Electronic Supplementary Information

Removing structural water from sodium titanate anode towards barrier-free ion diffusion for sodium ion batteries

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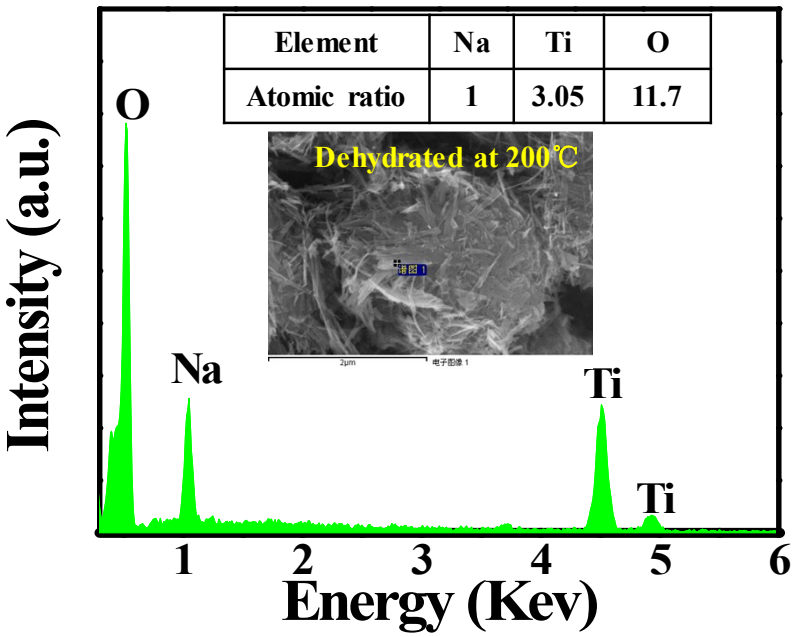

Figure S1 EDX of $NaTi_3O_6(OH)\cdot 2H_2O$ sample after dehydrated at 200 °C.

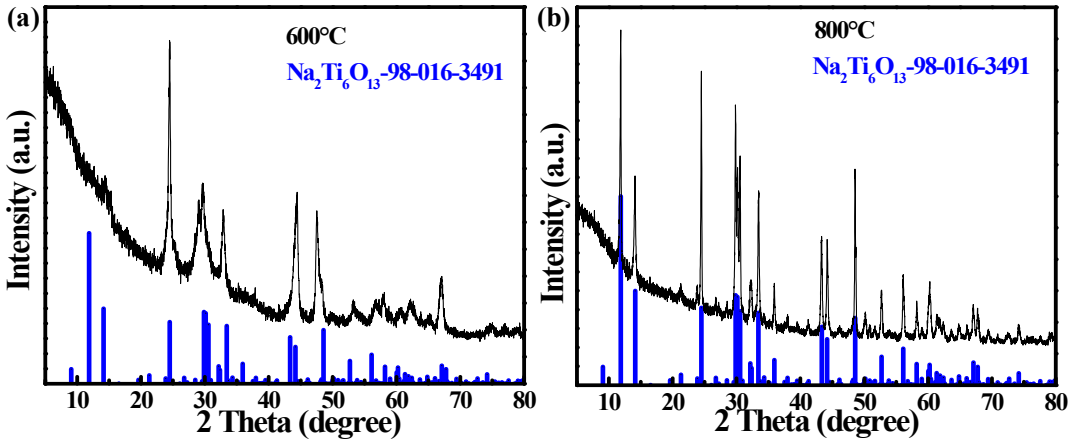

Figure S2 XRD patterns of $NaTi_3O_6(OH)\cdot 2H_2O$ sample after heated at (a) 600 and (b) 800 °C.

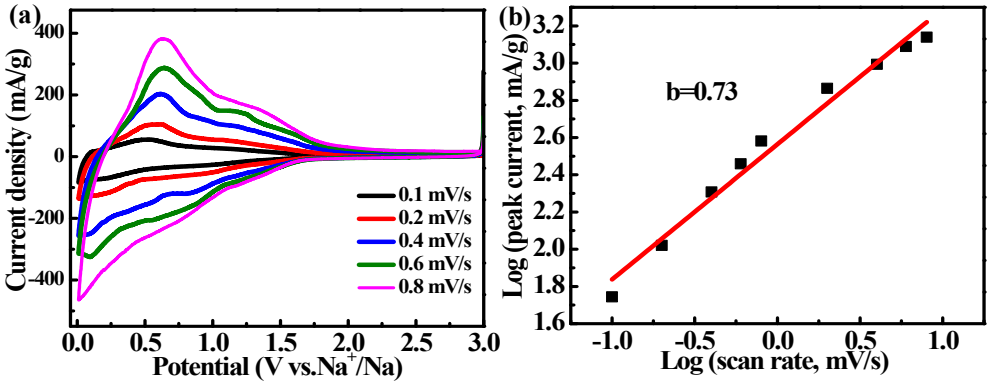

Figure S3 (a) CV curves at different scan rates, (b) relationship between logarithm oxidatic peak current and logarithm scan rates of as-prepared $NaTi_3O_6(OH)\cdot 2H_2O$ nanowires.

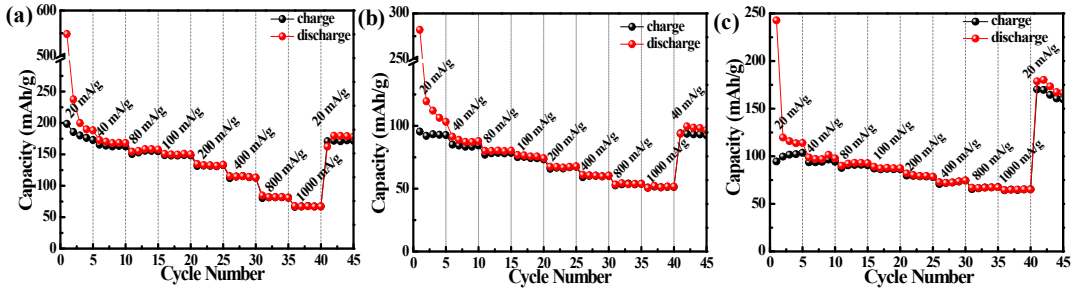

Figure S4 Rate performance of $NaTi_3O_6(OH)\cdot 2H_2O$ sample (a) before and after heated at (b) 600, (c) 800 °C.

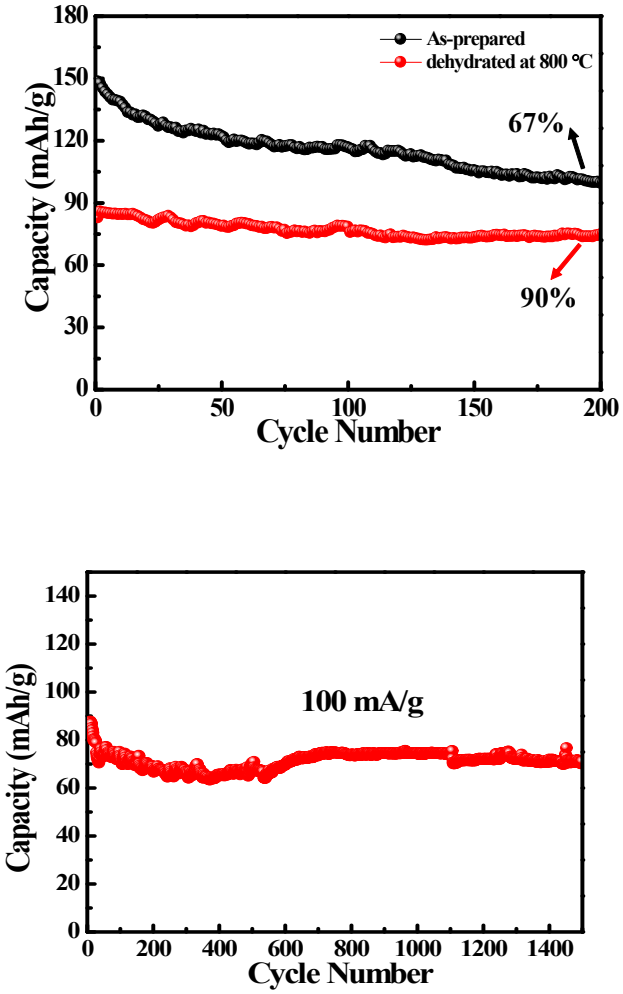

Figure S5 Cycling performance comparison of NTO sample before and after dehydrated at 800 °C at the current density of 100 mA/g (up); long cycle performance of NTO sample dehydrated at 800°C at 100 mA/g (down).

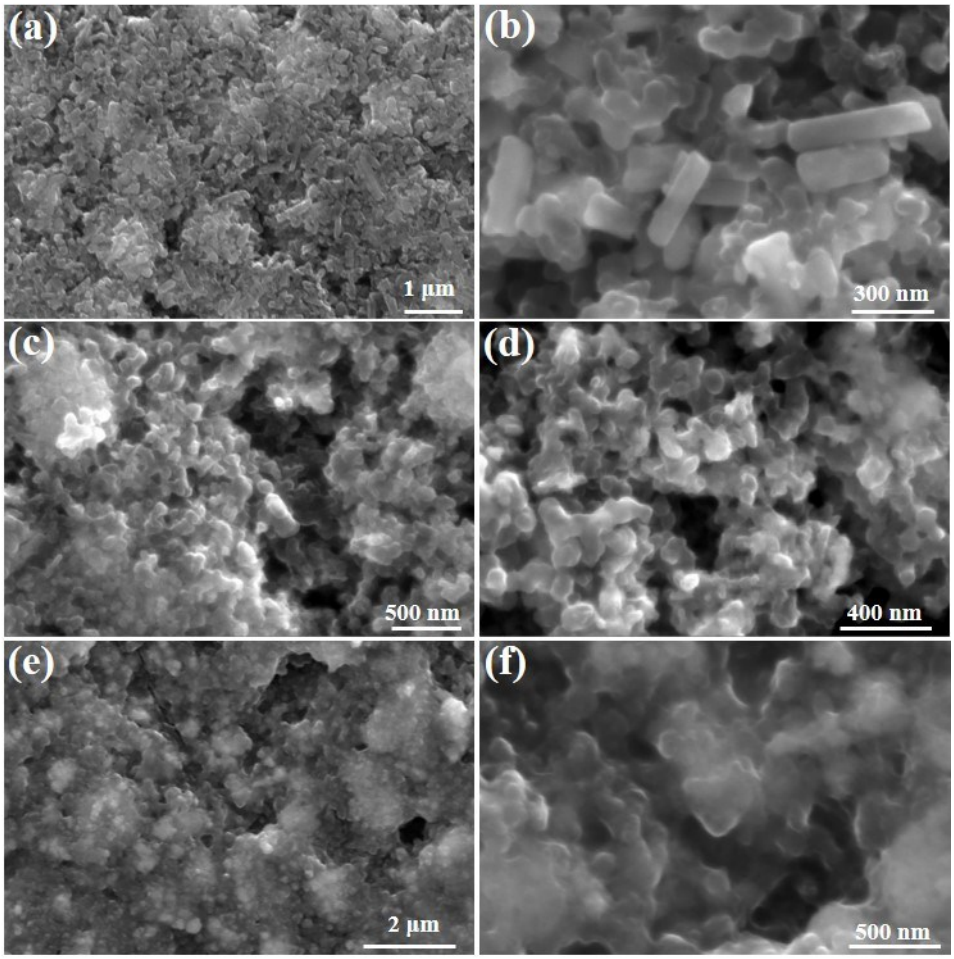

Figure S6 SEM images of sample (a, b) dedydrated at 800 °C, (c, d) dedydrated at 600 °C, (e, f) as-prepared sample after 50 cycles.

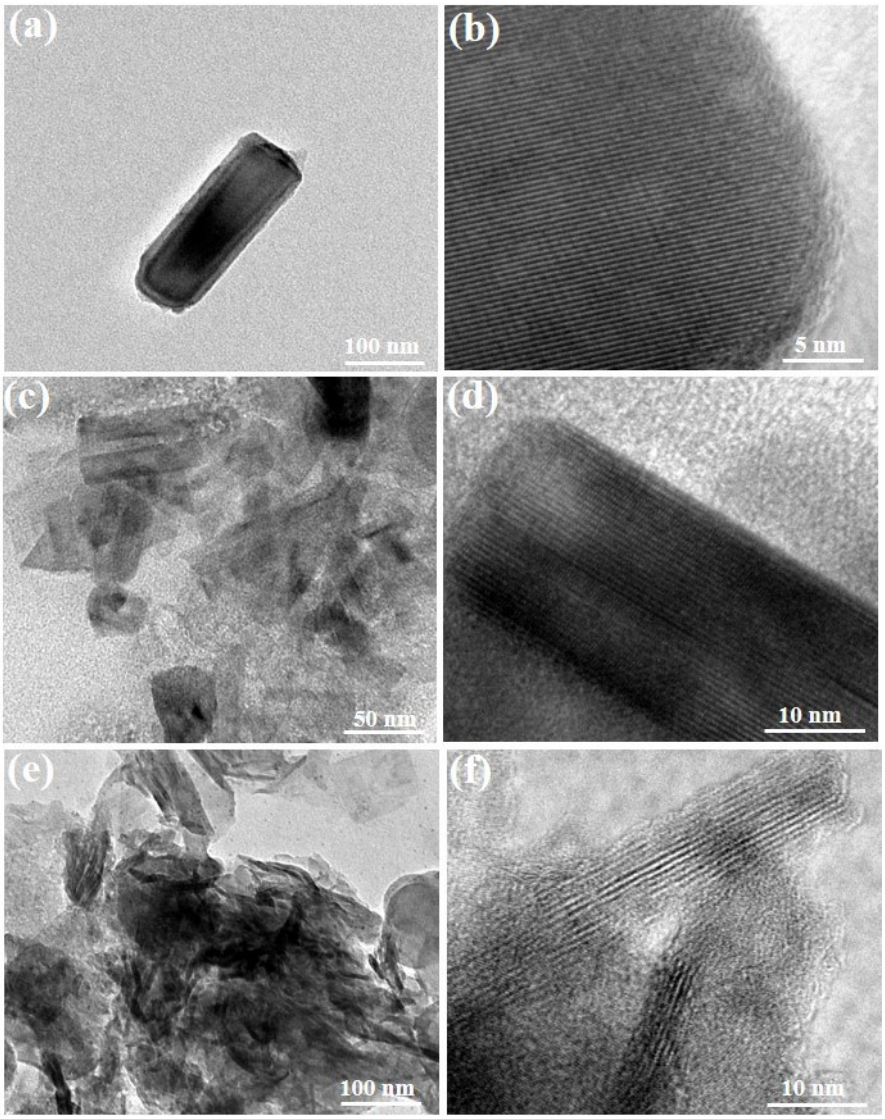

Figure S7 TEM and HRTEM images of sample (a, b) dedydrated at 800 °C, (c, d) dedydrated at 600 °C, (e, f) as-prepared sample after 50 cycles.