

Supporting information

Structural transition in the growth of copper terephthalate metal–organic frameworks: understanding the effect of the synthetic protocol and its impact on electrochemical behavior

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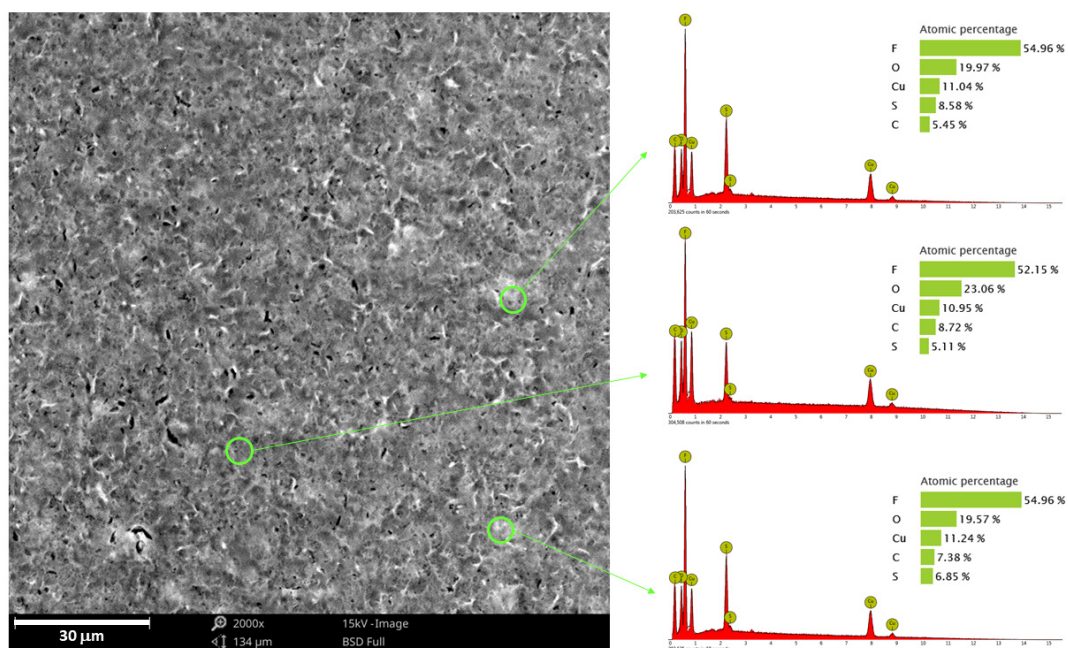


Figure S1. Large-scale SEM photograph of a GC-supported MWA-M/Nafion® film and EDS spectra recorded on different points of the film with the corresponding results of the semi-quantitative elemental analysis.

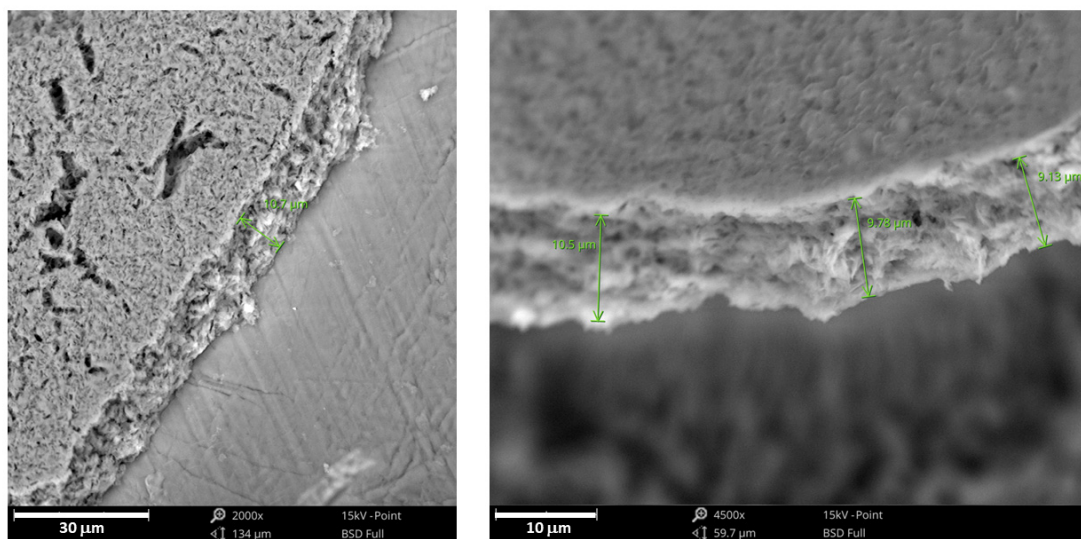


Figure S2. SEM photographs of MWA-M/Nafion® film thicknesses.

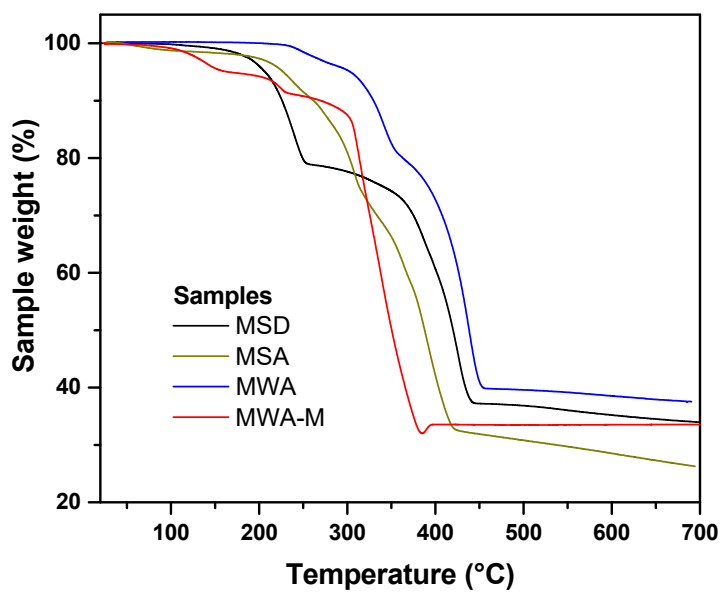


Figure S3. TGA curves of the synthesized Cu-BDCs: MSD, MSA, MWA and MWA-M.

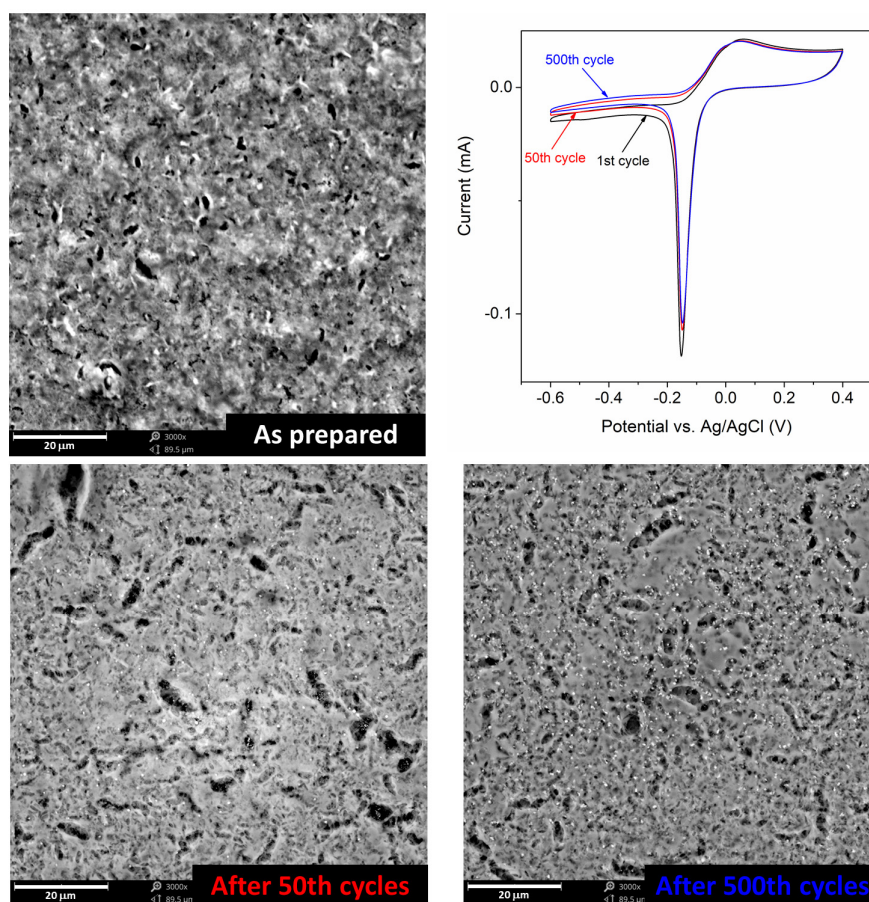


Figure S4. Obtained CVs and corresponding SEM photographs of a GC-supported MWA-M/Nafion[®] film before and after prolonged potential cycling, in 0.2 M phosphate buffer solution (pH = 7) saturated with N₂ (Scan rate: 0.1 V s⁻¹).

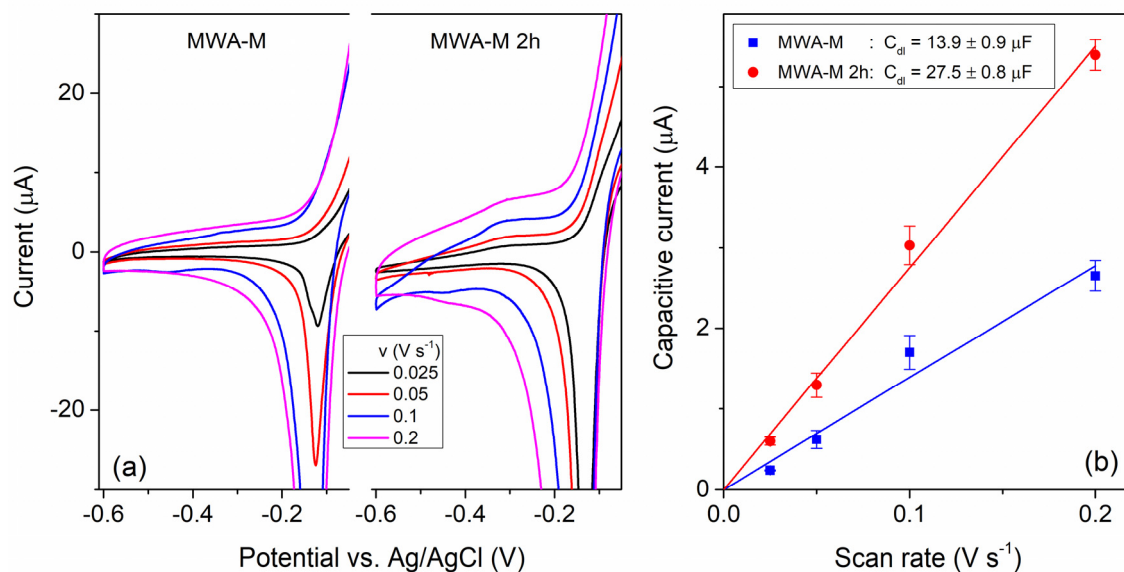


Figure S5. (a) CVs measured at different scan rates on MWA-M and on MWA-M sonicated for 2 h supported on GC RDEs in 0.2 M phosphate buffer solution (pH = 7) saturated with N_2 . (b) Capacitive currents measured from the CVs at -0.35 V vs. Ag/AgCl as a function of the scan rate. Lines are linear fittings whose slopes are the double layer capacitances (C_{dl}) indicated within the graph.

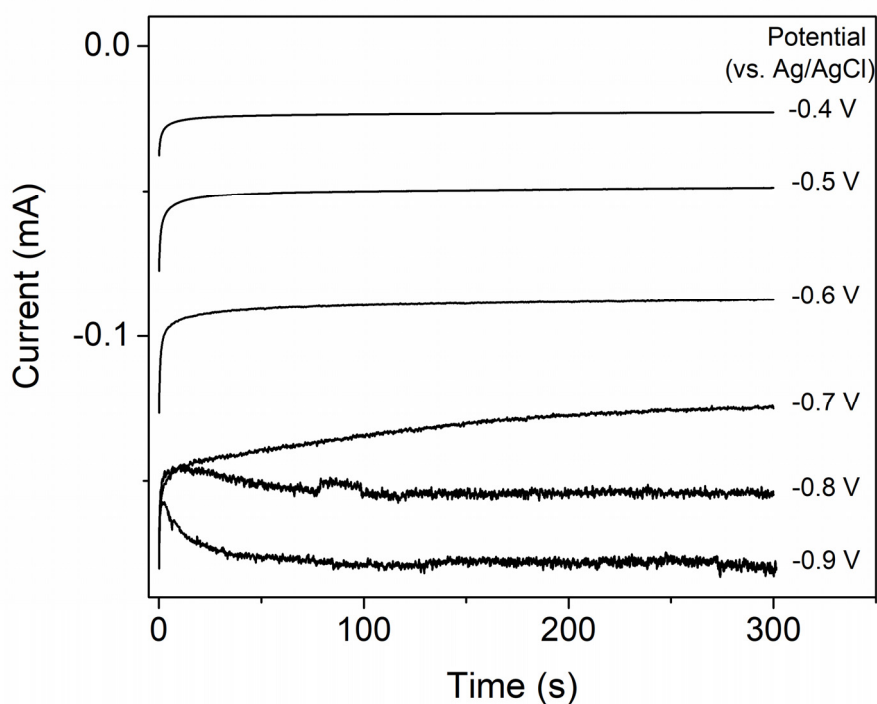


Figure S6. Amperometric current-time curves measured at different potentials on a GC-supported MWA-M/Nafion[®] film, in 0.2 M phosphate buffer solution (pH = 7) saturated with O_2 (rotation rate: 1600 rpm).