

Electronic Supplementary Information (ESI)

**SnO<sub>2</sub> nanotube arrays embedded in a carbon layer  
for high-performance lithium-ion battery applications**

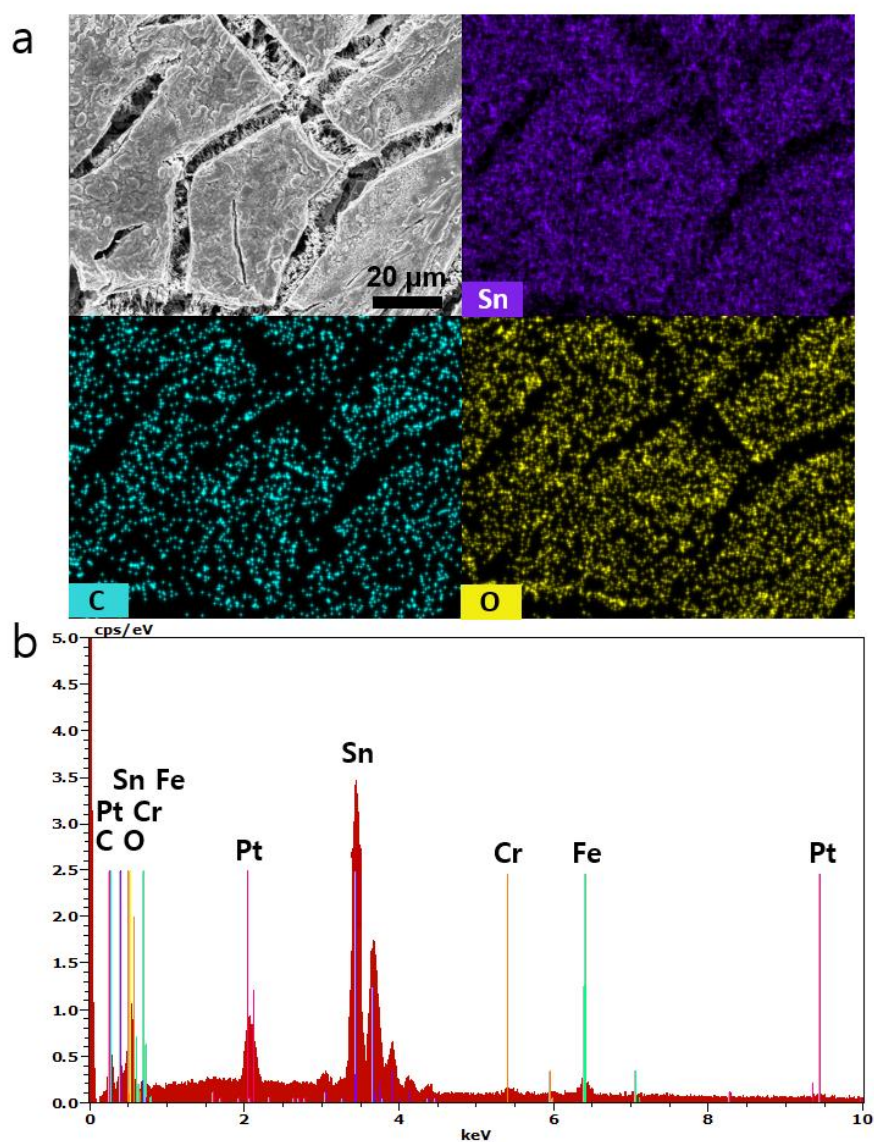
*Ji Hyun Um,<sup>ab</sup> Seung-Ho Yu,<sup>ab</sup> Yong-Hun Cho<sup>\*c</sup> and Yung-Eun Sung<sup>\*ab</sup>*

<sup>a</sup> School of Chemical & Biological Engineering, Seoul National University, Seoul 151-742, Republic of Korea.

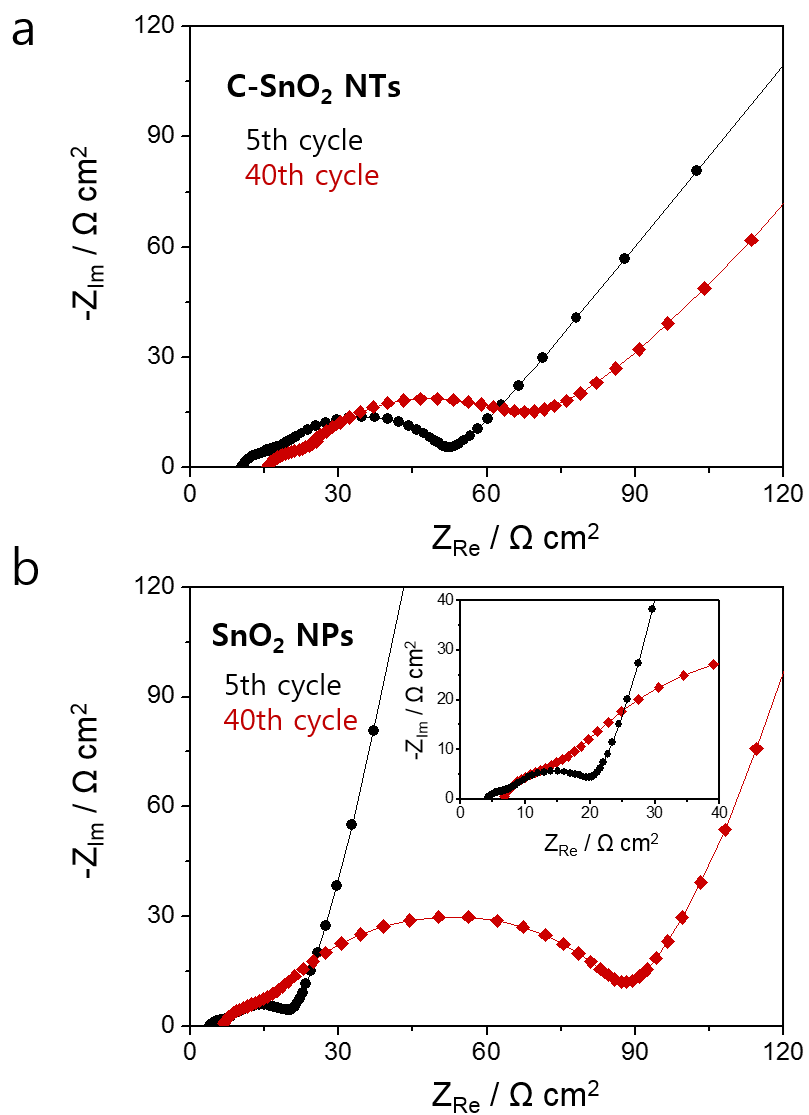
<sup>b</sup> Center for Nanoparticle Research, Institute for Basic Science (IBS), Seoul 151-742, Republic of Korea.

<sup>c</sup> School of Advanced Materials Engineering, Kookmin University, Seoul 136-702, Republic of Korea

\*Corresponding author: E-mail: [yhun00@kookmin.ac.kr](mailto:yhun00@kookmin.ac.kr) (Y.-H. Cho);  
[ysung@snu.ac.kr](mailto:ysung@snu.ac.kr) (Y.-E. Sung)



**Figure S1.** (a) FE-SEM images of C-SnO<sub>2</sub> NTs using EDX mapping and (b) EDX spectrum.



**Figure S2.** Cell impedance tests of (a) C-SnO<sub>2</sub> NTs and (b) SnO<sub>2</sub> NPs, after the 5th and 40th cycles at 781 mAh g<sup>-1</sup>.