Nb$_2$O$_5$ nanoparticles encapsulated into ordered mesoporous carbon matrix as advanced anode materials for Li ion capacitors

Jingjie Wang, Hongsen Li, Laifa Shen, Shengyang Dong, and Xiaogang Zhang

Jiangsu Key Laboratory of Materials and Technology for Energy Conversion, College of Material Science & Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, 210016, P.R. China. Email: azhangxg@nuaa.edu.cn
**Fig. S1** Small angle X-ray diffraction (SAXRD) patterns of the CMK-3 carbon template.
Fig. S2 Raman spectrum of the original CMK-3 carbon template.
Fig. S3 Cycle performances of bulk Nb₂O₅ and Nb₂O₅/CMK-3 nanocomposite at 1 C.
Fig. S4 SEM image of Peanut shell carbon (PSC).
Fig. S5 a) galvanostatic charge-discharge curve of PSC at 0.2 C. b) Cycle performance and coulombic efficiency of PSC at 0.1 C.
**Fig. S6** The cyclic voltammetry curves of the Nb$_2$O$_5$/CMK-3//PSC hybrid device.