The Synergetic Effects of Multifunctional Citric Acid and Rice Husk Derived Honeycomb Carbon Matrix on Silicon Anode for High-Performance Lithium Ion Batteries

Supporting information

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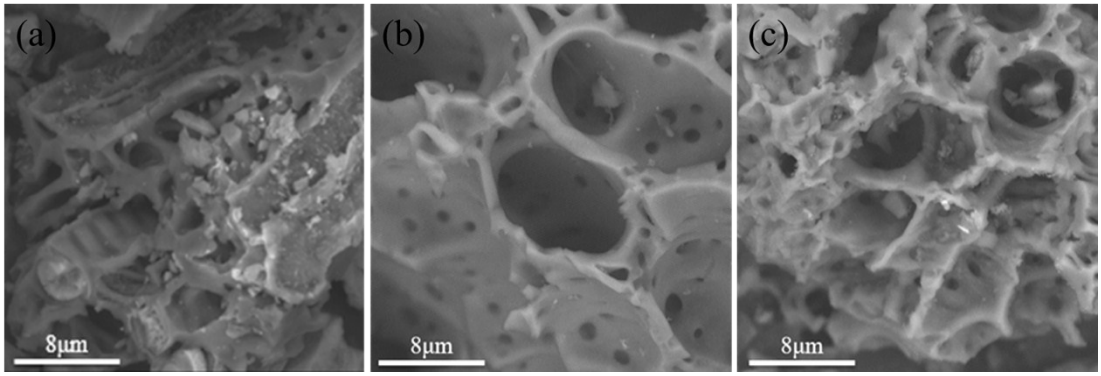

Figure S1. a-c) SEM image of RH obtained at 400 °C, 500 °C and 600 °C.

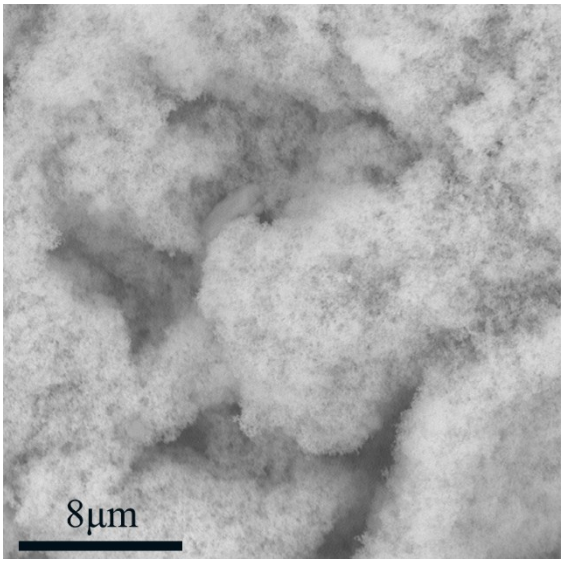

Figure S2. SEM image of Si@CA@RH composite.

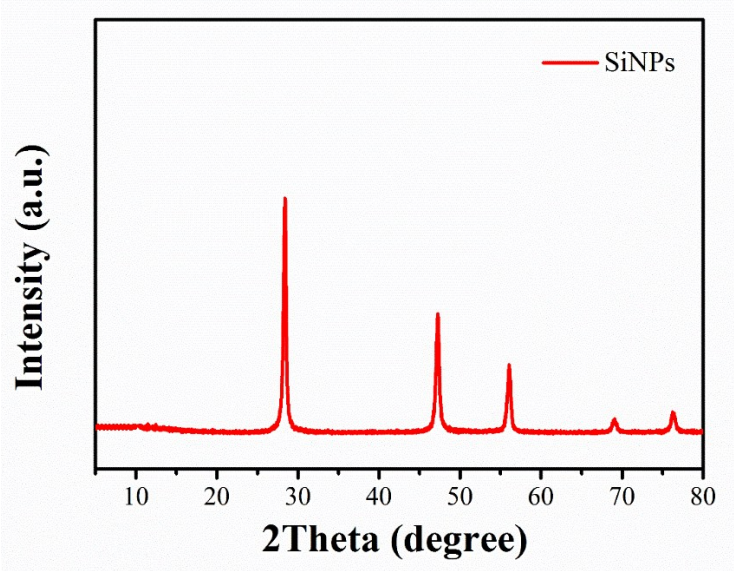

Figure S3. XRD patterns of commercial Si.

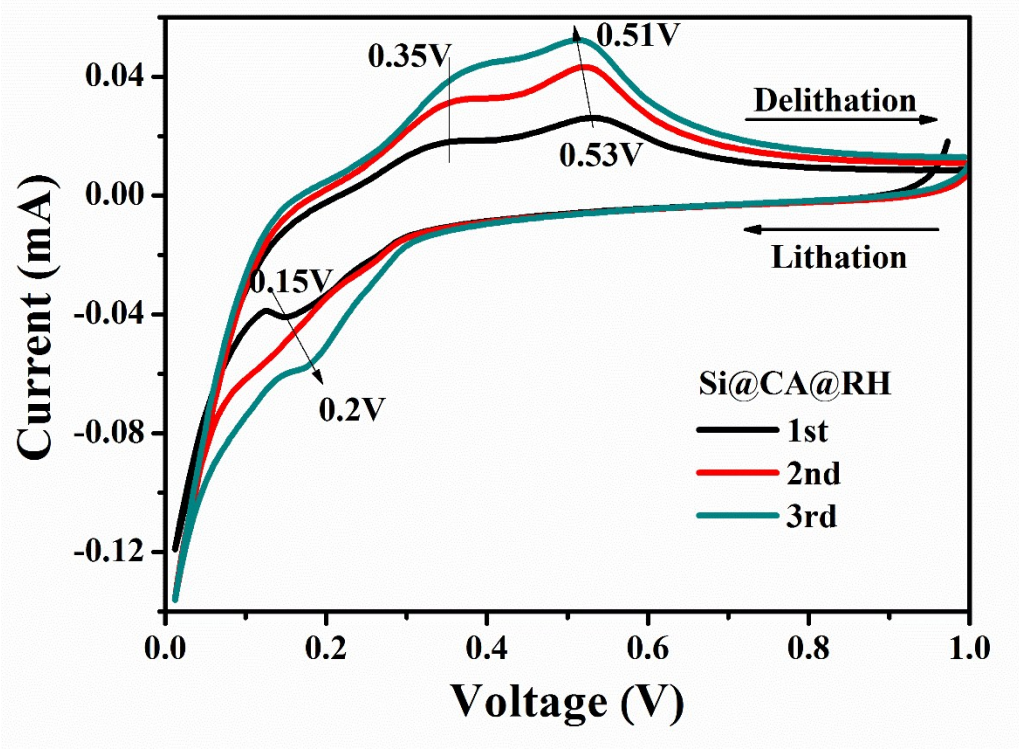

Figure S4. CV curves of Si@CA@RH at 0.1 mV s^{-1} in the range of 0.01-1 V.

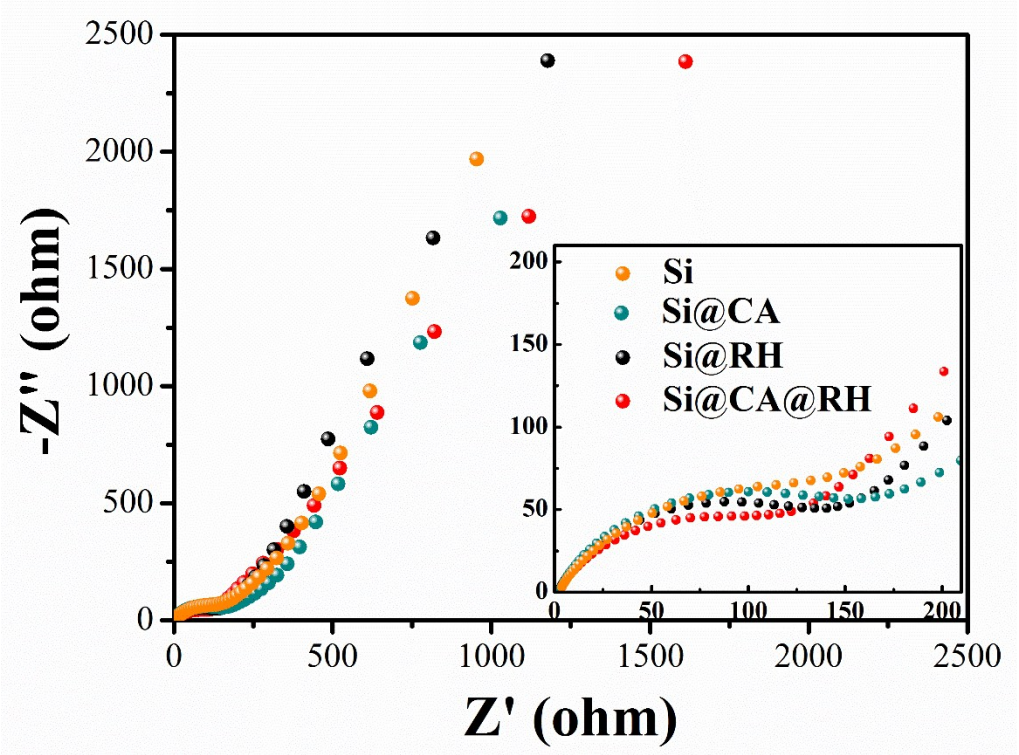

Figure S5. Nyquist plots of Si, Si@CA, Si@RH, Si@CA@RH electrode.

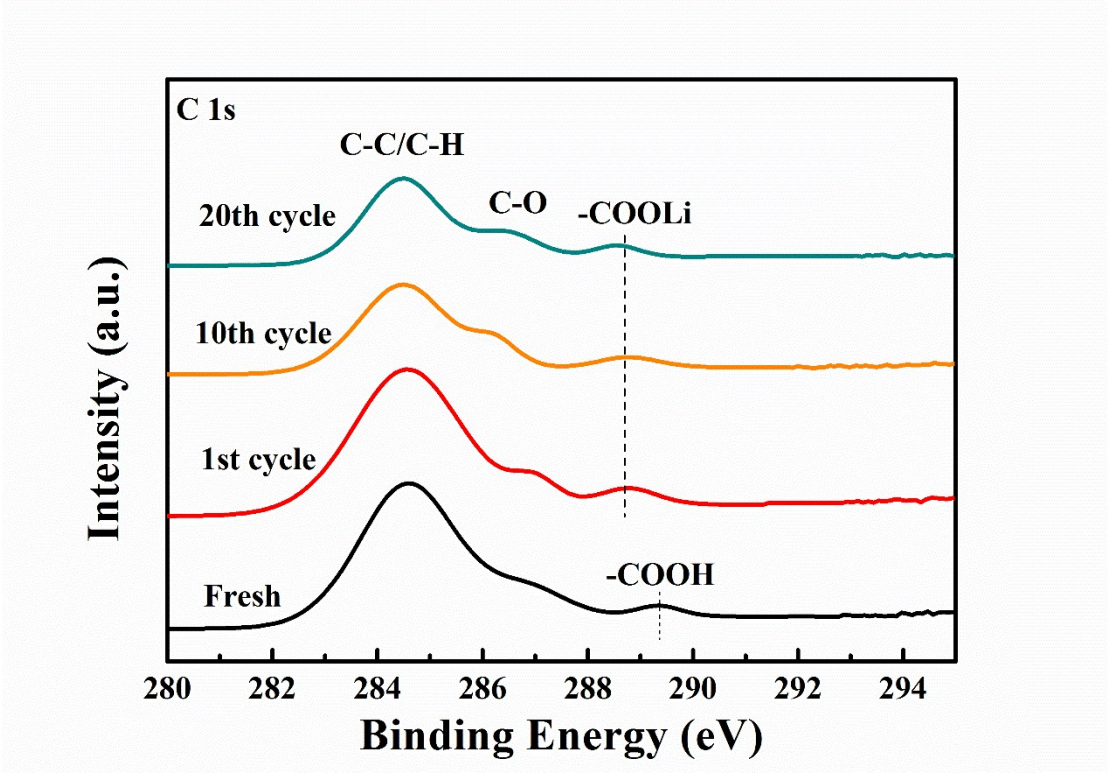

Figure S6. XPS spectra of Si@CA composite.

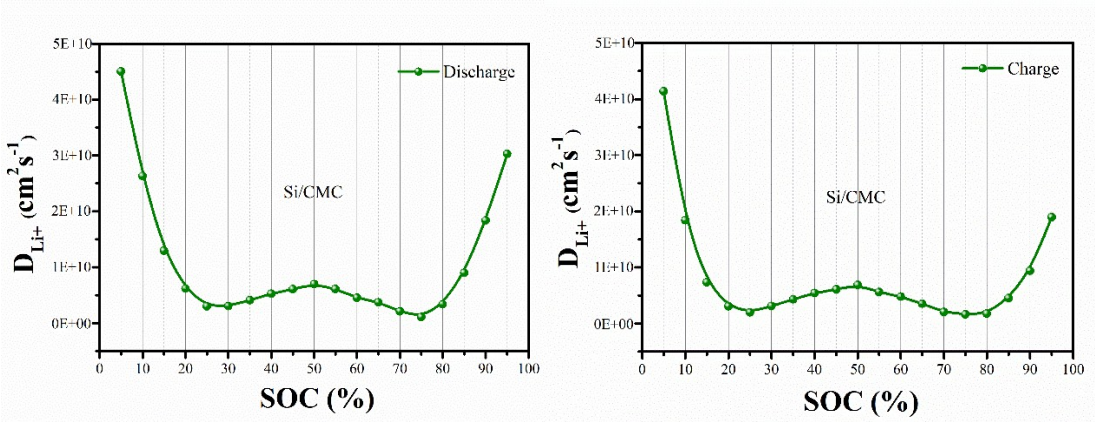

Figure S7. D_{Li}^+ of pure Si electrode with CMC binder during the discharge and charge processes.