Supporting Information

From Chromonic Self-Assembly to Hollow Carbon Nanofibers for Efficient Materials in Supercapacitor and Vapor Sensing Applications

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1. TEM images of Ultra-Microtome Cuts

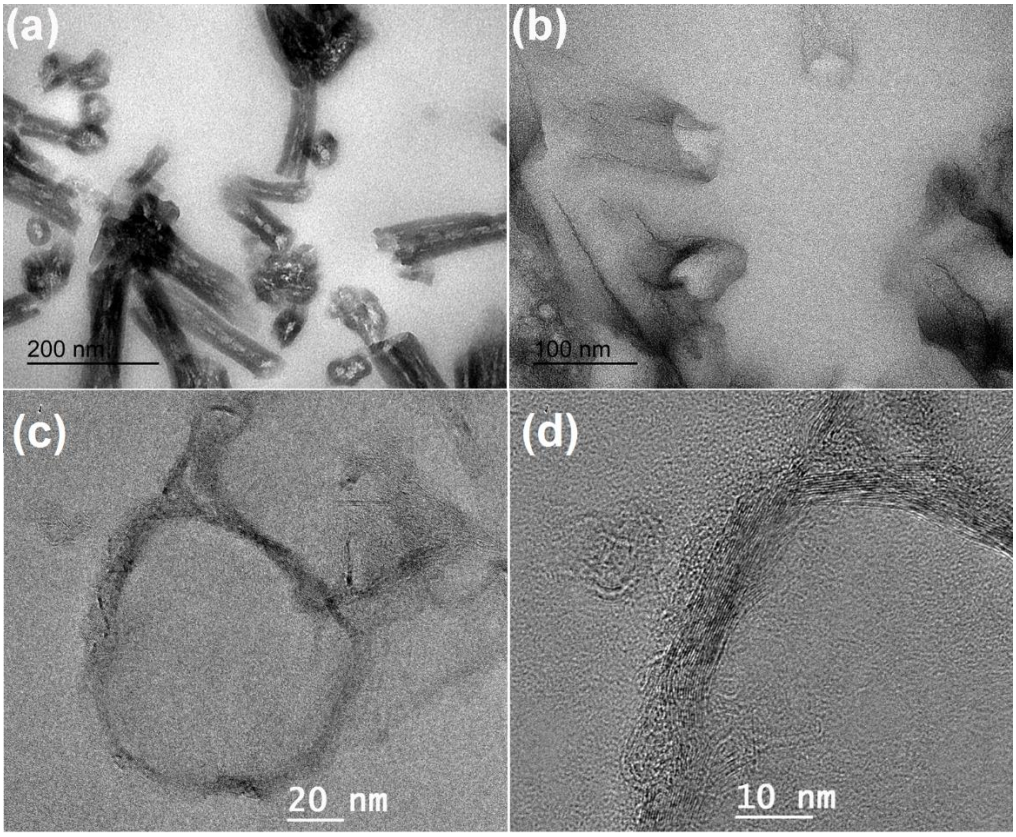

Figure S1. TEM images of ultra-microtome cuts: (a) **SiO_2NF,** (b) **CNF-PiC**, (c) **CNF-2000**, and (d) HR-TEM image of **CNF-2000**.

2. Nitrogen adsorption/desorption

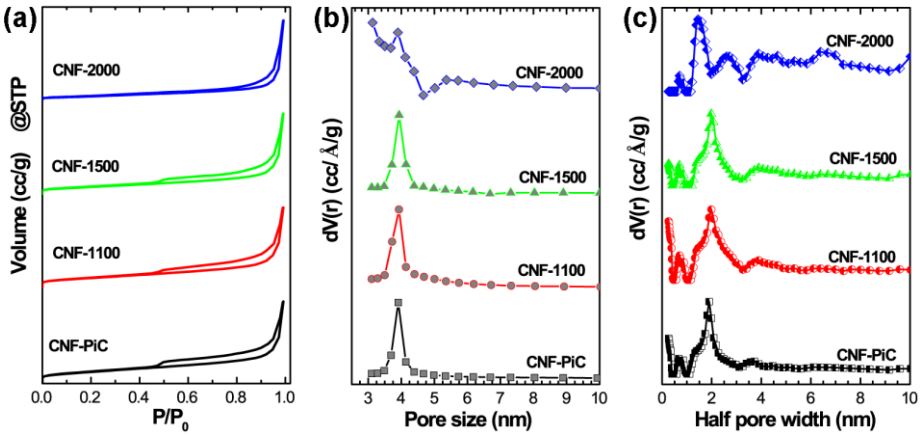

Figure S2. (a) Nitrogen sorption isotherms of CNFs, (b) pore size distribution estimated by BJH method, and (c) corresponding pore size distribution curves by NDFT method.

3. Thermal stability of CNFs (TG curves)

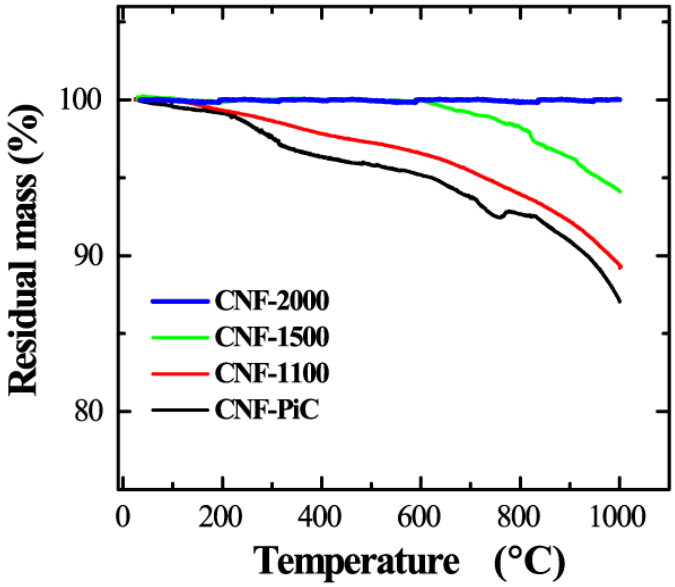

Figure S3. TG curves of CNFs in argon atmosphere.

4. Additional SEM images of CNFs

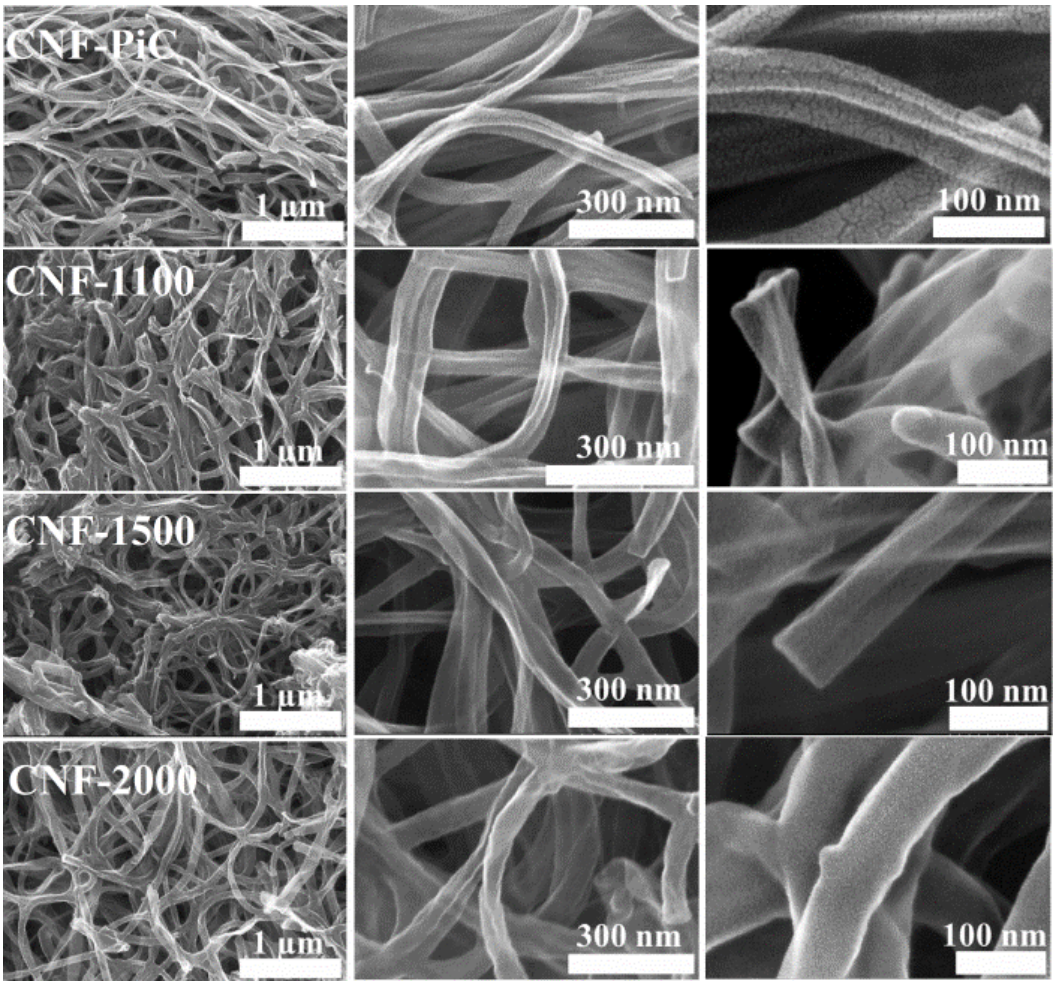

Figure S4. Additional SEM images of CNFs.

5. Additional TEM and HR-TEM images of CNFs

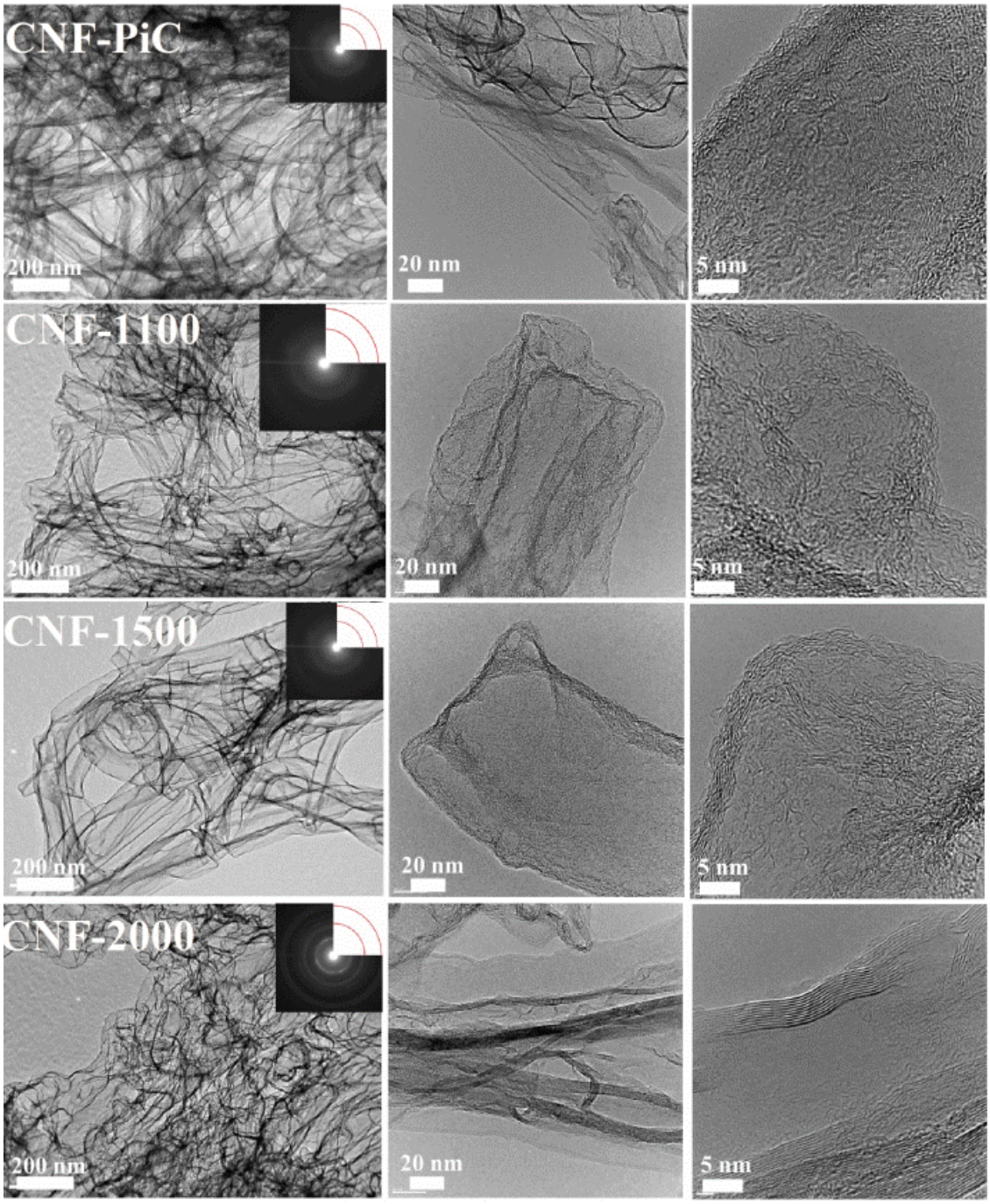

Figure S5. TEM and HR-TEM images of CNFs.

6. Additional XPS data

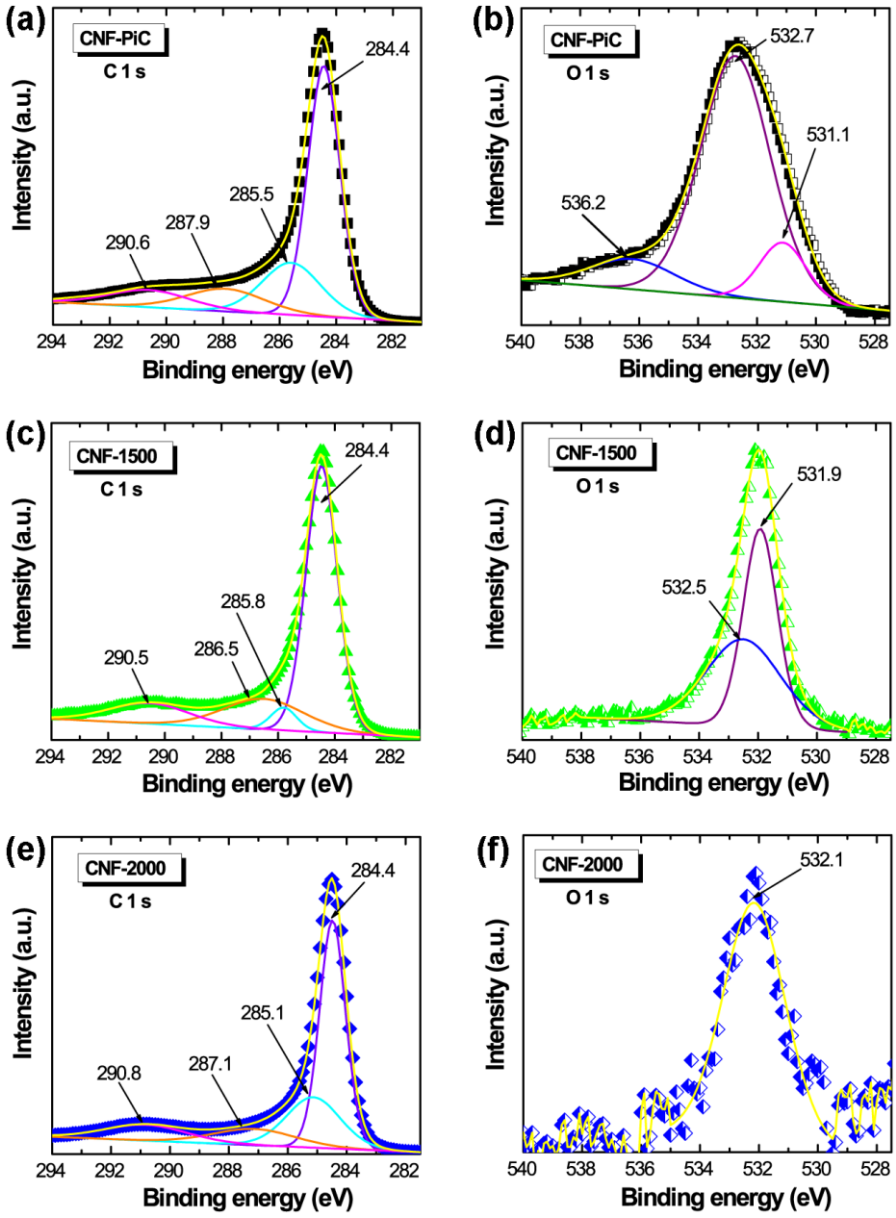

Figure S6. (a) XPS C 1s spectrum with deconvoluted peaks for **CNF-PiC** and (b) corresponding O 1s spectrum with deconvoluted peaks, (c) XPS C 1s spectrum with deconvoluted peaks for **CNF-1500** and (d) corresponding O 1s spectrum with deconvoluted peaks, and (e) XPS C 1s spectrum with deconvoluted peaks for **CNF-2000** and (f) corresponding O 1s spectrum with deconvoluted peaks.

7. Additional CV and chronopotentiometry data

Table S1. Electrode mass loadings for the different CNF samples, calculated from QCM measurements.

Sample	Mass Loading (μg)
CNF-PiC	4.67 ± 0.31
CNF-1100	2.53 ± 0.10
CNF-1500	2.06 ± 0.23
CNF-2000	2.63 ± 0.15

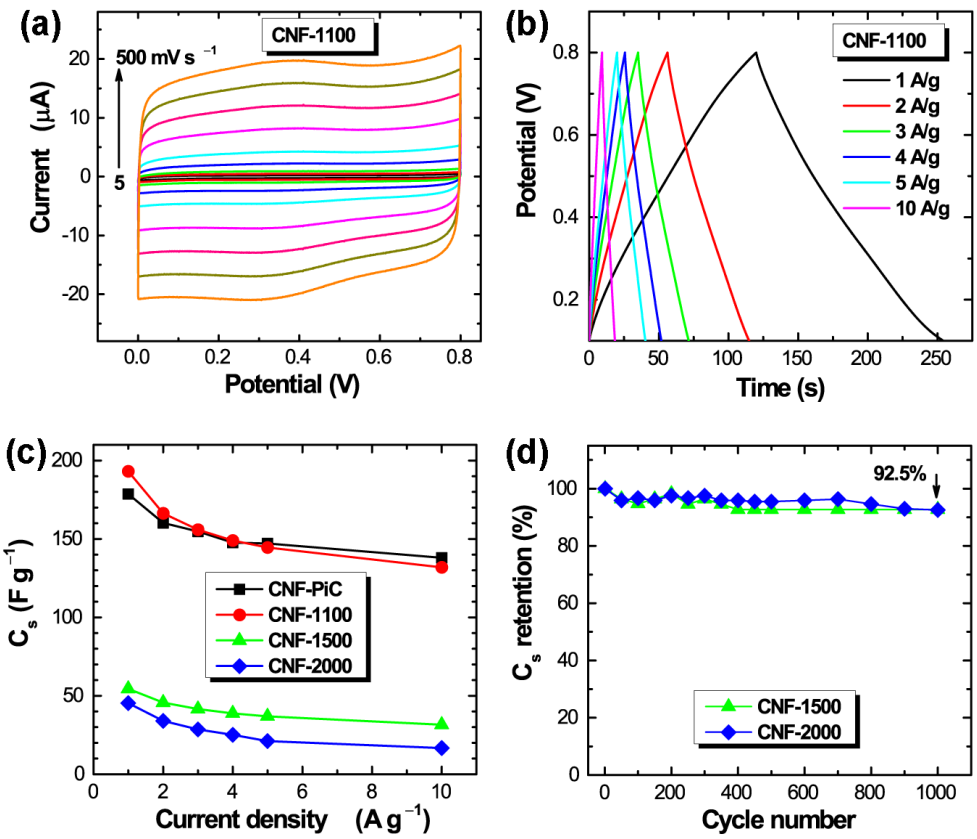

Figure S7. (a) CV curves of **CNF-1100** at different scan rates (5, 10, 20, 50, 100, 200, 300, 400, and 500 mV/s, (b) charge-discharge curves of **CNF-1100** at different current densities (1, 2, 3, 4, 5, and 10 A/g, (c) specific capacitance vs current density obtained from charge-discharge curves, and (d) cyclic stability plots for **CNF-1500**, and **CNF-2000** up to 1000 cycles.