Electronic Supplementary Material (ESI) for Nanoscale.
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Supporting Information for

Template-assisted loading of Fe_3O_4 nanoparticles inside hollow carbon "rooms" to achieve high volumetric lithium storage

Yongpeng Cui,[1] Wenting Feng,[1] Wei Liu,[*] Jiajia Li, Yuan Zhang, Yongxu Du, Mingzhu Li, Wei Huang, Huanlei Wang, Shuang Liu

School of Materials Science and Engineering, Ocean University of China, Qingdao 266100, People's Republic of China.

[1] The authors Yongpeng Cui and Wenting Feng contributed equally to this paper.

*Email: weiliu@ouc.edu.cn

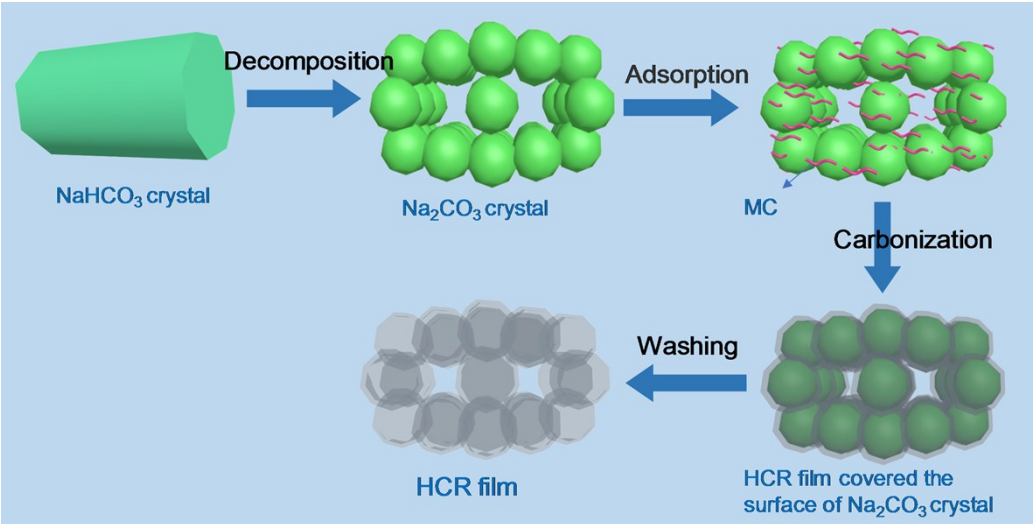

Figure S1. Schematic diagram of the synthesis process for HCR materials.

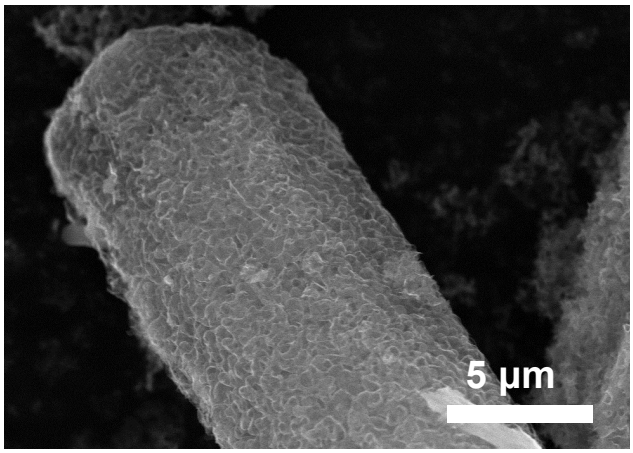

Figure S2. SEM micrographs of HCR materials.

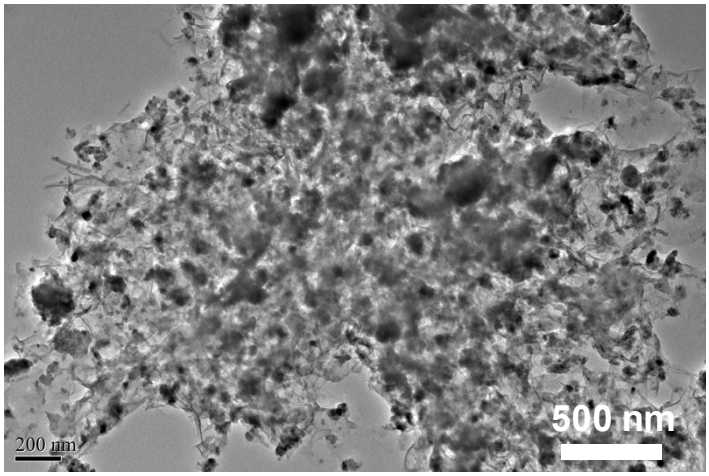

Figure S3. TEM micrographs of the HCR@Fe_3O_4 materials.

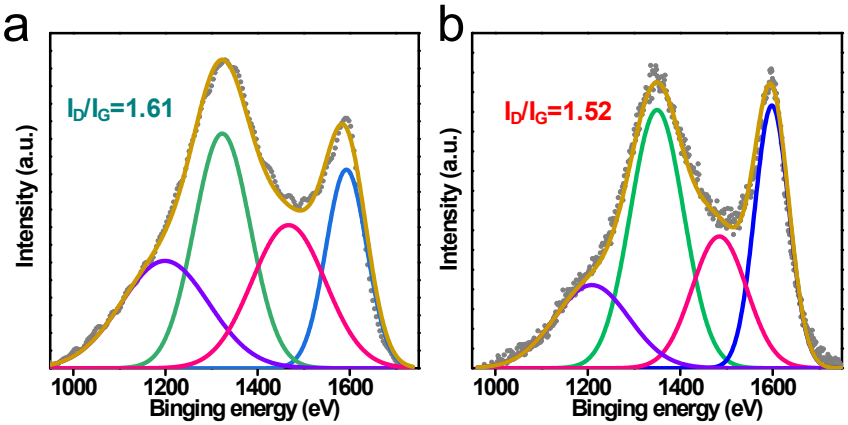

Figure S4. Raman spectra of (a) HCR and (b) HCR@Fe_3O_4.

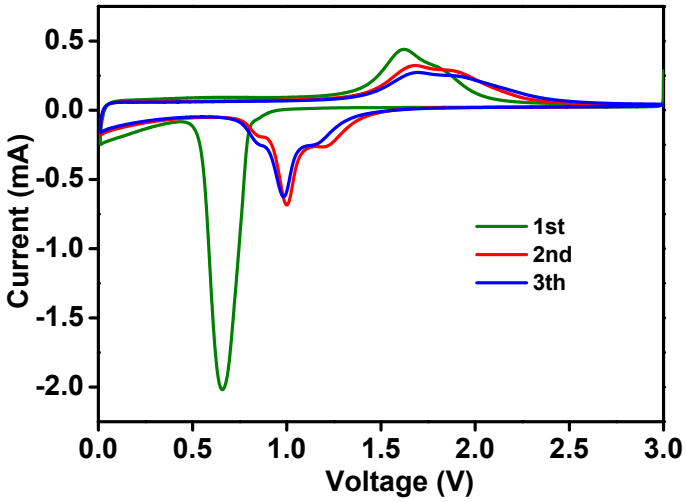

Figure S5. CV curves of pure Fe_3O_4 electrode.

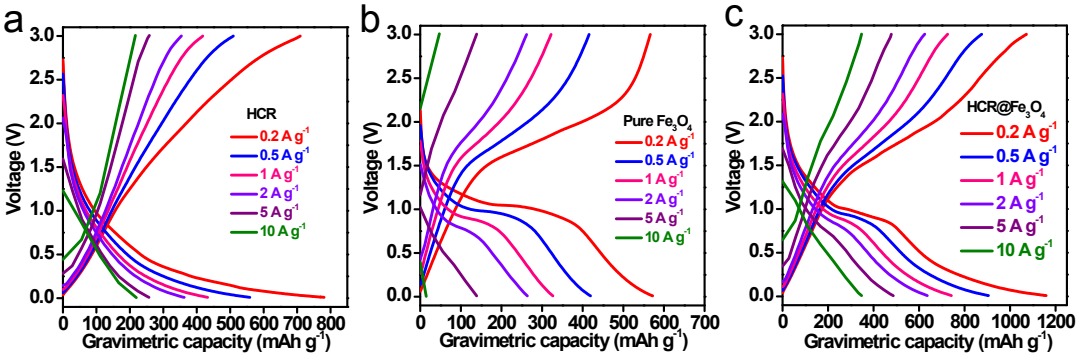

Figure S6. Galvanostatic charge-discharge curves of (a) HCR, (b) pure Fe_3O_4, and (c) HCR@Fe_3O_4 electrodes at the fifth cycle test at each current density.

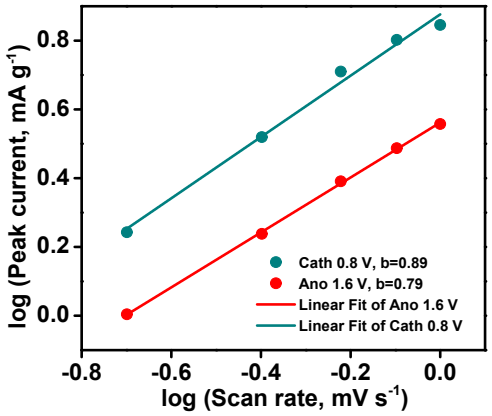

Figure S7. Determination of the b-value according to the relationship between peak current and scan rate.

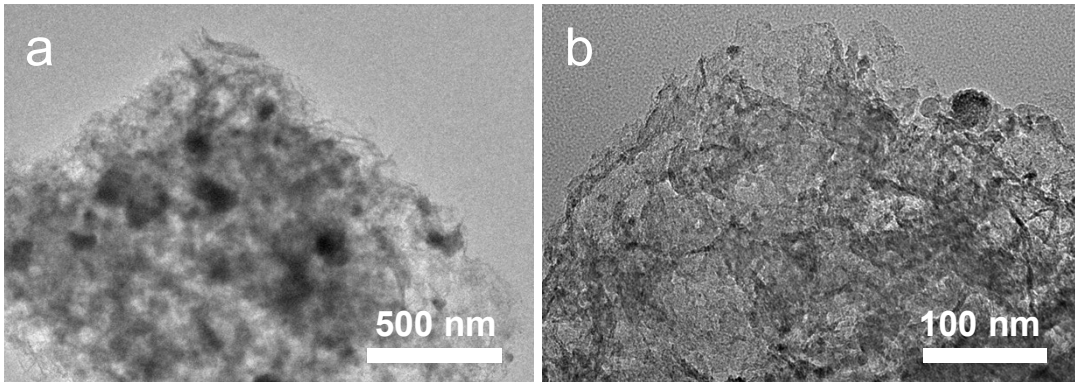

Figure S8. TEM micrographs of HCR@Fe_3O_4 electrode after a cycling test.

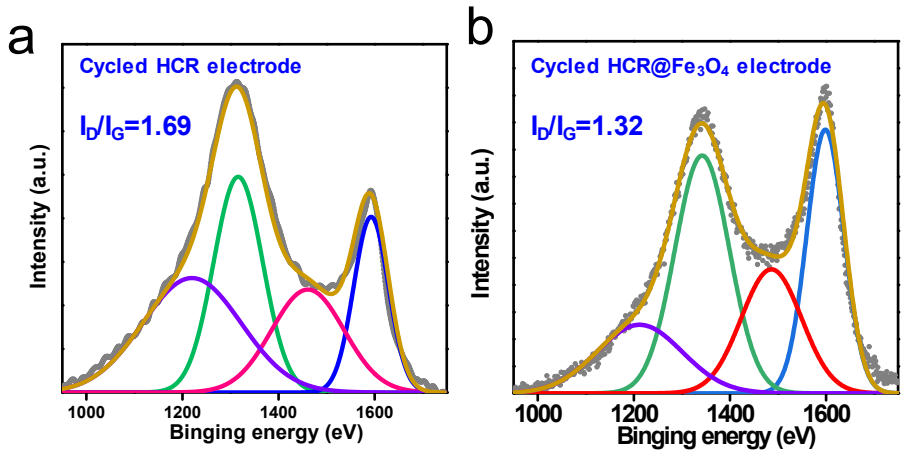

Figure S9. Raman spectra of cycled HCR and HCR@Fe_3O_4 electrode after a cycling test.

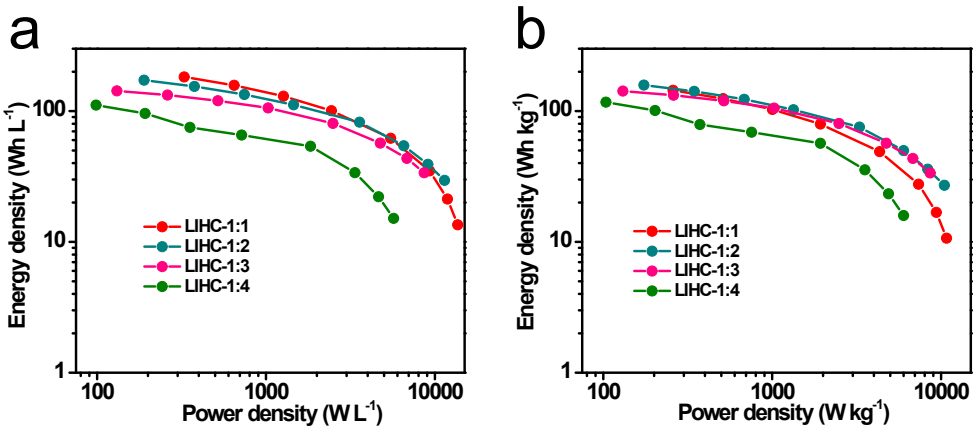

Figure S10. Ragone plots of the present HCR@Fe_3O_4//AC LIHC device with different mass match. (a) Volumetric energy/power density. (b) Gravimetric energy/power density.