Supporting information for

Template Orienting One-Dimensional Schiff-Base Polymer: towards Flexible Nitrogen-enriched Carbonaceous Electrodes with Ultrahigh Electrochemical Capacity

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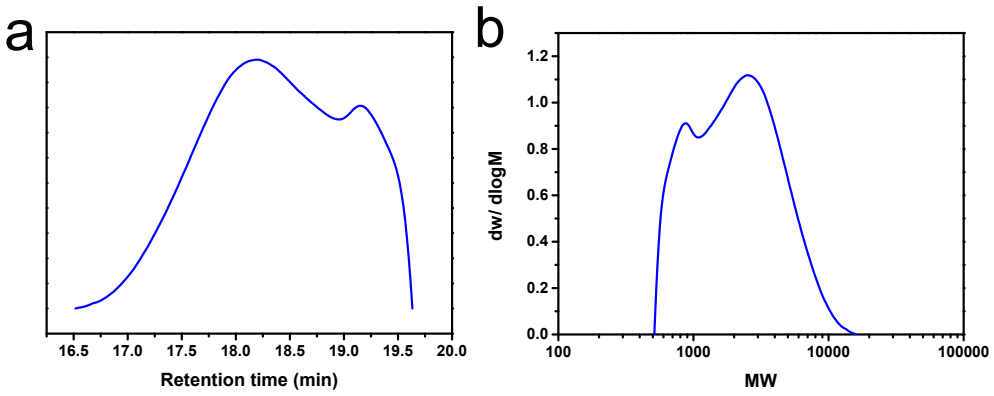

Fig. S1 (a) GPC curve and (b) molecular weight distribution curve of SBO.

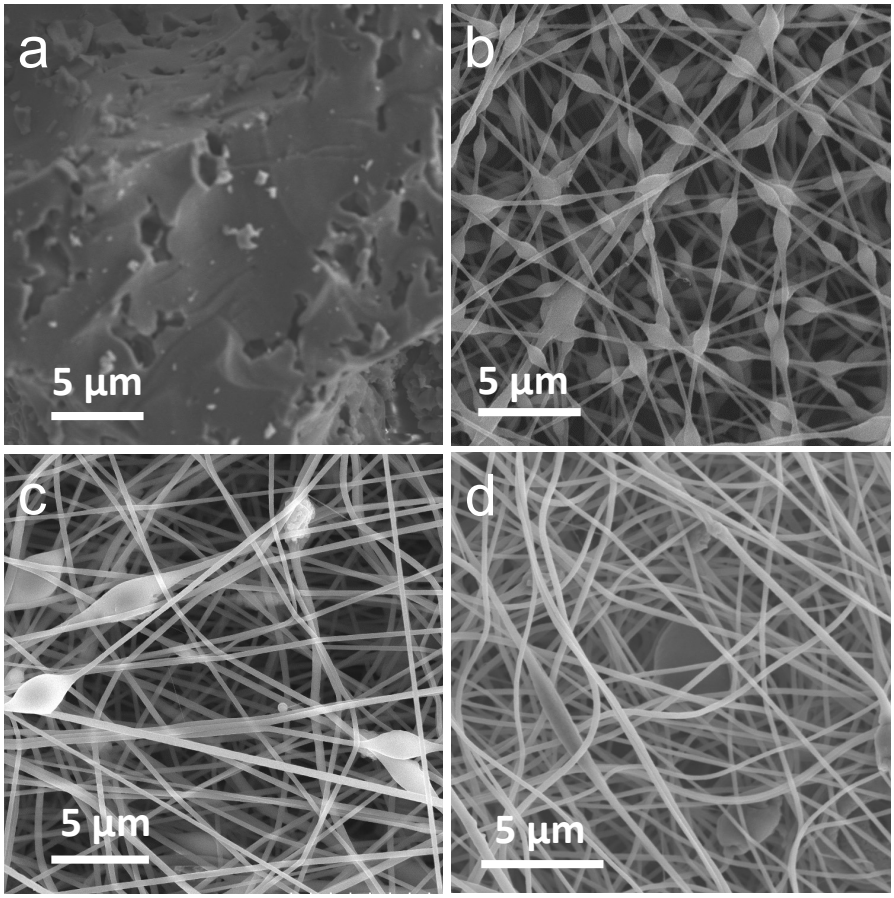

Fig. S2 Investigation of morphological evolution with the variation of the volume ratio between PAN/ DMF and SBO. SEM images of (a) SBO, (b) PNF-2, (c) PNF-1.7 and (d) PNF-1.3.

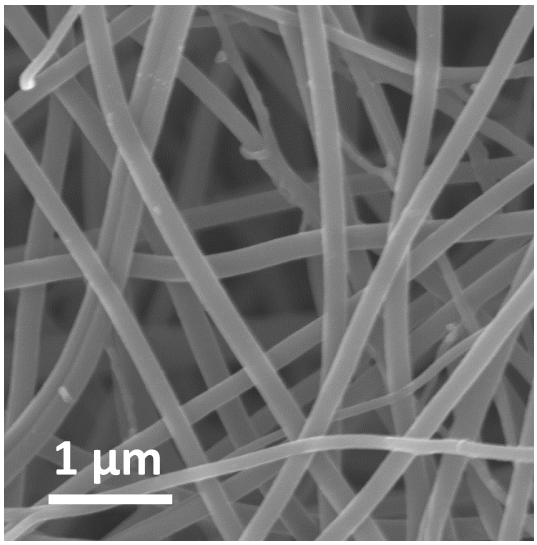

Fig. S3 SEM image of PAN.

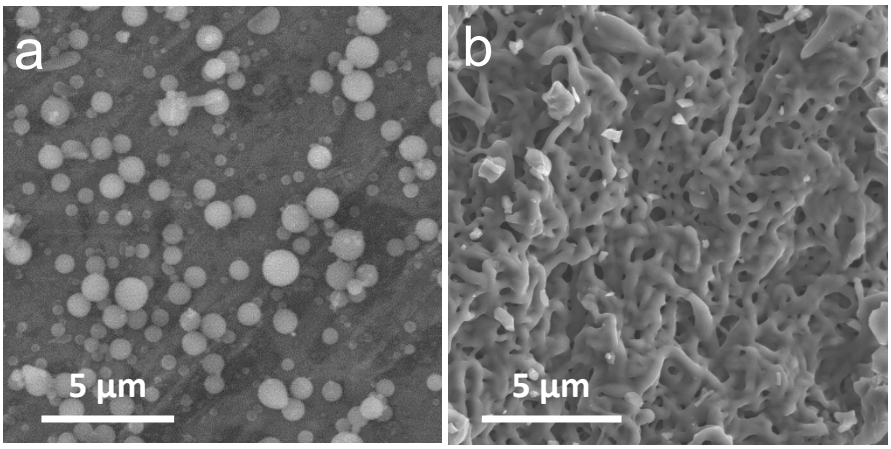

Fig. S4 SEM images of (a) control sample 1 with insufficient reaction time; (b) control sample 2 without crosslinking reaction at 200 ˚C.

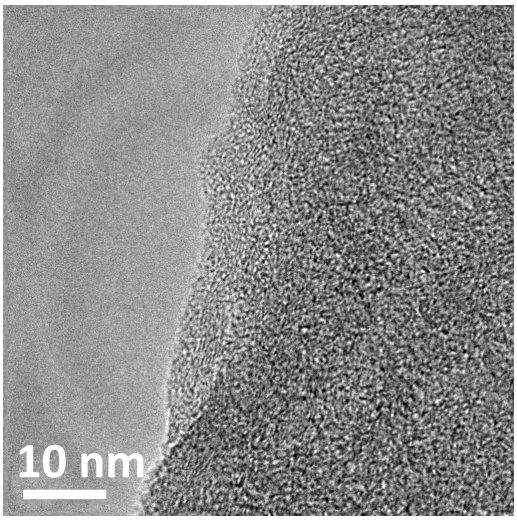

Fig. S5 TEM image of NPCNF.

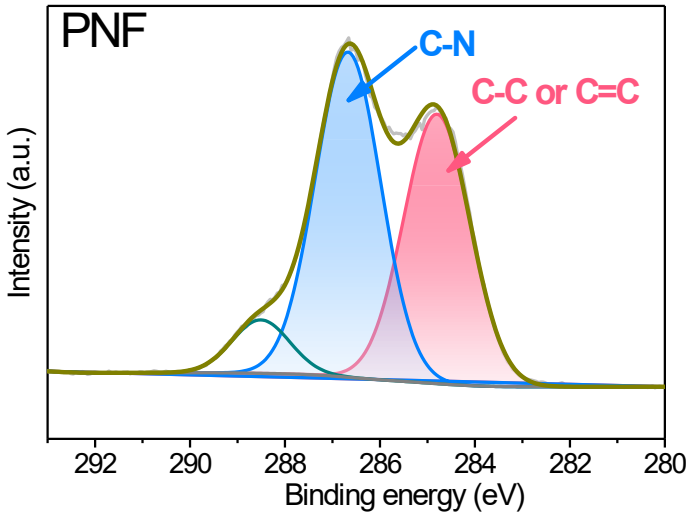

Fig. S6 The high-resolution XPS spectrum of C 1s of PNF.

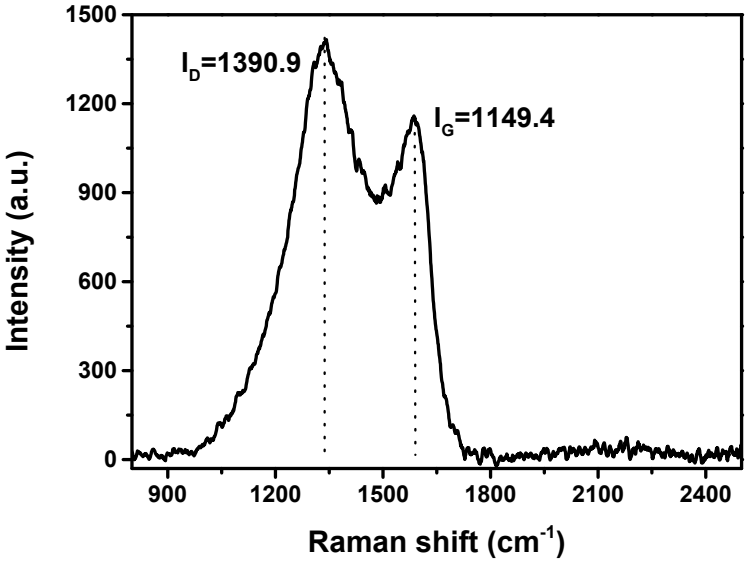

Fig. S7 Raman spectrum of NPCNF.

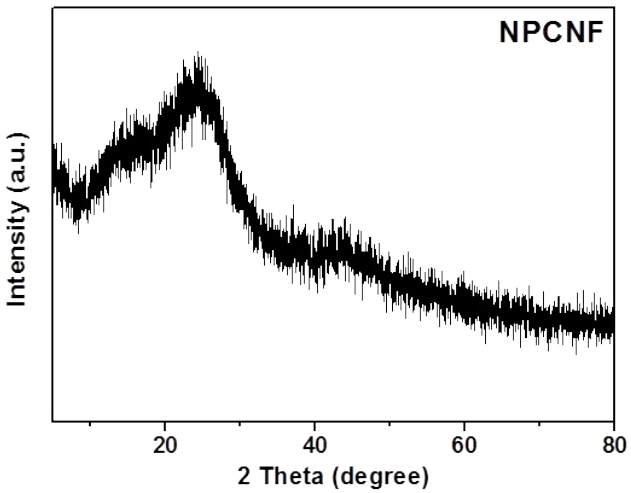

Fig. S8 XRD pattern of NPCNF.

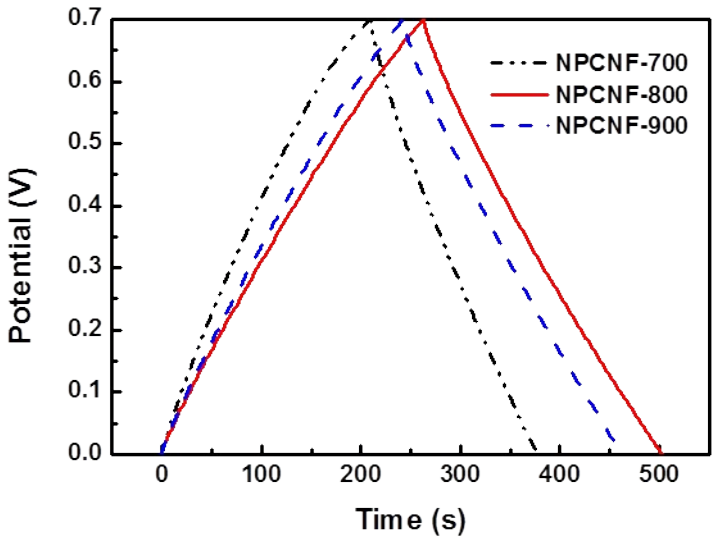

Fig. S9 Comparison of electrochemical performance of NPCNF-700, NPCNF and NPCNF-900 measured in a three-electrode system at 1 A g^{-1}.

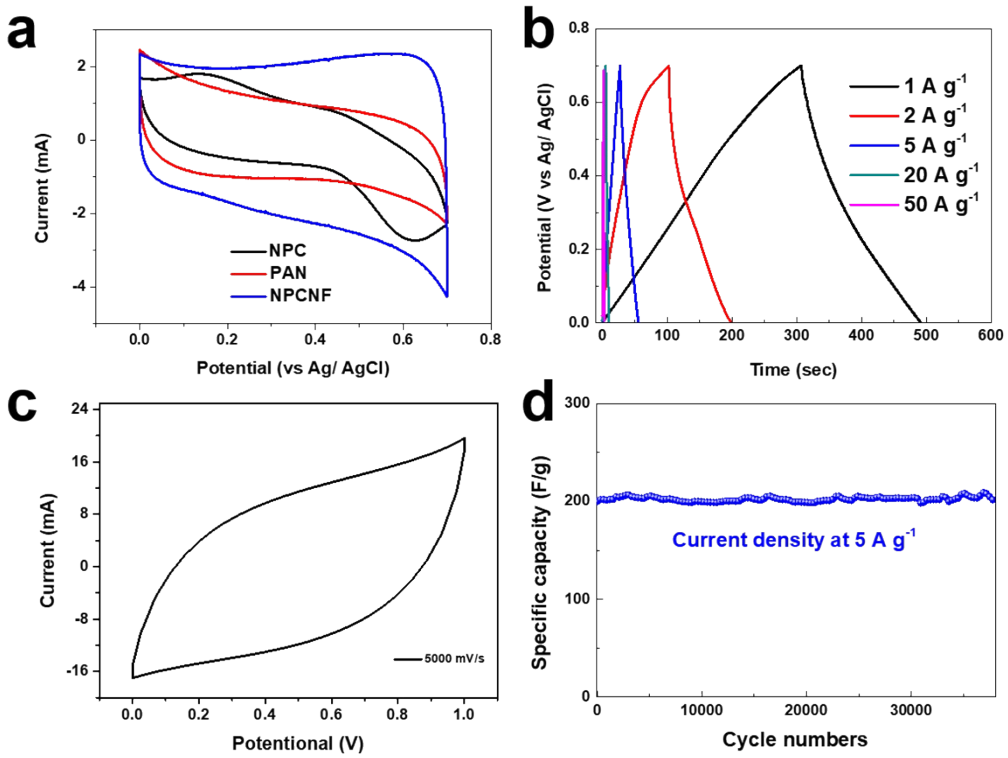

Fig. S10 Electrochemical capacitive performances of NPC, PAN and NPCNF electrodes: comparison of a) CV curves at a scan rate of 50 mV s^{-1}; b) CV curve of NPCNF in 6 M KOH at 5000 mV s^{-1}; c) galvanostatic charge/ discharge curves at different current densities; d) cycling stability at a current density of 5 A g^{-1}.

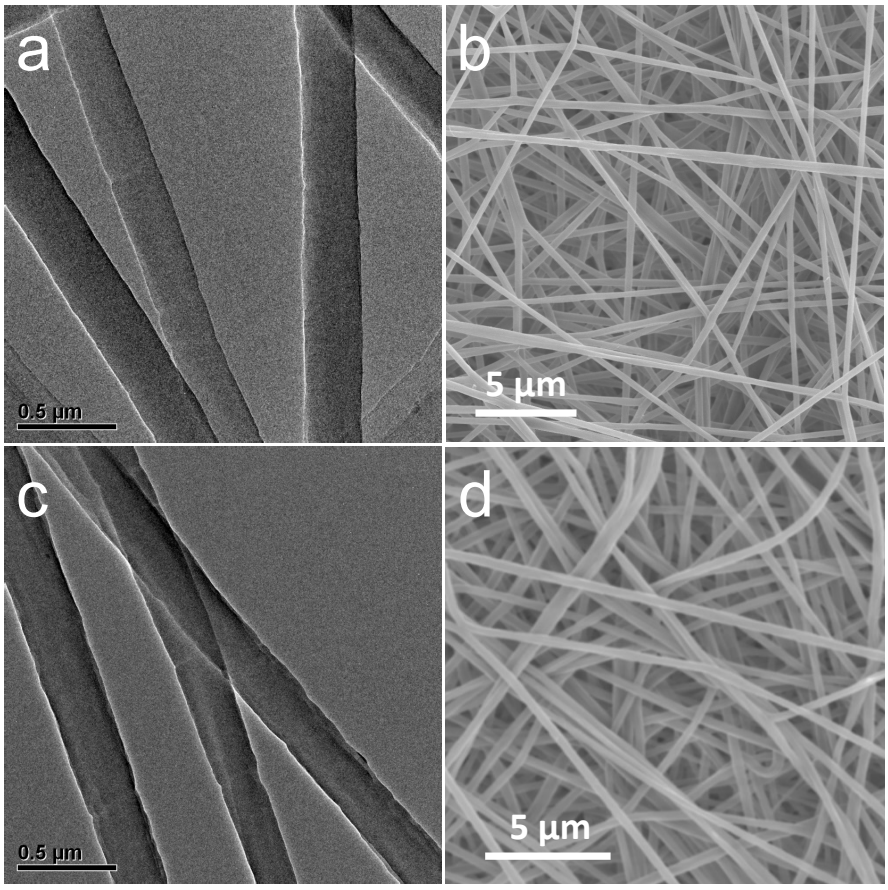

Fig. S11 (a) TEM image and (b) SEM image of the pristine NPCNF electrode; (c) TEM image and (d) SEM image of the NPCNF electrode after a galvanostatic charge-discharge process at 0.5 A g^{-1} for 200 cycles.

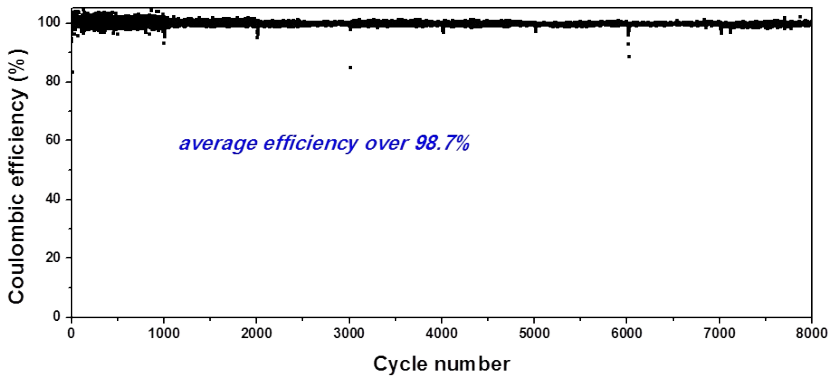

Fig. S12 Corresponding coulombic efficiency of NPCNF// AC LIC for 8,000 cycles at 5 A g^{-1}.