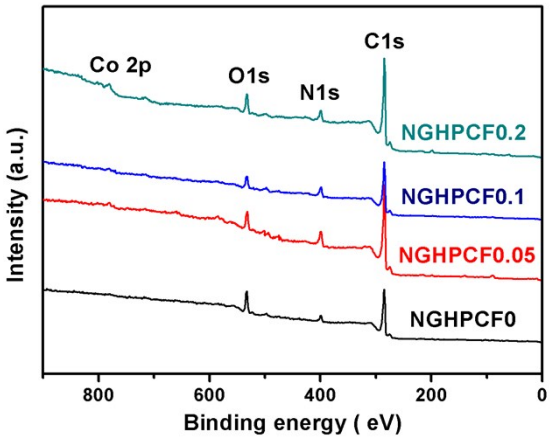

Fig. S4 The XPS spectrum of NGHPCF0, 0.05, 0.1 and 0.2.

Table. S1. Surfce properties and element analysis of NHHPCFs

sample	S_{BET} (m^2 g^{-1})	Pore volume fraction			Ultimate analysis			Id/Ig
		V_{total}	V_{mic}	V_{mes}	$N_{(wt\%)}$	$C_{(wt\%)}$	C/N	
NHCF0-800	775.38	1.078	0.215	0.534	15.33	54.93	3.6	1.06
NHCF0.05-800	623.51	0.995	0.102	0.396	13.83	53.45	3.8	1.03
NHCF0.1-800	483.47	0.810	0.096	0.247	13.44	58.82	4.4	1.01
NHCF0.2-800	342.77	0.816	0.078	0.465	8.8	61.19	6.9	0.96
NHCF0.05-700	285.46	0.526	0.046	0.220	16.98	52.81	3.2	1.14
NHCF0.05-900	636.47	0.890	0.172	0.379	8.31	74.12	8.9	0.92

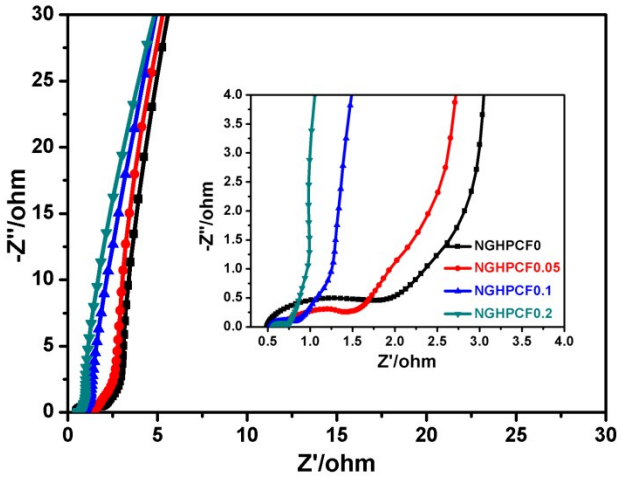

Fig. S5 Nyquist plots of NGHPCF0, 0.05, 0.1 and 0.2.

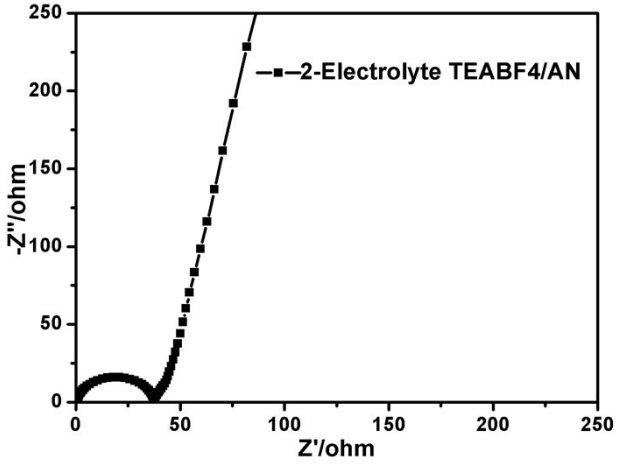

Fig. S6 The Nyquist plots of NGHPCF0.05 electrode in $TEABF_4$/AN electrolyte.