Metal-organic frameworks-engaged formation of hierarchical hybrid with carbon nanotubes inserted porous carbon polyhedra for highly efficient capacitive deionization

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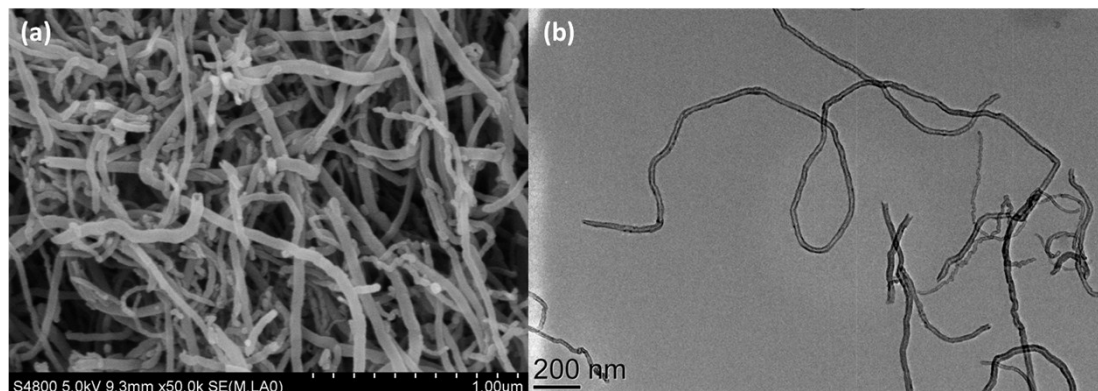
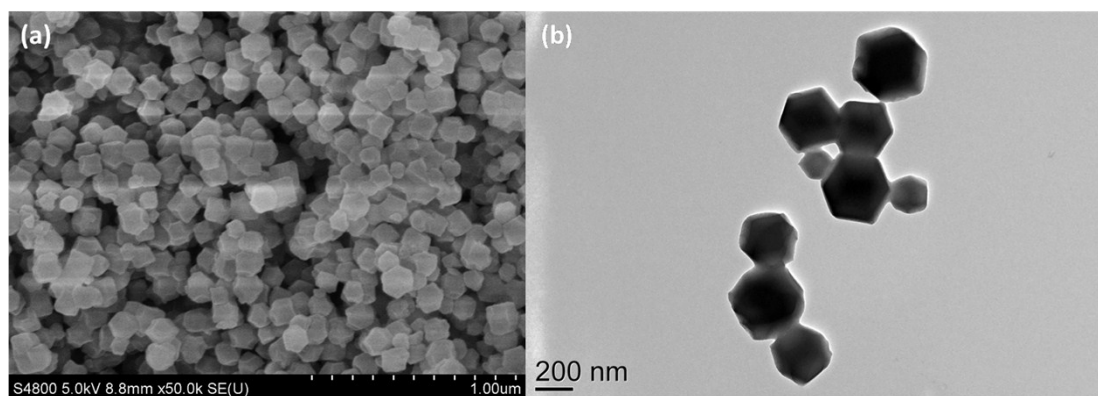# Results and discussion

Fig. S1 SEM (a) and TEM (b) images of CNTs.

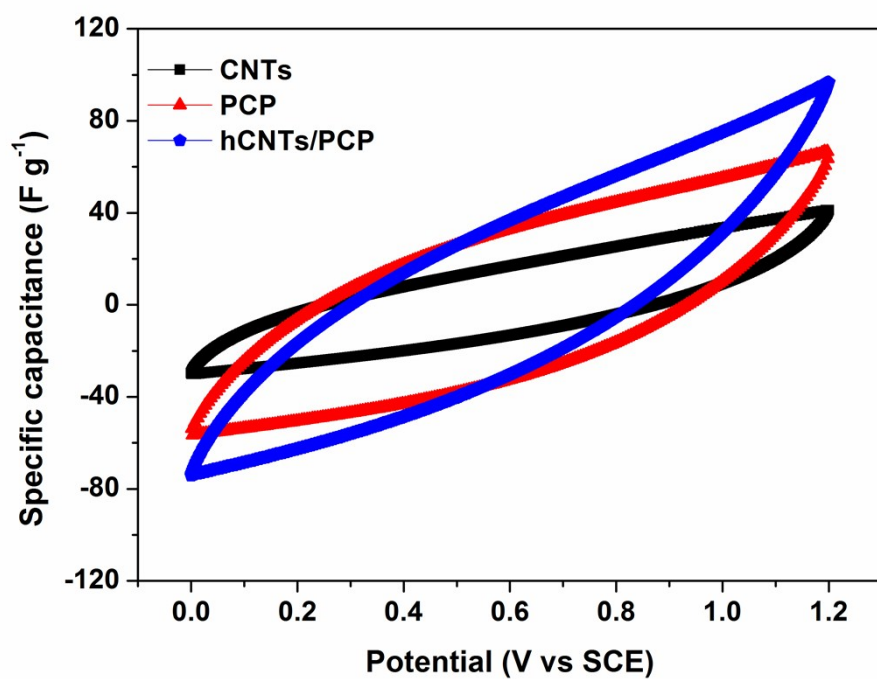Fig. S2 SEM (a) and TEM (b) images of PCP.

Fig. S3 CV curves of CNTs, PCP and hCNTs/PCP in 17 mM (~1000 mg L^{-1}) NaCl solution at a
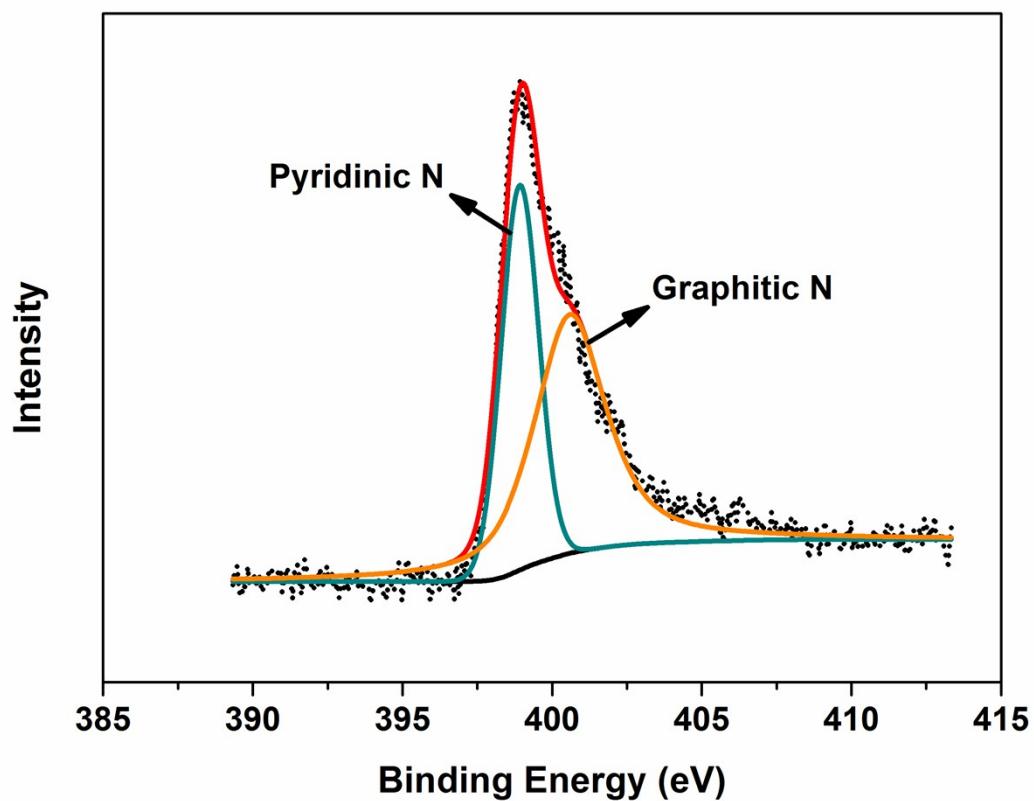
scan rate of 5 mV s^{-1}.

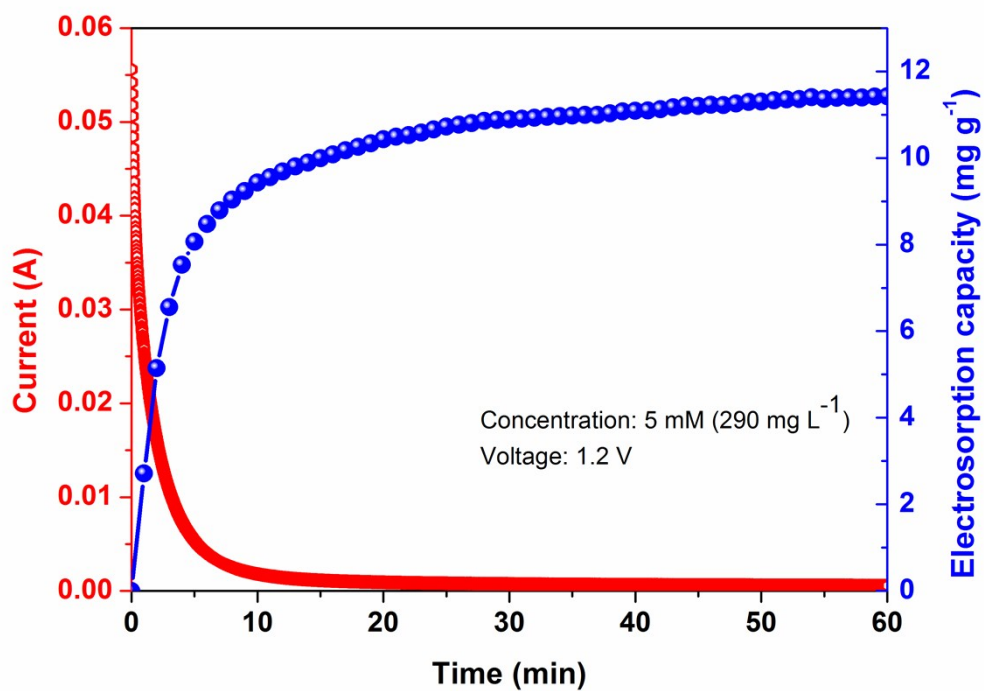Fig. S4 High-resolution N1s XPS spectrum of hCNTs/PCP.

Fig. S5 Current and electrodorption capacity of hCNTs/PCP electrode *vs* time in NaCl solution

with an initial concentration of 290 mg L^{-1} at 1.2 V.

Table S1 Thickness of CNTs, PCP and hCNTs/PCP-based CDI positive and negative electrodes.

Sample	CNTs		PCP		hCNTs/PCP	
	positive electrode	negative electrode	positive electrode	negative electrode	positive electrode	negative electrode
Thickness (μm)	215	213	190	193	207	205