

SUPPLEMENTARY MATERIAL

Influence of Surface Chemistry on the Electrochemical Performance of Biomass-Derived Carbon Electrodes for its Use as Supercapacitors

Abdelhakim Elmouwahidi ¹, Esther Bailón-García ¹, Luis A. Romero-Cano ², Ana I. Zárate-Guzmán ³, Agustín F. Pérez-Cadenas ^{1,*} and Francisco Carrasco-Marín ¹

¹ Research Group in Carbon Materials, Inorganic Chemistry Department, Faculty of Sciences, University of Granada, Campus Fuente Nueva s/n. 18071 Granada, Spain

² Facultad de Ciencias Químicas, Universidad Autónoma de Guadalajara, Av. Patria 1201, Zapopan, Jalisco C. P. 45129, México

³ Centro de Investigación y Desarrollo Tecnológico en Electroquímica (CIDETEQ) S.C., Parque Tecnológico Sanfandila, Pedro Escobedo, Querétaro 760703, México

* Correspondence: afperez@ugr.es; Tel.: +34 958243316

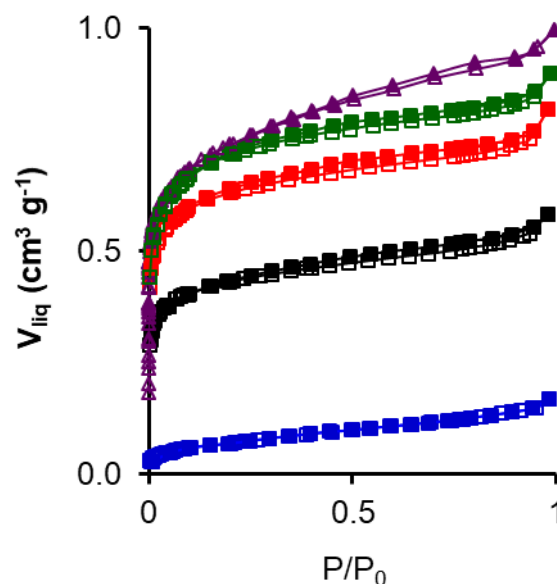


Figure S1. N₂ adsorption (open symbols) and desorption (close symbols) isotherms at 77K of CK-series samples. Sample CK is in purple. Treatments: melamine (red), ammonium carbamate (green), nitric acid (blue) and ammonium persulfate (black).

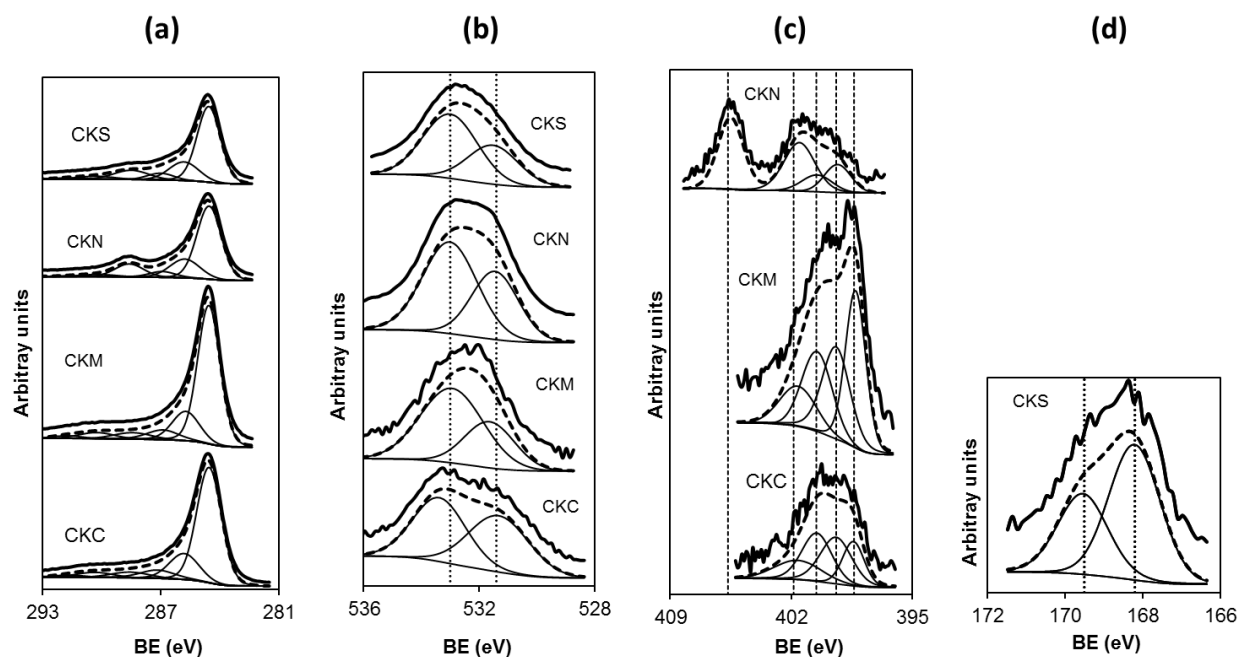


Figure S2. High resolution XPS deconvoluted spectra in the corresponding regions: (a) C_{1s} , (b) O_{1s} , (c) N_{1s} and (d) $S_{2p_{3/2}}$ for the activated carbons prepared from Custard apple tree wood (CK-Serie).

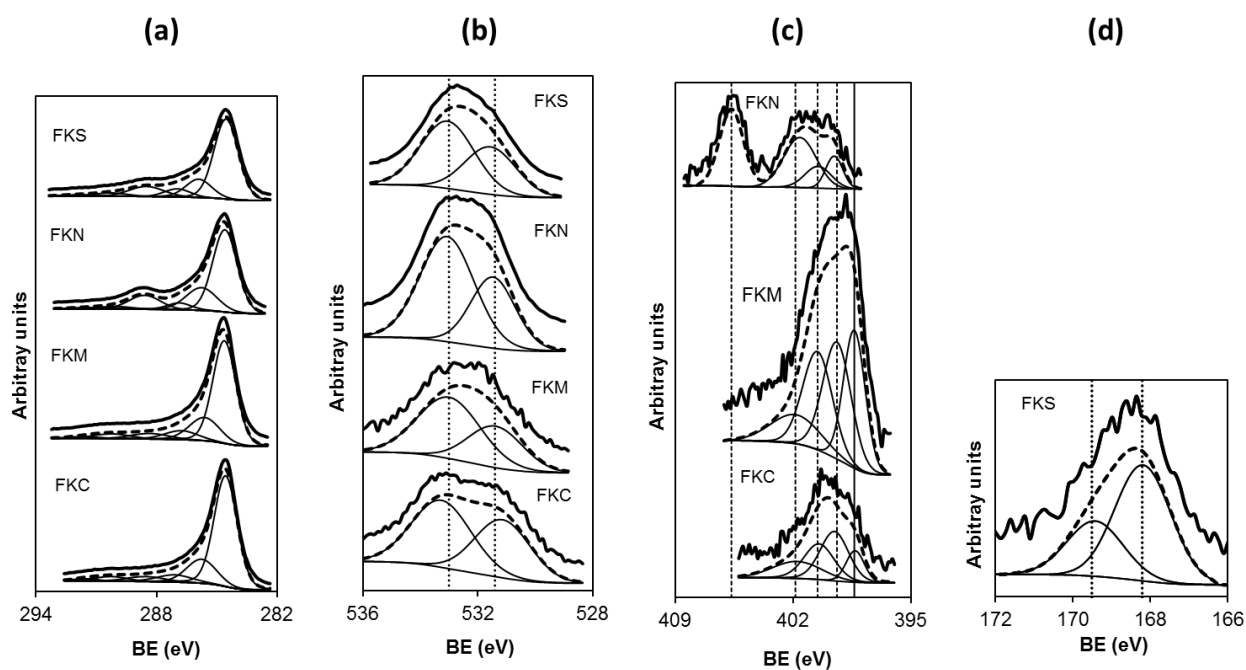


Figure S3. High resolution XPS deconvoluted spectra in the corresponding regions: (a) C_{1s} , (b) O_{1s} , (c) N_{1s} and (d) $S_{2p_{3/2}}$ for the activated carbons prepared from Fig tree wood (FK-Serie).

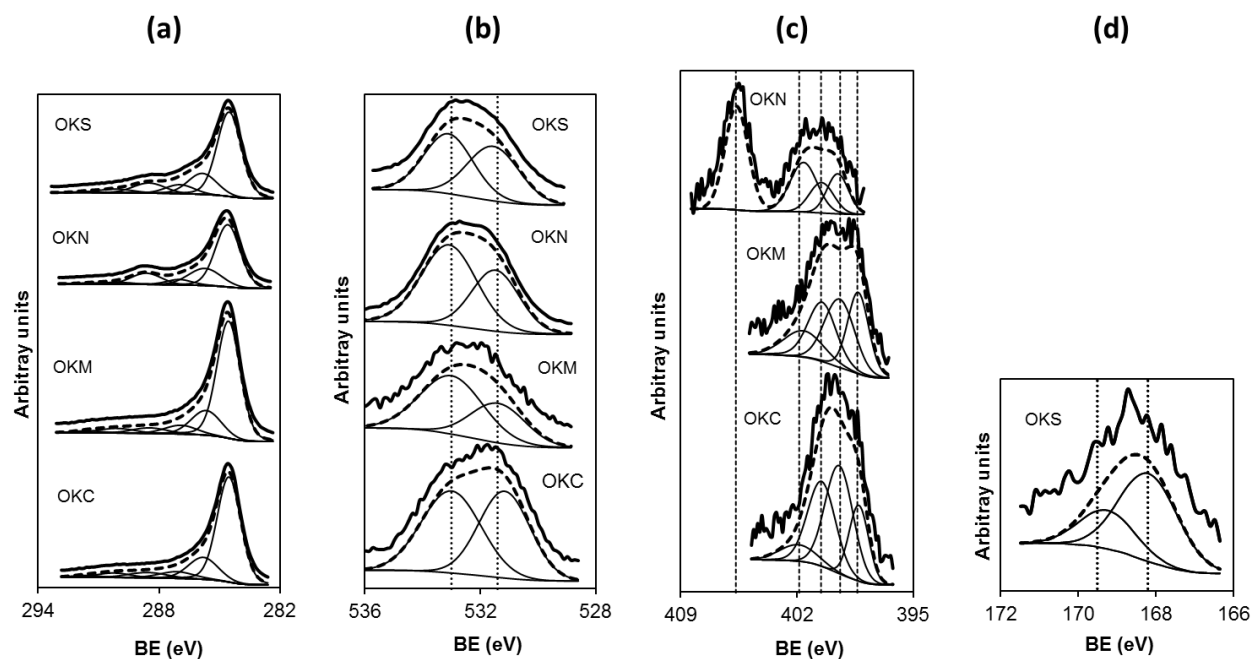


Figure S4. High resolution XPS deconvoluted spectra in the corresponding regions: (a) C_{1s}, (b) O_{1s}, (c) N_{1s} and (d) S_{2p_{3/2}} for the activated carbons prepared from Olive tree wood (OK-Serie).