Electronic Supplementary Material (ESI) for Inorganic Chemistry Frontiers.

Highly dispersive $CoSe_2$ nanoparticles encapsulated in carbon nanotube-grafted multichannel carbon fibers as advanced anodes for sodium-ion half/full batteries

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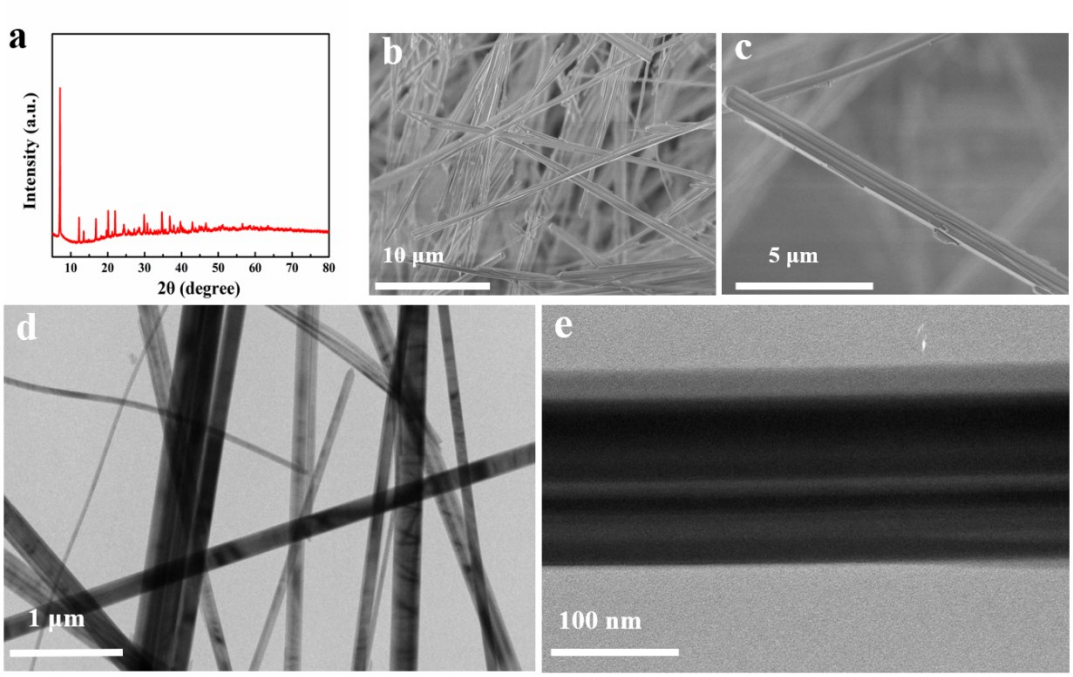

Fig. S1 Microstructure and morphology of cobalt coordination polymer nanowires. (a) XRD pattern; (b, c) SEM images; (d, e) TEM images.

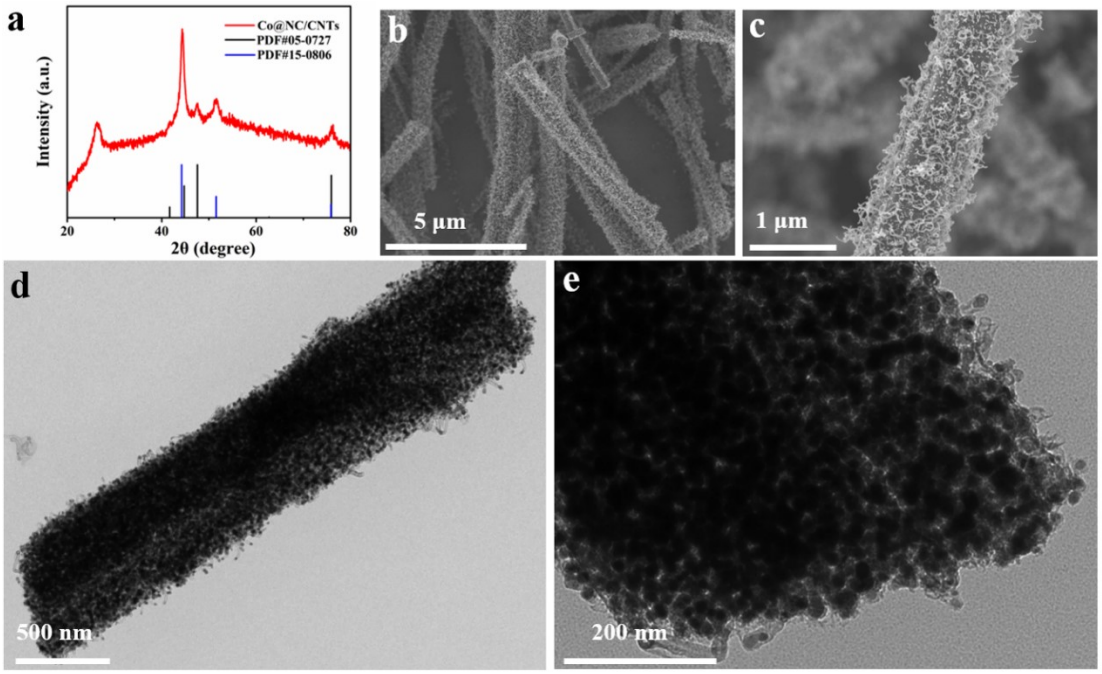

Fig. S2 Microstructure and morphology of Co@NC/CNTs. (a) XRD pattern; (b, c) SEM image; (d, e) TEM image.

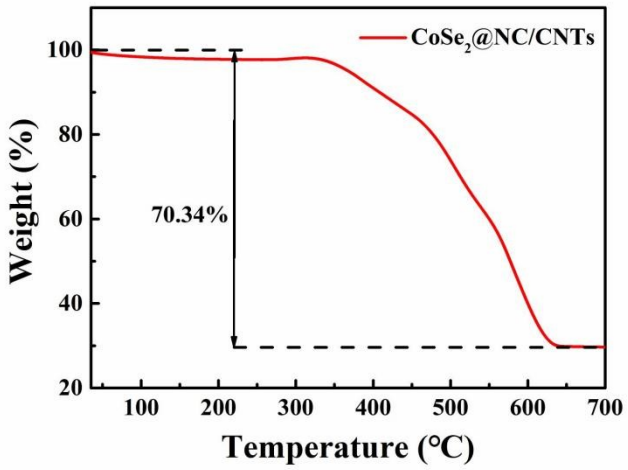

Fig. S3 TGA curve of $CoSe_2$@NC/CNTs.

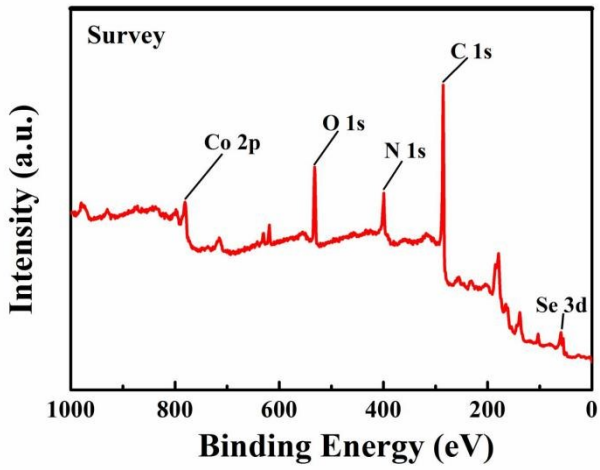

Fig. S4 XPS survey spectrum of $CoSe_2$@NC/CNTs.

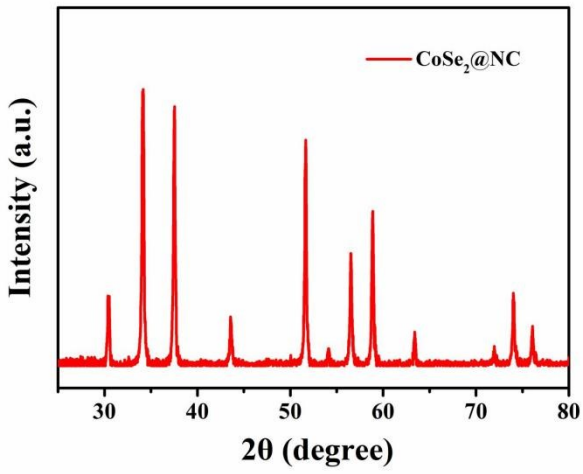

Fig. S5 XRD pattern of the $CoSe_2$@NC.

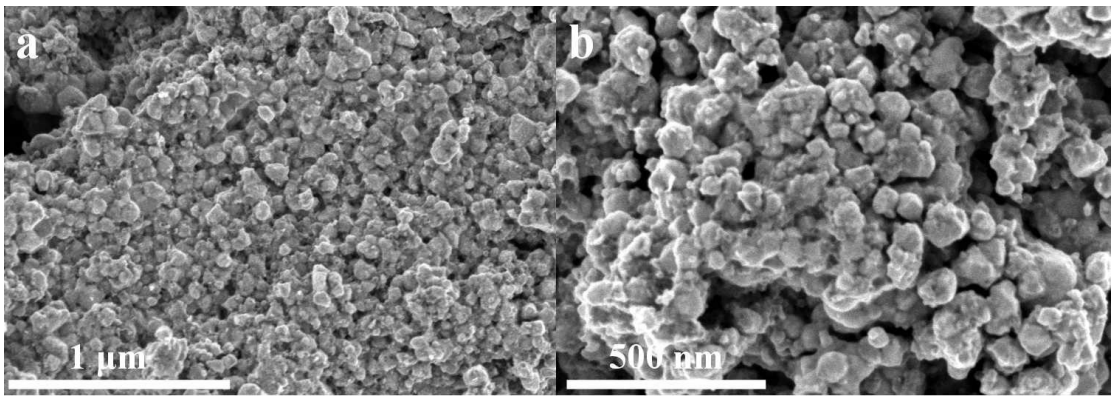

Fig. S6 SEM images of the $CoSe_2$@NC.

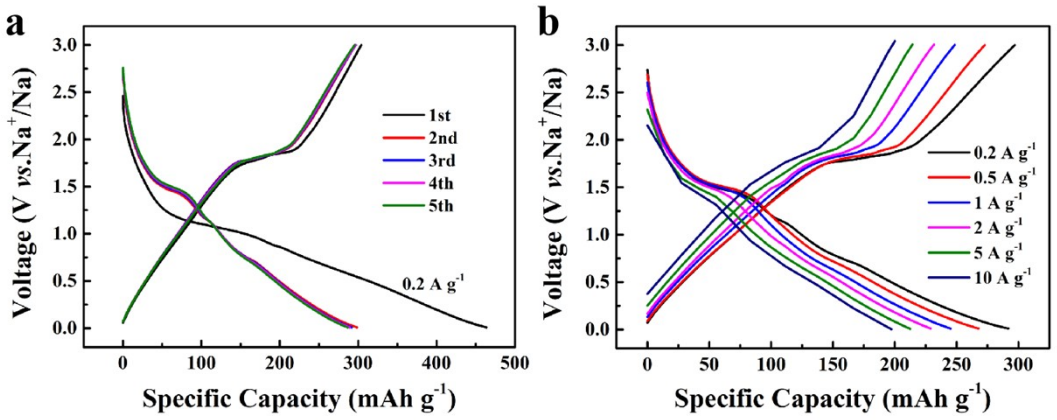

Fig. S7 (a) The GCD curves at 0.2 A g^{-1} and (b) rate capacities at current densities of $CoSe_2$@NC.

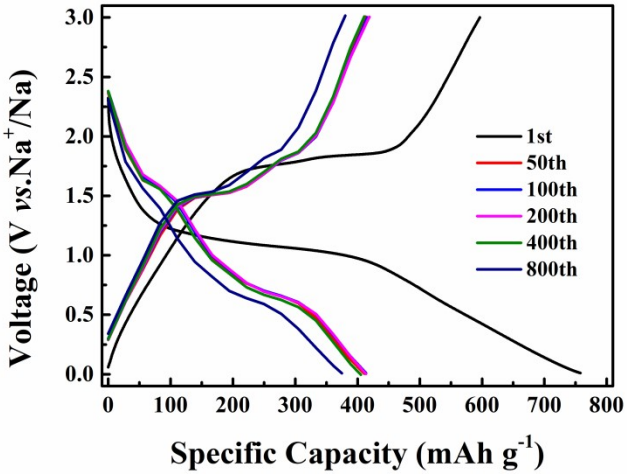

Fig. S8. The GCD curves at 10 A g^{-1} of $CoSe_2$@NC/CNTs.

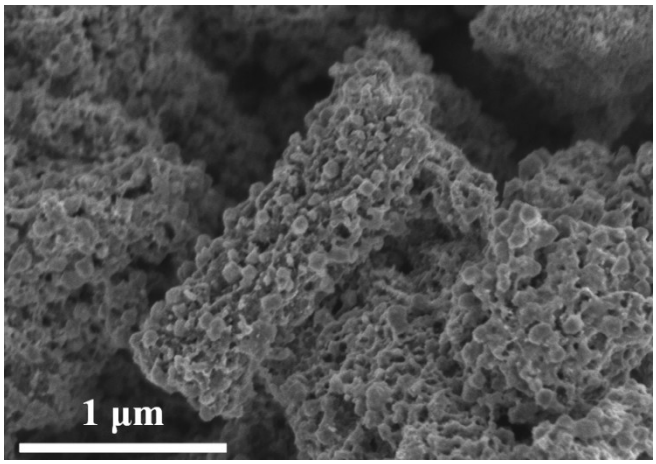

Fig. S9 SEM image of $CoSe_2$@NC/CNTs after 50 cycles.

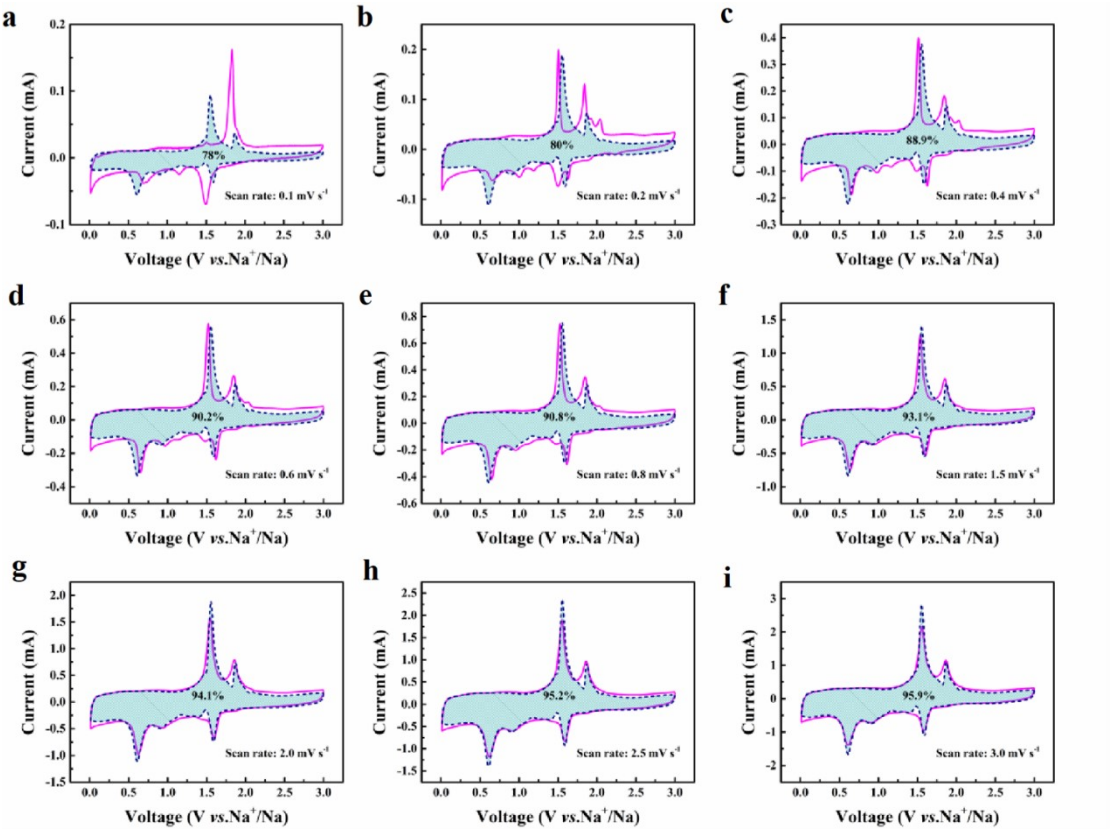

Fig. S10. Separation of the capacitive and diffusion-controlled current contribution at different scan rates.

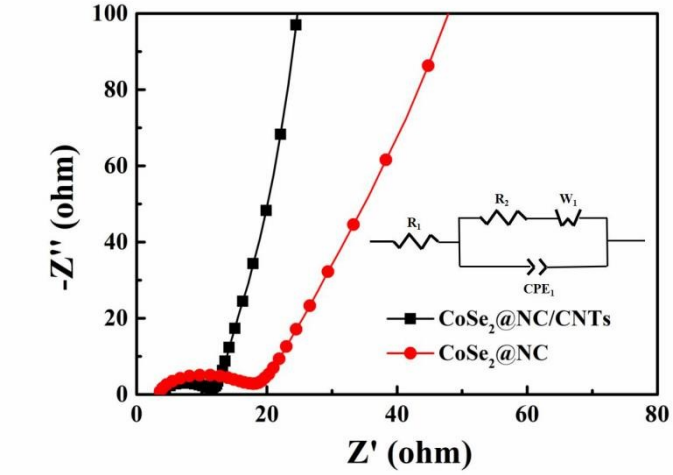

Fig. S11 EIS spectra of $CoSe_2$@NC/CNTs and $CoSe_2$@NC (Inset is the corresponding equivalent circuit).

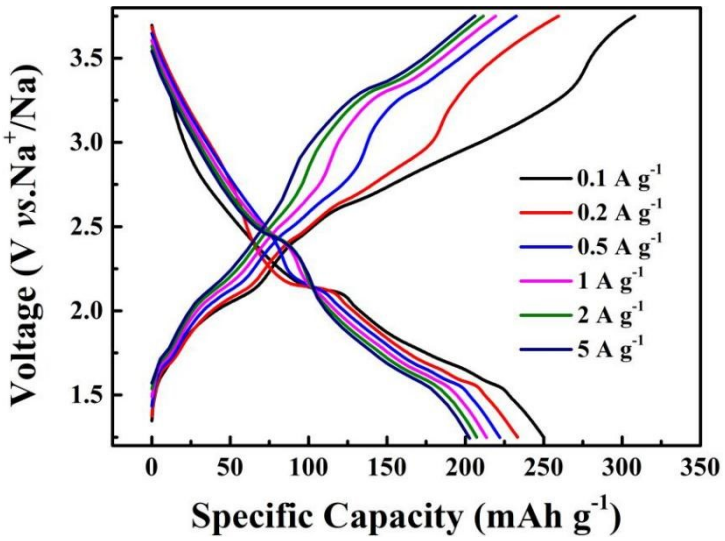

Fig. S12 GCD curves of $CoSe_2$@NC/CNTs//NVPOF full cell at different current densities.