Supporting Information

Graphene oxide template-directed synthesis of porous carbon nanosheets from expired wheat flour for high-performance supercapacitors

Xu Zhang,* Qiuyu Fan, He Yang, Anmin Liu*

State Key Laboratory of Fine Chemicals, School of Petroleum & Chemical Engineering, Dalian University of Technology, Panjin 124221, China

Figure S1. SEM image of GO.
Figure S2. AFM images and corresponding height images (a, c) NCG; (b, d) NSCG.

Figure S3. XRD patterns of NC, NCG and NSCG.
Figure S4. Raman spectra of NC, NCG and NSCG.

Figure S5. (a) XPS spectra of NC, NCG and NSCG; high-resolution C1s spectra of the (b) NC; (c) NCG ; (d) NSCG
Figure S6. Volumetric specific capacitances of the samples at different current densities.

Figure S7. Schematic depiction of $E_{\text{HOMO}}$, $E_{\text{LUMO}}$, and $\Delta E$ of NCG and NSCG.
Figure S8. (a) Cyclic voltammograms of NSCG at the scan rates from 5 mV s$^{-1}$ to 100 mV s$^{-1}$ in the two-electrode cell; (b) Galvanostatic charge-discharge curves and (c) Specific capacitances of NSCG at different current densities in the two-electrode cell; (d) Ragone plot of NSCG measured in the two-electrode cell.

Figure S9. Ragone plot of the NSCG sample.