Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supporting Information

$Na_3V_2(PO_4)_2F_3$@C dispersed within carbon nanotube frameworks as high tap density cathode for high-performance sodium-ion batteries

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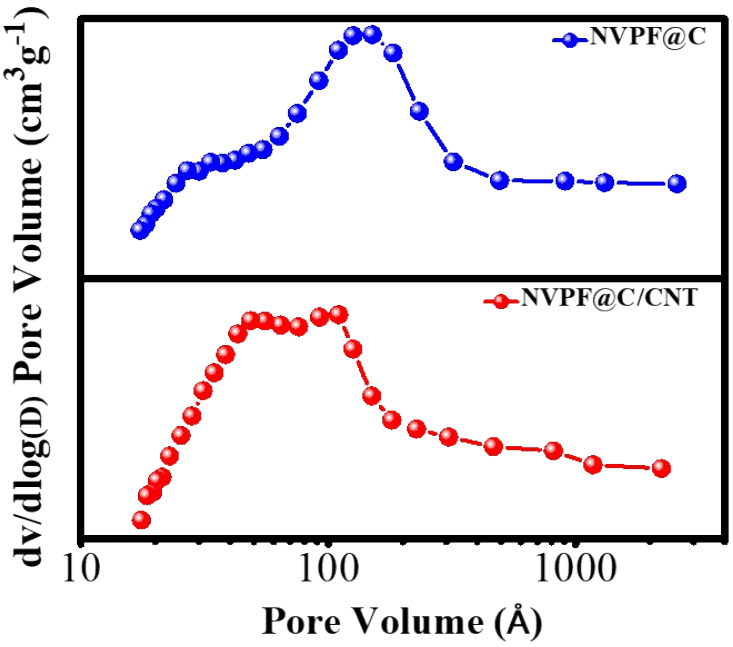

Figure S1. The plot of pore-size distribution of NVPF@C and NVPF@C/CNTs, respectively.

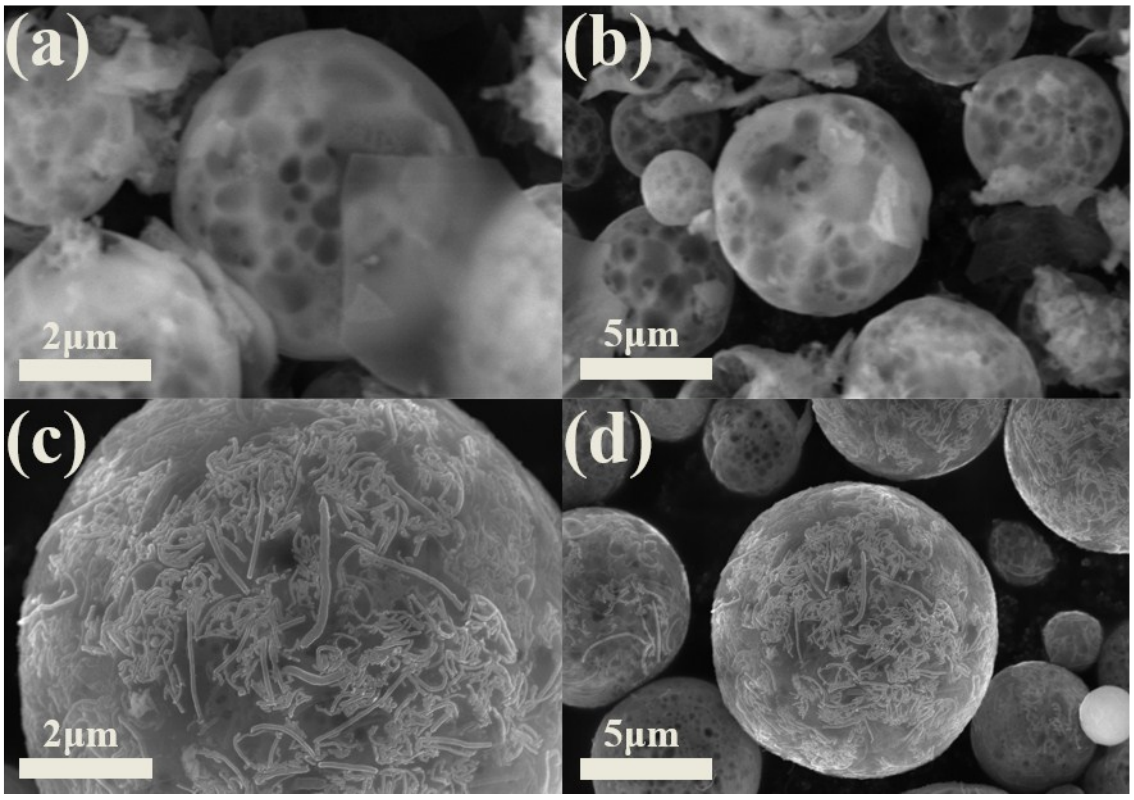

Figure S2. SEM images of the precursor (a, b) NVPF@C and (c, d) of NVPF@C/CNTs.

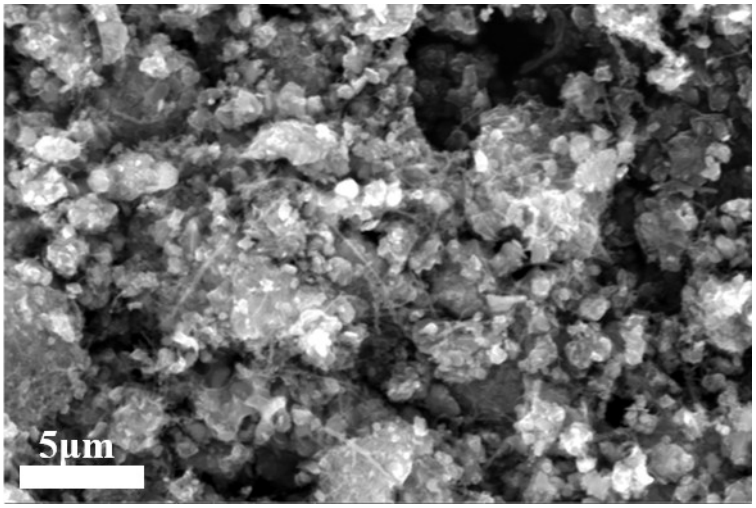

Figure S3. The SEM images of BM-NVPF@C/CNTs samples with an irregular shape of secondary particle and nano-sized of primary particle.

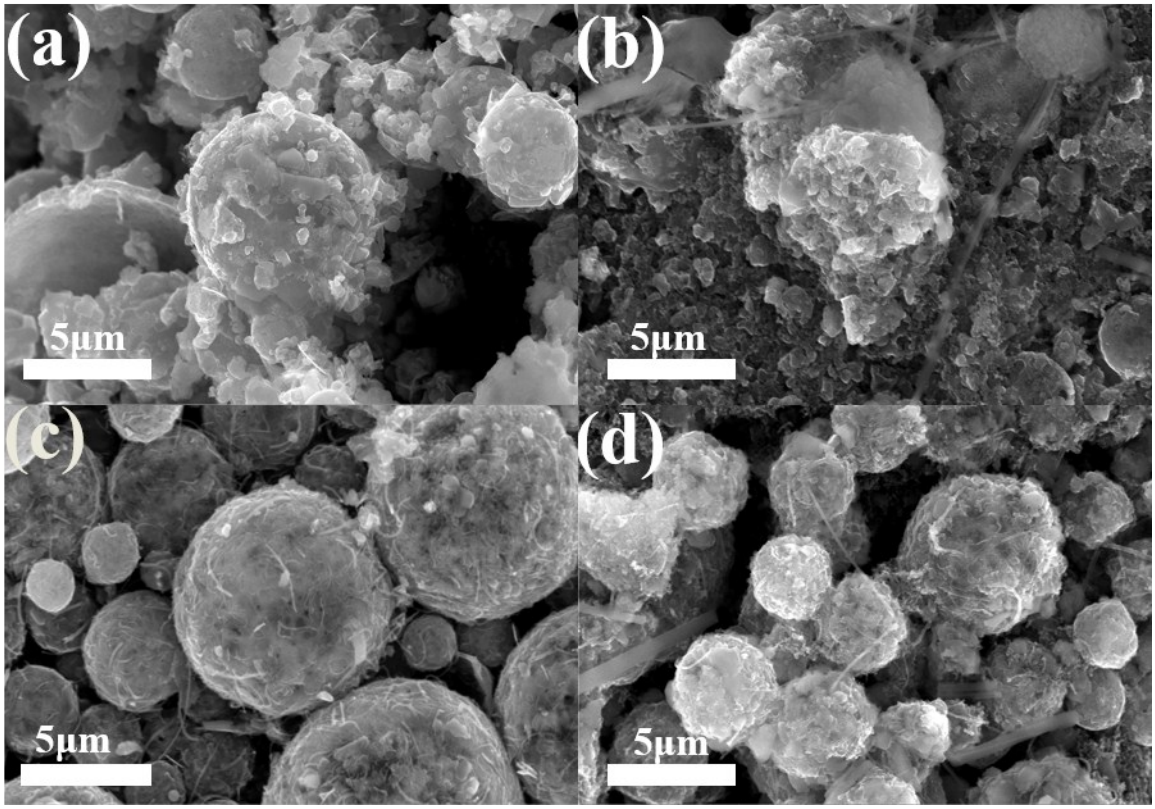

Figure S4. SEM images of (a) NVPF@C and (c) NVPF@C/CNT before cycle; SEM images of (b) NVPF@C and (d) NVPF@C/CNTs, after discharge and charge at 10 C for 300 cycles.

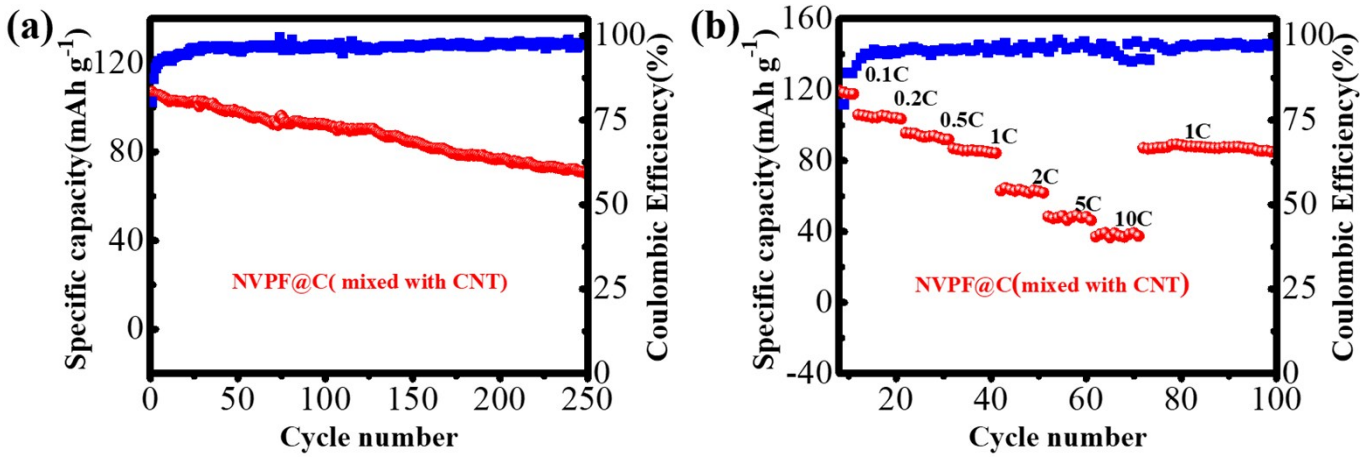

Figure S5. (a) Cycle performance and Coulombic efficiency of the physical mixture of NVPF@C and CNTs for 250 cycles; (b) Rate capability at various current rates for the physical mixture of NVPF@C and CNTs.

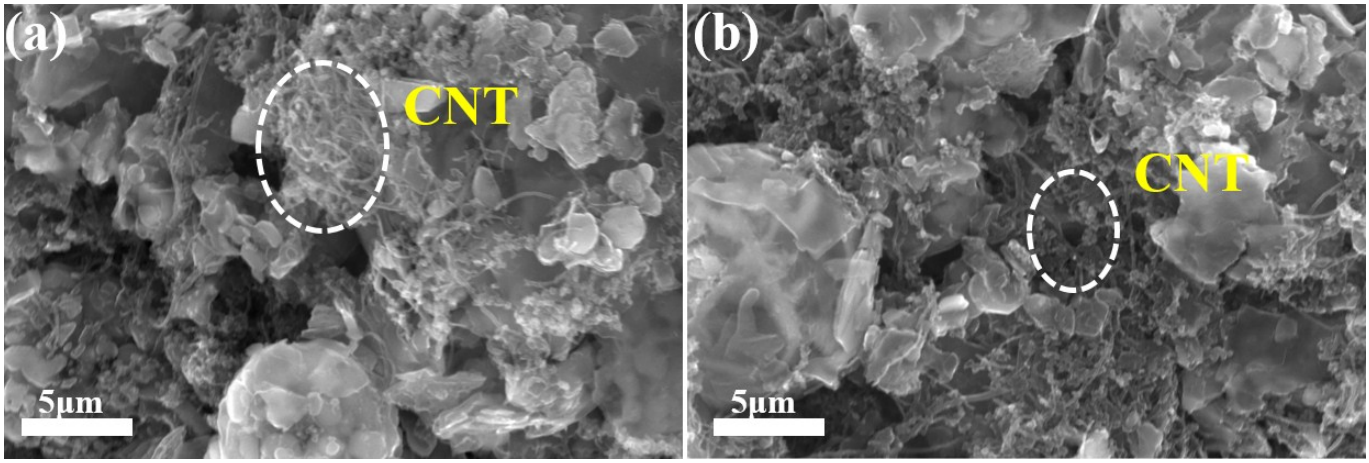

Figure S6. (a-b) SEM images of the physical mixture of NVPF@C and CNTs.

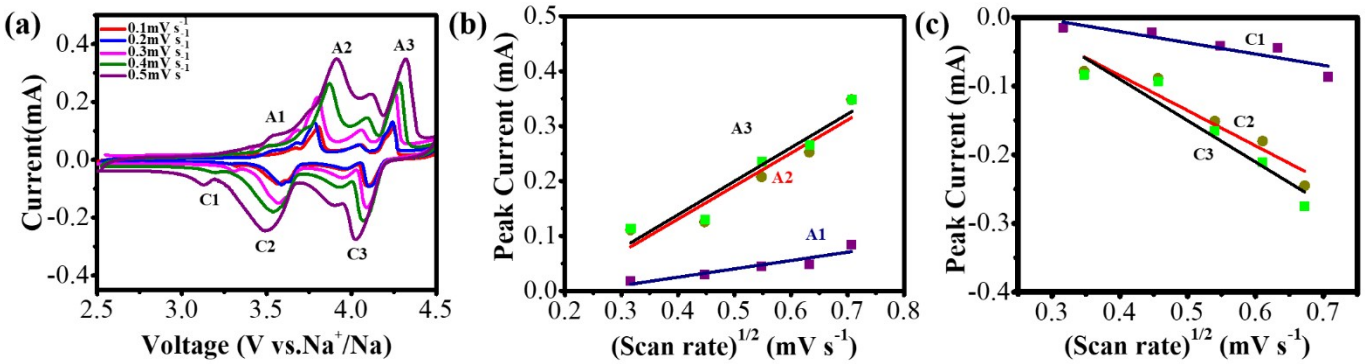

Figure S7. (a) CV curves at different scan rates of the NVPF@C; (b, c) show the relationship between the peak current (I_p) and the square root of the scan rate ($n^{1/2}$).