## **Electronic Supplementary Information (ESI)**

## A Modified "Gel-Blowing" Strategy toward One-step Mass Production of 3D N-doped Carbon Nanosheets@Carbon Nanotubes Hybrid Network for Supercapacitor

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Fig. S1 (a, b) FESEM images of NCNS@CNTs.



Fig. S2 (a, b) FESEM images of NCNS.



Fig. S3 FESEM images of NCNS using (a) CA and (b) EDTA as complexing agent.



**Fig. S4** CV curves of (a) NCNS@CNTs-550, (b) NCNS@CNTs-750, (c) NCNS@CNTs-850, and (d) NCNS@CNTs-1000 at different scan rates.



Fig. S5 GCD curves of (a) NCNS@CNTs-550, (b) NCNS@CNTs-750, (c) NCNS@CNTs-850, and (d) NCNS@CNTs-1000 at different current densities.



Fig. S6 Nyquist plots of NCNS@CNTs-550, NCNS@CNTs-750, NCNS@CNTs-850, and NCNS@CNTs-1000.



Fig. S7 XRD patterns of NCNS@CNTs-550, NCNS@CNTs-750, NCNS@CNTs-850, and NCNS@CNTs-1000.



Fig. S8 Raman spectra of NCNS@CNTs-550, NCNS@CNTs-750, NCNS@CNTs-850, and NCNS@CNTs-1000.



Fig. S9 (a)  $N_2$  adsorption/desorption isotherms and (b) Comparative specific surface area (SSA) of NCNS@CNTs-550, NCNS@CNTs-750, NCNS@CNTs-850, and NCNS@CNTs-1000.



Fig. S10 Rate capability of the assembled device at different current densities.



Fig. S11 XRD pattern of the NCNS@CNTs@NiO.



Fig. S12 FESEM images of the NCNS@NiO at different magnifications.



**Fig. S13** (a, b) CV curves at different scan rates and (c, d) GCD curves at different current densities of the NCNS@NiO and NCNS@CNTs@NiO.