Supporting information for

3D Ultralong Nanowire Arrays with Tailored Hydrogen Titanate Phase as Binder-Free Anodes for Li-Ion Capacitors

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Figure S4. Volumetric energy density vs. volumetric power density, only for electrodes.

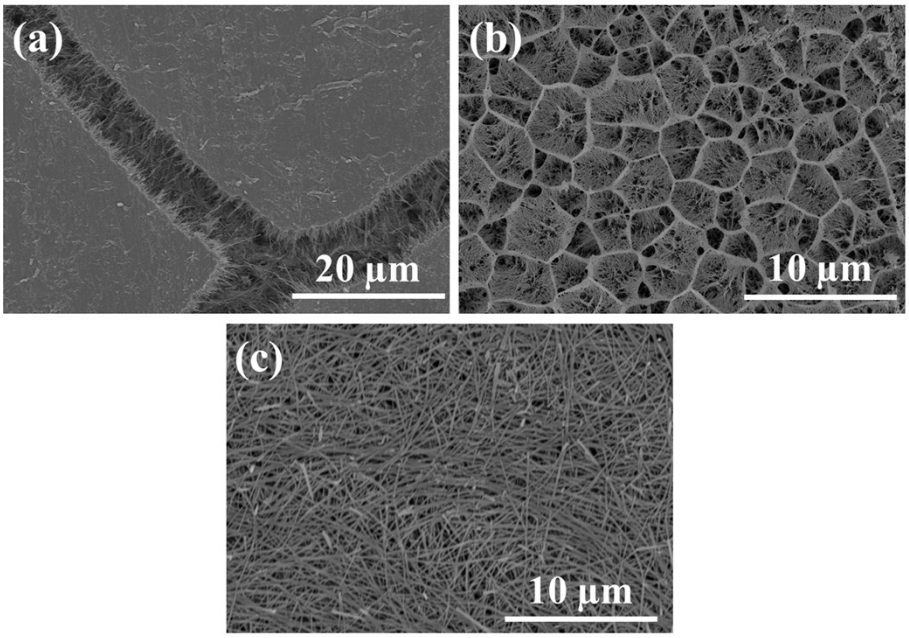

Fig. S1 FESEM images of sodium titanate nanowires with different treated time (a) 2h, (b) 6h and (c) 12h, respectively.

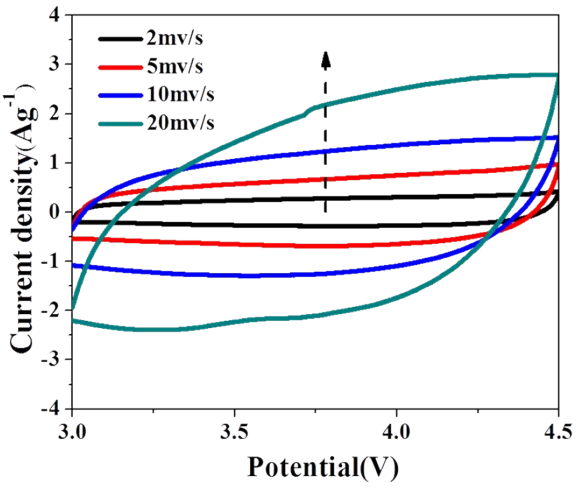

Fig. S2 CV curves of AC cathode in various scan rates.

The volumetric energy density is based on the thickness and mass loading following the equation: $\rho = m / S\,d$, where m is the mass of electrode materials (g), S and d are the area (cm^2) and thickness (cm) of the effective electrode materials, respectively. As shown in Fig. S3, the thicknesses of the cathode and anode are 37.5μm and 7.1μm, respectively. The packing density of the cathode and anode was calculated as ~0.69 and 0.92 $g \cdot cm^{-3}$, respectively. Thus, the volumetric energy densities (only for the electrodes) are demonstrated in Fig S4.

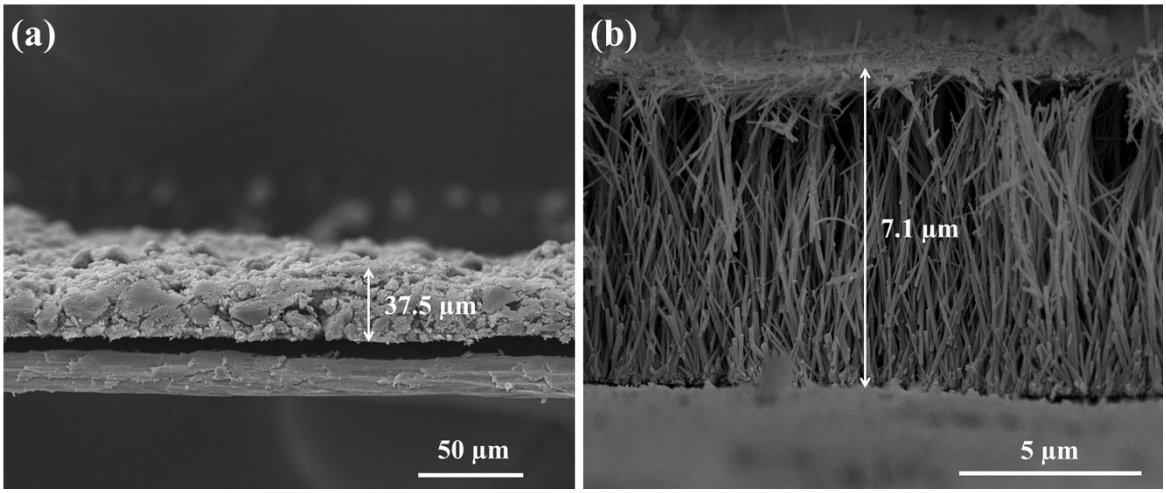

Fig. S3 Cross-sectional FESEM images of (a) AC cathode and (b) HTO NWAs anode

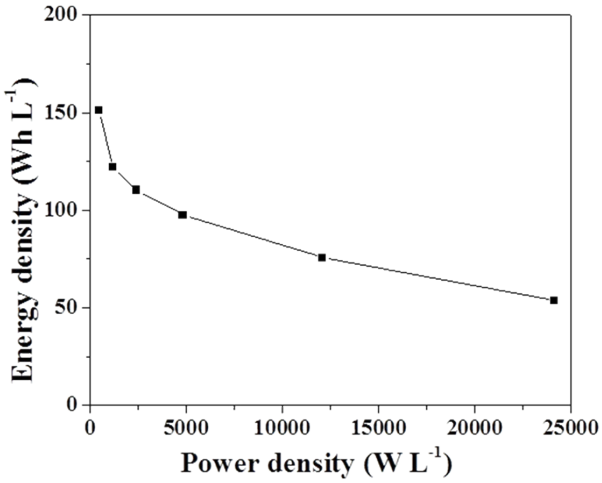

Fig. S4 Volumetric energy density vs. volumetric power density, only for electrodes.