Supporting information for

Electrode Activation via Vesiculation: Improved Reversible Capacity of y-

Fe₂O₃@C/MWNT Composite Anode for Lithium-ion Batteries

Yongfei Liu^{†,*}, Junmin Xu[‡], Xiaoying Qin^{†,*}, Hongxing Xin[†], Xueqin Yuan[†], Jian Zhang[†], Di Li[†], Chunjun Song[†]

[†] Key Laboratory of Materials Physics, Institute of Solid State Physics, Chinese Academy of Sciences, Hefei 230031, P R China, [‡] High Magnetic Field Laboratory, Chinese Academy of Sciences, Hefei 230031, China

* Address correspondence to log1218@163.com or xyqin@issp.ac.cn



Figure S1. (a) SEM, (b) TEM, and (c) HRTEM images of γ -Fe₂O₃@C particles; (d) HRTEM image of a MWNT.



Figure S2. Representative CV curves of the (a) γ -Fe₂O₃@C and (b) γ -Fe₂O₃@C/MWNT electrodes obtained at a scan rate of 0.2 mV/s.



Figure S3. Discharge capacities of a MWNT electrode at a current density of 100 mA/g.



Figure S4 SEM images of the cycled γ -Fe₂O₃@C (left) and γ -Fe₂O₃@C/MWNT (right) anodes. Lots of cracking (as marked by red arrows) can be observed in the γ -Fe₂O₃@C anode, while no obvious cracking can be found in the γ -Fe₂O₃@C/MWNT anode.