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Supporting Information

Cobalt sulfide nanoparticles decorated on TiO_2 nanotubes via thermal vapor sulfurization of conformal TiO_2-coated $Co(CO_3)_{0.5}(OH)\cdot 0.11H_2O$ core-shell nanowires for energy storage applications

H. F. Liu,[1,*] Y. D. Wang,[2] M. Lin,[1] L. T. Ong,[1] S. Y. Tee[1], and D. Z. Chi[1]

[1]*Institute of Materials Research and Engineering (IMRE), A*STAR (Agency for Science, Technology and Research), 3 Research Link, Singapore 117602, Singapore*

[2]*School of Engineering, Nanyang Polytechnic, 180 Ang Mo Kio Avenue 8, Singapore 569830, Singapore*

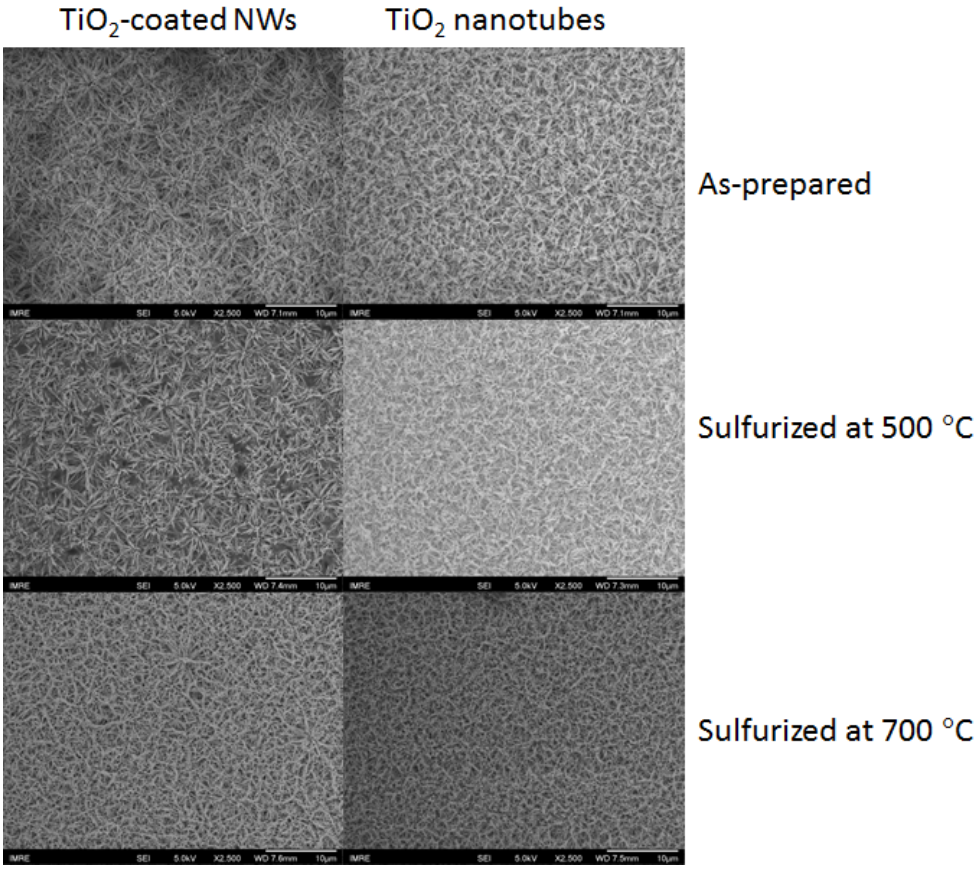

Fig. S1 SEM image of the $Co(CO_3)_{0.5}(OH)\cdot 0.11H_2O$-$TiO_2$ core-shell nanowires (left panels) and TiO_2 nanotubes (right panels) before and after thermal vapor sulfurization. The scale bars are 10 μm.

* Author to whom correspondence should be addressed; electronic mail: liuhf@imre.a-star.edu.sg

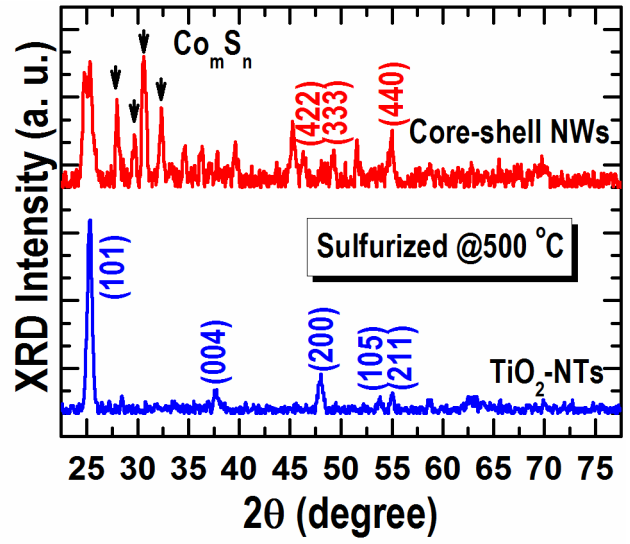

Fig. S2 XRD patterns collected from the $Co(CO_3)_{0.5}(OH)\cdot 0.11H_2O$-$TiO_2$ core-shell nanowires and the TiO_2 nanotubes samples sulfurized at 500 °C.

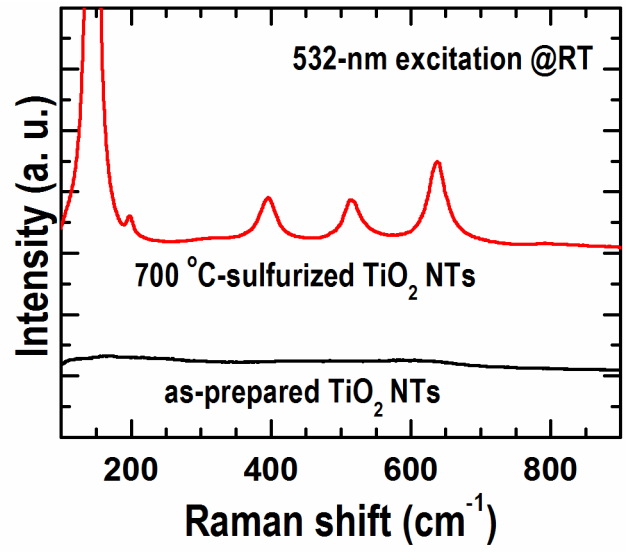

Fig. S3 Raman spectra collected at room temperature from the TiO_2 nanotubes prepared on quartz substrates before and after the thermal vapor sulfurization.

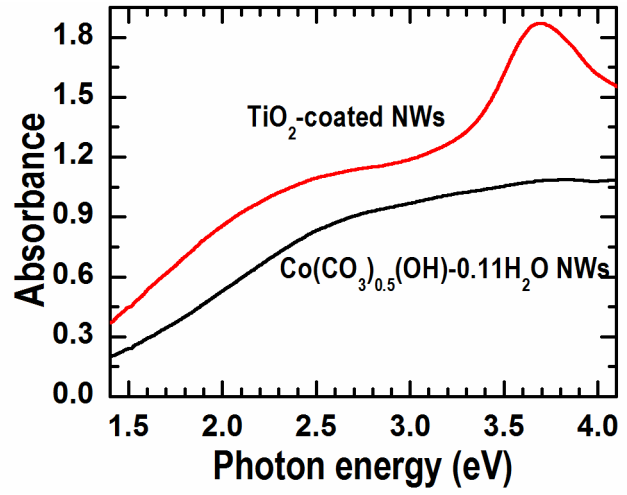

Fig. S4 Absorbance spectra collected from $Co(CO_3)_{0.5}(OH)\cdot 0.11H_2O$ nanowires before and after TiO_2 coating by ALD.