Supplementary Material

for

Effective removal and selective capture of copper from salty solution in flow electrode capacitive deionization

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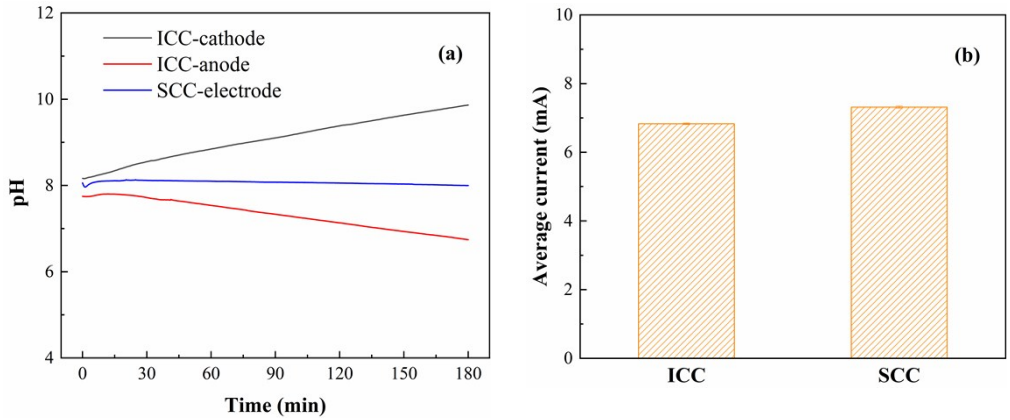

Figure S1. (a) pH fluctuation of flow electrode and (b) Current of FCDI device in ICC and SCC mode (2.4 V, initial pH of 8.0).

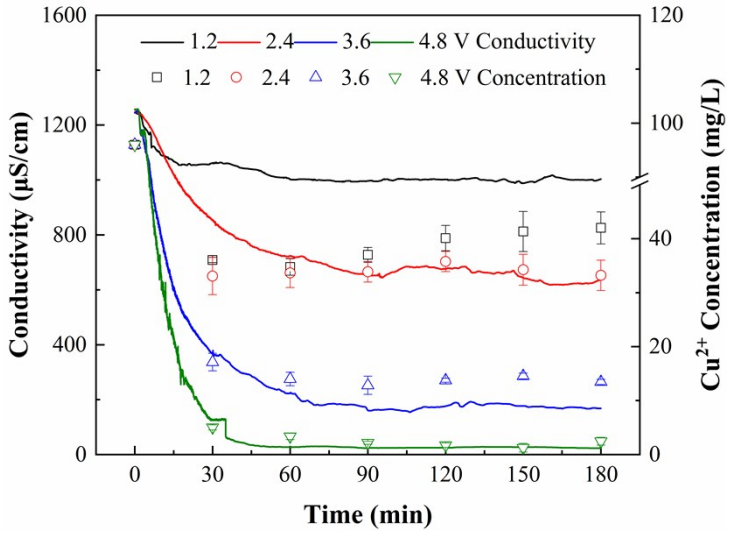

Figure S2. Conductivity and Cu^{2+} concentrations of the effluent at applied voltage of 1.2, 2.4, 3.6 and 4.8 V (SCC mode, initial pH of 8.0).

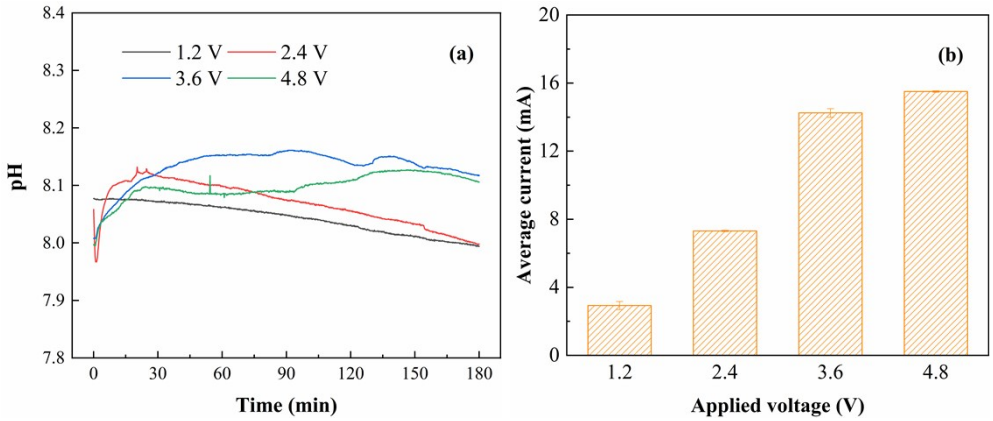

Figure S3. (a) pH fluctuation of flow electrode and (b) Current of FCDI device at applied voltage of 1.2 V, 2.4, 3.6 and 4.8 V (SCC mode, initial pH of 8.0).

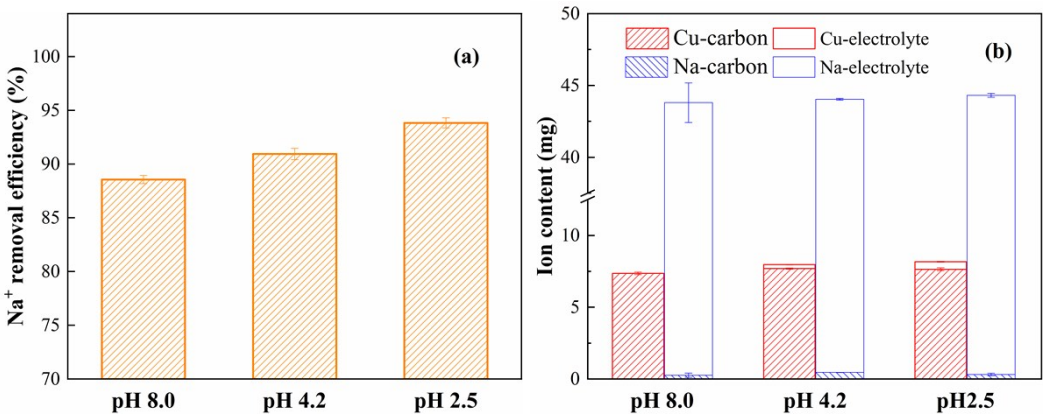

Figure S4. (a) Na^+ removal efficiency of the influent and (b) ion content of Cu, Na in the carbon particles and in the electrolyte with initial pH of 2.5, 4.2, 8.0 (SCC mode, 3.6 V).

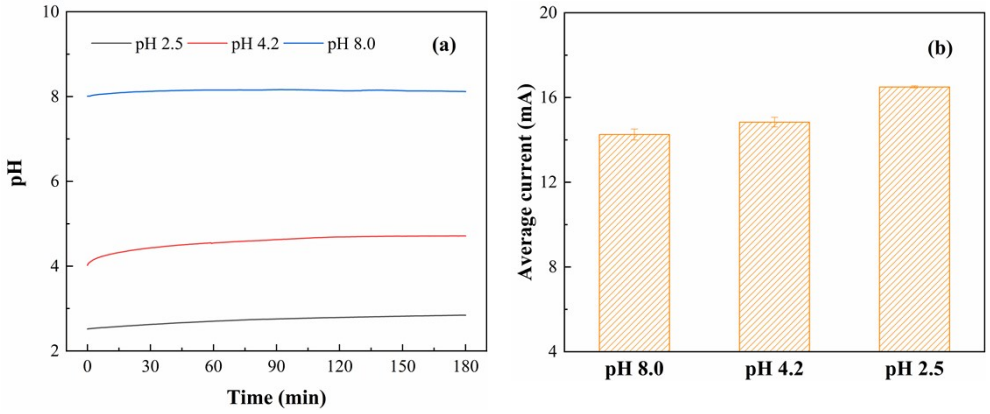

Figure S5. (a) pH fluctuation of flow electrode and (b) Current of FCDI device with initial pH of 2.5, 4.2, 8.0 (SCC mode, 3.6 V).

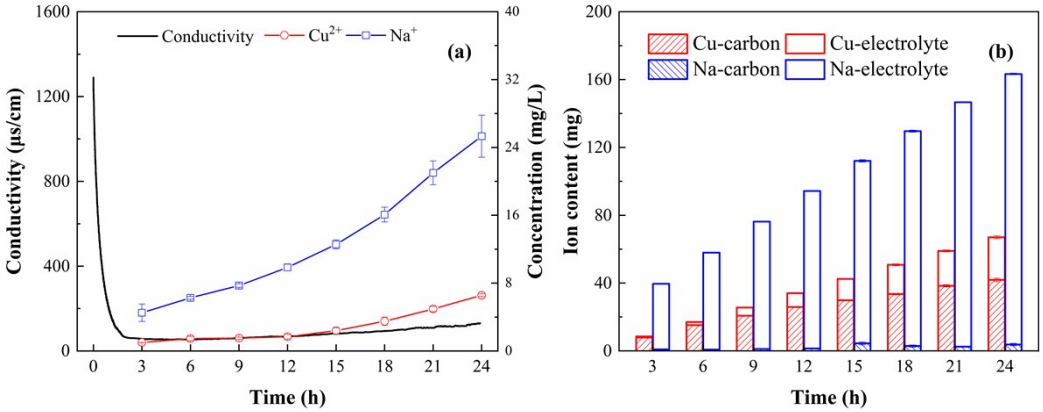

Figure S6. Time-course variation in (a) conductivity, Cu^{2+} and Na^{+} concentrations of the effluent and (b) content of Cu, Na in the activated carbon and in the electrolyte (SCC mode, 3.6 V, initial pH of 2.5).

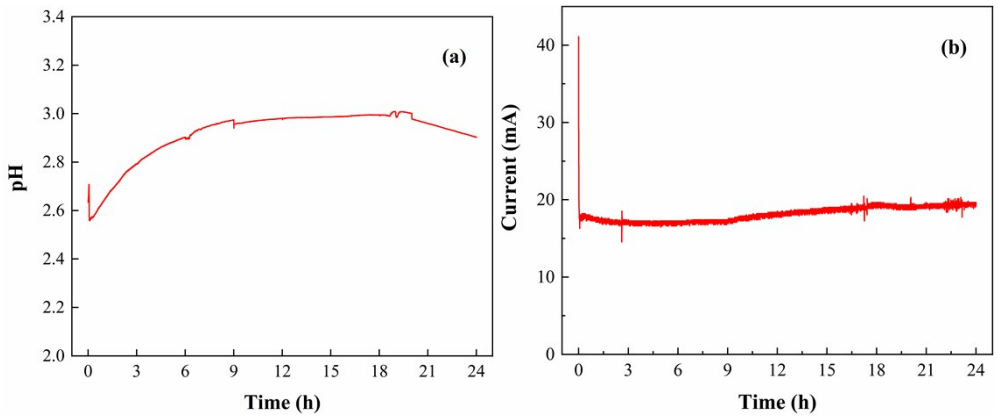

Figure S7. Time-course variation in (a) pH fluctuation of flow electrode and (b) Current of FCDI device (SCC mode, 3.6 V, initial pH of 2.5).