Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Enhanced capacitive deionization performance by rGO-SnO_2 nanocomposite modified carbon felt electrode

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Fig. S1

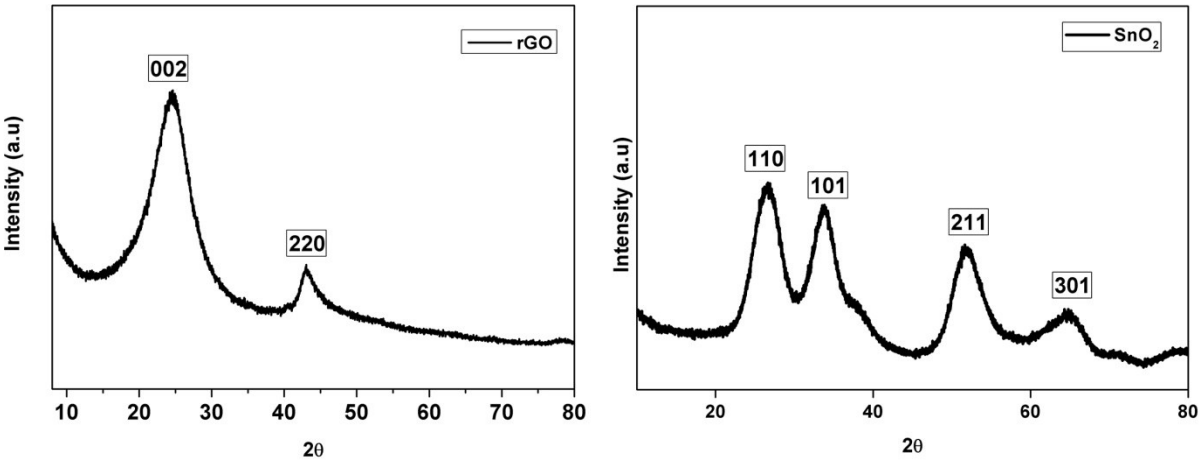

Figure S1. The XRD patterns of rGO and pristine SnO_2.

Fig. S2

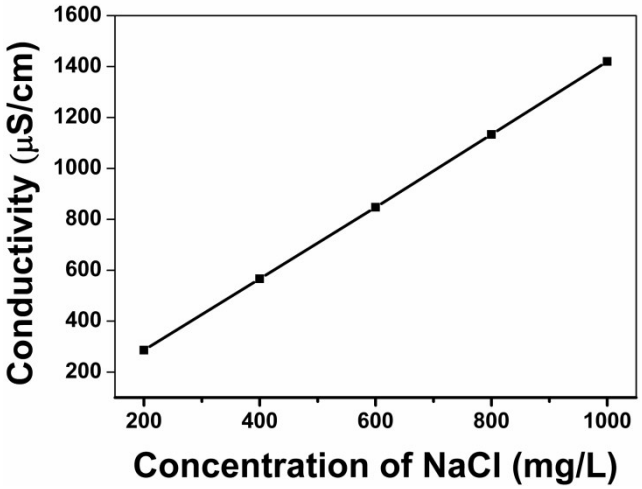

Fig. S2. Calibration curve for conductivity at different NaCl concentrations.

Fig. S3

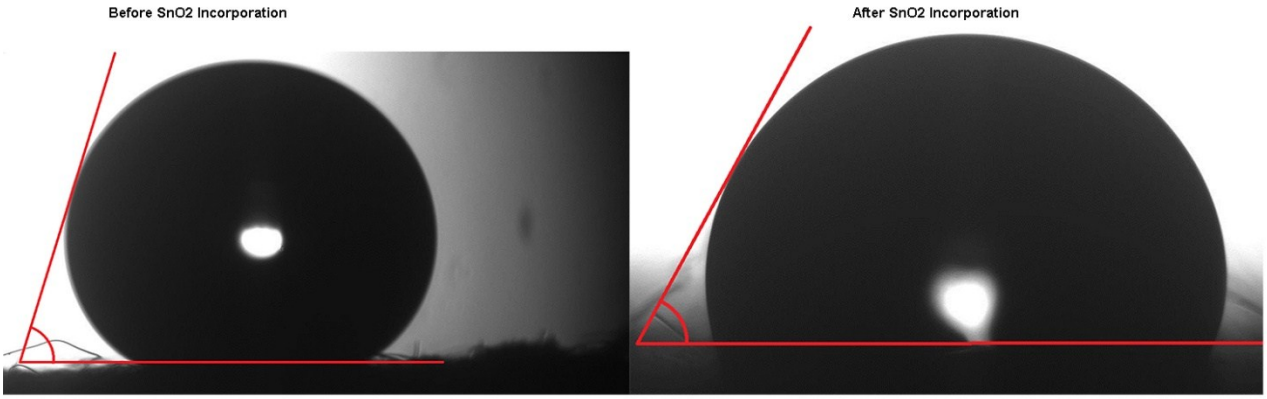

Fig. S2. Dynamic water contact angle analysis before and after SnO_2 Incorporation.

Fig. S4

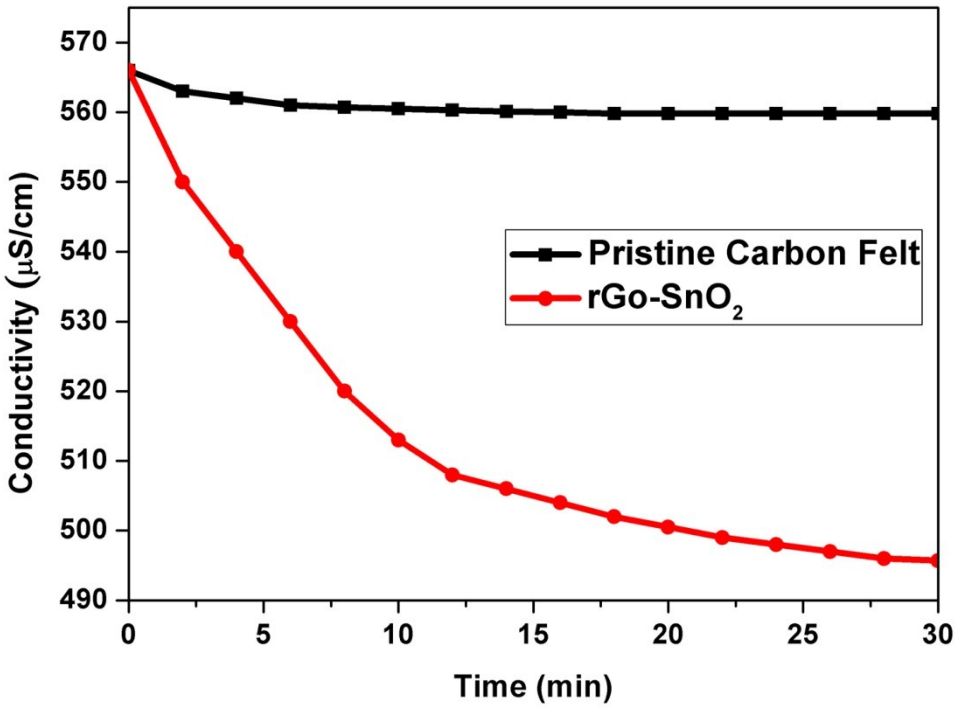

Fig. S4. Electrosorption behavior of pristine carbon felt electrode and rGO-SnO_2 nano-composite electrode in CDI at 1.2V.

Fig. S5

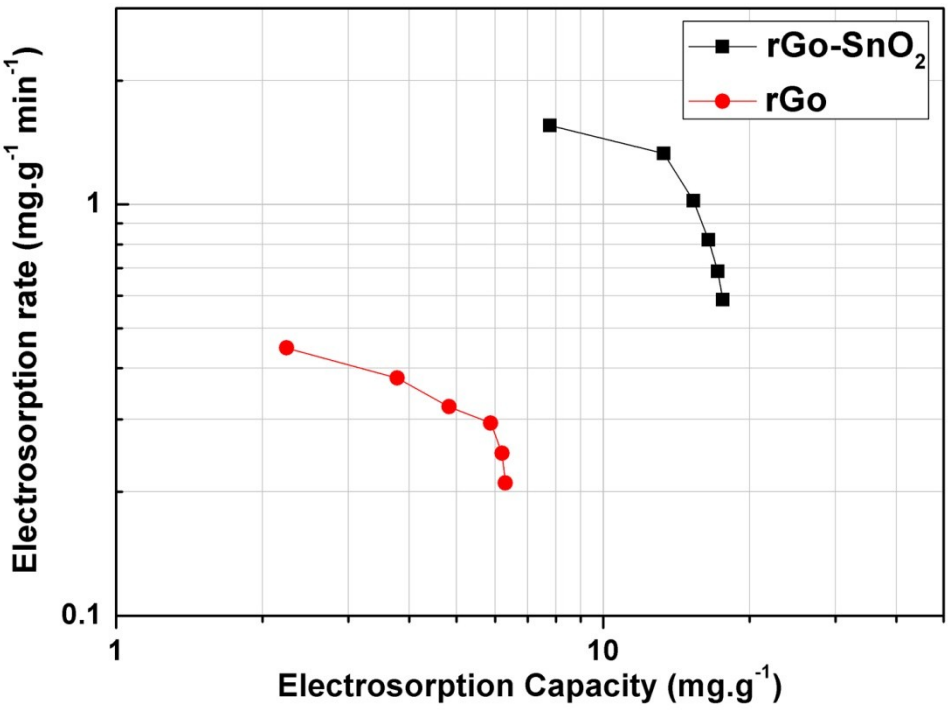

Fig. S5. CDI Ragone plot for rGO and rGO-SnO_2 in a 400mg/L NaCl solution at 1.2 V

Table S1. Salt electrosorption performance reported for different materials as electrodes for CDI.

Sr.No	Electrode Material	Applied Voltage (V)	Initial NaCl Concentration (mg/l)	Electrosorption Capacity (mg/g)	References
1	Activated Carbon	1.6	1000	5.9	[1]
2	Activated Carbon fibers	1.6	192	4.64	[2]
3	Amine Modified Microporous Carbon	1.1	250	5.3	[3]
4	rGO/activated carbon	2	50	0.8	[4]
5	Activated Carbon/Graphene	1.2	2230	2.4	[5]
6	Spongy Graphene Aerogel	1.5	32	4.95	[6]
7	Graphene Aerogel	1.2	250	9.9	[7]
8	Sulfonic and amine functionalized graphene	1.4	500	13.72	[8]
9	Graphene-like nanoflakes	2	25	1.3	[9]
10	Activated 3D graphene	2	70	11.86	[10]
11	Cellulose Derived Graphenic Fibers	1.2	500	13.1	[11]
12	3-D macroporous graphene	2	52	5.93	[12]
13	CNT/rGO	1.6	100	0.9	[13]
14	Activated Carbon/TiO_2	1.2	100	8.04	[14]
15	Graphene-coated carbon spheres	1.6	29	1.3	[15]
16	Graphene/MnO_2	1.2	50	5.01	[16]
17	rGO/TiO_2	1.2	300	16.4	[17]

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