Electronic Supplementary Material (ESI) for Journal of Materials Chemistry

Carbon-coated SnO_2@C with hierarchically porous structures and graphite layers inside for high performance lithium-ion battery

Yao Li [a], Shenmin Zhu [a*], Qinglei Liu [a], Jiajun Gu [a], Zaiping Guo [b], Zhixin Chen [b], Chuanliang Feng [a], Di Zhang [a*] and Won-Jin Moon [c]

[a] *State Key Laboratory of Metal Matrix Composites, Shanghai Jiao Tong University, Shanghai 200240, China*
[b] *The Faculty of Engineering, University of Wollongong, NSW 2522, Australia*
[c] *Chonnam National University,300 YongBong-Dong, Buk-Gu, Gwang ju 500-757,Korea, Gwang ju Center, Korea Basic Science Institute*
* *E-mail:smzhu@sjtu.edu.cn (S.-M. Z.) zhangdi@sjtu.edu.cn（D.Z.）*

Content

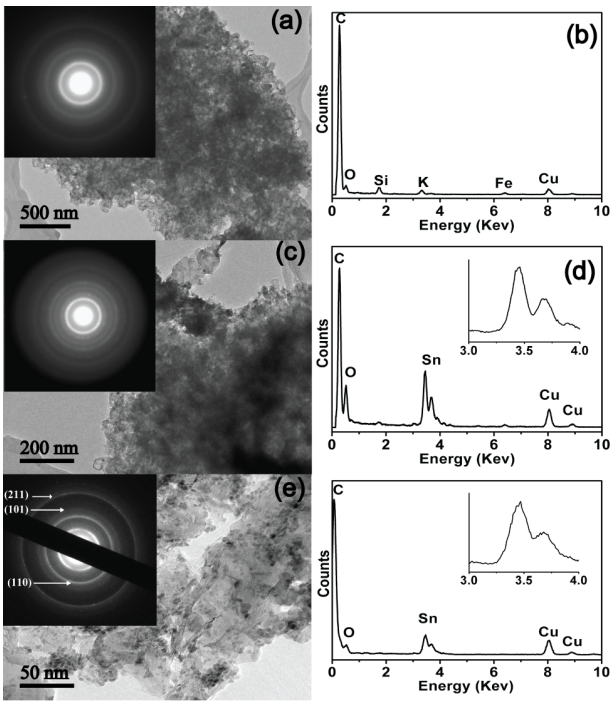

Figure S1. TEM images (left), corresponding SAED patterns (insets), and EDS spectra (right) of (a, b) the activated carbon matrix (RHC), (c, d) RHC-SnO_2, and (e, f) RHC-SnO_2-C.

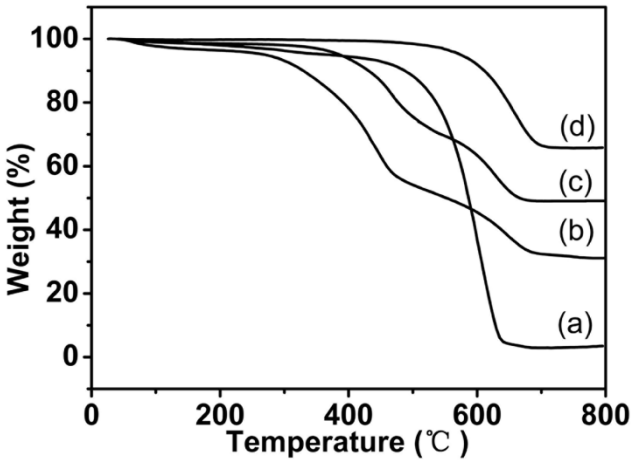

Figure S2. TGA curves of (a) RHC, (b) RHC-SnO_2, (c) RHC-SnO_2-C after heat treatment, and (d) RHC-SnO_2-C before heat treatment.

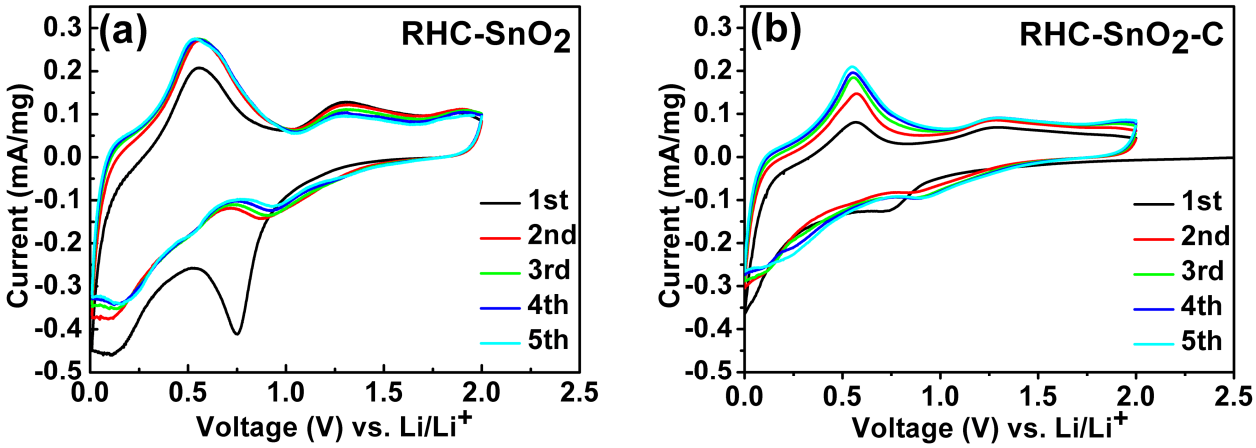

Figure S3. CV curves of (a) RHC-SnO2 and (b) RHC-SnO_2-C.