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Supplementary Materials for

BCN Nanosheets Templated from g-C_3N_4 as an Extraordinary Electrode for Capacitive Deionization

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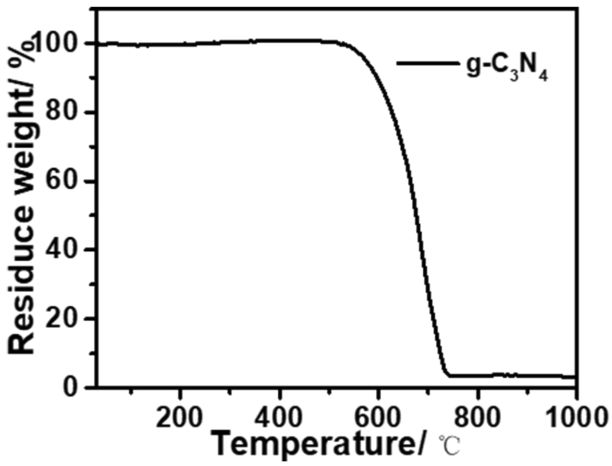

Figure S1 TGA of g-C_3N_4

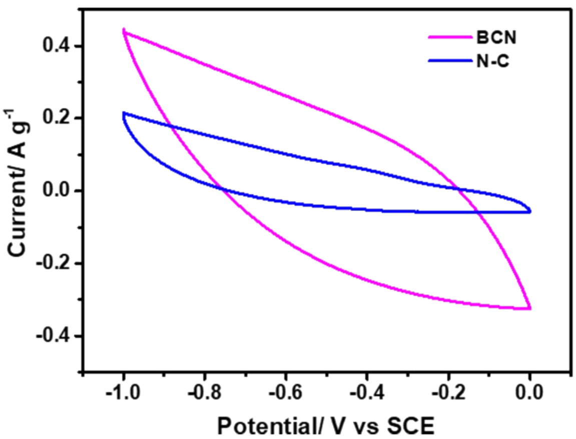

Figure S2 CV curves of BCN and N-C in 500 mg L^{-1} (~ 8.5 mM) NaCl solution at a scan rate of 5 mV s^{-1}

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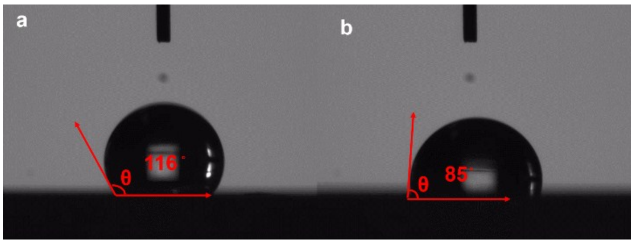

Figure S3 Water contact angle measurements of the (a)N-C and (b)BCN electrodes.

Table.S1 Summary of salt adsorption capacity of CDI electrode materials in recently work

Sample	Applied voltage (V)	Initial concentration (mg L^{-1})	salt adsorption capacity (mg g^{-1})
CNTs-CNTs[1]	1.4	1000	11
AC/TiO_2 NPs[2]	1.2	500	2.7
Graphene/CNTs[3]	1.2	500	1.4
N-PHCS[4]	1.4	500	12.95
Carbon aerogel[5]	1.2	500	10.5
chemically exfoliated MoS_2[6]	1.2	2900	4.41
N-AC/SnO_2[7]	1.2	50	3.42
PAC/PTS[8]	1.2	600	14.9
Porous carbon spheres[9]	1.6	500	5.81
3D porous graphene[10]	2	70	11.86
Ti_3C_2-MXene[11]	1.2	300	13 ± 2
BNPC[12]	1.4	500	16.63
N-HMCSs[13]	1.6	500	16.6
BCN nanosheet (this work)	1.2	500	12.1
BCN nanosheet (this work)	1.4	500	13.6

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