Supporting Information for

Hierarchically porous carbon networks derived from chitosan for high-performance electrochemical double-layer capacitor

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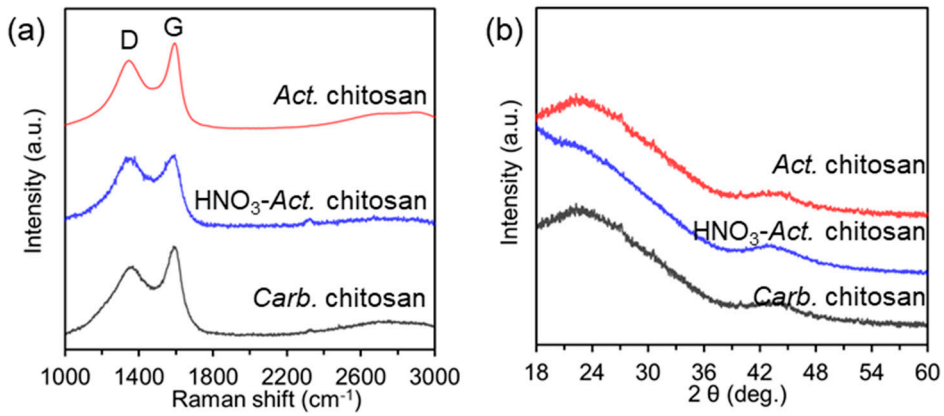

Figure S1. Raman spectroscopy and X-ray diffraction patterns of Carb. Chitosan, HNO_3-*Act.* Chitosan. (a) Raman spectroscopy. (b) XRD patterns.

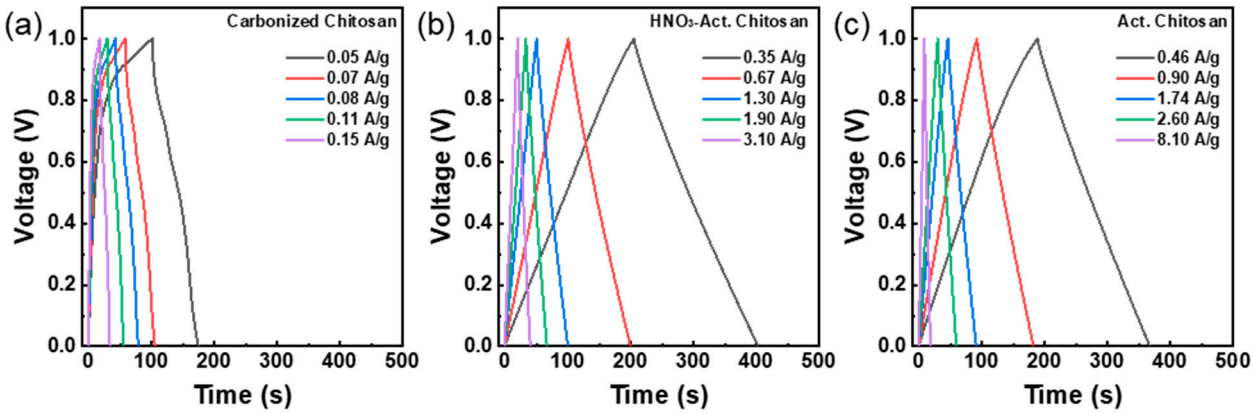

Figure S2. Galvanostatic charge/discharge (GCD) curves of (a) *Carb.* Chitosan, (b) HNO_3-*Act.* Chitosan and (c) *Act.* Chitosan samples at a function of current densities.

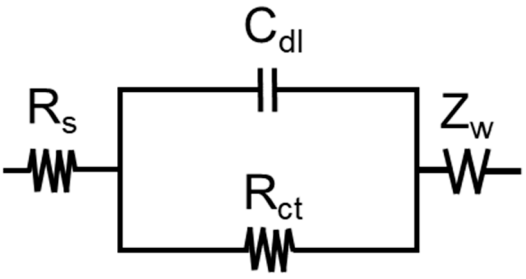

Figure S3. Equivalent circuit model for fitting of the Nyquist plot for various carbon samples. R_s: series resistance, R_{ct}: charge transfer resistance, C_{dl}: double layer capacitance, and Z_w: Warburg impedance.

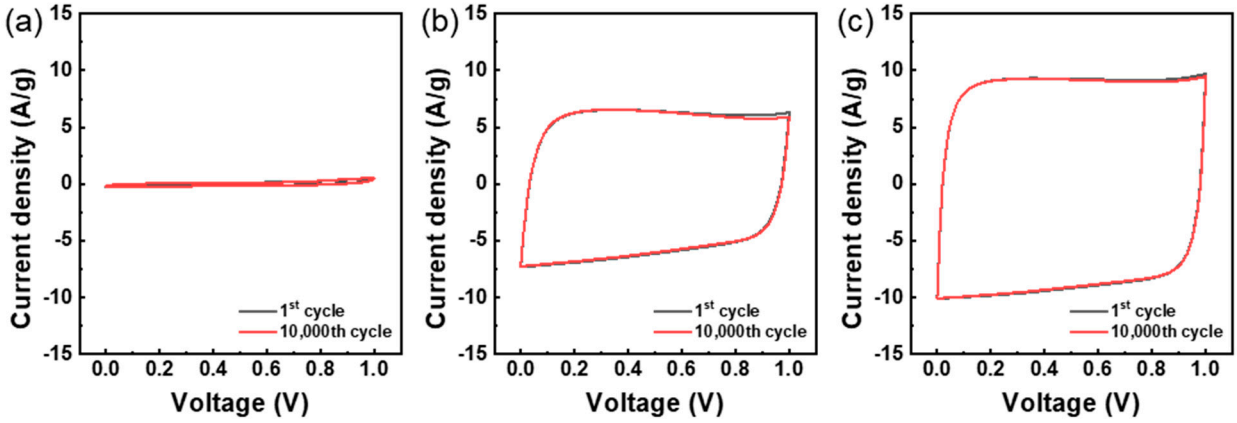

Figure S4. CV curves collected at the first and after 10,000 cycles. (a) *Carb.* Chitosan, (b) HNO_3-*Act.* Chitosan and (c) *Act.* Chitosan

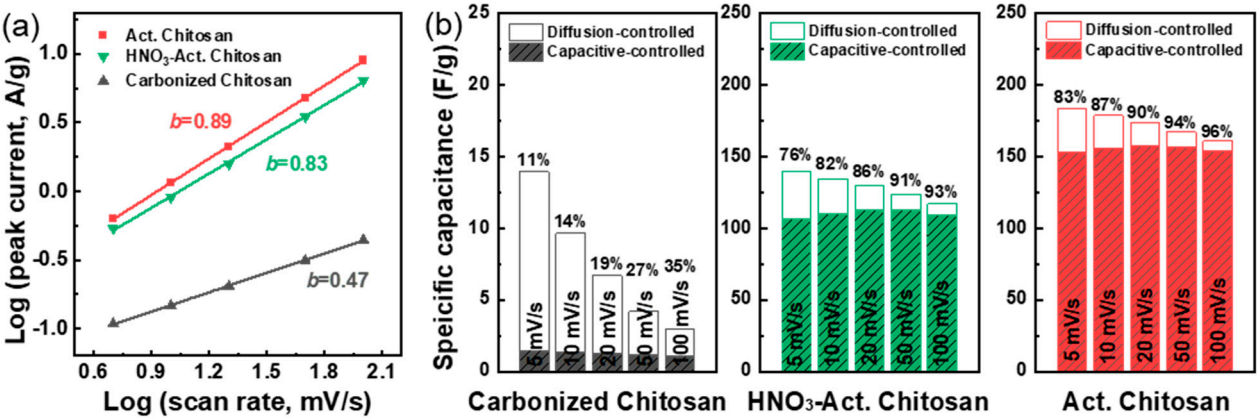

Figure S5. Charge storage mechanisms. (a) log(I) vs. log(ν) plots of anodic current at 1.0 V. (b) Capacitance comparisons of *Carb.* Chitosan, HNO_3-*Act.* Chitosan, and *Act.* Chitosan samples with capacitive contribution at a scan rate from 5 to 100 mV/s.

Table S1. Detailed Nyquist plot fitting results for various carbon samples.

Sample	R_s (Ω)	R_{ct} (Ω)
Carb. Chitosan	2.694	458.2
HNO_3-*Act.* Chitosan	3.667	0.438
Act. Chitosan	2.807	0.395