Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supplementary Materials for

Vacancy Engineering of Solution Processes CuI Semiconductor: Tuning the Electrical Properties of Inorganic P-Channel Thin Film Transistors

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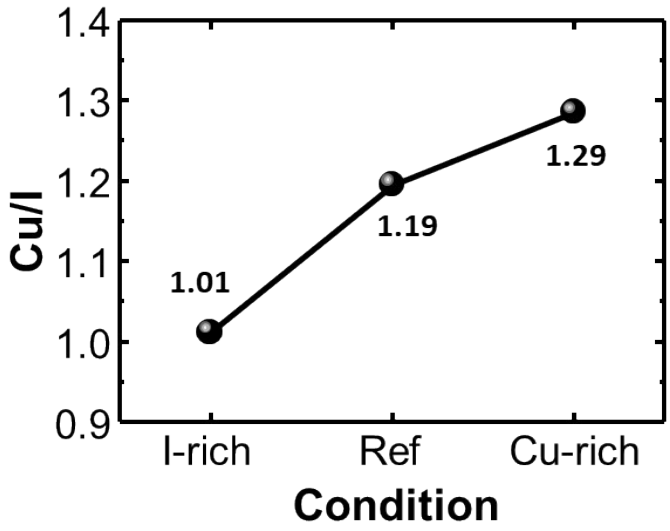

Figure S1. Changes of compositional Cu/I ratio for CuI samples. The ratio was calculated from the XPS Cu and I core level peaks.

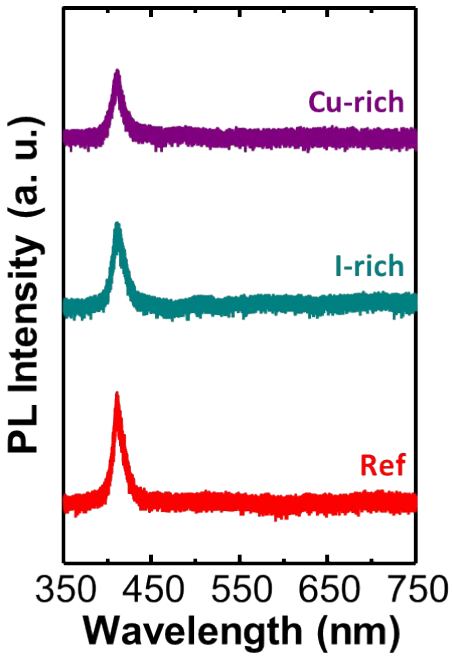

Figure S2. Full range PL spectra of CuI samples.

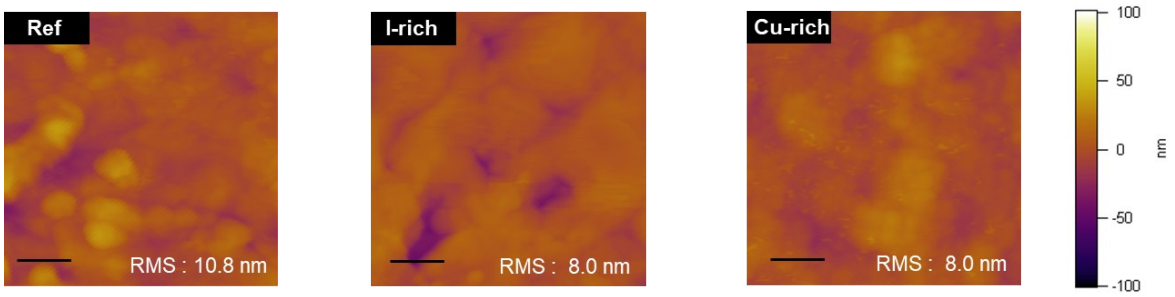

Figure S3. AFM height images of CuI samples. The scan area is 1 μm × 1μm. Scale bar: 200 nm.

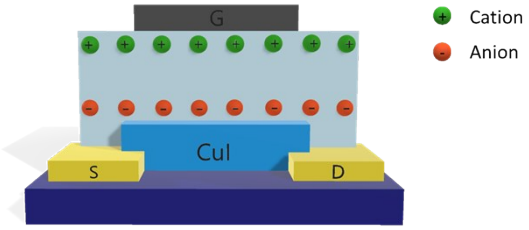

Figure S4. Device structure of electrolyte gated transistors. Aligned cations and anions suggest the formation of high capacitance electric double layer.

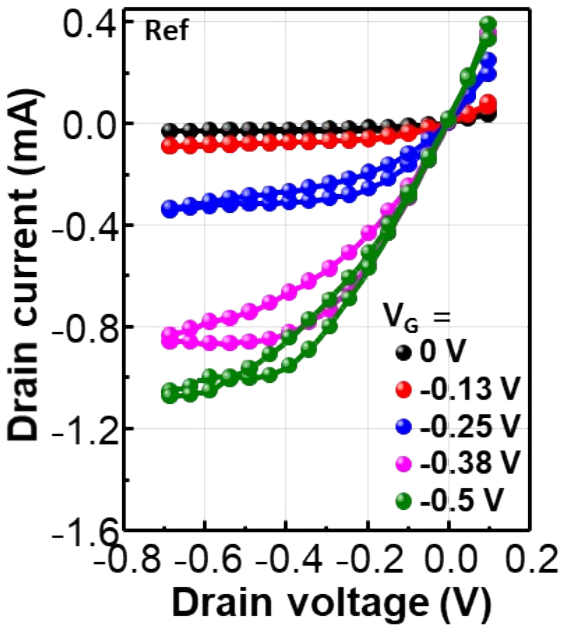

Figure S5. I_D-V_D curves for CuI-TFTs (Ref-CuI).

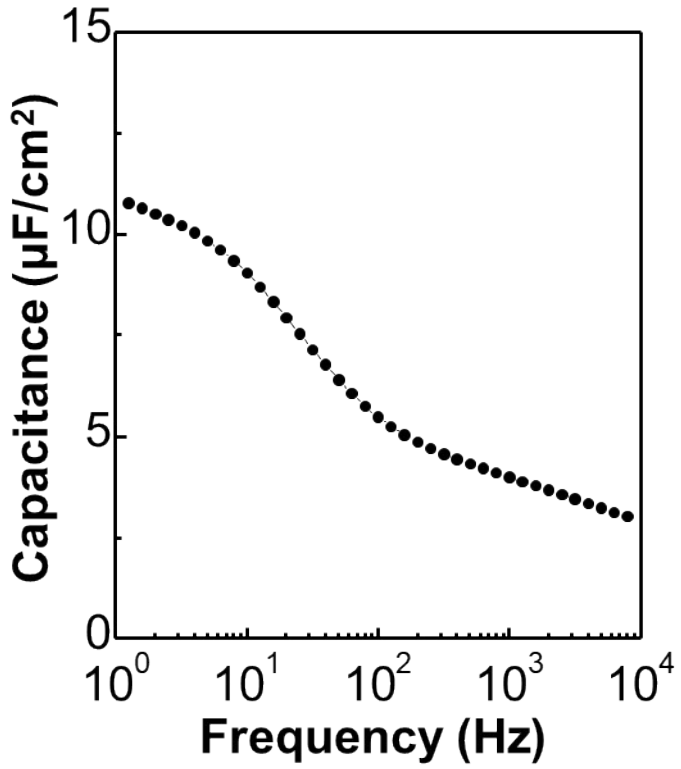

Figure S6, Frequency-capacitance plot of Au/electrolyte/Au.

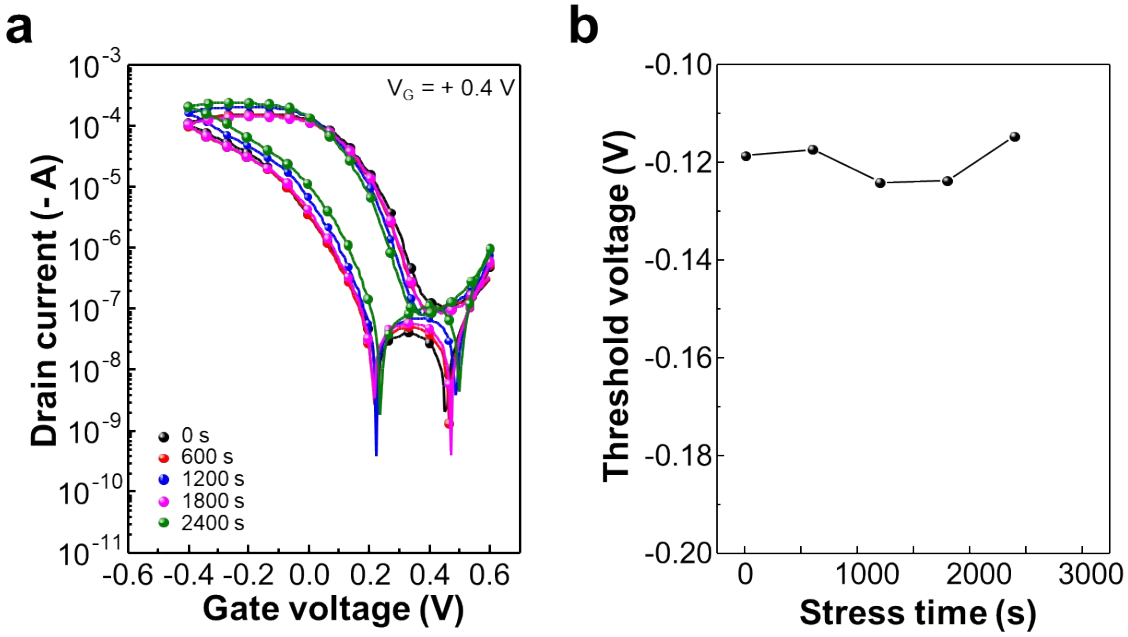

Figure S7. (a) Transfer curves for positive bias stress measurement (Ref-TFTs). (b) Changes of V_{th} during the PBS test.