Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Fast Lithium-ion Storage of Nb_2O_5 nanocrystals *in situ* Grown on Carbon Nanotubes for High-performance Asymmetric Supercapacitors

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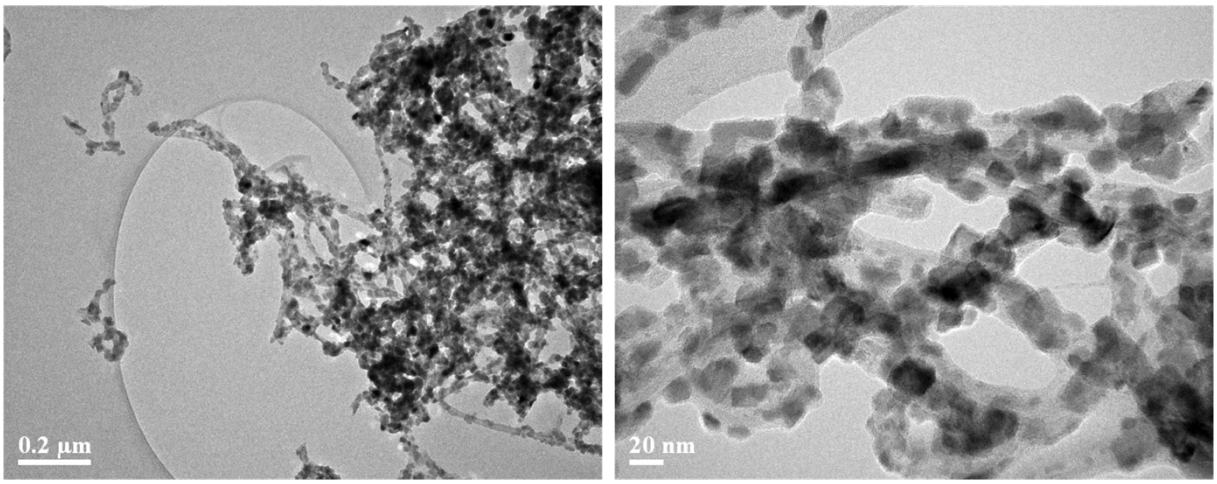

Figure S1. TEM images of the CNT/Nb_2O_5 nanocomposites. To further demonstrate the in-situ growth and intimate contact, the sample was dispersed in ethanol under ultrasonication for 12 h. There are no isolated or separated Nb_2O_5 nanocrystals that can be observed.

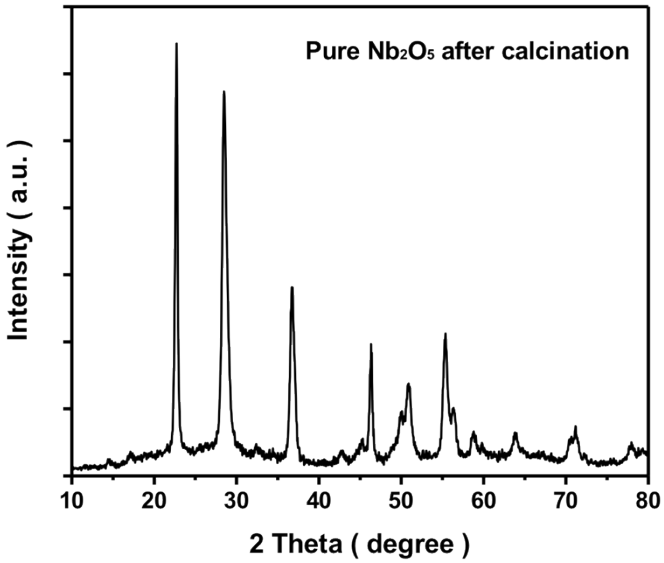

Figure S2. XRD pattern of pure Nb_2O_5 synthesized at identical condition to CNT/Nb_2O_5 nanocomposites.

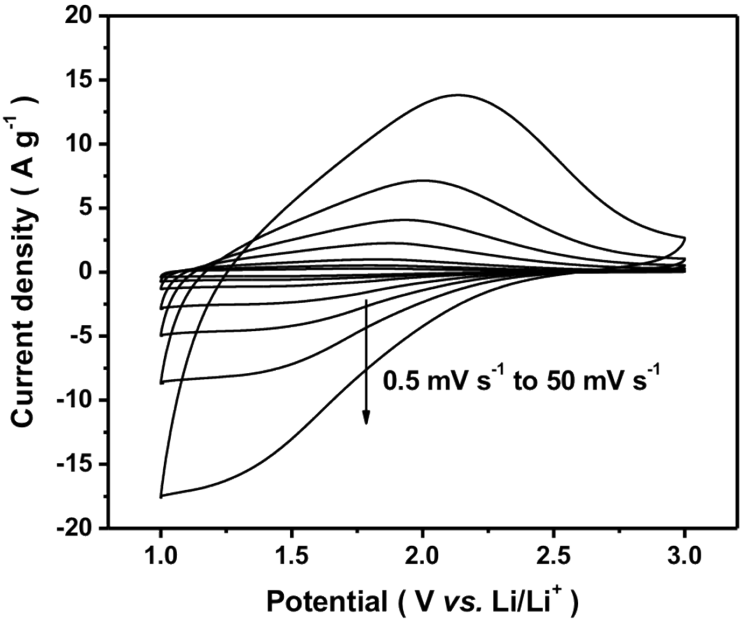

Figure S2. CV curves of the CNT/Nb_2O_5 composite electrode at various potential scanning rates from 0.5 to 50 mV s^{-1} at room temperature.

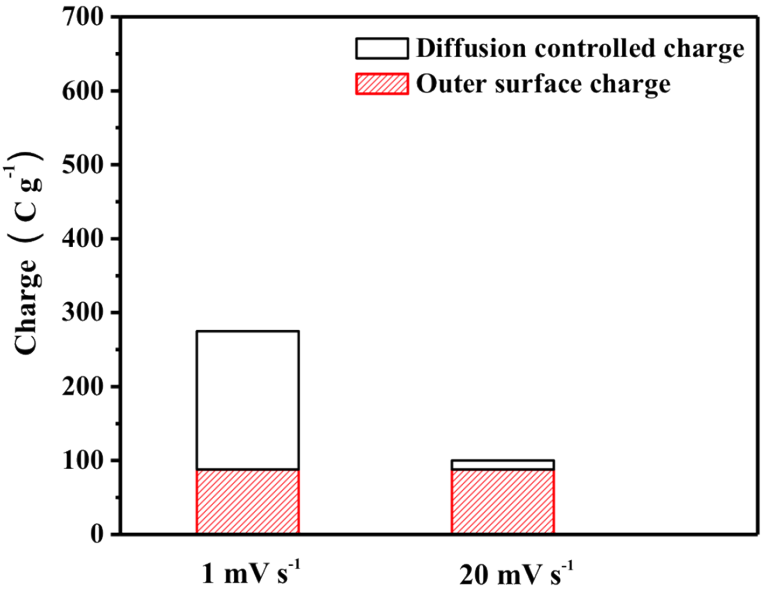

Figure S4. Analysis of the total charge stored on the electrode based on pure Nb_2O_5 nanocrystals synthesized through identical condition.