

Supporting Information

S, O dual-doped porous carbon derived from activation of waste papers as electrodes for high performance lithium ion capacitors

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Table S1. XPS analysis of the samples

Sample	C (at%)	O (at%)	S (at%)	N (at%)
S-NPC-40	88.49	9.05	2.13	0.33
S-NPC-60	88.10	9.51	2.08	0.31
S-NPC-KOH	89.31	7.97	2.33	0.39
S-NPC-40 without H ₂ SO ₄ solvothermal	88.69	10.09	0.76	0.46

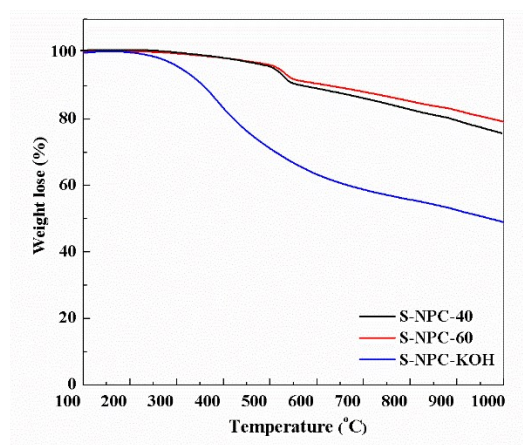


Fig. S1 TGA results of S-NPC-40, S-NPC-60 and S-NPC-KOH under N_2 .

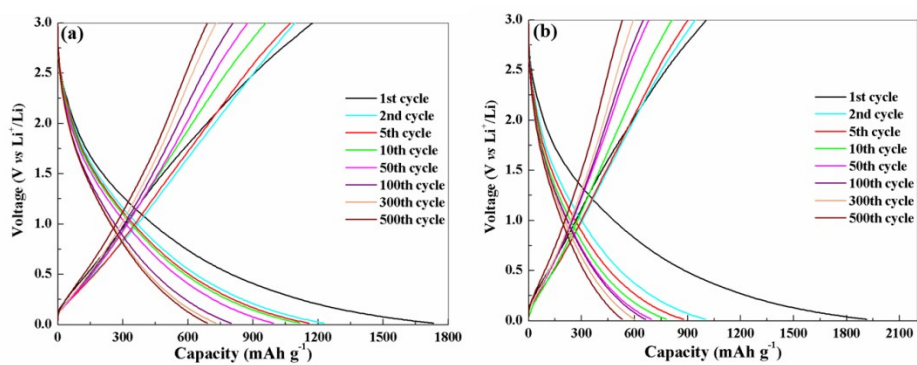


Fig. S2 Charge-discharge curves of the S-NPC-60 and S-NPC-KOH anode at a current density of $0.1\ A\ g^{-1}$.

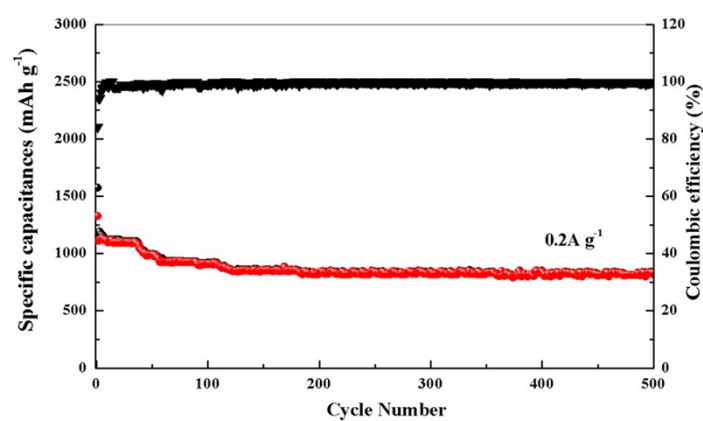


Fig. S3 Cycle performance of the S-NPC-40 anode at a current density of $0.2\ A\ g^{-1}$ for 2000 cycles.

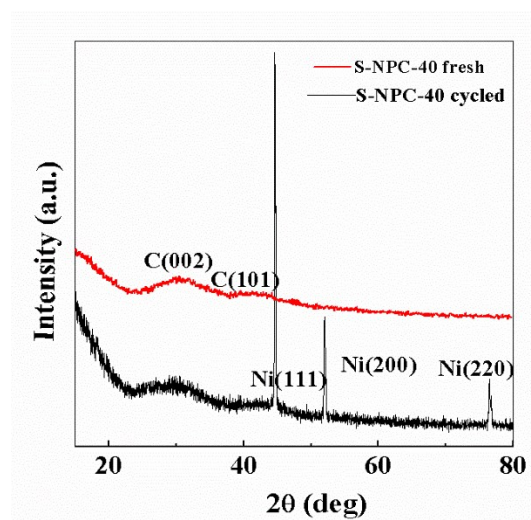


Fig. S4 XRD patterns of S-NPC-40 samples before and after cycling.

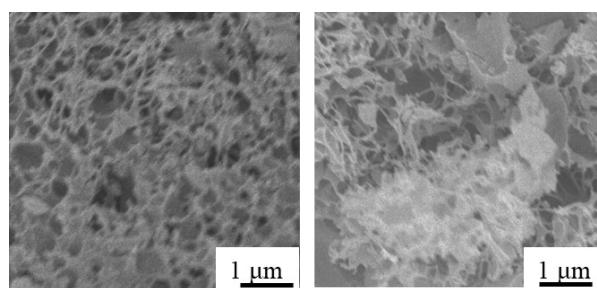


Fig. S5 A typical SEM image of S-NPC-40 anode and cathode after cycling.

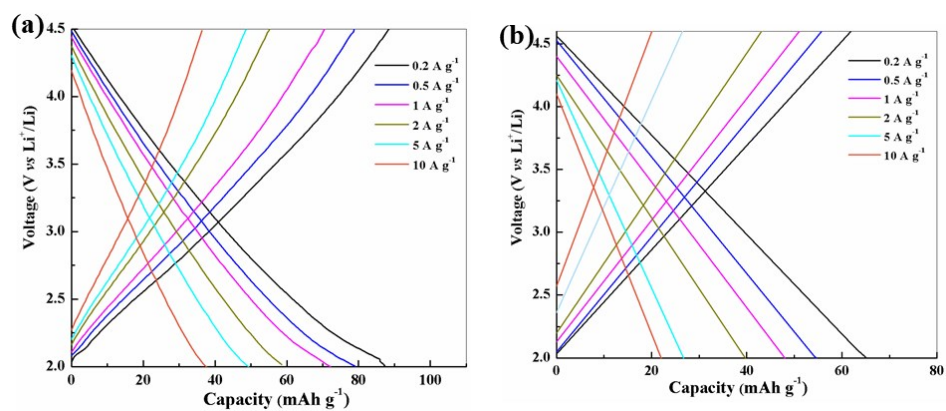


Fig. S6 Charge-discharge curves of the S-NPC-60 and S-NPC-KOH cathode at different current densities.

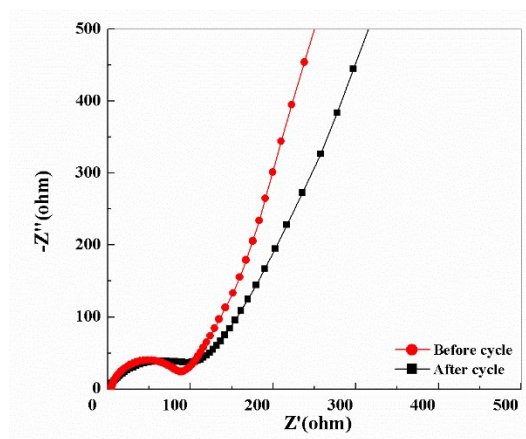


Fig. S7 Nyquist plots of S-NPC-40 before and after cycling.

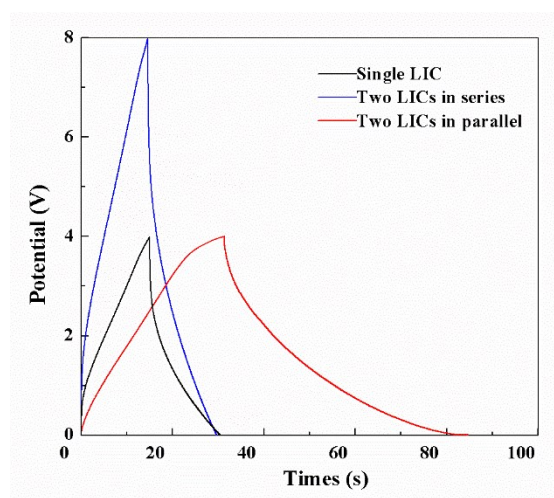


Fig. S8 GCD curves of single S-NPC-40//S-NPC-40 LIC, two S-NPC-40//S-NPC-40 LICs in parallel, and two S-NPC-40//S-NPC-40 LICs connected in series.