



SUPPORTING INFORMATION

Electrode–Electrolyte Interactions in an Aqueous Aluminum–Carbon Rechargeable Battery System

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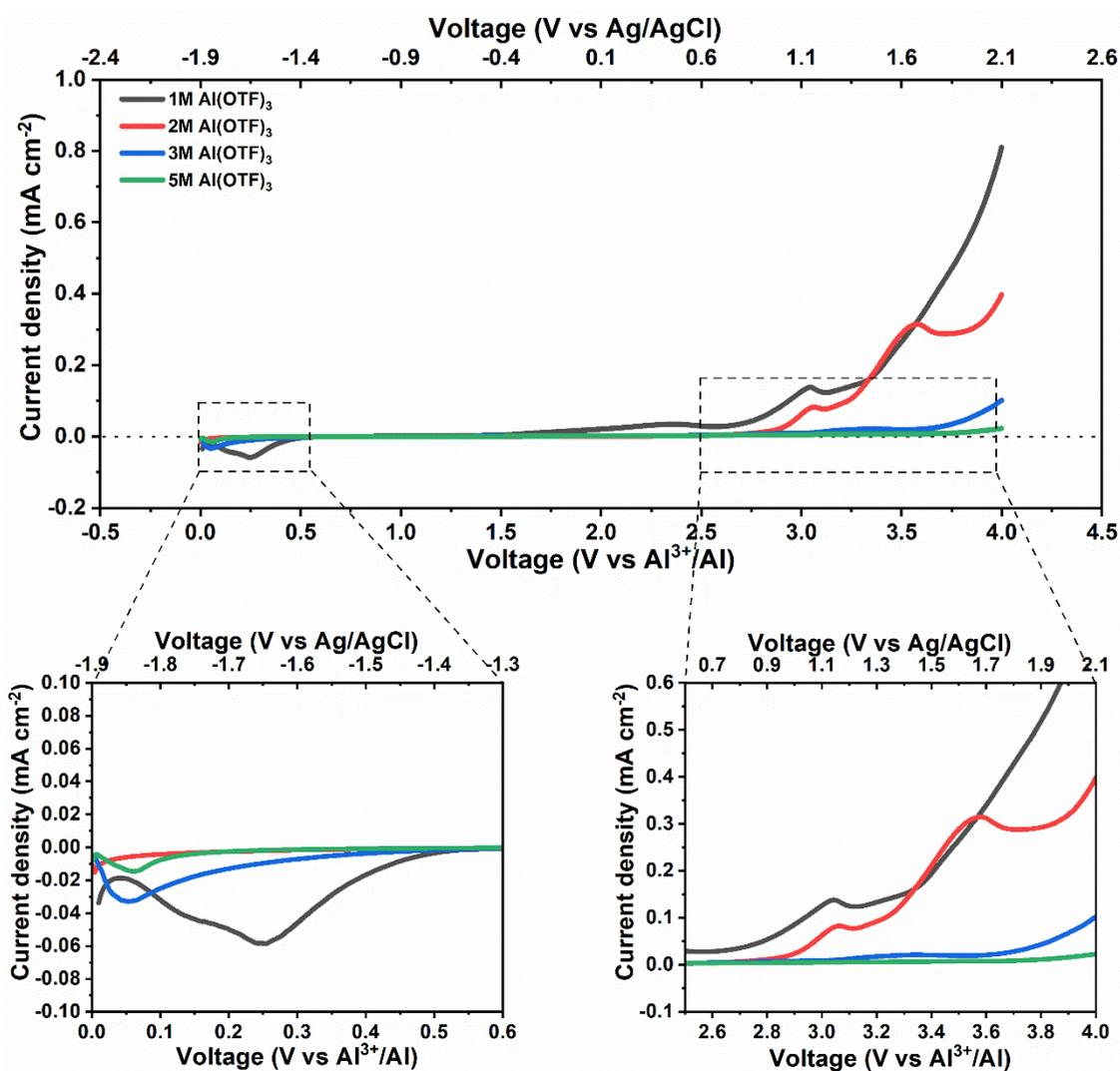


Figure S1. Electrochemical voltage window of stability for the $\text{Al}(\text{OTF})_3$ electrolyte at different concentrations (1M to 5M).

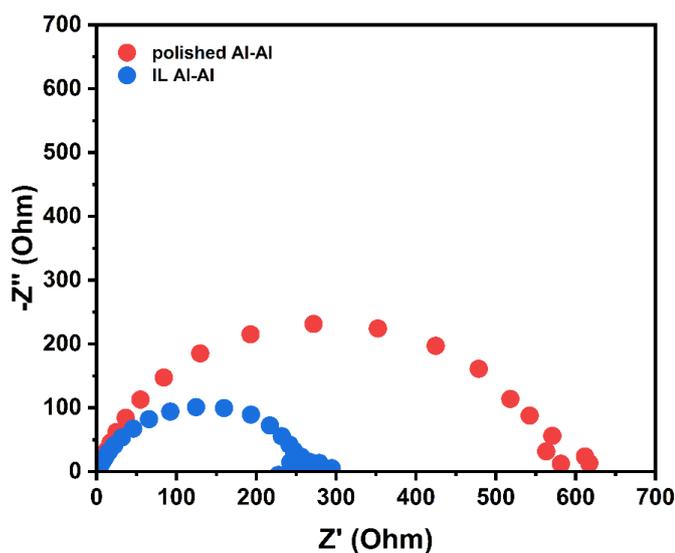


Figure S2. EIS of the Al anode with different pretreatment methods (all taken before cycling, i.e. 0 h).

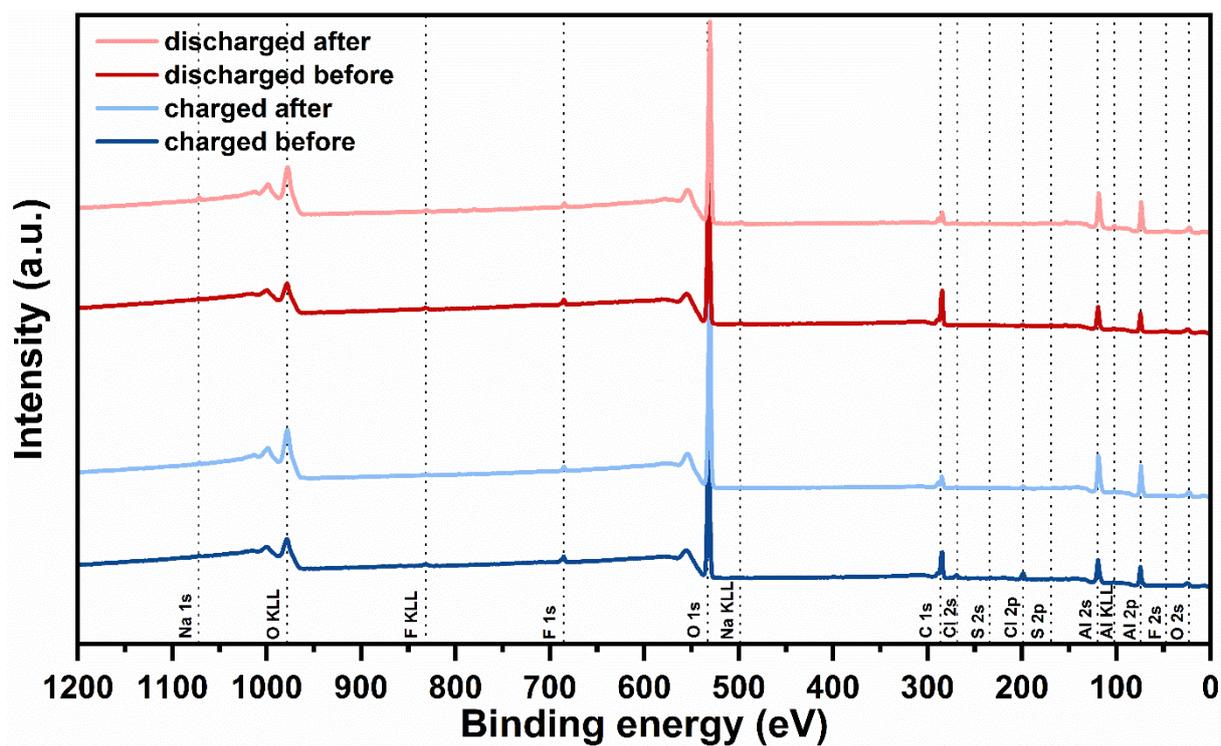


Figure S3. Survey XPS spectra of the charged and discharged Al anode's surface before and after etching. The dashed lines are guides for the eyes.

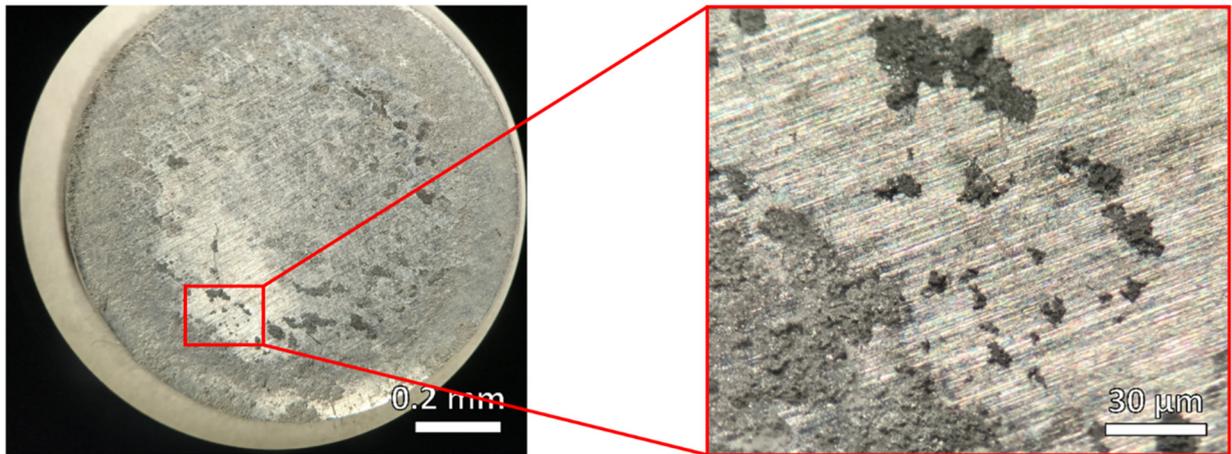


Figure S4. Optical microscopy images of the aluminum anode surface after electrochemical cycling.

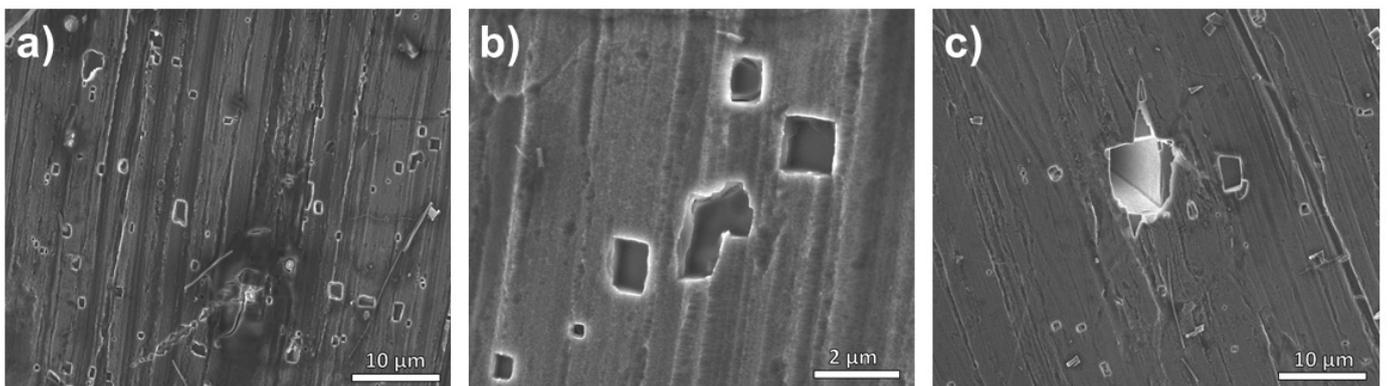


Figure S5. (a–c) SEM images of the aluminum anode surface after electrochemical cycling.