

Supporting Information

A native frustrated Lewis pairs on core-shell $\text{In@InO}_x\text{H}_y$ enhances CO_2 -to-formate conversion

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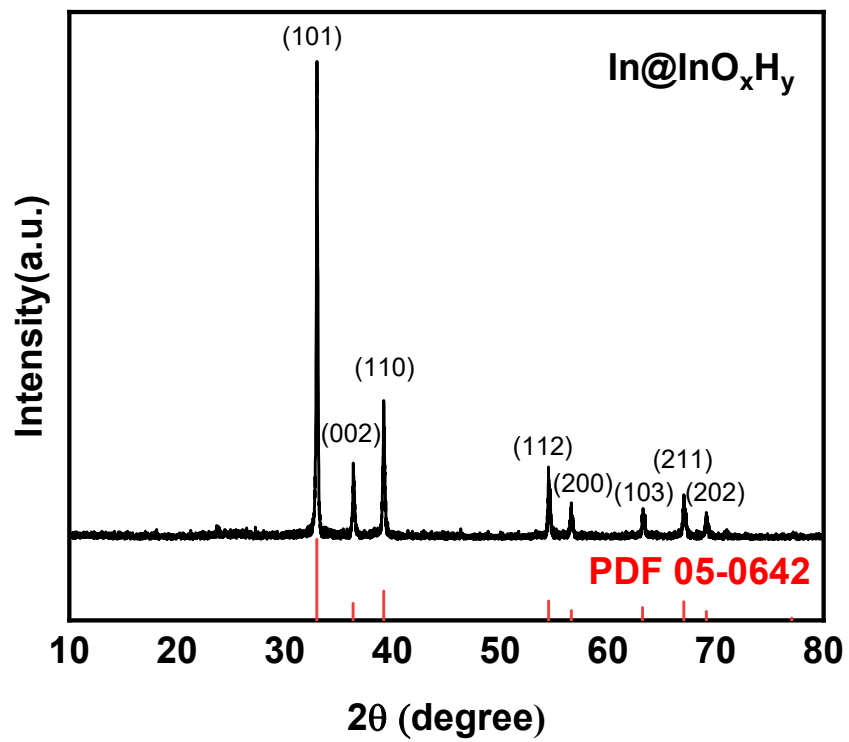


Figure S1. XRD pattern for of $\text{In@InO}_x\text{H}_y$.

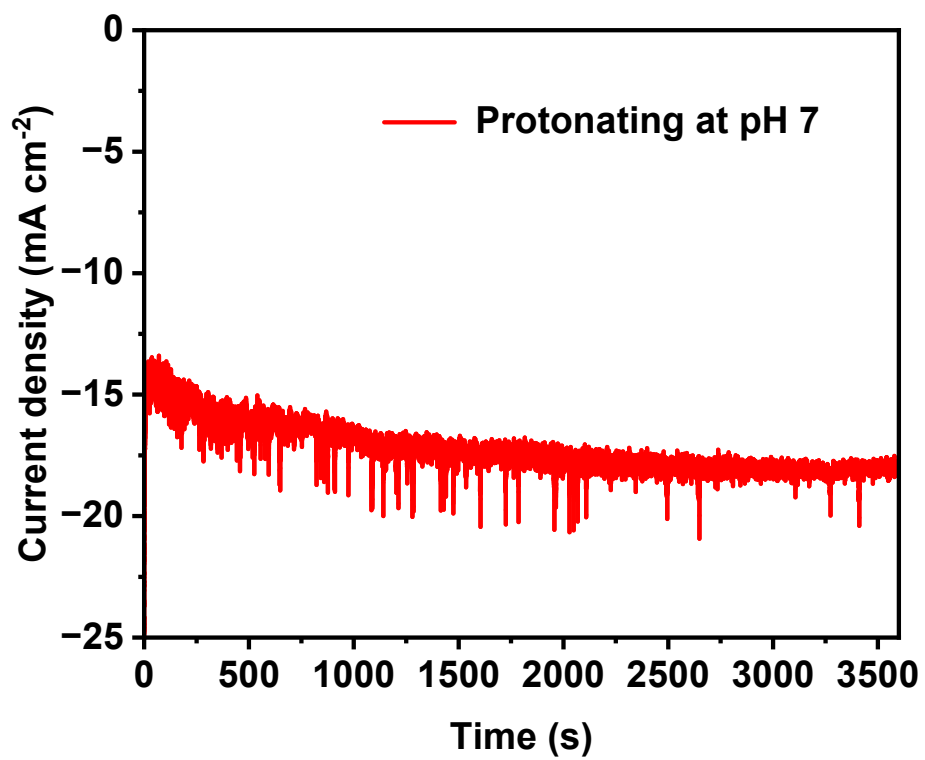


Figure S2. Activation curve of In@InO_xH_y electrode in CO₂-saturated 0.5 M KHCO₃ electrolyte.

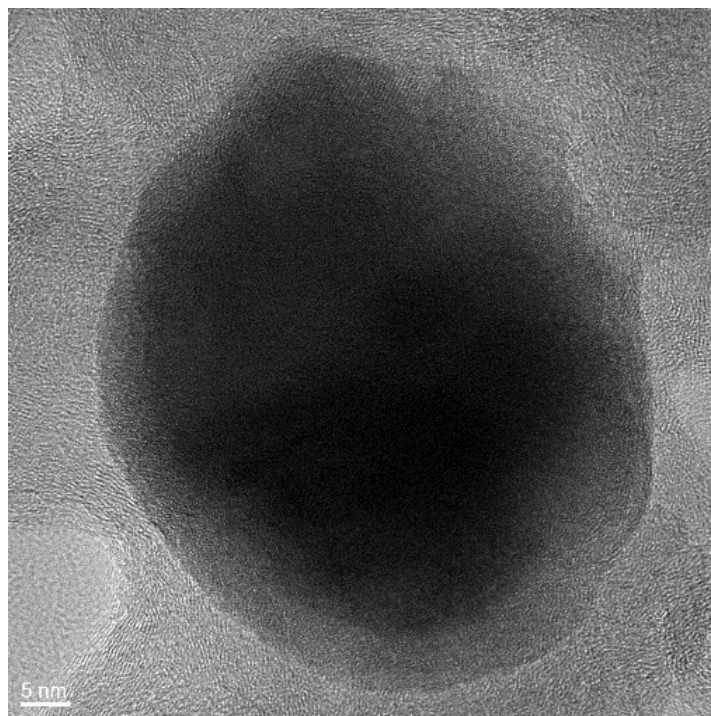


Figure S3. HRTEM images of In@InO_xH_y after CO₂RR.

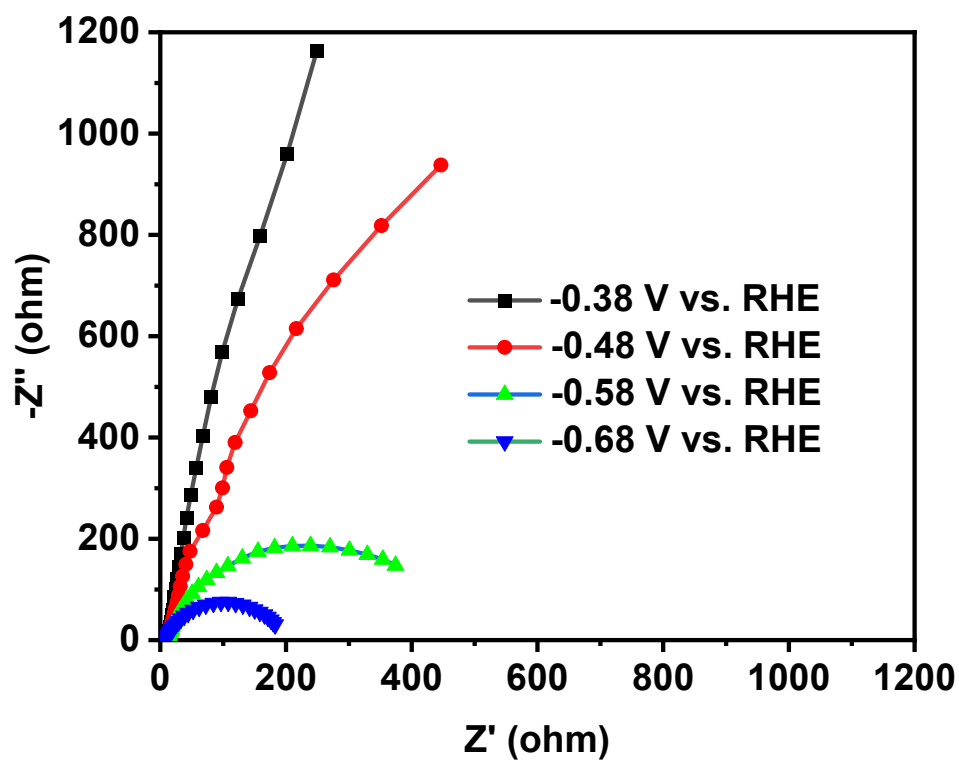


Figure S4. Potential-dependent EIS spectra of the In@InO_xH_y electrode when potentials varied from -0.38 V to -0.68 V vs. RHE in CO₂-saturated 0.5 M KHCO₃ electrolyte.

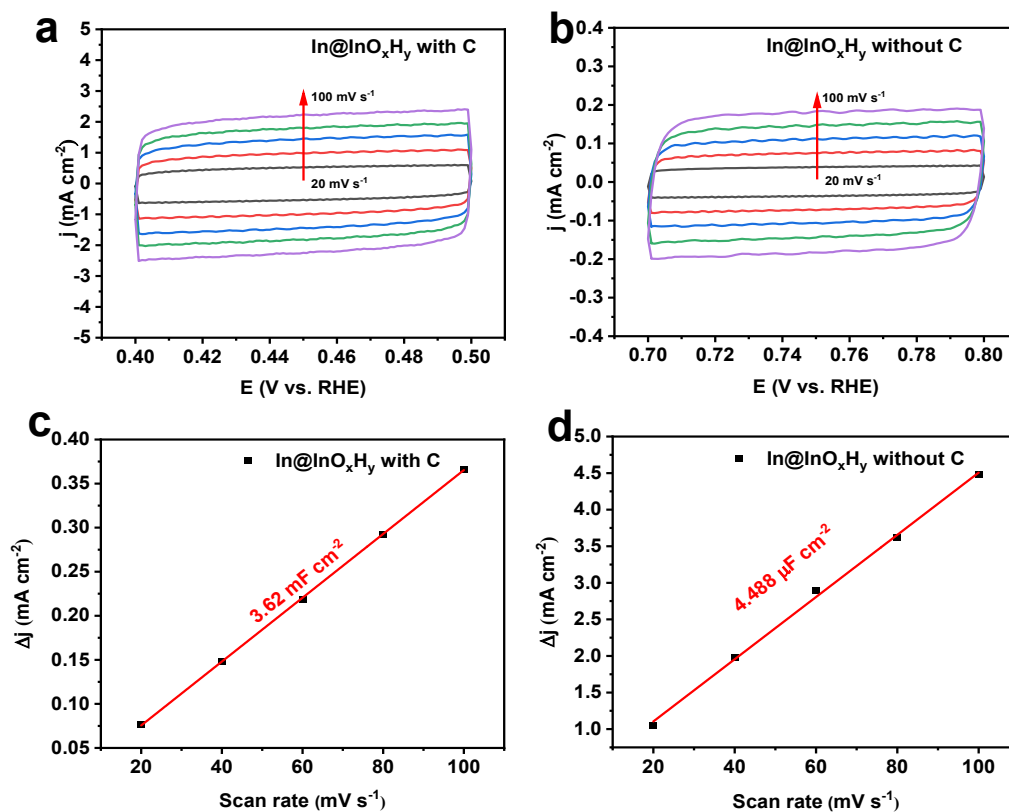


Figure S5. (a) Cyclic voltammetry scanning curve of $\text{In@InO}_x\text{H}_y$ electrode with C and (b) $\text{In@InO}_x\text{H}_y$ electrode without C, the scanning speed range is 20~100 mV s^{-1} (c) The functional relationship between the charging current density difference and the scanning speed of $\text{In@InO}_x\text{H}_y$ electrode with C and (d) $\text{In@InO}_x\text{H}_y$ electrode without C, the slope is the capacitance value of the electric double layer.

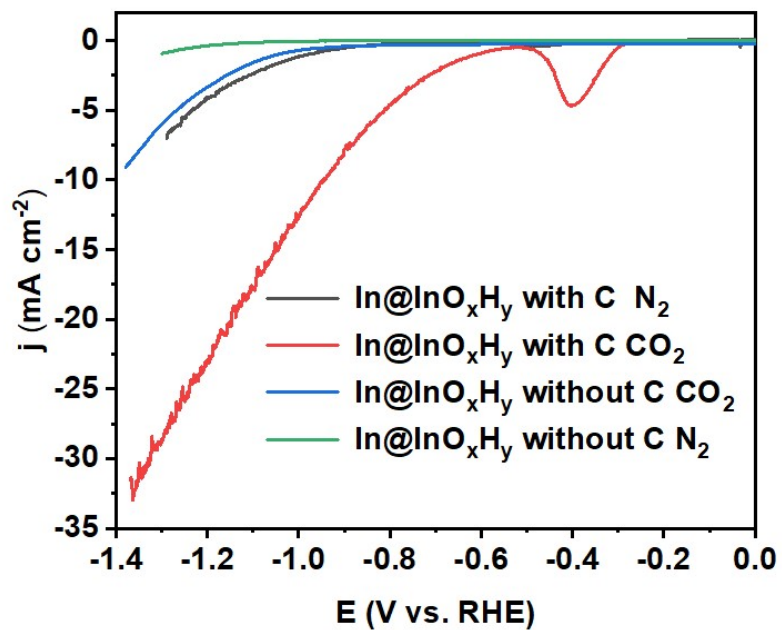


Figure S6. LSV curves of In@InO_xH_y with and without C in N₂- or CO₂-saturated 0.5 M KHCO₃ at the rate of 10 mV s⁻¹.

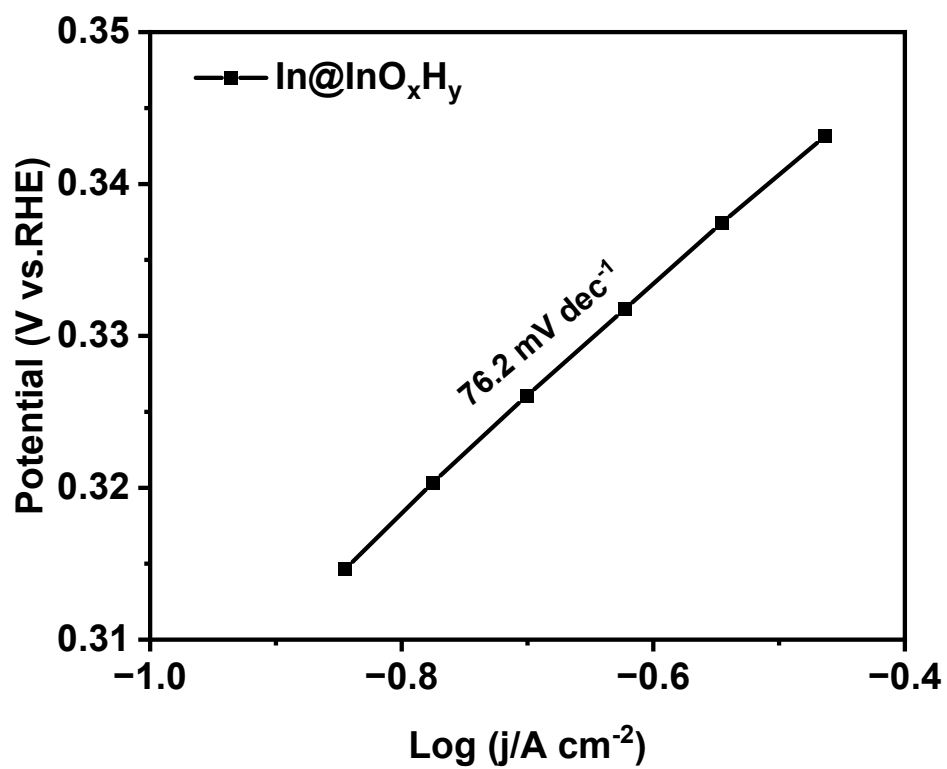


Figure S7. Tafel plots of In@InO_xH_y in CO₂-saturated 0.5 M KHCO₃ electrolyte.