Supporting Information

A String of Nickel Hexacyanoferrate Nanocubes Coaxially Grown on CNTs@Bipolar Conducting Polymer as a High-Performance Cathode Material for Sodium-Ion Batteries

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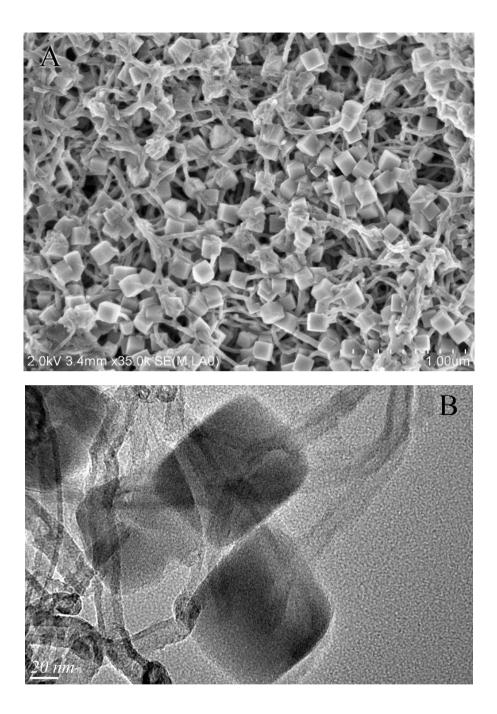


Figure S1. A) SEM images of the as-prepared sting-type CNTs@NiHCF-BCP nanohybrid. B) High-magnification TEM image of CNTs@NiHCF-BCP

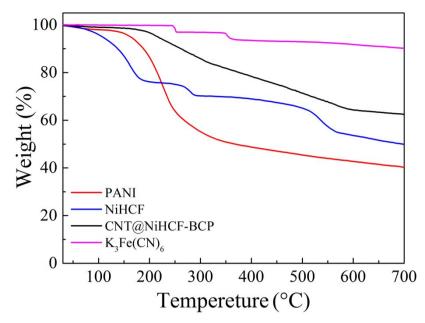


Figure S2. TGA curves of PANI, NiHCF, $K_3Fe(CN)_6$ and CNTs@NiHCF-BCP.

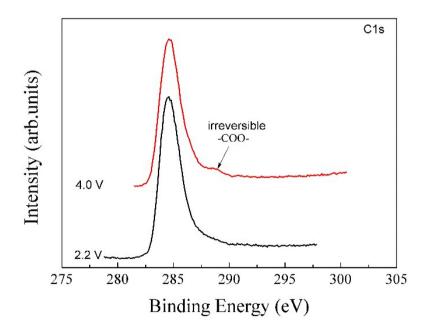


Figure S2. C_{1s} of XPS in the CNTs@NiHCF-BCP electrode for sodium-ion batteries at different voltages during charging.

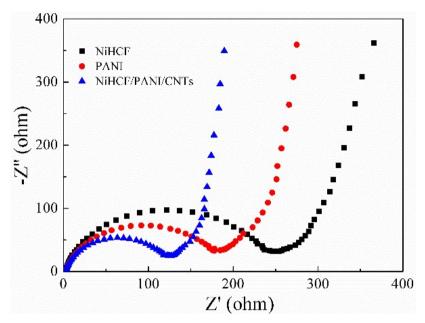


Figure S3. EIS spectra of the cells at the fifth cycle in a fully charged state over the frequency range of 0.01–100 kHz.

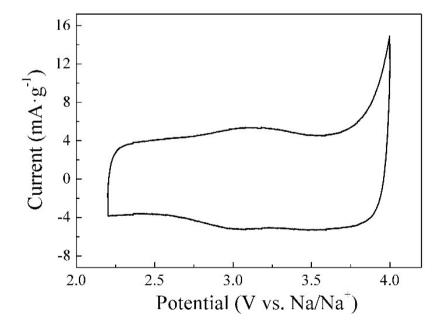


Figure S4. CV curve of the the as-prepared PANI electrode with a scan rate of 0.1 mV·s⁻¹

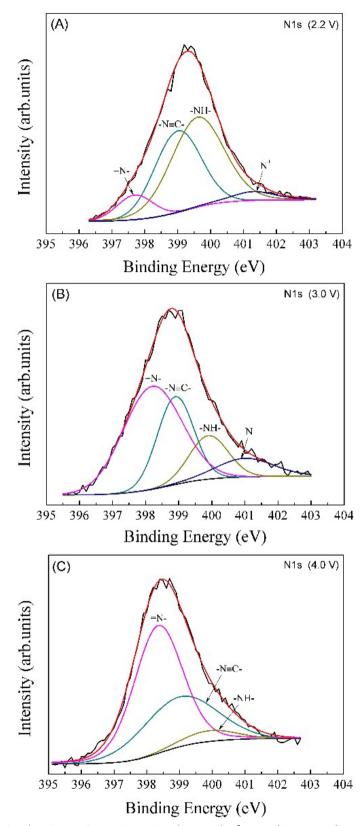


Figure S5. A-C) N_{1s} of XPS in the CNTs@NiHCF-BCP electrode for sodium-ion batteries at different voltages during charging.

Elt.	Line	Intensity	Atomic	Conc	Units	Error	MDL	
		(c/s)	Ratio			2-sig	3-sig	
C	Ka	144.30	1.0000	69.305	wt.%	1.295	.297	
N	Ka	2.97	.2177	17.596	wt.%	14.048	3.865	
Fe	Ka	27.94	.0268	8.635	wt.%	3.209	.292	
Ni	Ka	10.40	.0132	4.464	wt.%	5.760	.320	
				100.000	wt.%			Total

Table S1. Elemental analysis by EDS for the CNTs@NiHCF-BCP nanohybrid.

a) 20.0 kV; Takeoff Angle: 35.0°; Elapsed Livetime: 60