

Supporting Information

A novel dual-ion capacitive deionization system design with ultrahigh desalination performance

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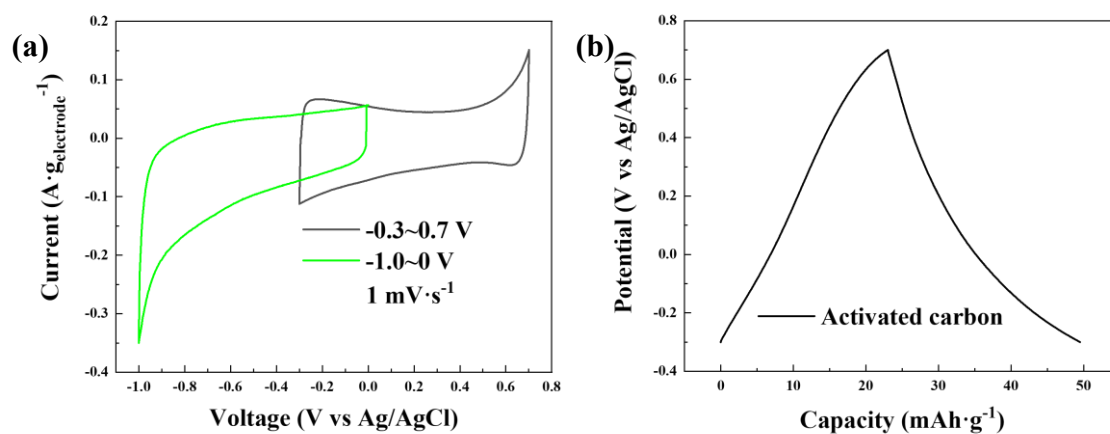


Figure S1. (a) Cyclic voltammetry profiles of activated carbon with different scan ranges and (b) the galvanostatic charge-discharge (GCD) curve of activated carbon (-0.3~0.7 V versus Ag/AgCl) with a current density of $0.1 \text{ A} \cdot \text{g}^{-1}$ in 1.0 M NaCl solution.

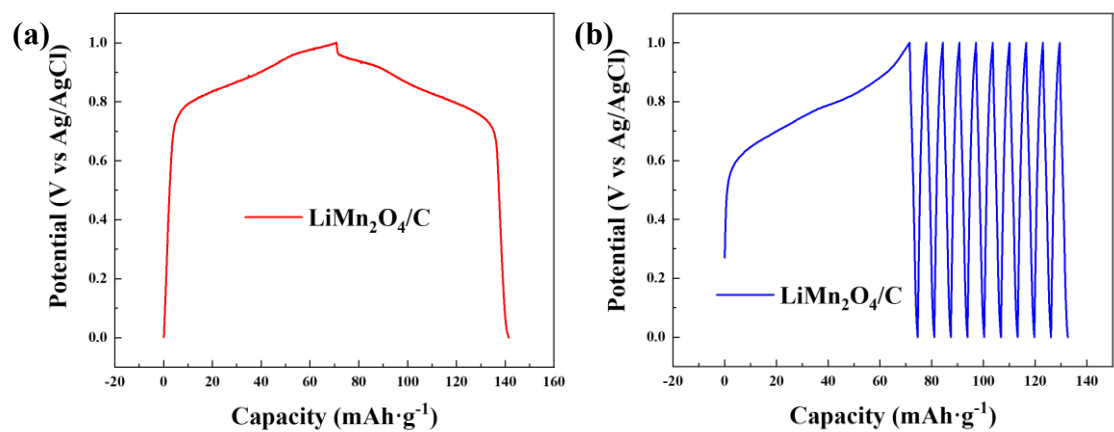


Figure S2. GCD curves of $\text{LiMn}_2\text{O}_4/\text{C}$ ($0.1 \text{ A} \cdot \text{g}^{-1}$) in (a) 1.0 M LiCl solution and (b) 1.0 M NaCl solution.

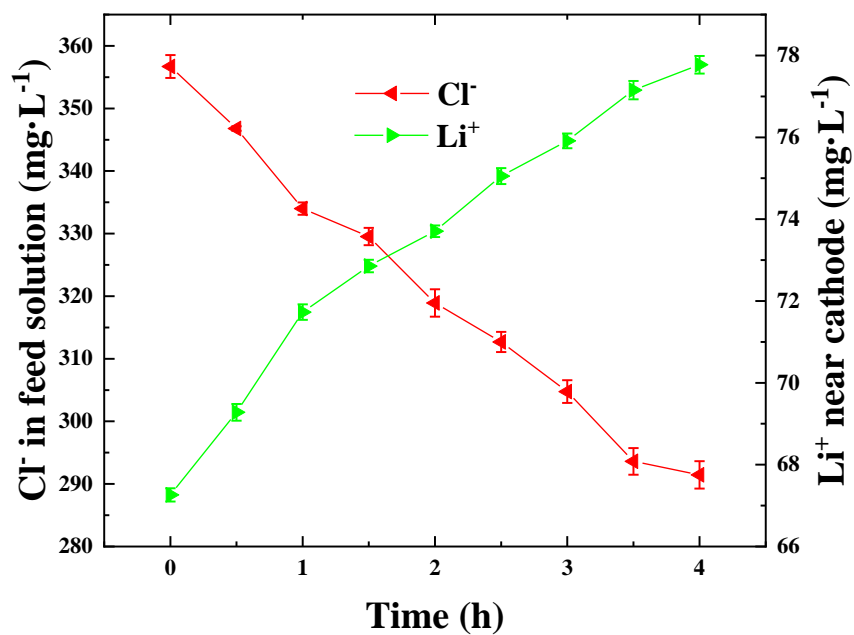


Figure S3. The concentration variations of lithium ions near the cathode and chloride ions in the feed solution during CDI desalination at 1.8 V with the initial salt concentration of 10 mM.