

Supplementary information

Highly porous carbon materials derived from silicon oxycarbides and effect of the pyrolysis temperature on their electrochemical response

Jose Merida¹, Maria T. Colomer², Fausto Rubio² and M. Alejandra Mazo ^{2,*}

¹ Departamento de Ingeniería Química, Universidad Autónoma de Madrid, C/Tomás y Valiente 7, 28049 Madrid, Spain; josseantoniomerida@gmail.com (JM)

² Instituto de Cerámica y Vidrio, Consejo Superior de Investigaciones Científicas, C/Kelsen 5, 28049 Madrid, Spain; tcolomer@icv.csic.es (MTC), frubio@icv.csic.es (FR) and sandra@icv.csic.es (MAM)

* Correspondence: sandra@icv.csic.es (MAM)

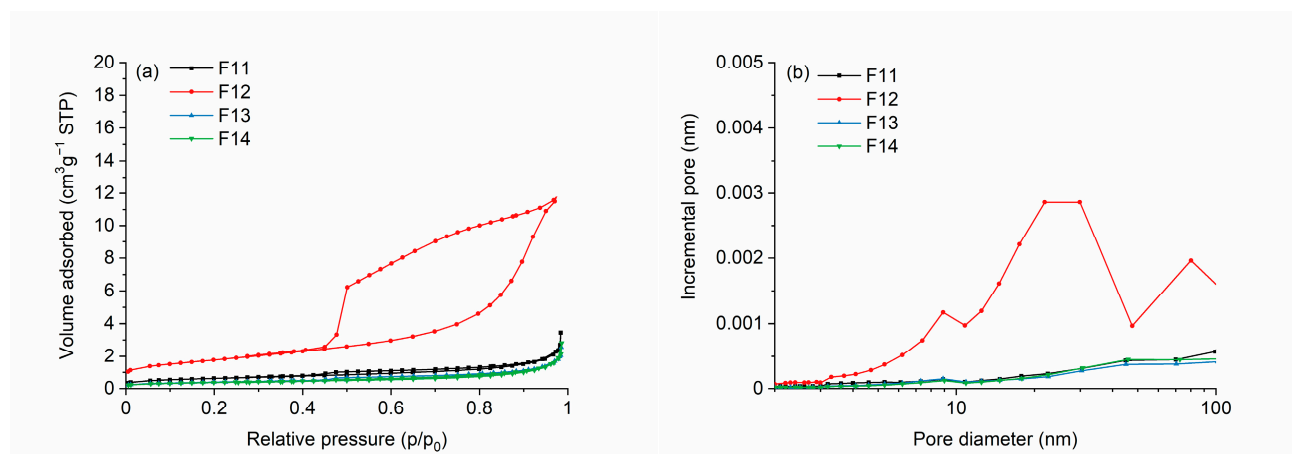


Figure S1. (a) N₂ adsorption-desorption isotherms and (b) pore size distribution of SiOC materials pyrolyzed at different temperatures.

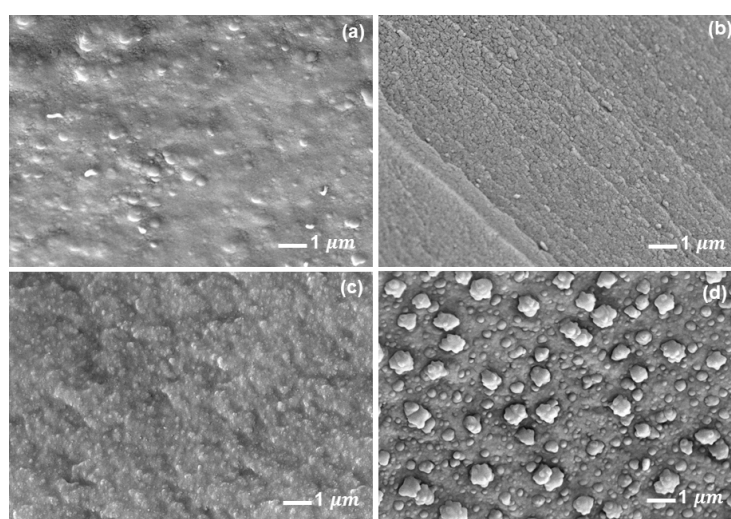


Figure S2. FE-SEM micrographs of SiOC pyrolyzed at different temperatures: (a) 1100 °C, (b) 1200 °C, (c) 1300 °C and (d) 1400 °C.

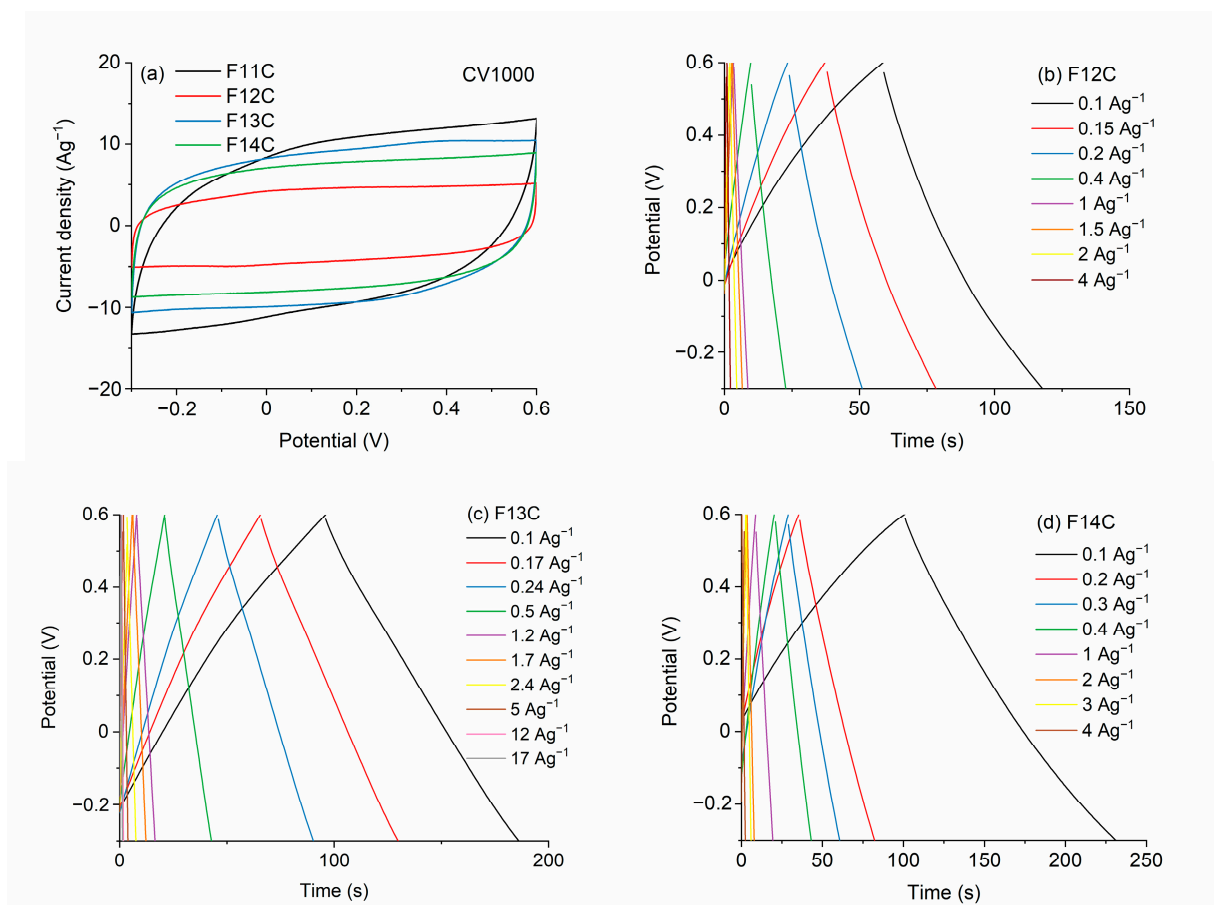


Figure S3. (a) CV curves at scan rate of 1000 mVs⁻¹ of SiOC-DC materials after Cl₂ etching pyrolyzed at different temperatures, GCD curves at different current densities of (b) F12C, (c) F13C and (d) F14C, respectively.

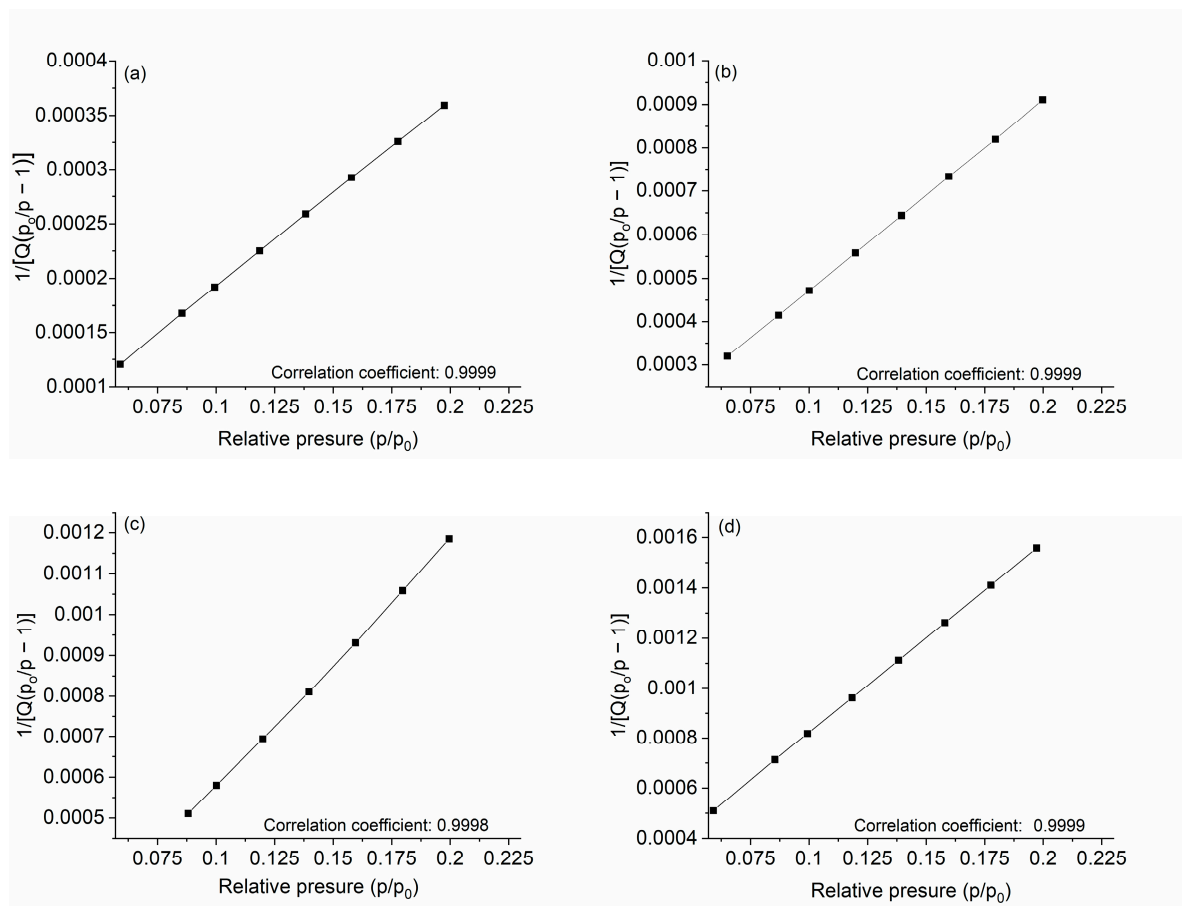


Figure S4. BET plots of SiOC-DC materials after Cl_2 etching pyrolyzed at different temperatures (a) 1100 °C, (b) 1200 °C, (c) 1300 °C and (d) 1400 °C, respectively.