

Supporting information

Vanadium Nitride Nanoparticles Grown on Carbon Fiber Cloth as an Advanced Binder-Free Anode for the Storage of Sodium and Potassium Ions

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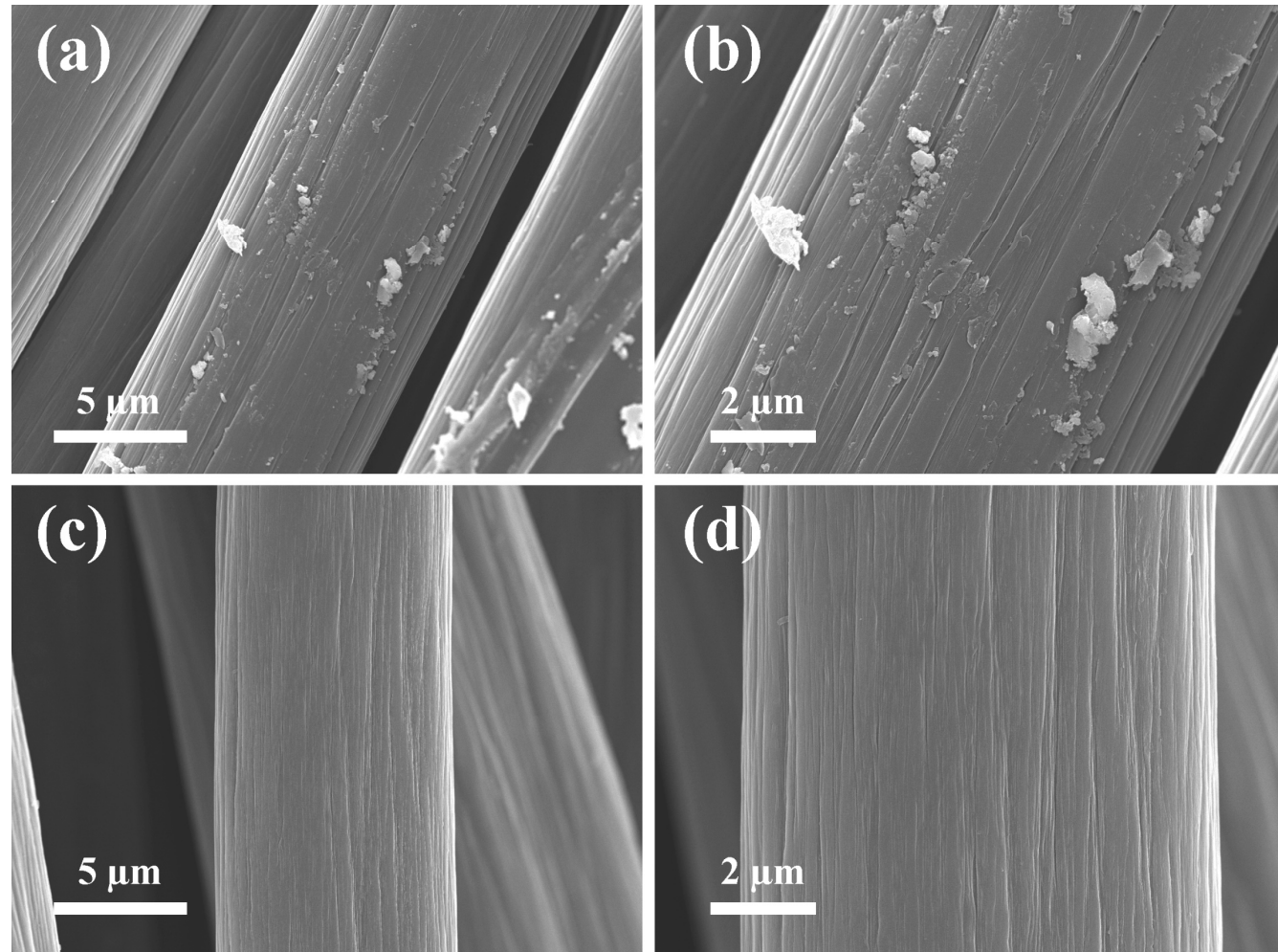


Fig. S1. Comparison of SEM morphology of (a, b) commercial and (c, d) treated carbon cloth.

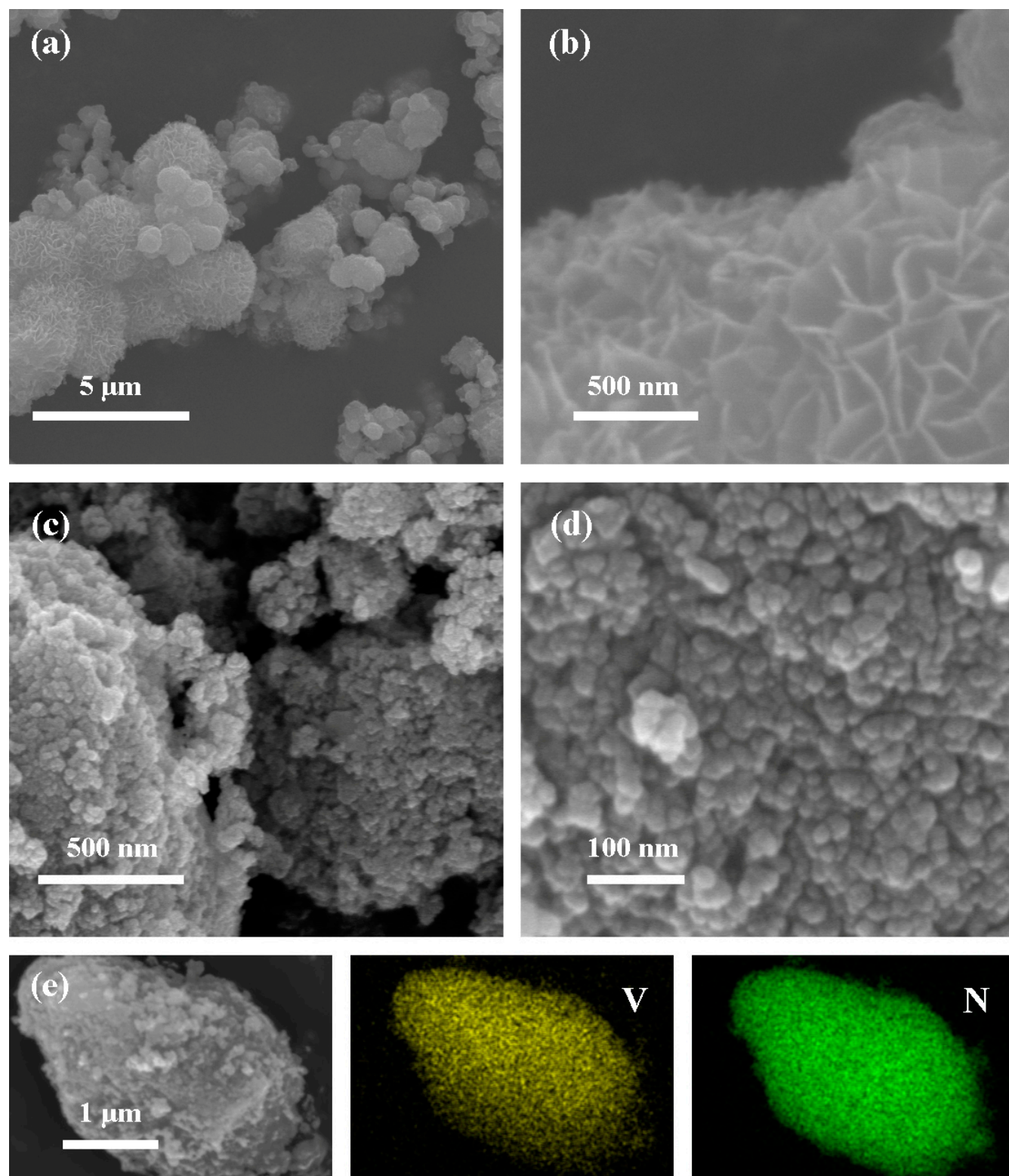


Fig. S2. SEM micrographs of (a, b) VN precursor, (c, d) VN, (e) HAADF images and corresponding elemental mapping distribution of VN.

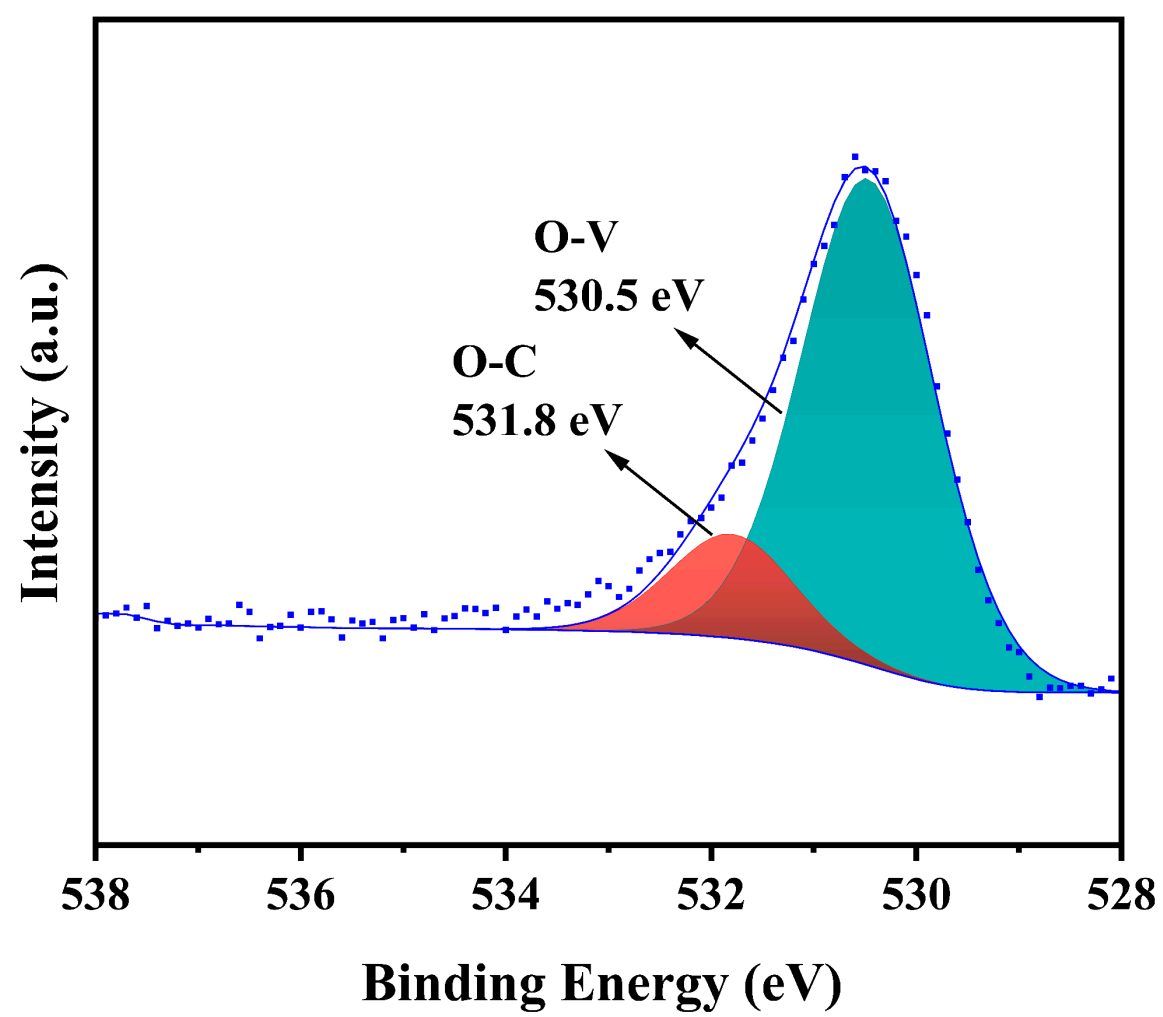


Fig. S3. High-resolution O 1s spectra recorded for the VN/CFC composite material.

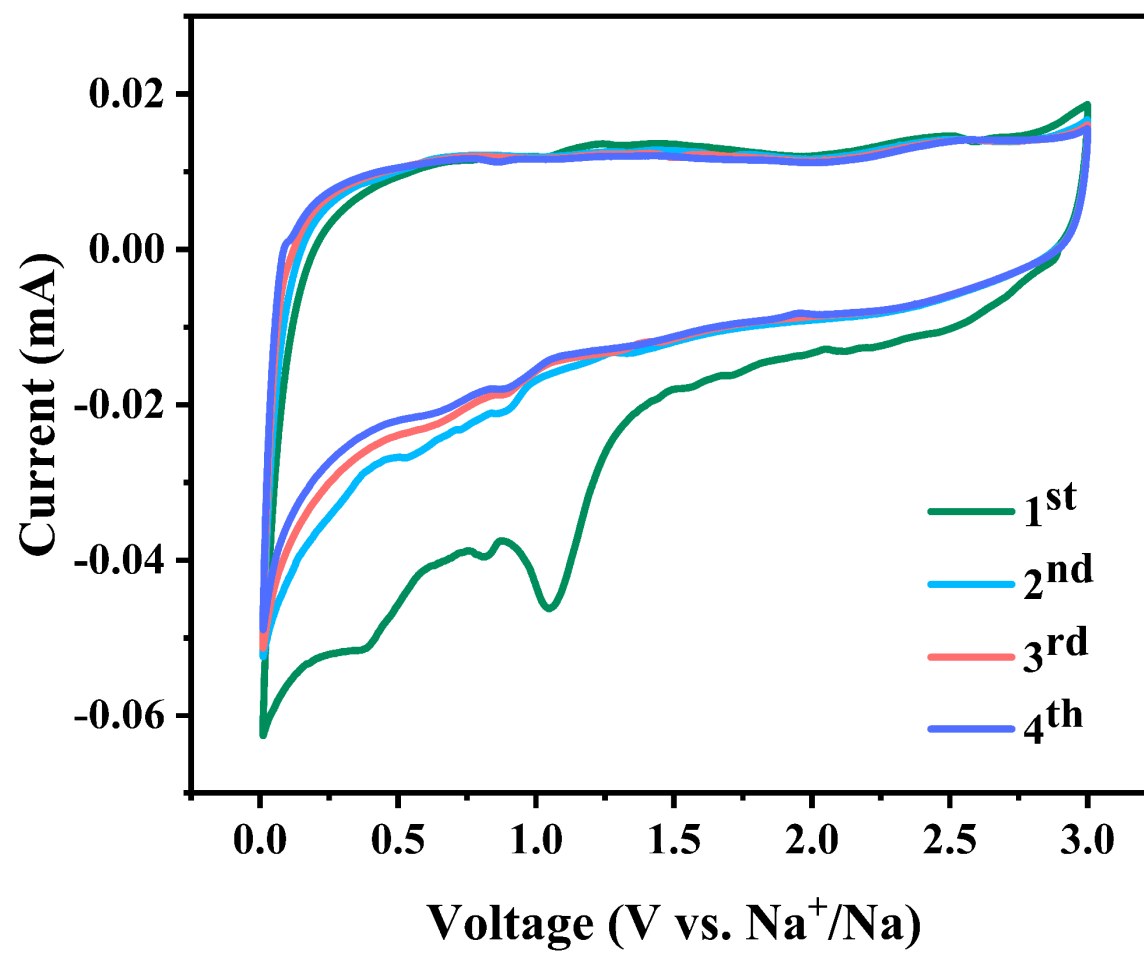


Fig. S4. CV curve of VN at a scan rate of 0.1 mV s⁻¹ between 0.01 and 3 V.

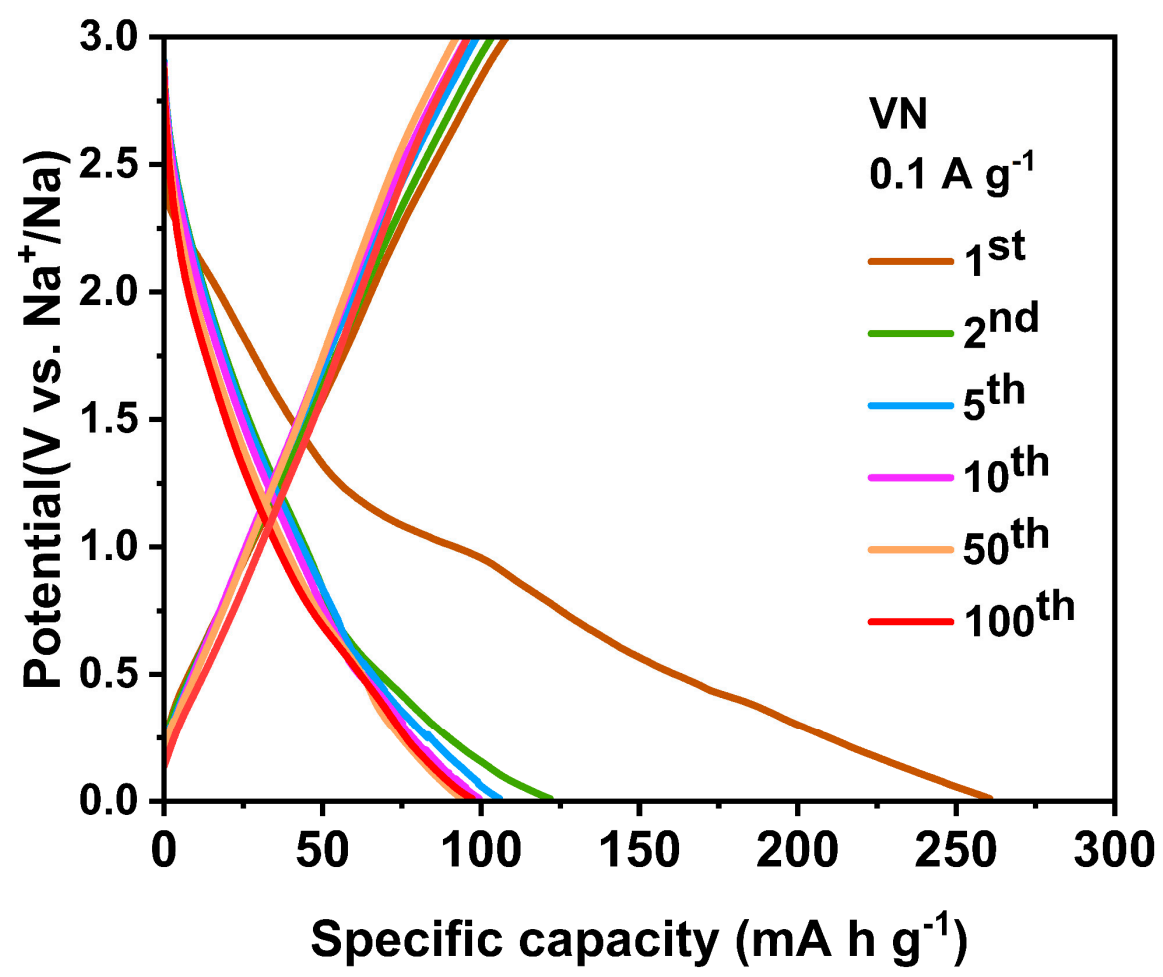


Fig. S5. Galvanostatic charge-discharge curves of VN-based anodes at 0.1 A g⁻¹ rate.

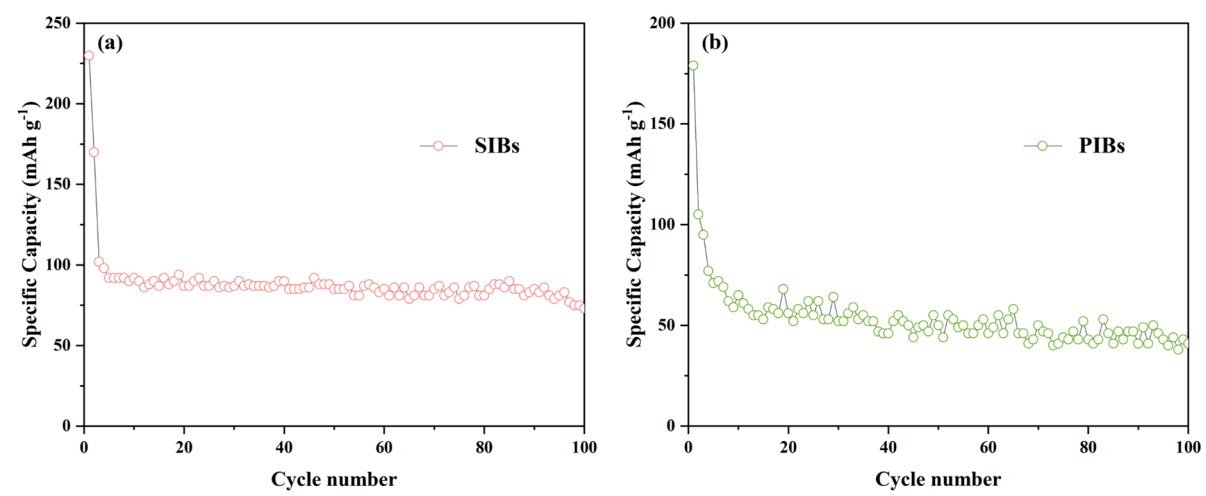


Fig. S6. Cycle performance of CFC for SIBs and PIBs at 0.1 A g⁻¹ current density.

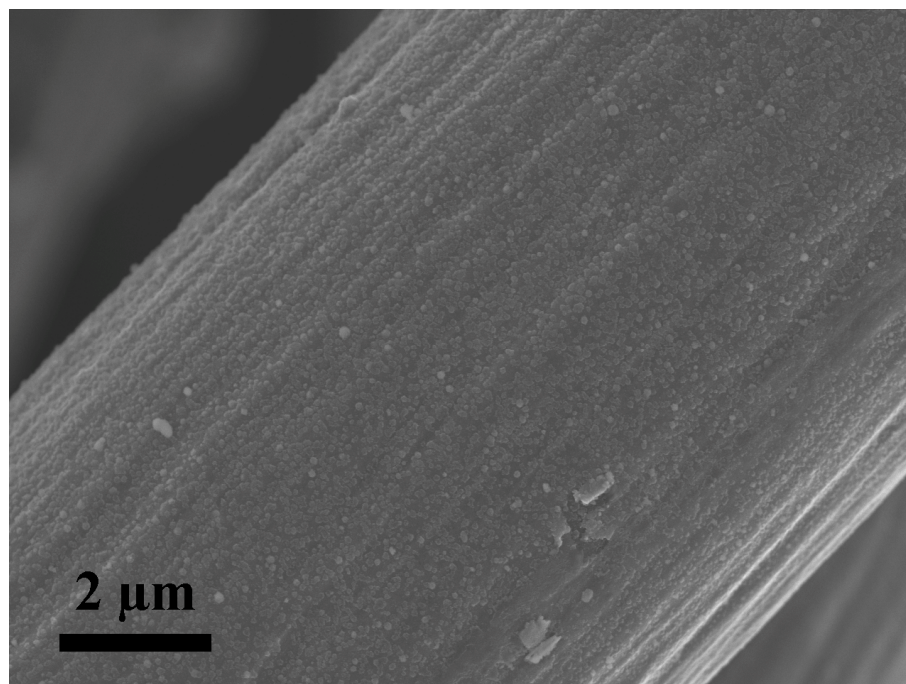


Fig. S7. The ex-situ SEM images of VN/CFC electrode after 10 cycles at a current density of 0.5 A g^{-1} .

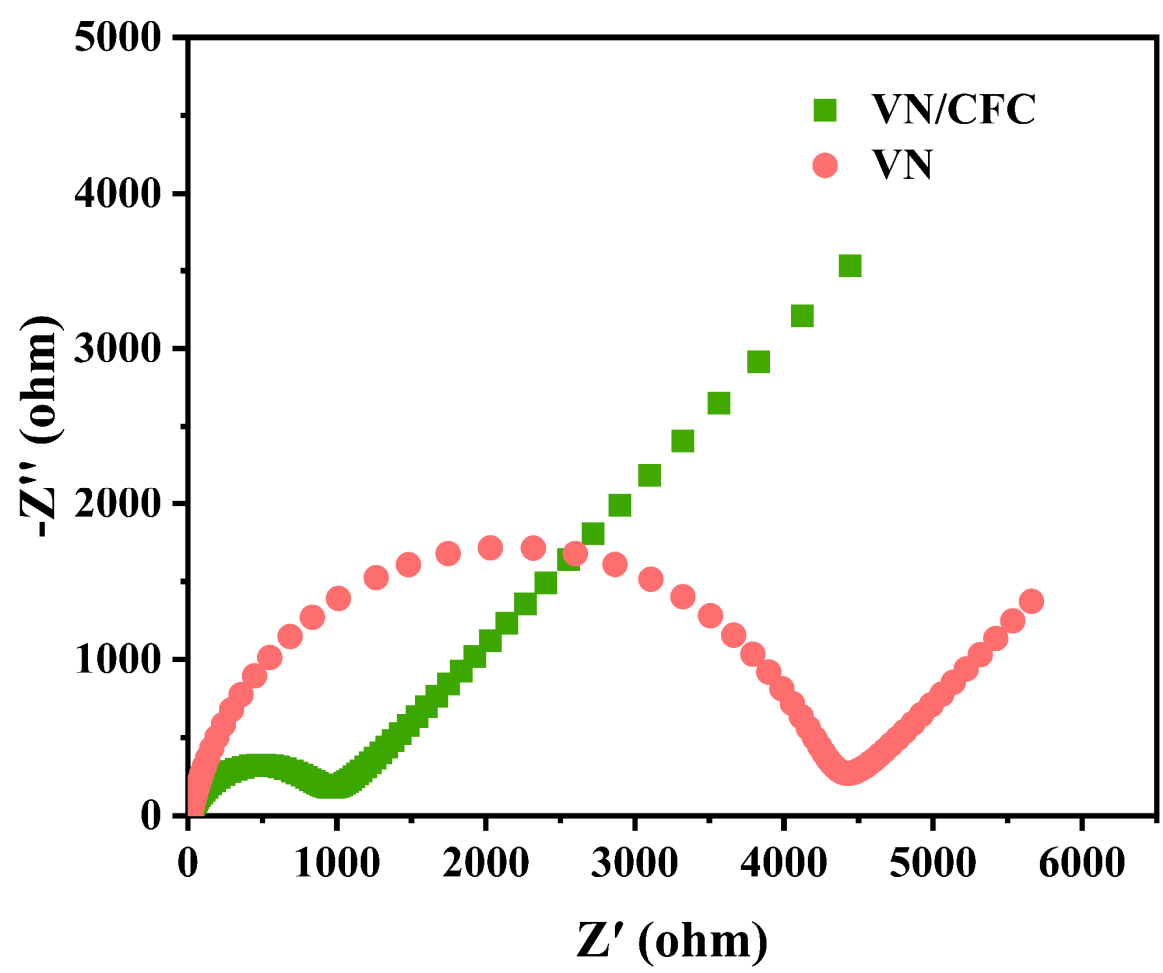


Fig. S8. Nyquist plots of VN and VN/CFC as the anode materials for SIBs before cycling.