## ARTICLE

## **Supporting information**

## A high-performance $C@Na_5V_{12}O_{32}$ nanowire electrode derived from reconstruct of carbon quantum dots

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Figure S1. The SEM image of the  $Na_5V_{12}O_{32}$ .



Figure S2. The SEM image of the CDs/NVO

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Figure S3. TEM images of carbon dots.



Figure S4. XRD patterns of carbon quantum dots.



Figure S5. FT-IR spectra of carbon quantum dots.



Figure S6. The survey spectra of C@NVO -400 samples.



Figure S7. Ragone plots of NVO and C@NVO electrodes.



Figure S8. (a) Cycling performance and (b) rate capability of NVO, 0.025gC@NVO, 0.05gC@NVO and 0.1gC@NVO electrodes.



Figure S9. EIS spectra and the fitting curves of C@NVO-400and NVO electrodes at an open voltage.