

Supplementary Information

Lithium-ion electrosorption on lithium manganese oxide soft and bare electrodes

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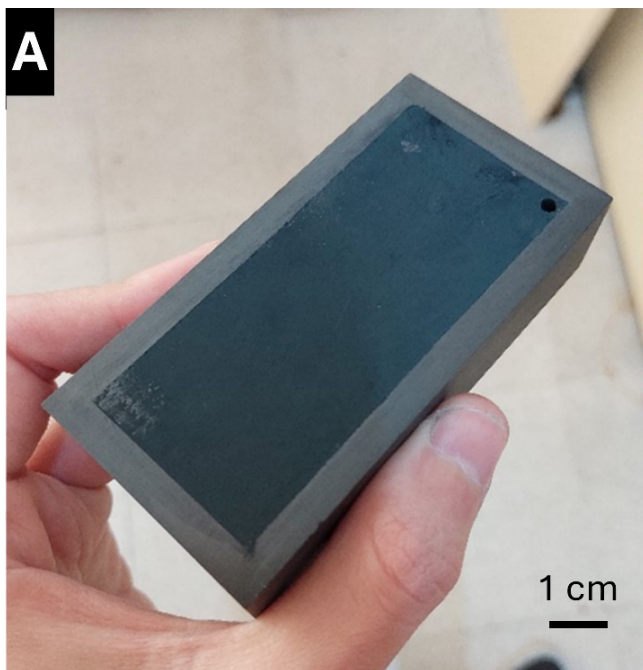


Figure S1. (A) LMO electrode deposited on the current collector before oxidation. (B) LMO electrode after the oxidation process, with a noticeable reddish color on the surface in contact with the solution.

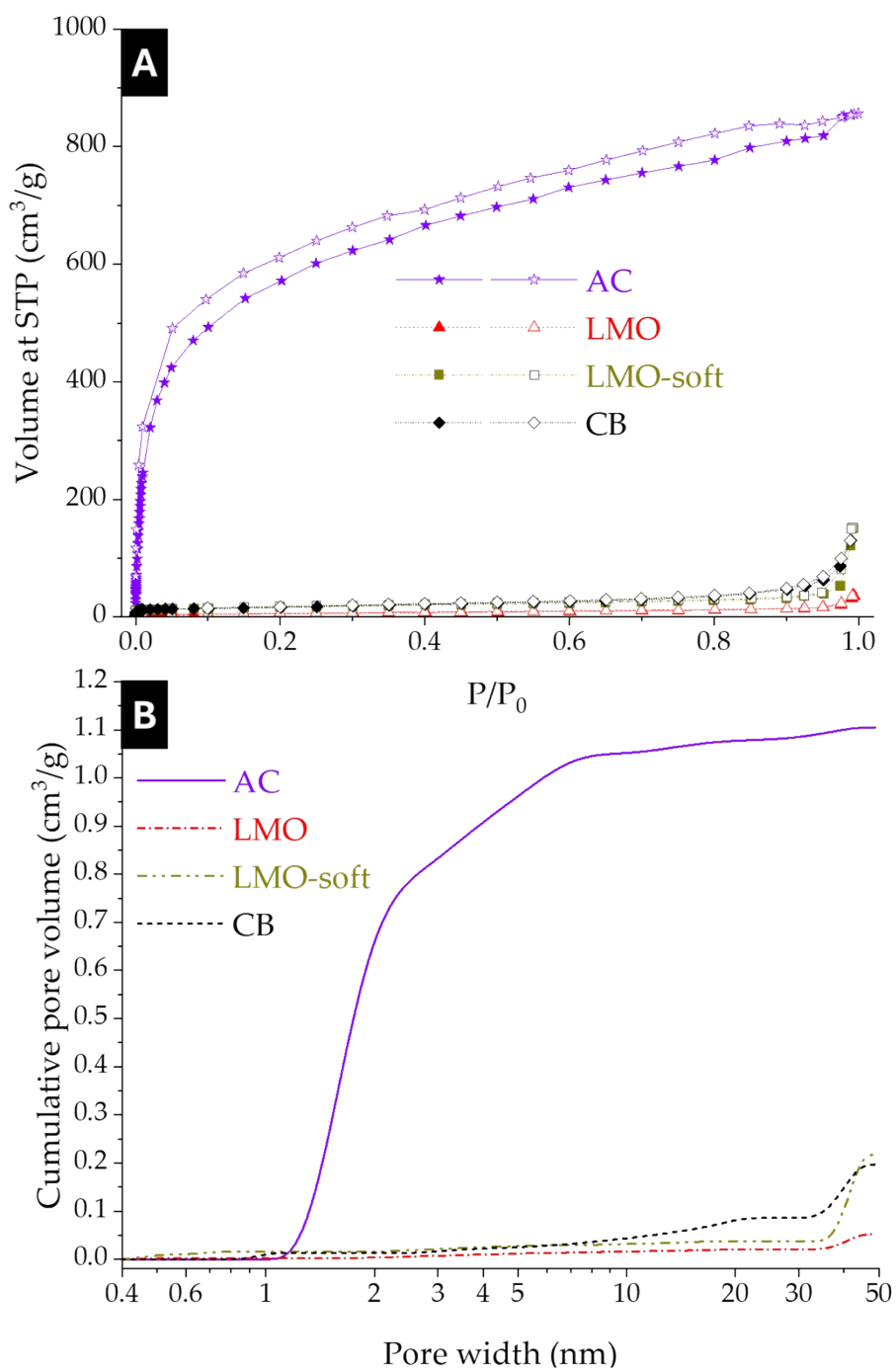


Figure S2. Nitrogen adsorption-desorption data recorded at -196°C of electrode components. (A) Adsorption isotherms expressed as volume at STP versus relative pressure. (B) Cumulative pore volume curves as a function of pore width, measured for AC, LMO, LMO-soft CB.

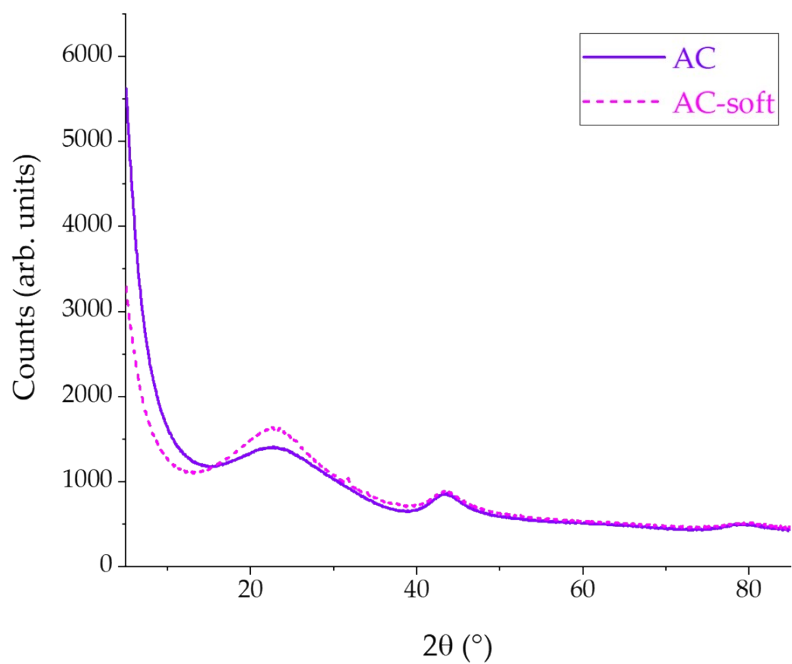


Figure S3: X-ray diffractograms of AC and AC-soft.

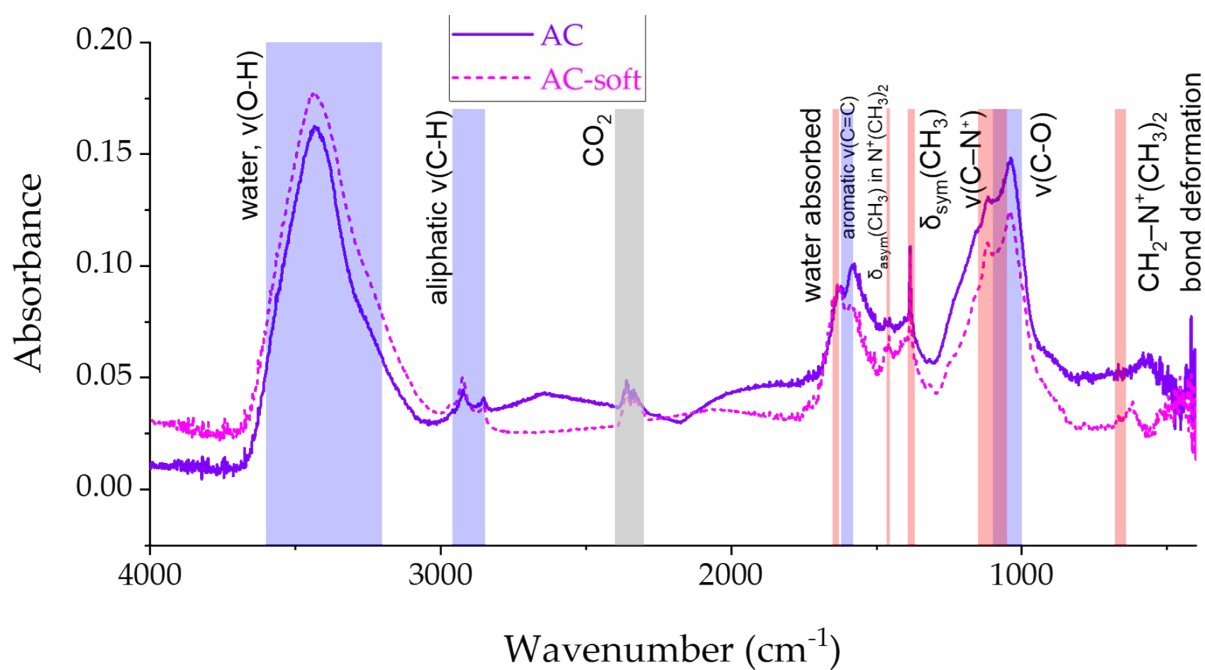


Figure S4: FTIR spectra of AC and AC-soft. Grey bands correspond to environmental contaminants (H_2O , CO_2), red bands to the PDADMAC coating, and blue bands to AC vibrations.

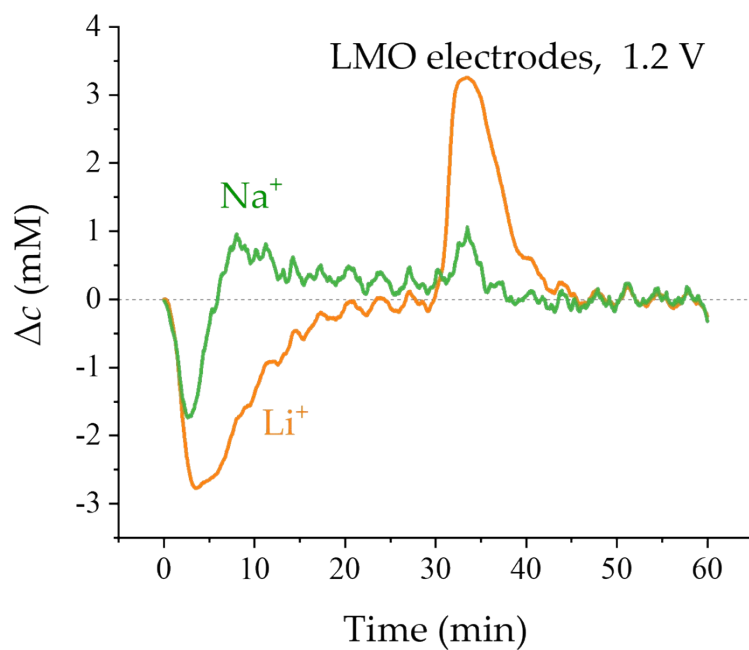


Figure S5. Differences between the outlet and inlet concentrations when desalting 5 mM LiCl + 5 mM NaCl for LMO electrodes. The cell voltage is 1.2 V.