Supporting information for

Highly dispersion of TiO_2 nanocrystals within porous carbon towards tunable lithium storage ability and its battery application versus $LiNi_{0.5}Mn_{1.5}O_4$

Hai Ming,[a,b] Jun Ming,*[b] Seung-Min Oh,[b] Eung-Ju Lee,[b] Hui Huang,[c] Qun Zhou,[a] Junwei Zheng,*[a] and Yang-Kook Sun*[b]

[a] *College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Suzhou 215123, P. R. China. E-mail: jwzheng@suda.edu.cn;*

[b] *Department of Energy Engineering, Hanyang University, Seoul,133-791, Republic of Korea; E-mail: yksun@hanyang.ac.kr; mingjun6297@gmail.com;*

[c] *Institute of Functional Nano & Soft Materials (FUNSOM) and Jiangsu Key, Laboratory for Carbon Based Functional Materials & Devices, Soochow University, Suzhou, Jiangsu 215123, P. R. China.*

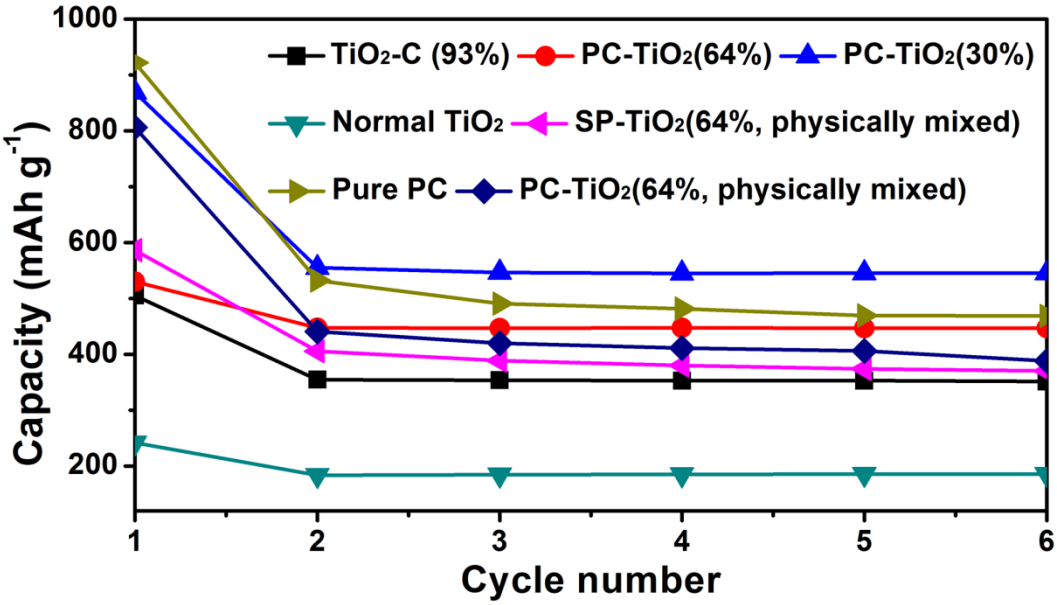

Fig. S1 Comparative performances of TiO_2-C(93%), PC-TiO_2(64%), PC-TiO_2(30%), normal TiO_2 nanoparticls, PC-TiO_2(64%, physically mixed) and SP-TiO_2 (64%, physically mixed) electrodes under the current density of 50 mA g^{-1}.