

Supplementary materials

Sandwich-Like Cr₂O₃-Graphite Intercalation Composites as High-Stable Anode Materials for Lithium-ion Batteries

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Figure S1 FESEM image of the as-prepared CrO_3 -GICs.

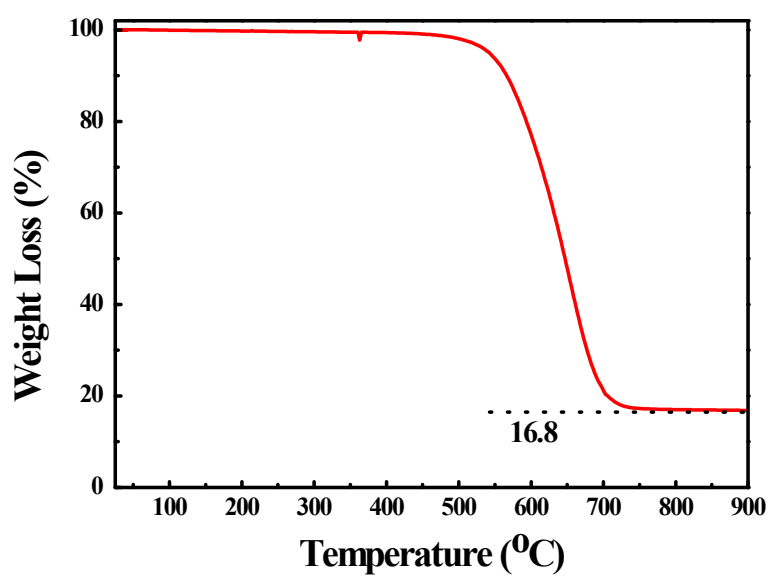


Figure S2. TG curves for the Cr_2O_3 -GICs obtained in oxygen flow at a heating rate of 10 $^{\circ}\text{C}/\text{min}$

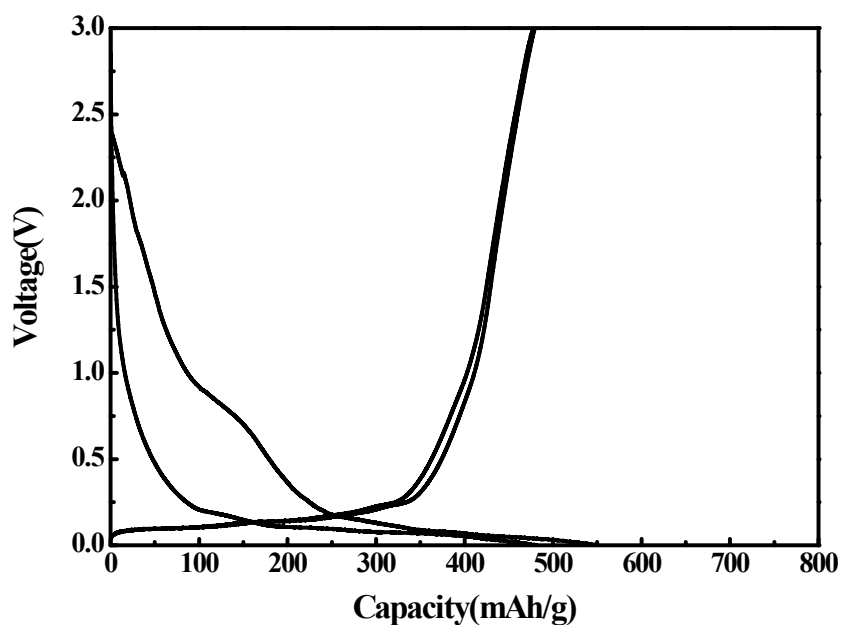


Figure S3. Charge/discharge curves of Cr_2O_3 -GICs after surface modification.

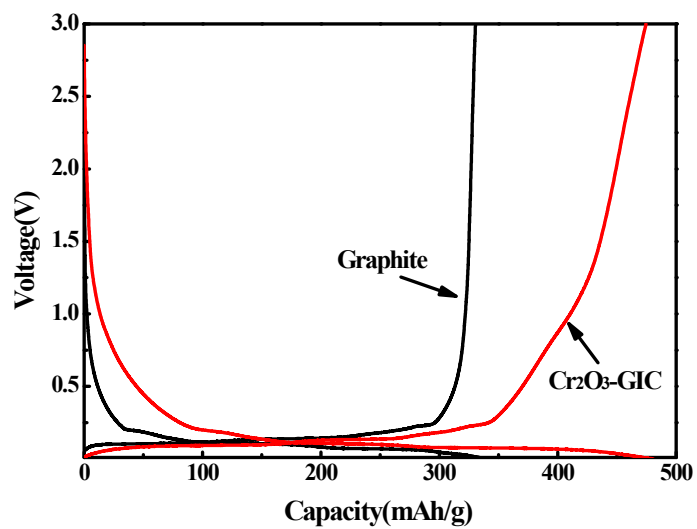


Figure S4. The comparison of Cr_2O_3 -GICs to the commercial graphite anode material during the second discharge/charge cycle.

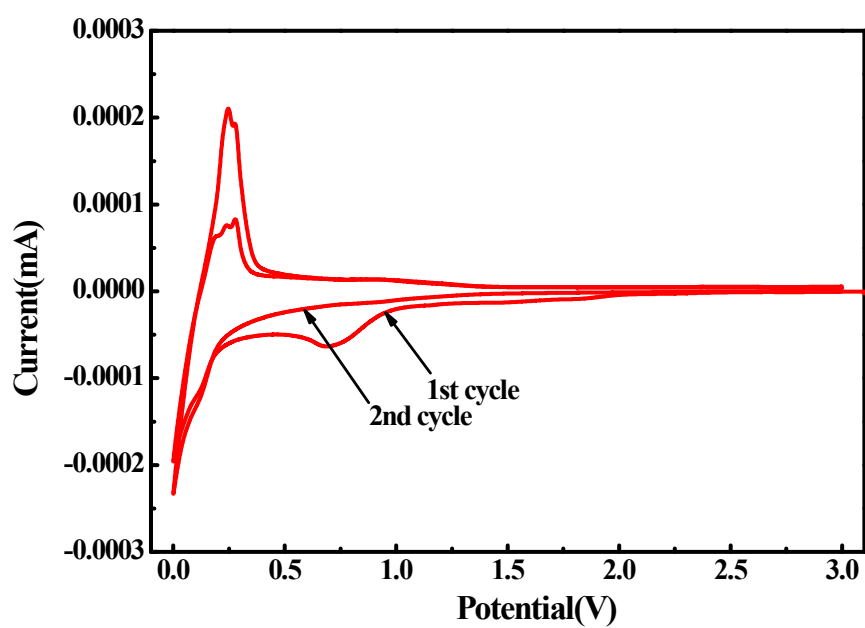


Figure S5. Cyclic voltammogram curves of Cr_2O_3 -GICs.

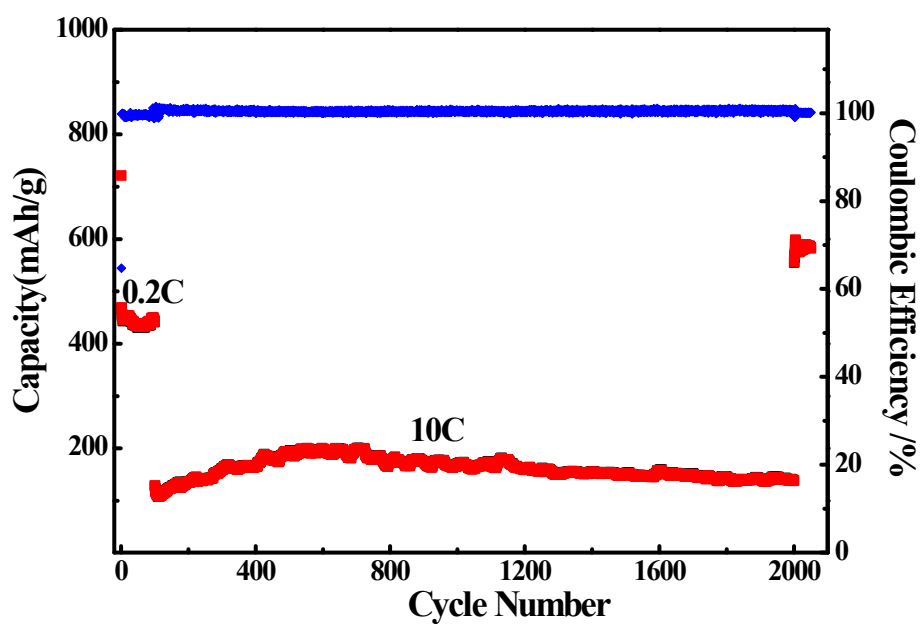


Figure S6. Cycling performance of Cr_2O_3 -GICs at 10C from 101th cycle to the 2000th cycle after the first 100 cycles at 0.2C.

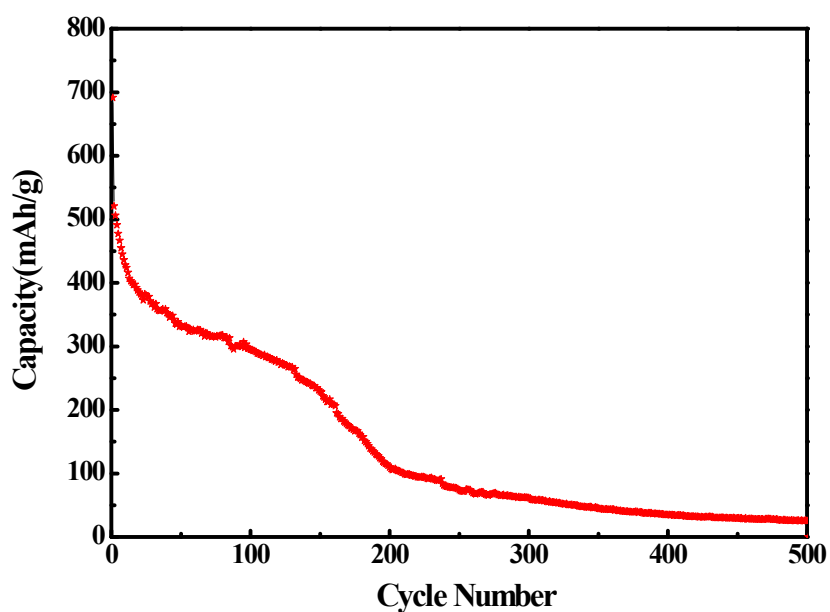


Figure S7. Cycle ability of Cr_2O_3 /graphite mixture (the wt. % of Cr_2O_3 17%) between voltage limits of 0 and 3.0 V at a current of 100 mA/g at room temperature.

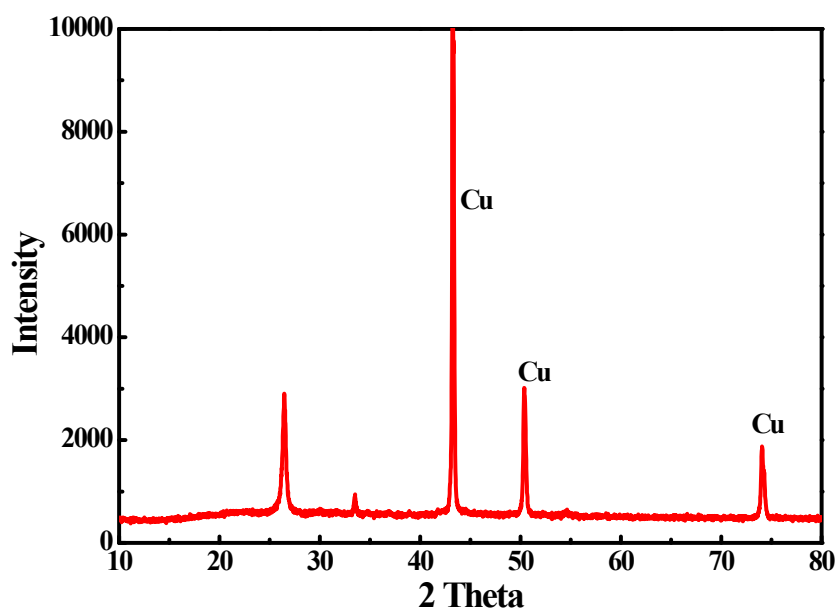


Figure S8. Ex situ XRD patterns of the Cr_2O_3 -GICs based composite electrode after 800 cycles.