

Supporting Information for

Coupling Hierarchical Iron Cobalt Selenide Arrays with

N-doped Carbon as Advanced Anodes for Sodium Ion Storage

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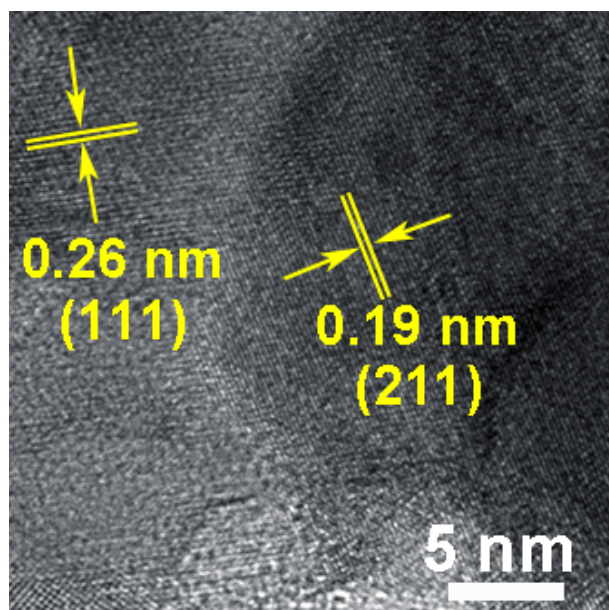


Fig. S1. HRTEM image of FeCo-Se anode in the core region.

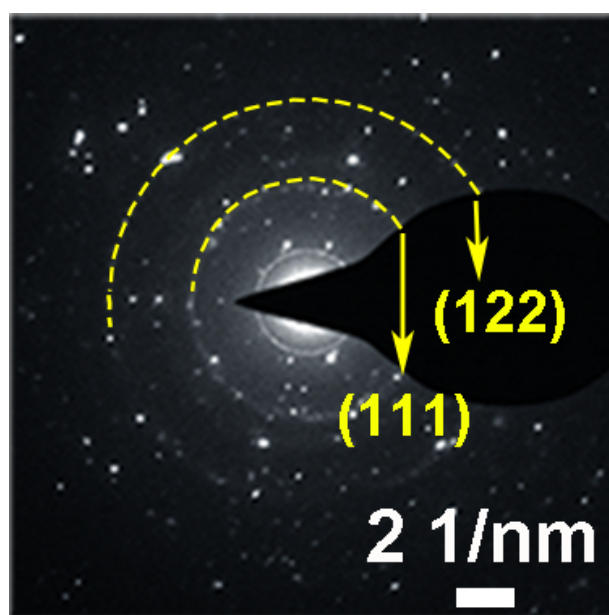


Fig. S2. Typical SAED pattern of FeCo-Se anode.

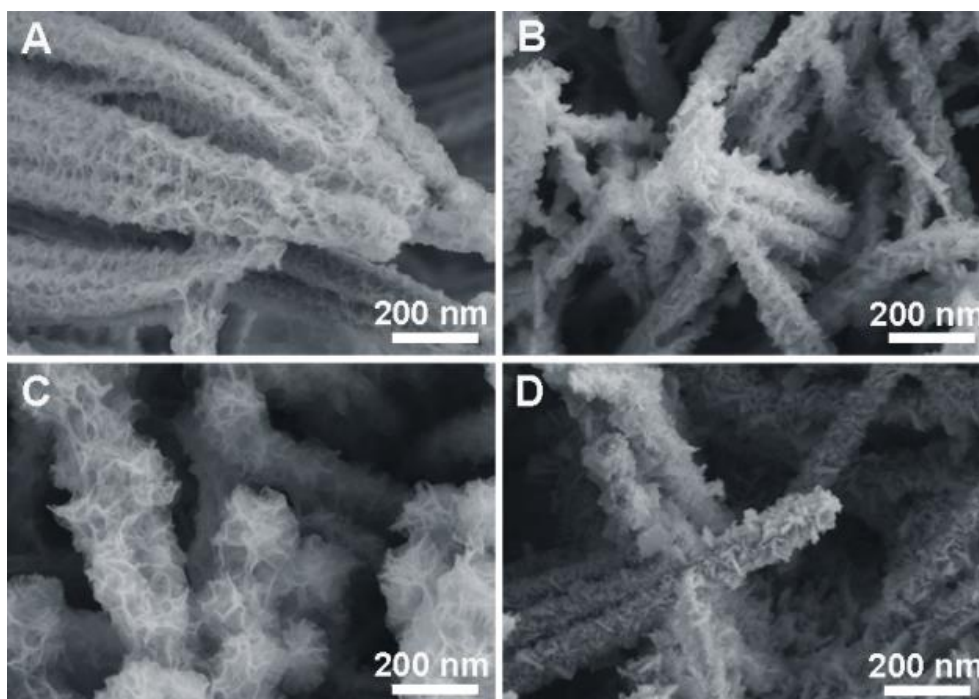


Fig. S3. SEM images of (A) Co-Se, (B) FeCo-Se-1.5, (C) FeCo-Se-2, and (D) FeCo-Se-3.

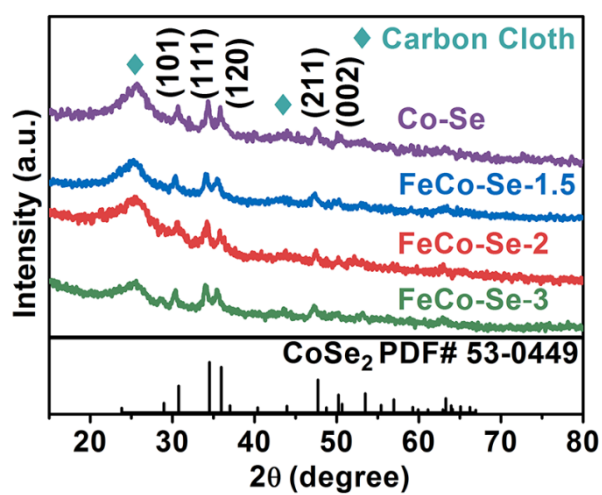


Fig. S4. XRD patterns of Co-Se, FeCo-Se-1.5, FeCo-Se-2, and FeCo-Se-3.

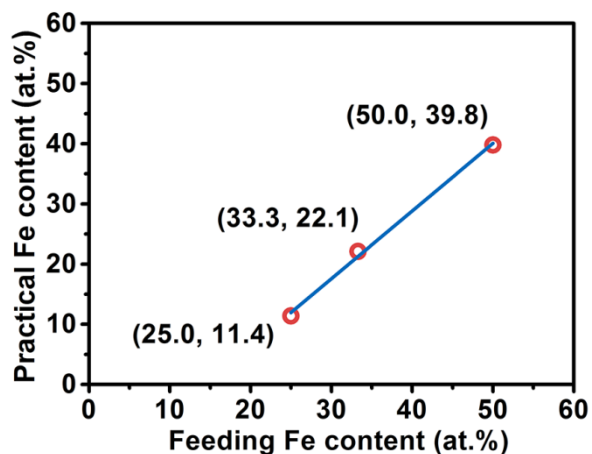


Fig. S5. The linear relationship between the practical Fe contents of (Fe/Fe+Co) in products and the feeding Fe contents in the starting materials for the samples.

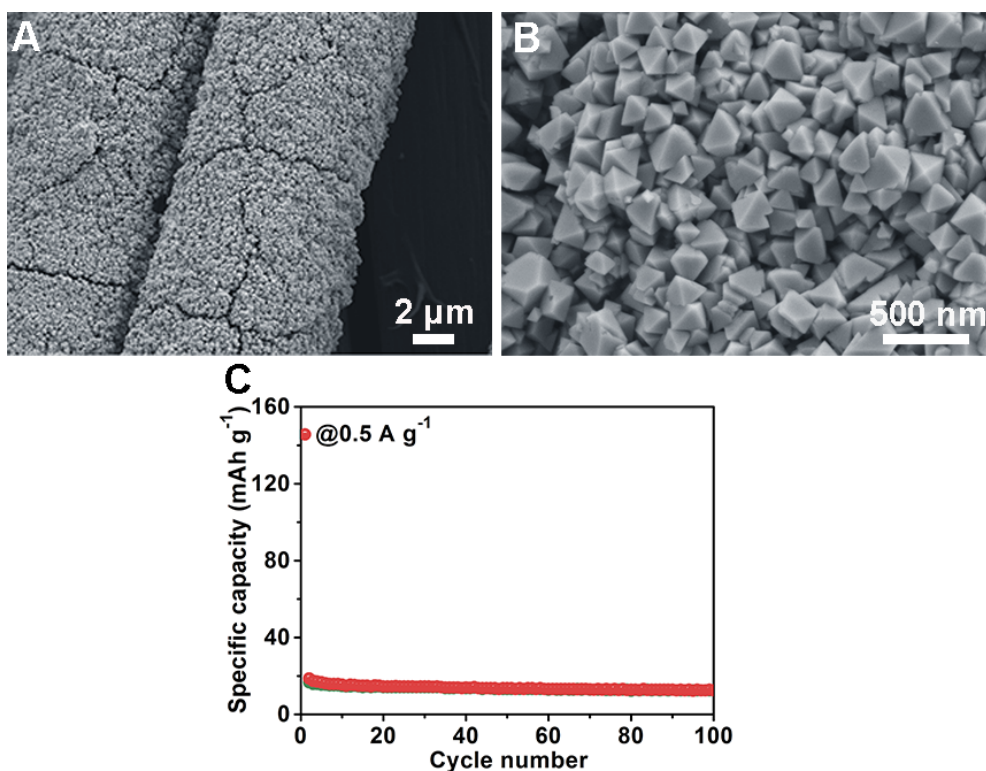


Fig. S6. (A, B) Typical low- and high-magnification SEM images of the iron selenide arrays, and (C) cycling stability of the iron selenide electrode tested at 0.5 A g^{-1} .

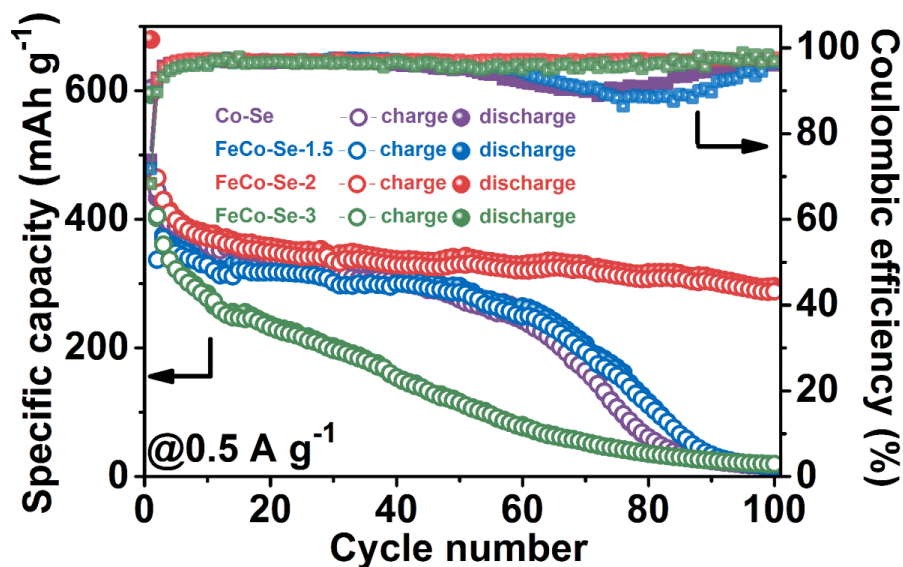


Fig. S7. The cycling performances of the Co-Se, FeCo-Se-1.5, FeCo-Se-2, and FeCo-Se-3 tested at 0.5 A g^{-1} .

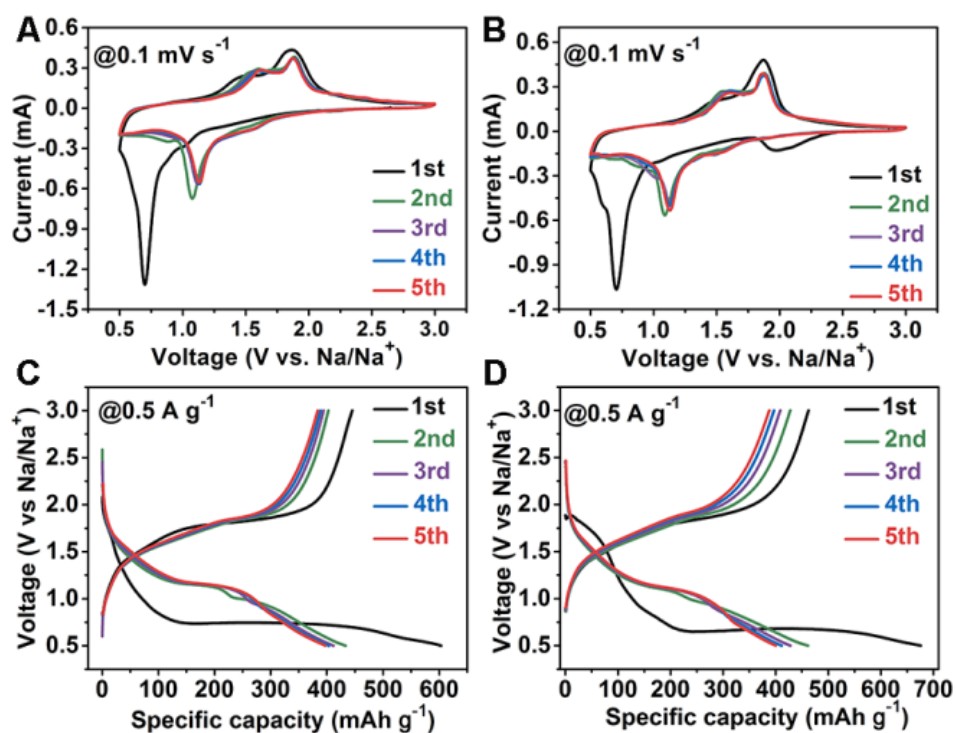


Fig. S8. CV curves of (A) Co-Se and (B) FeCo-Se anodes at a scan rate of 0.1 mV s^{-1} , and first five discharge–charge curves of (C) Co-Se and (D) FeCo-Se anodes at 0.5 A g^{-1} .

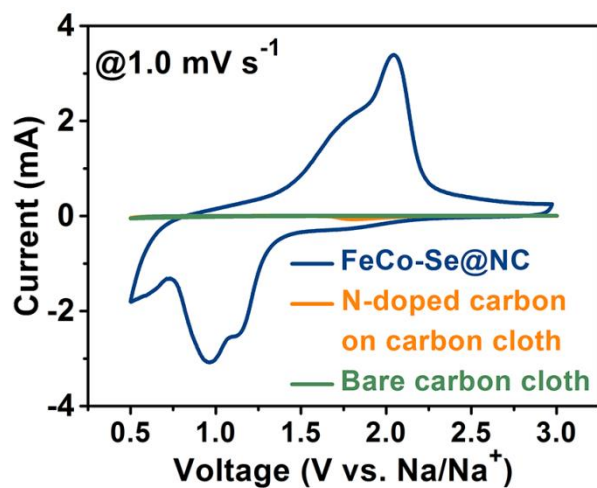


Fig. S9. Comparative CV curves for the FeCo-Se@NC, N-doped carbon on carbon cloth and bare carbon cloth tested at a scan rate of 1.0 mV s⁻¹.

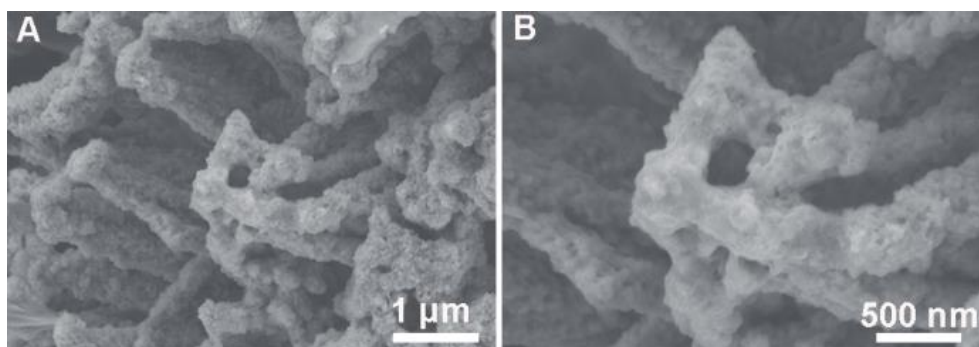


Fig. S10. (A) Low- and (B) high-magnification SEM images of the FeCo-Se@NC electrode after cycling.

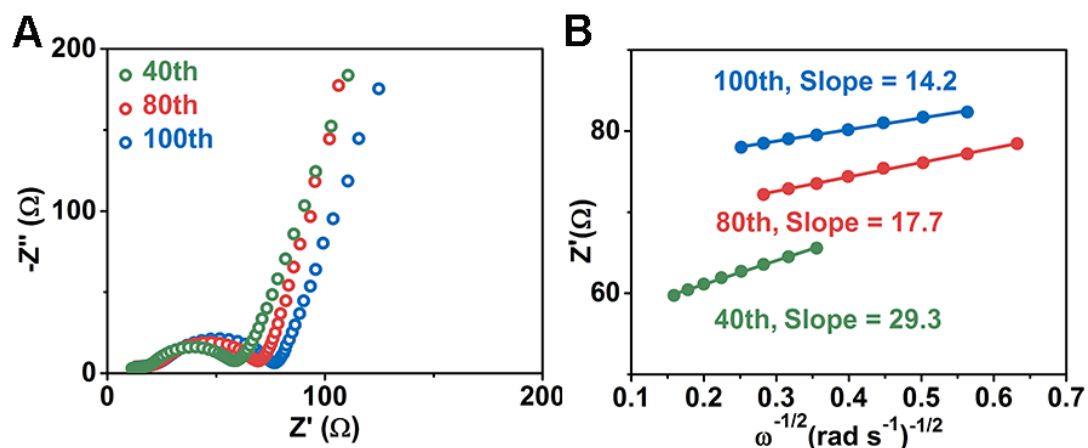


Fig. S11. (A) EIS spectra of the FeCo-Se@NC electrode after different cycles measured at discharged state of 0.5 V, and (B) the corresponding relationship of Z' versus $\omega^{-1/2}$.

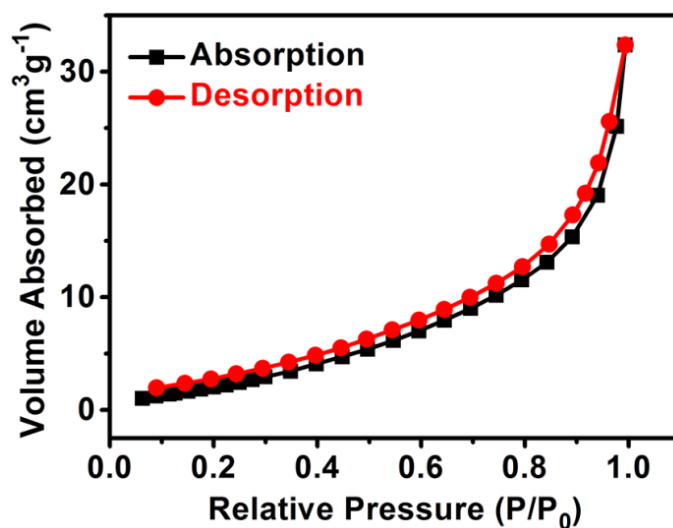


Fig. S12. N₂ adsorption-desorption isotherms of the FeCo-Se@NC sample tested at 77 K for the evaluation of specific surface area.

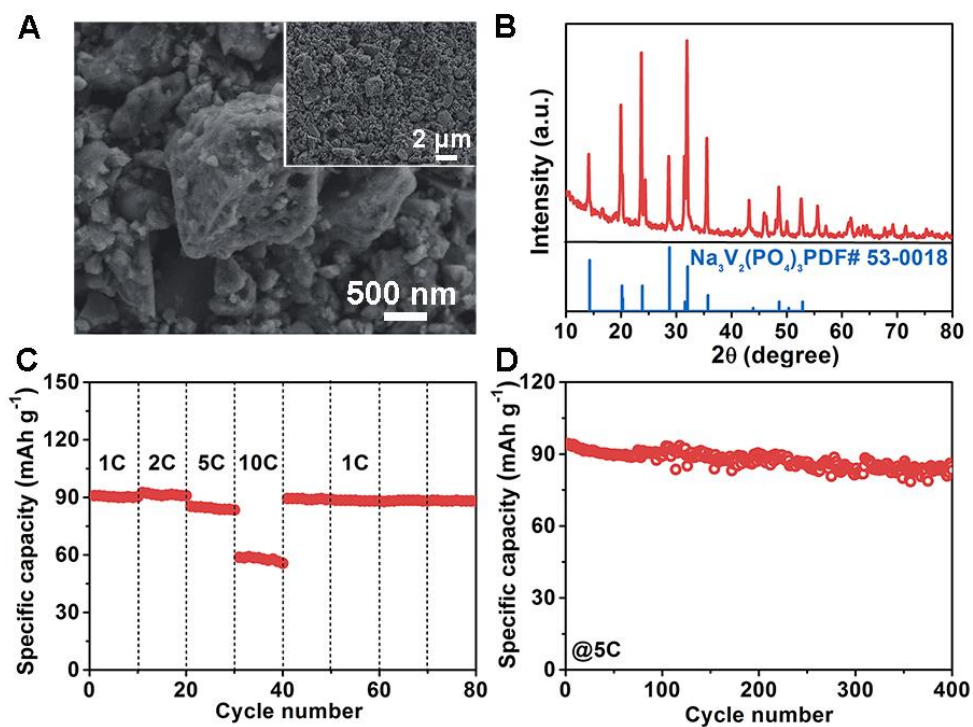


Fig. S13. (A) SEM image of $\text{Na}_3\text{V}_2(\text{PO}_4)_3/\text{C}$ cathode, (B) XRD pattern of $\text{Na}_3\text{V}_2(\text{PO}_4)_3/\text{C}$ cathode, (C) rate capability and (D) cycling stability of the $\text{Na}_3\text{V}_2(\text{PO}_4)_3/\text{C}$ cathode (1C = 0.374 A g^{-1}).

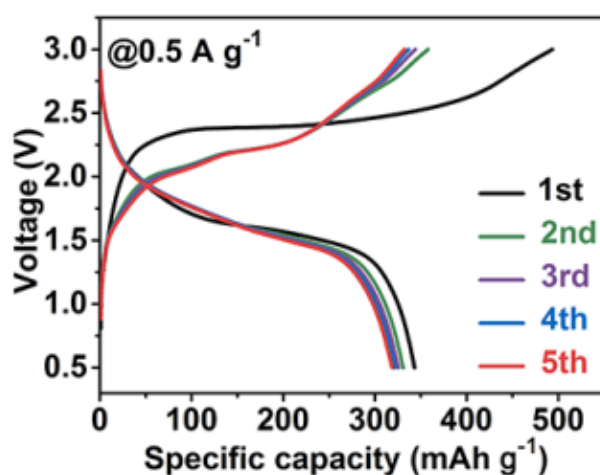


Fig. S14. First five charge-discharge curves of the full cell tested at 0.5 A g^{-1} without presodiation.