

Supporting Information

Carbonized Cellulose Nanofibril/Graphene Oxide Composite Aerogels for High-Performance Supercapacitors

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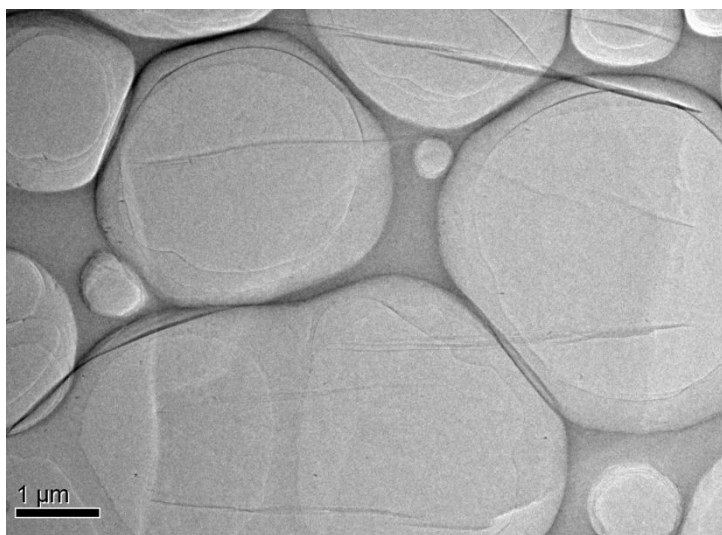


Figure S1. TEM image of GO.

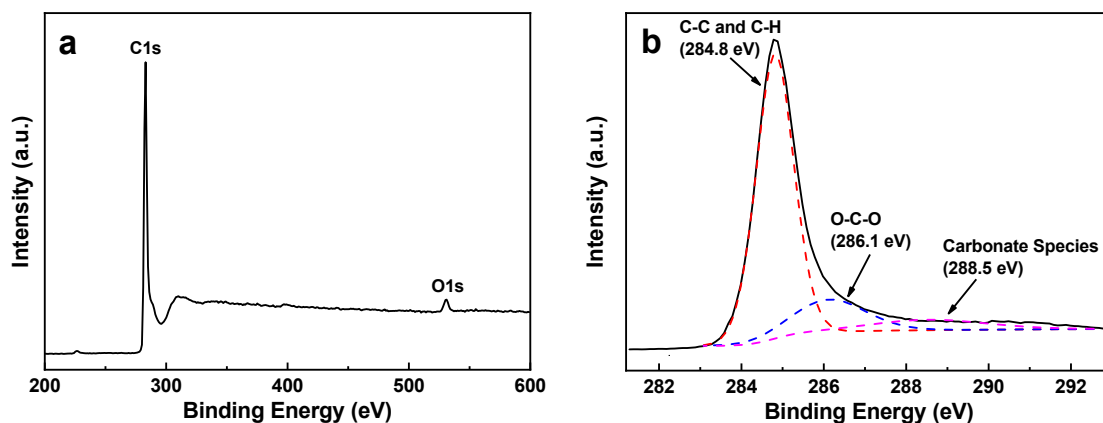


Figure S2. XPS of the carbonized TOCN.

The chemical states of elements in the carbonized TOCN were studied by the X-ray photoelectron spectroscopy (XPS) technique. A typical full XPS spectrum (Figure S2a) of the carbonized TOCN shows photoelectron lines at binding energy of about 285 and 530 eV that are attributed to C1s and O1s, respectively. The result clearly exhibited the main element in the material was C and only little O was observed. The high-resolution spectrum of C1s is shown in Figure S2b, which can be resolved into three peaks by the peak fitting program. The core level spectrum in the C1s region displays an asymmetric broad peak, which indicates that more than one chemical states of C are present. By fitting the experimental line profile, three peaks are identified and assigned to the aliphatic C-C and C-H bonds (284.8 eV), O-C-O complex (286.1 eV), and carbonate species (288.5 eV).^{S1}

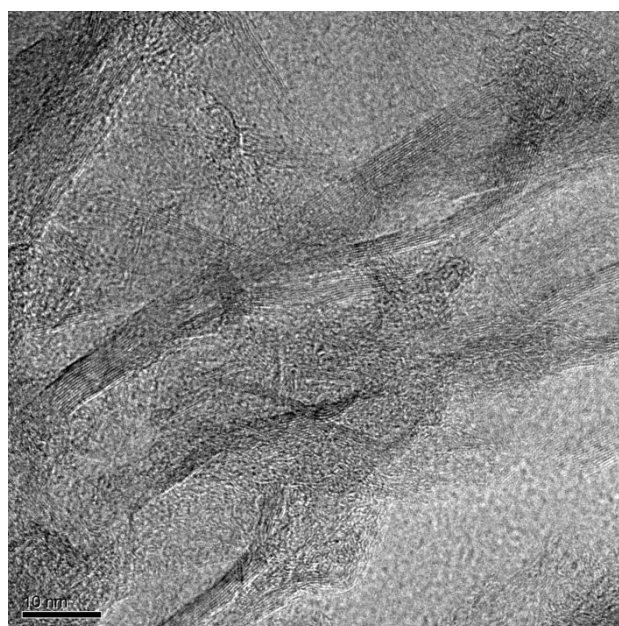


Figure S3. TEM image of the carbon nanofibers.

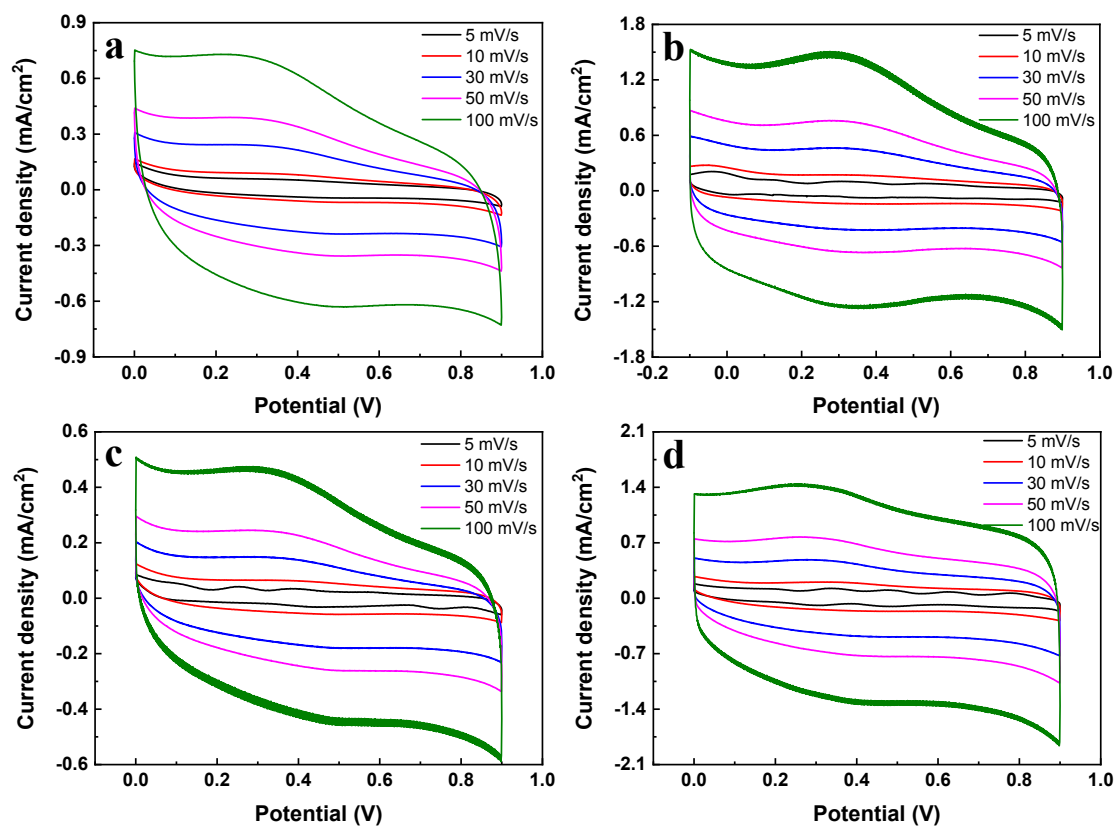


Figure S4. Cyclic voltammetry (CV) curves of (a) CTRGO5-750, (b) CTRGO10-750, (c) CTRGO20-750, and (d) CTRGO10-1100 at different scan rates.

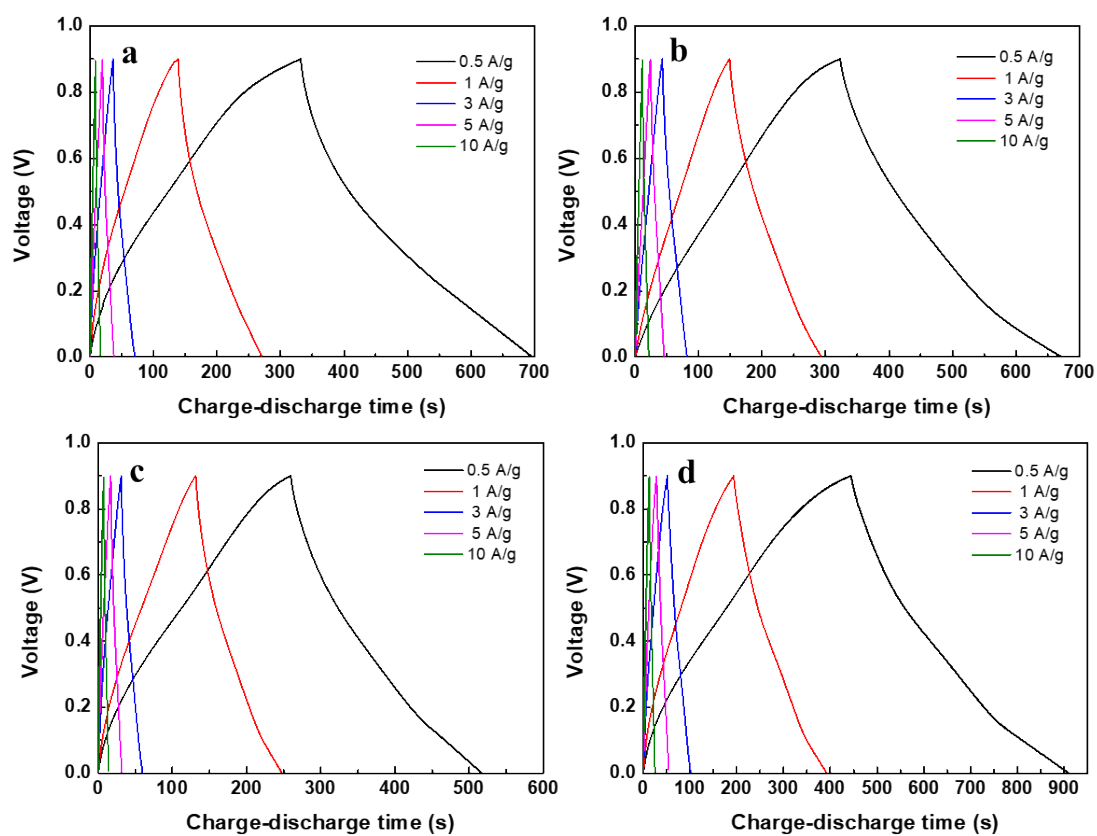


Figure S5. Galvanostatic charge/discharge (GCD) curves of (a) CTRGO5-750, (b) CTRGO10-750, (c) CTRGO20-750, and (d) CTRGO10-1100 at different current densities.

REFERENCE

(S1) Wang, Y.; Zhang, L.; Gao, X.; Mao, L.; Hu, Y.; Lou, X. One-Pot Magnetic Field Induced Formation of Fe₃O₄/C Composite Microrods with Enhanced Lithium Storage Capability. *Small* **2014**, *10*, 2815–2819.