

Electronic Supplementary Information[†]

Capacitance of KOH Activated Carbide-Derived Carbons

Cristelle Portet^a, María Ángeles Lillo-Ródenas^b, Angel Linares-Solano^b, Yury Gogotsi^a

^aDrexel University, Materials Science and Engineering, 3141 Chestnut Street, Philadelphia, PA, 19104

^bUniversidad de Alicante, Dept. Química Inorgánica, Ap. Correos 99, E-03080, Alicante, Spain

Table S1: Porosity characteristics⁺ and electrochemical performance of as-produced and KOH activated CDC.

Carbon	BET SSA (m ² /g)	Micropore volume (cm ³ /g)	Narrow* micropore volume (cm ³ /g)	Average pore size (nm)	Gravimetric capacitance (F/g)**
400°C	1092	0.51	0.51	0.65	131
500°C	1285	0.60	0.60	0.68	140
600°C	1235	0.59	0.57	0.70	143
800°C	1368	0.66	0.61	0.80	125
1000°C	1483	0.63	0.45	1.10	95
400°C-activated	2139	1.02	0.77	0.90	150
500°C-activated	1991	0.93	0.72	0.90	159
600°C-activated	1723	0.82	0.66	1.17	179
800°C-activated	1980	0.93	0.70	1.20	171
1000°C-activated	1708	0.64	0.47	1.30	103

⁺ Previous papers reported pore size and volume calculated using a NL DFT model and this should be taken into account when comparing with other publications on CDC.

* Pores <0.7 nm.

** Measured from galvanostatic cycling at I=20 mA.

Table S2: Porosity characteristics and electrochemical performances of microporous carbons produced from phenolic resin (sample 1) or anthracite (samples 2-4) and activated in KOH.

Carbon	BET SSA (m ² /g)	Micropore volume (cm ³ /g)	Narrow* micropore volume (cm ³ /g)	Average pore size (nm)	Gravimetric capacitance (F/g)
AC 1	1111	0.50	0.52	0.80	102
AC 2	1594	0.74	0.73	0.80	125
AC 3	1973	0.95	0.81	1.05	155
AC 4	3183	1.25	0.72	1.35	160

*Pores <0.7 nm

** Measured from galvanostatic cycling at I=20 mA.