

A hierarchical structure of $\text{Co}_{0.85}\text{Se}@NC/\text{ZnSe}@NC$ yolk-double-shell polyhedron for long-term lithium storage

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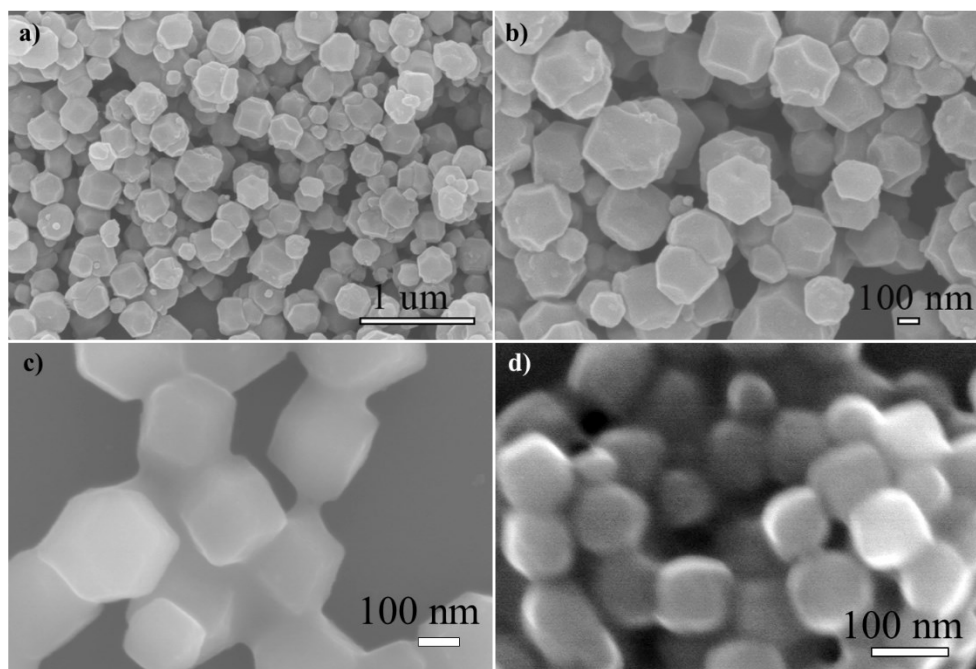


Fig. S1. SEM images of the (a, b) Co-ZIF, (c) Zn-ZIF, (d) ZnCo-ZIF.

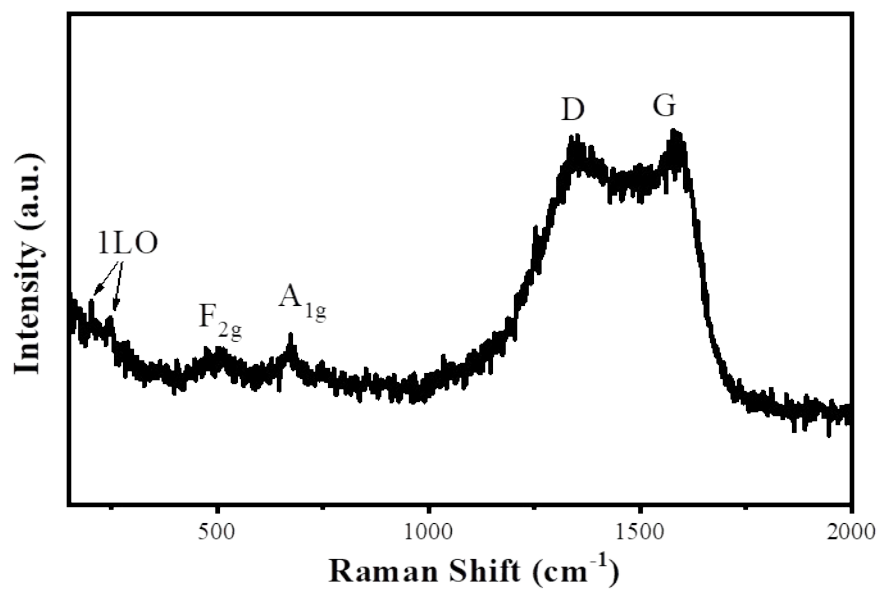


Fig. S2. Raman plot of the final $\text{Co}_{0.85}\text{Se}@NC/\text{ZnSe}@NC\text{-YDS}$.

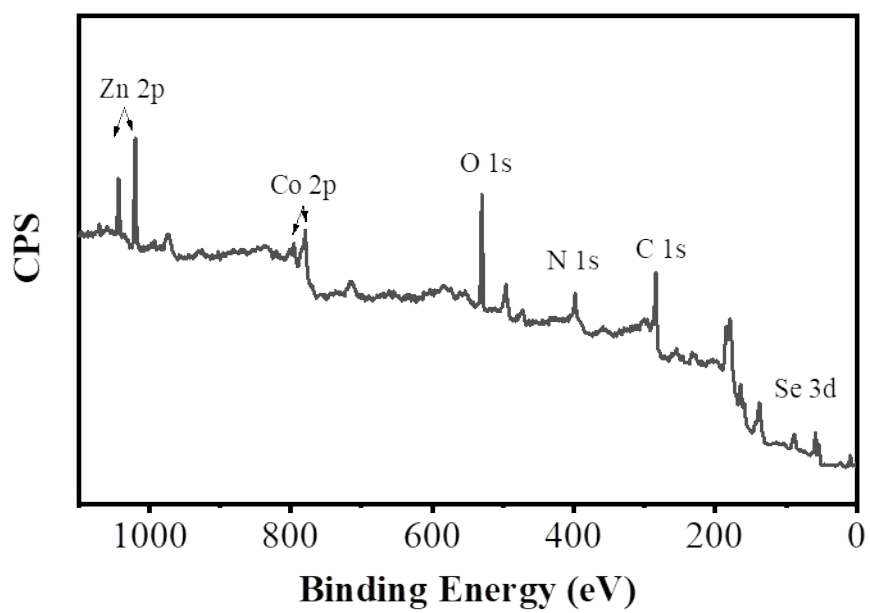


Fig. S3. XPS survey of the $\text{Co}_{0.85}\text{Se@NC/ZnSe@NC-YDS}$.

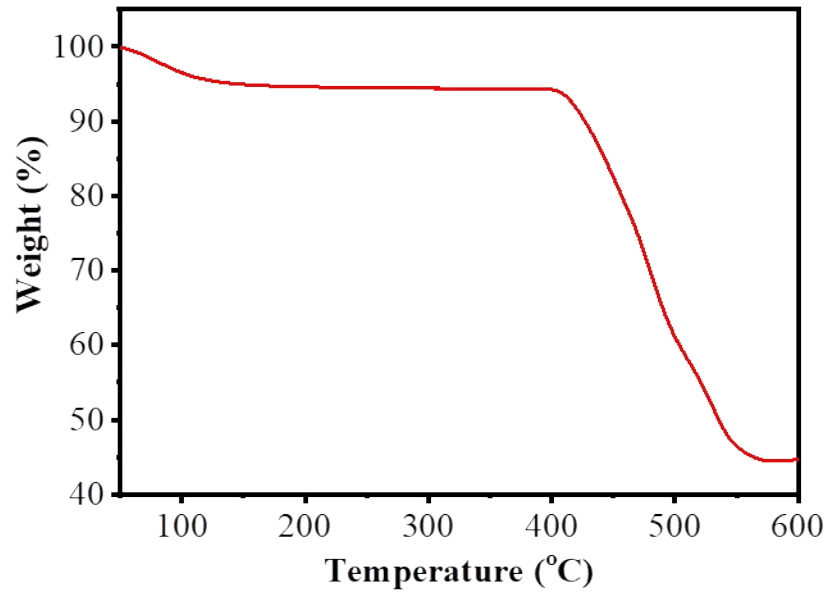


Fig. S4. TG curves of the Co_{0.85}Se@NC/ZnSe@NC-YDS, performed in air with a ramp of 10 °C min⁻¹.

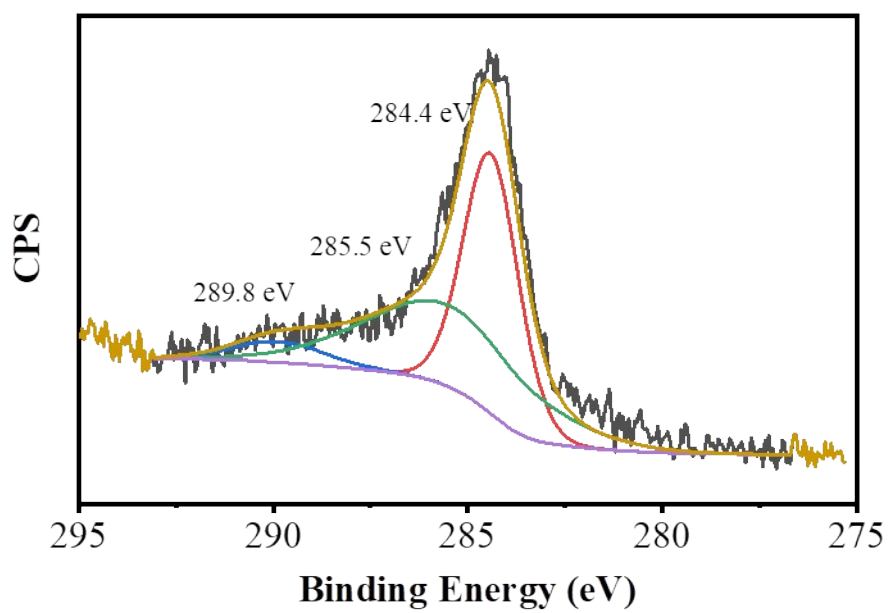


Fig. S5. High resolution C1s spectrum of the Co_{0.85}Se@NC/ZnSe@NC-YDS.

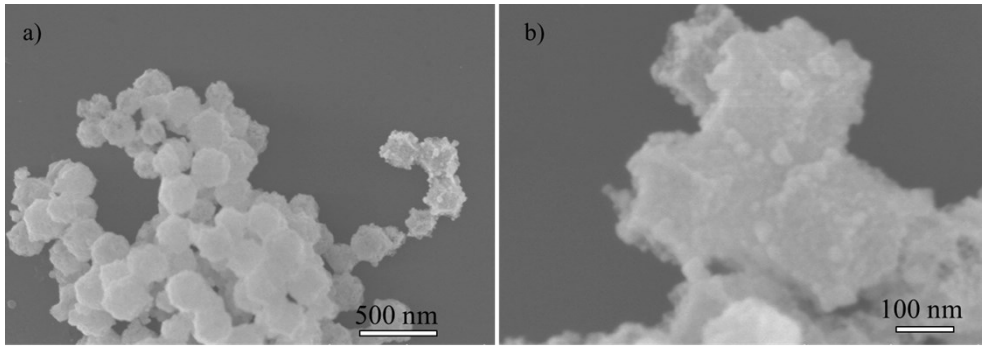


Fig. S6 SEM images of the Zn-ZIF derived ZnSe@NC

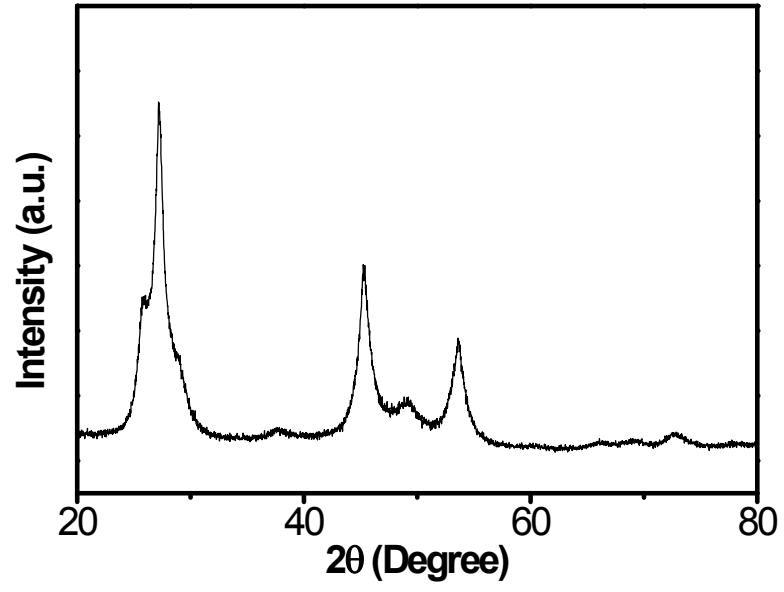


Fig. S7 XRD pattern for the Zn-ZIF derived ZnSe@NC

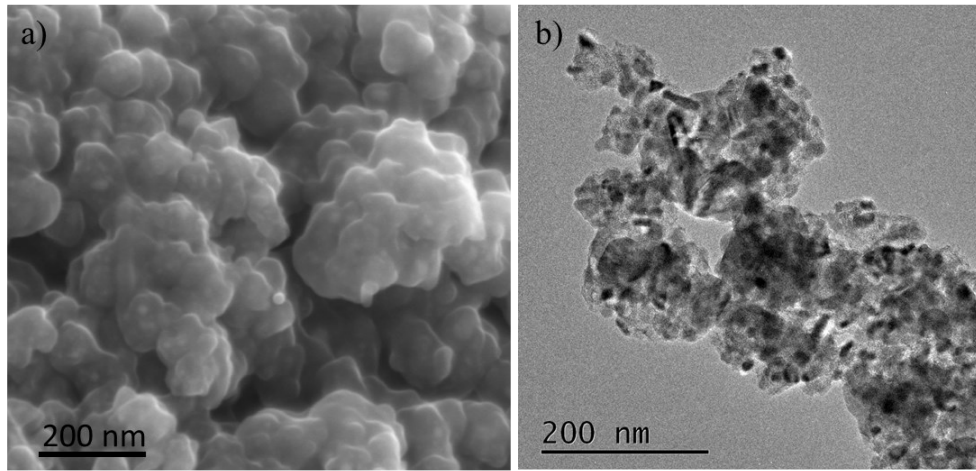


Fig. S8 (a) SEM and (b) TEM images of the ZnCo-ZIF derived $\text{Co}_{0.85}\text{Se}@\text{NC}/\text{ZnSe}@\text{NC}$

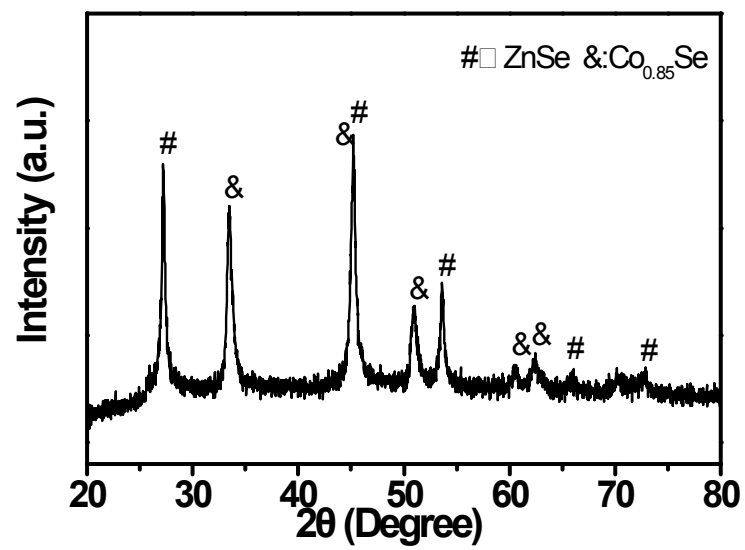


Fig. S9 XRD pattern of the ZnCo-ZIF derived $\text{Co}_{0.85}\text{Se}@NC/\text{ZnSe}@NC$.

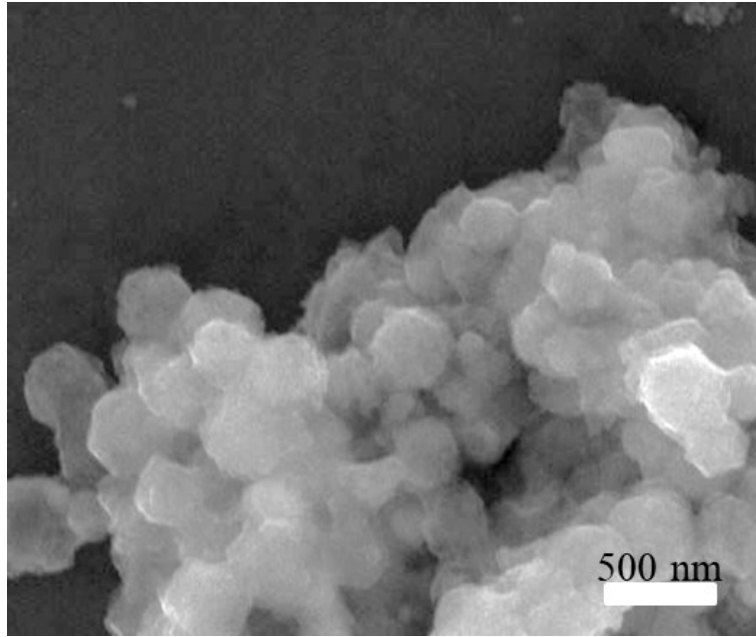


Fig. S10. SEM images of the after cycled $\text{Co}_{0.85}\text{Se}@NC/\text{ZnSe}@NC\text{-YDS}$ sample.