

Supporting Information

Highly reversible sodium storage in GeP₅/C composite anode with large capacity and low voltage

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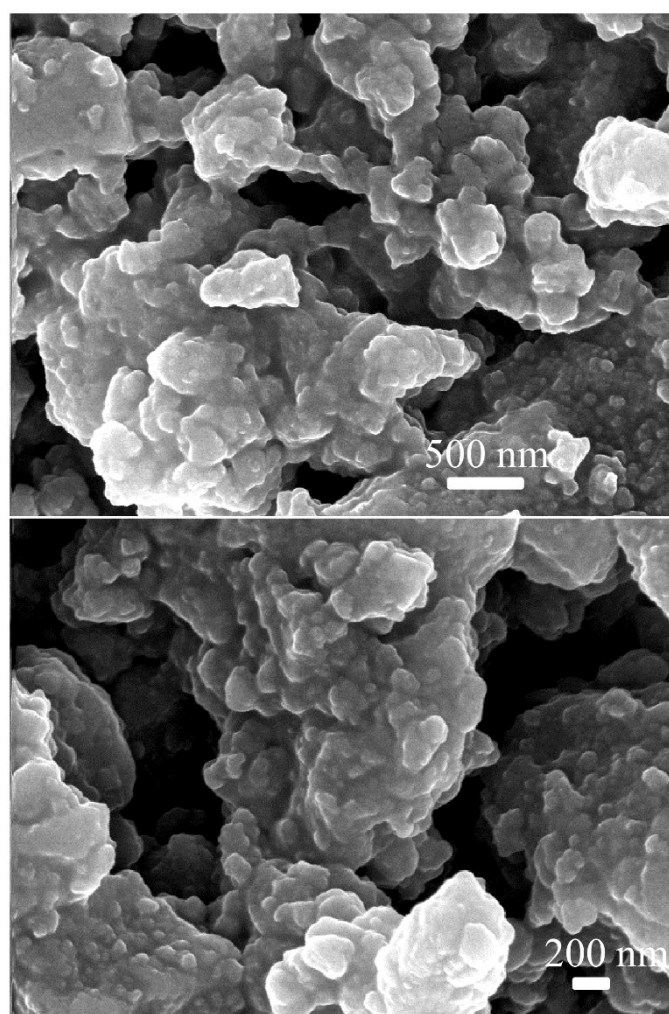


Figure S1. The high-magnification FSEM images taken on the agglomerated micro sized GeP₅ secondary grain.

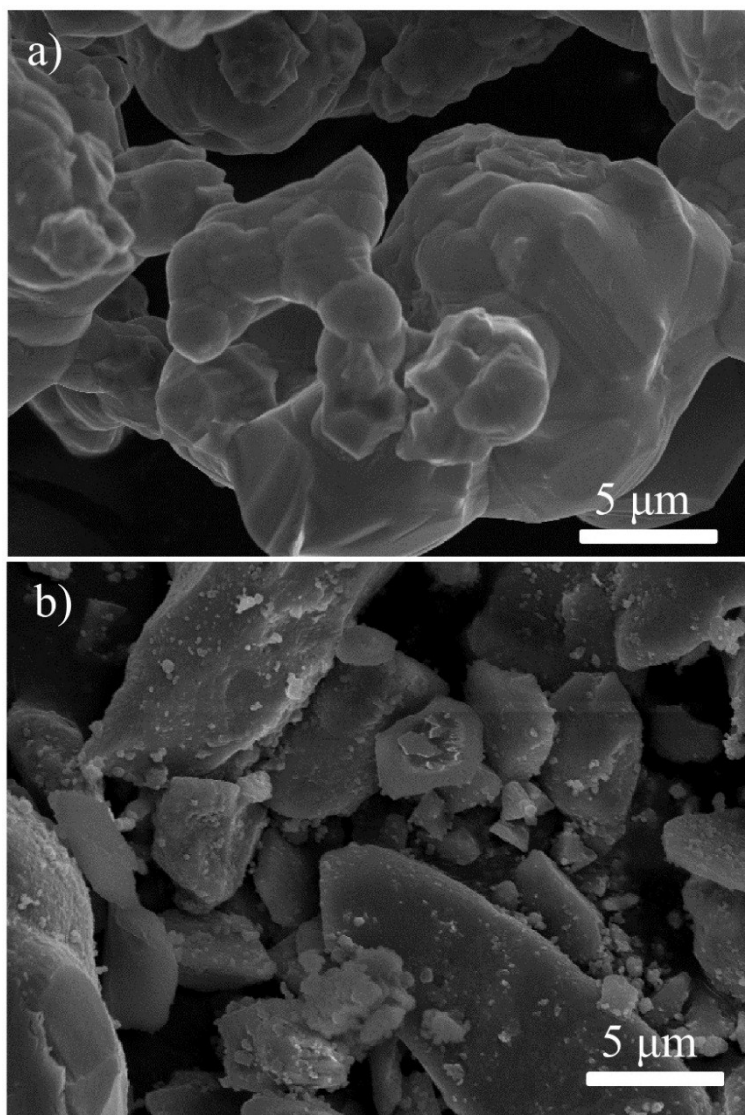


Figure S2. The FSEM images of (a) fresh Ge, and (b) P.

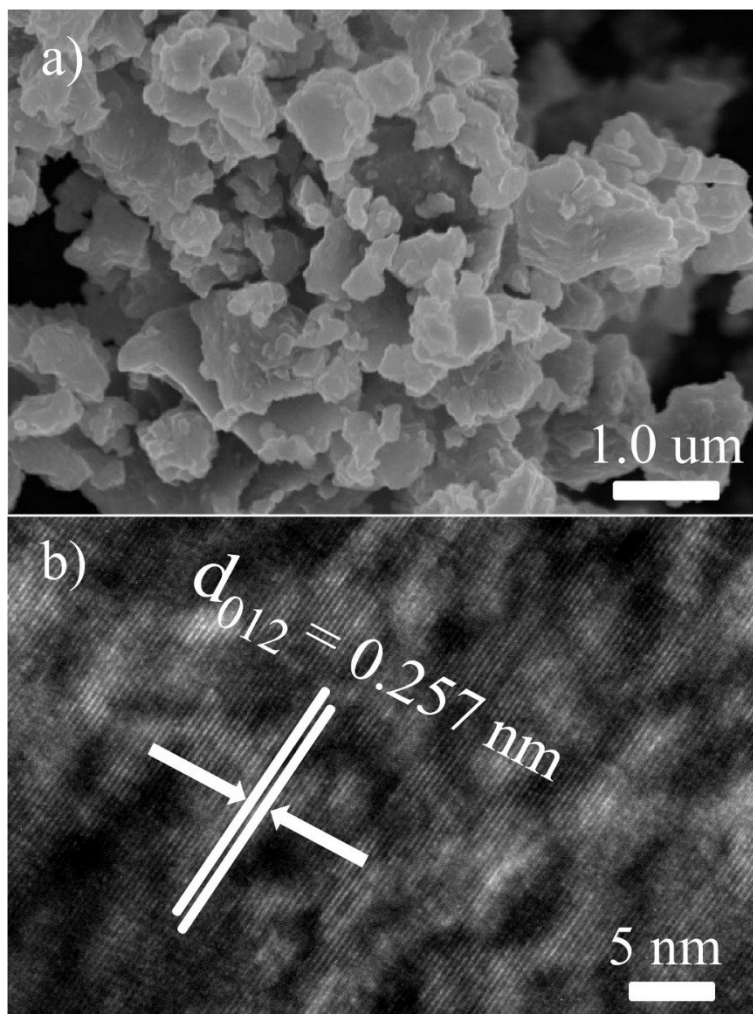


Figure S3. (a) The FSEM and HRTEM images of pure-phase GeP_5 .

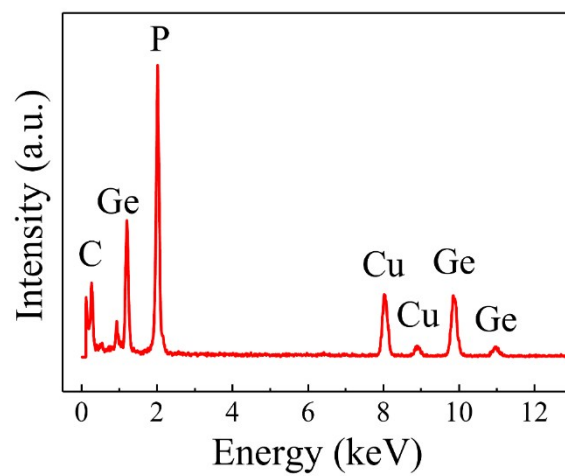


Figure S4. The EDX spectra of GeP_5/C composite.

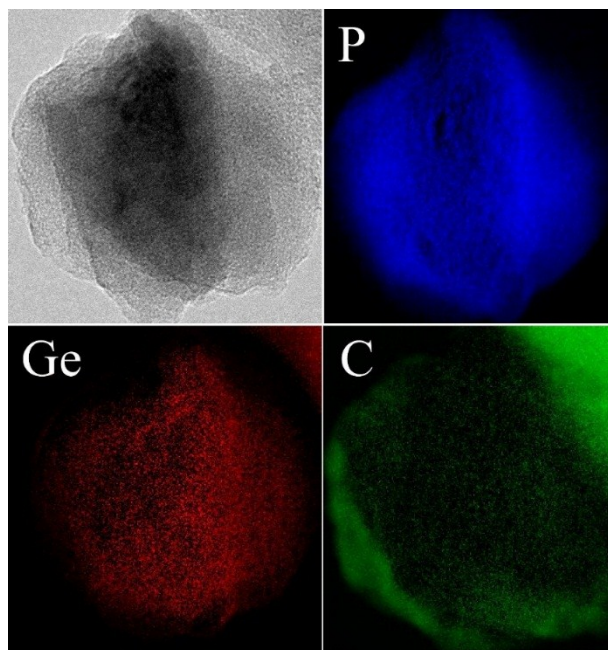


Figure S5. The individual elements distribution of of GeP₅/C (elemental mapping).

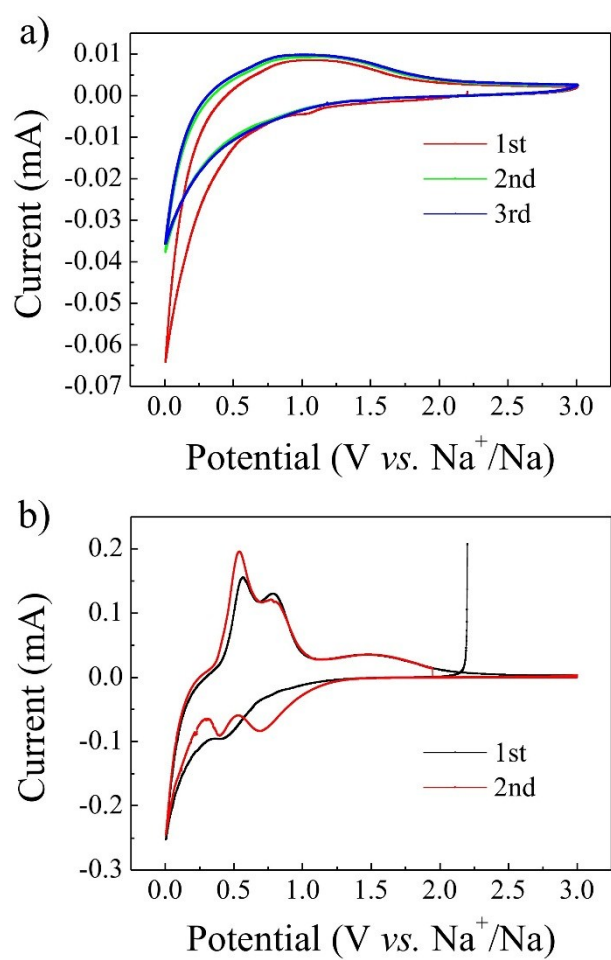


Figure S6. a) The initial three CV curves of Ge/C and b) P/C composite anode, respectively, at a scan rate of 0.05 mV s⁻¹.

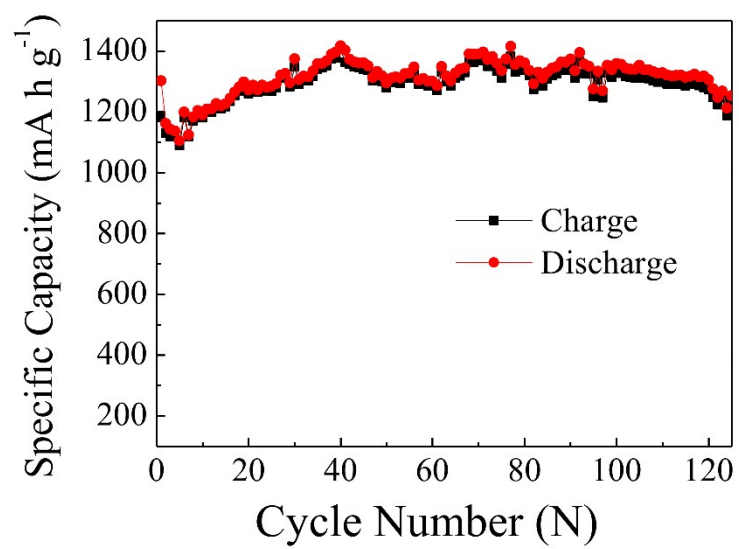


Figure S7. The cycle stability of GeP₅/C composite at a current density of 50 mA g⁻¹.

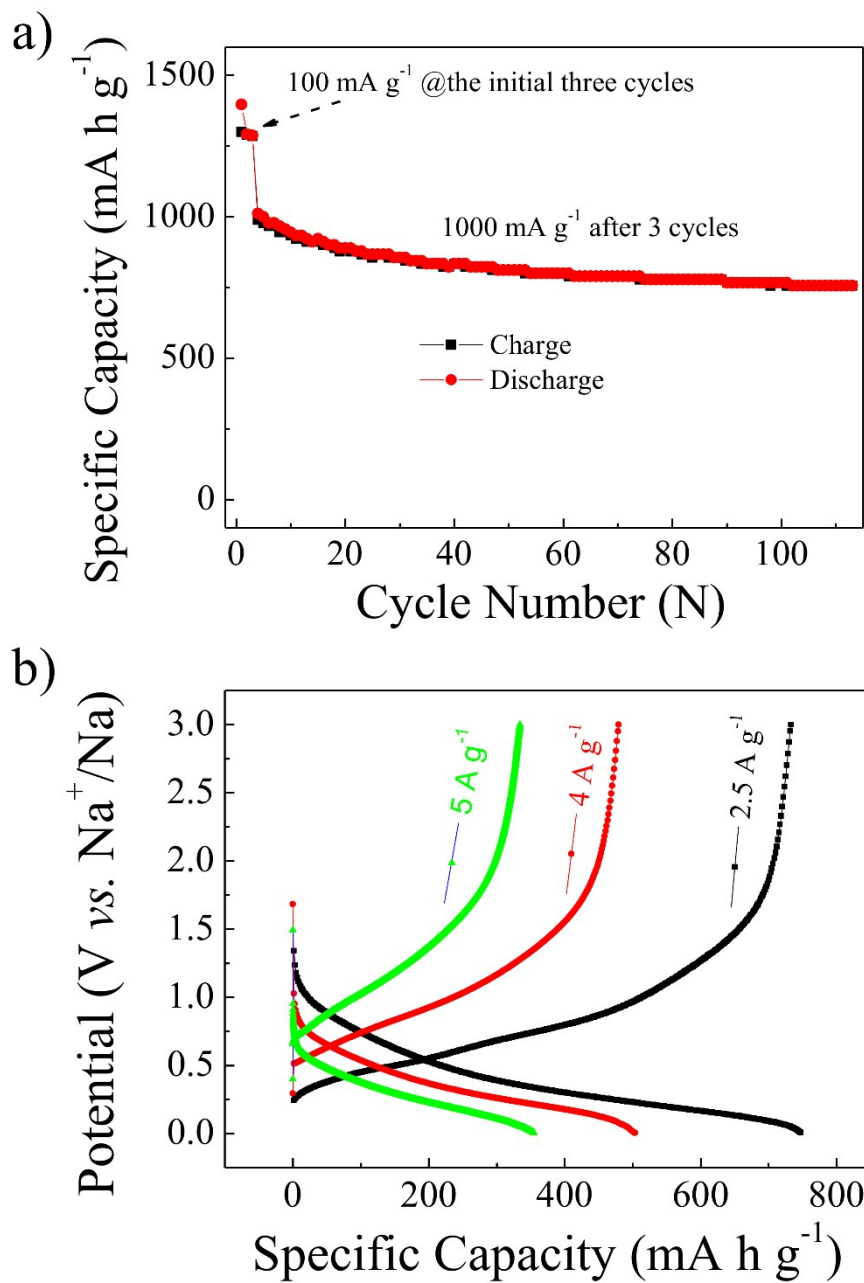


Figure S8. a) The cycle stability at the current density of 1000 mA g^{-1} ; b) The higher rate performances of GeP_5/C composite.

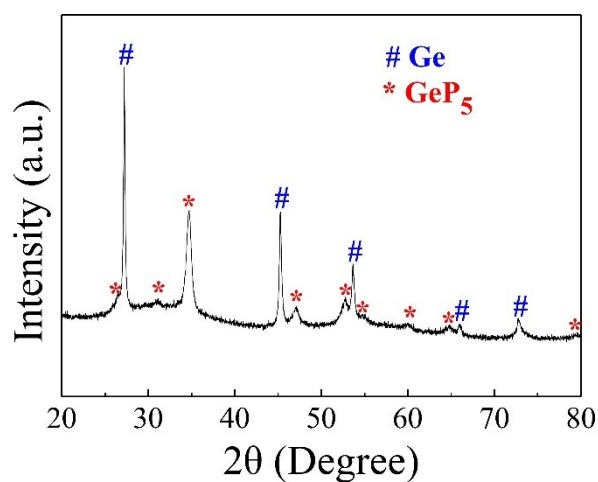


Figure S9. The XRD pattern of the mixture of GeP_5 , P and Ge (marked as $\text{GeP}_5\text{-P-Ge}$).

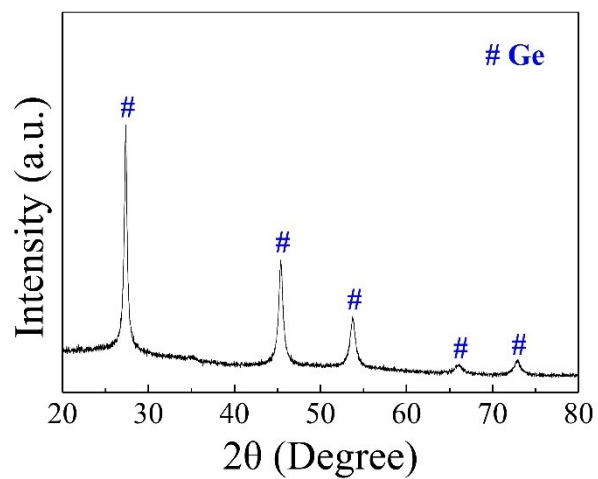


Figure S10. The XRD pattern of the mixture of Ge/C, and P/C (marked as Ge/C-P/C composite, and its atomic ratio of Ge:P is 1:5).

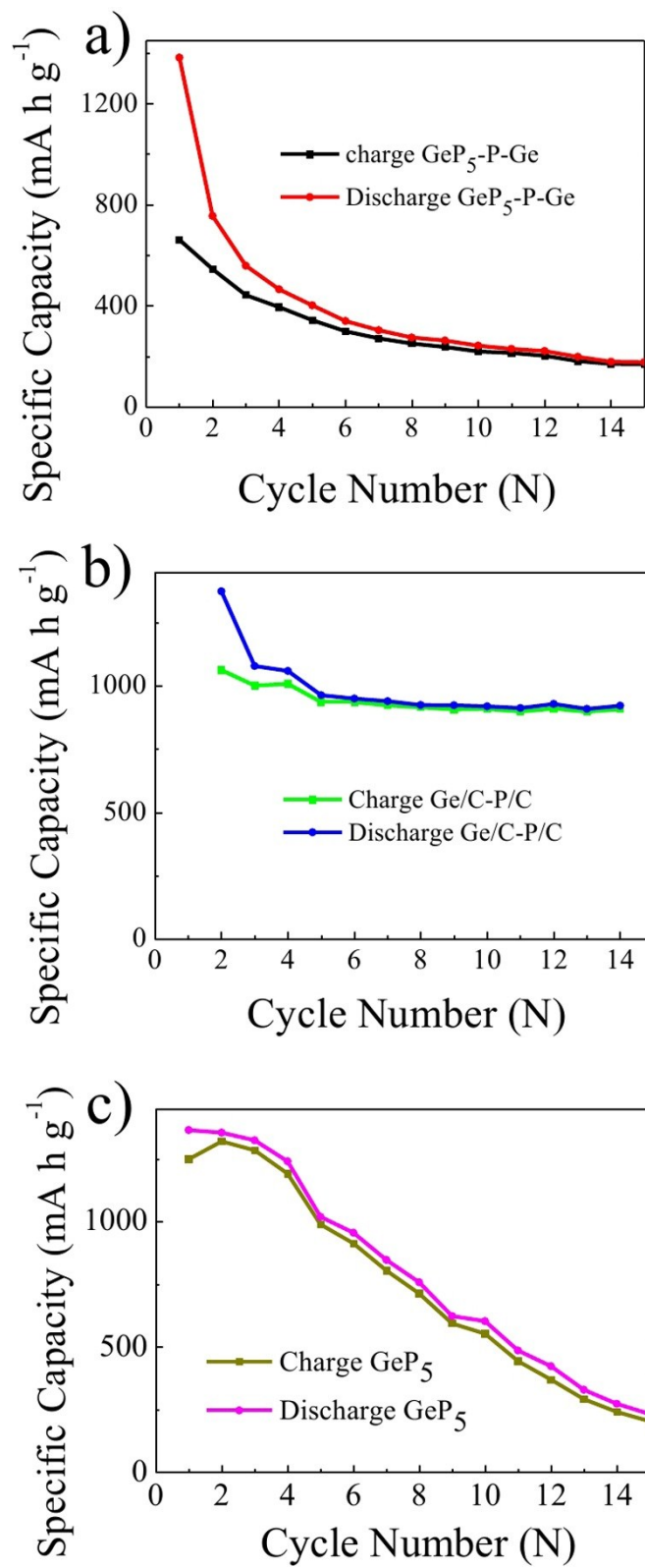


Figure S11. The electrochemical performances of a) the as-synthesized the medium $\text{GeP}_5\text{-P-Ge}$ composite; b) the Ge/C-P/C composite; c) pure GeP_5 .

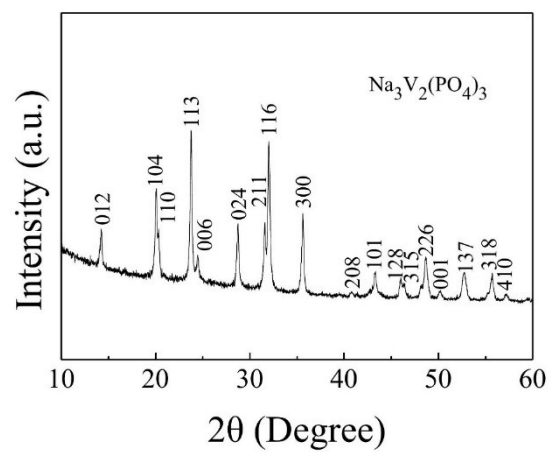


Figure S12. The XRD pattern of $\text{Na}_3\text{V}_2(\text{PO}_4)_3/\text{C}$.

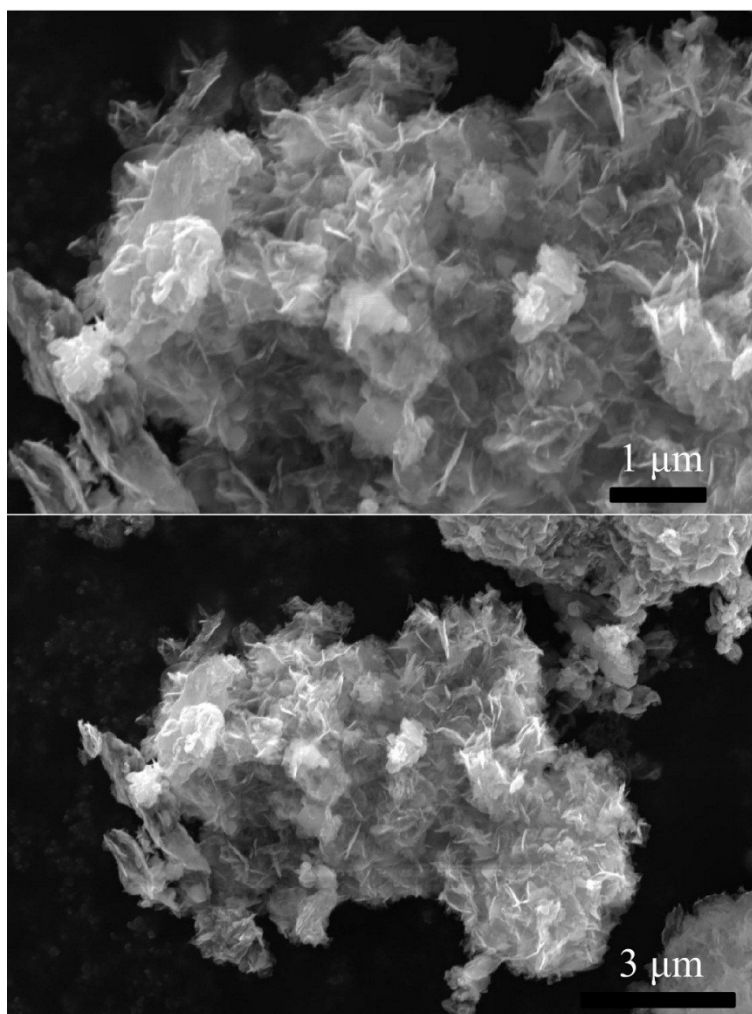


Figure S13. The FSEM images of $\text{Na}_3\text{V}_2(\text{PO}_4)_3/\text{C}$.

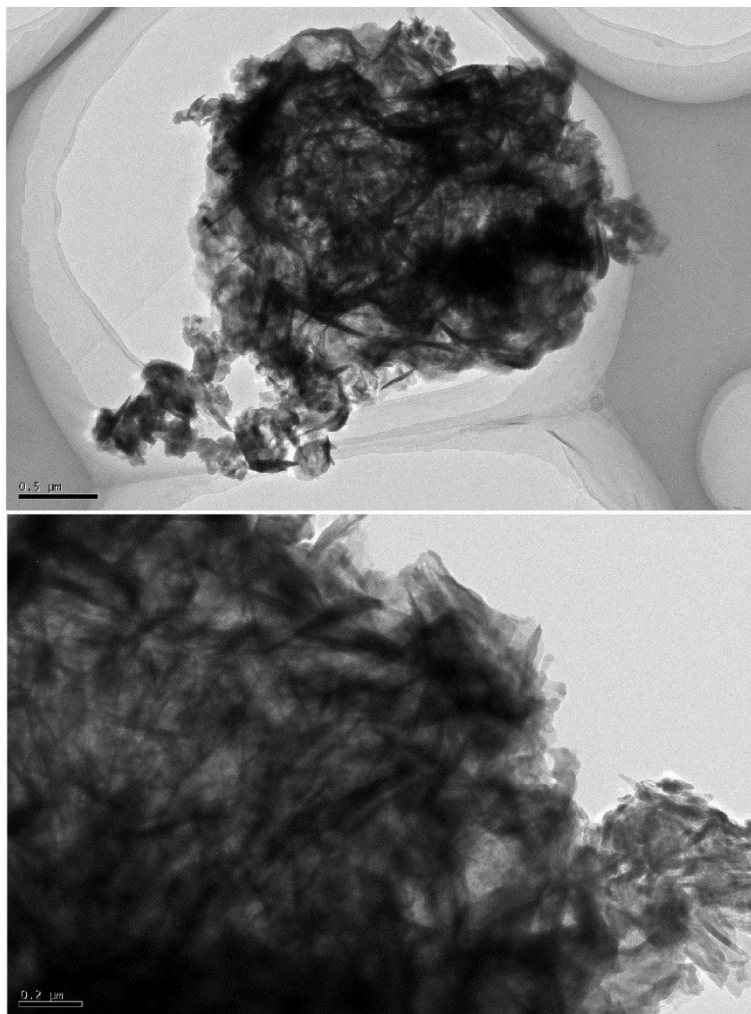


Figure S14. The TEM images of $\text{Na}_3\text{V}_2(\text{PO}_4)_3/\text{C}$.

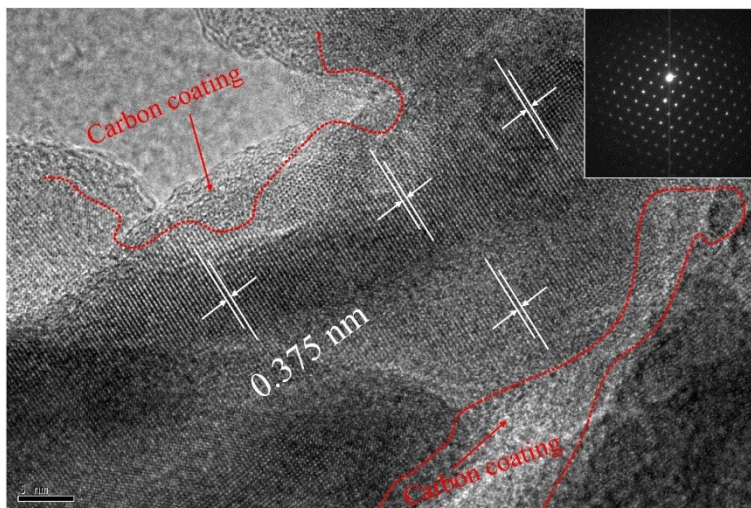


Figure S15. The TEM images of $\text{Na}_3\text{V}_2(\text{PO}_4)_3/\text{C}$.