Supporting Information

VN@C Hollow Structures Derived from ZIF-8 Templates for Lithium-Ion Battery Anode

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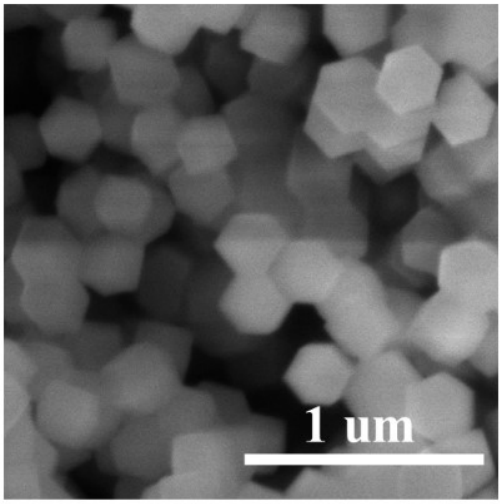

Fig. S1 SEM image of as-prepared ZIF-8.

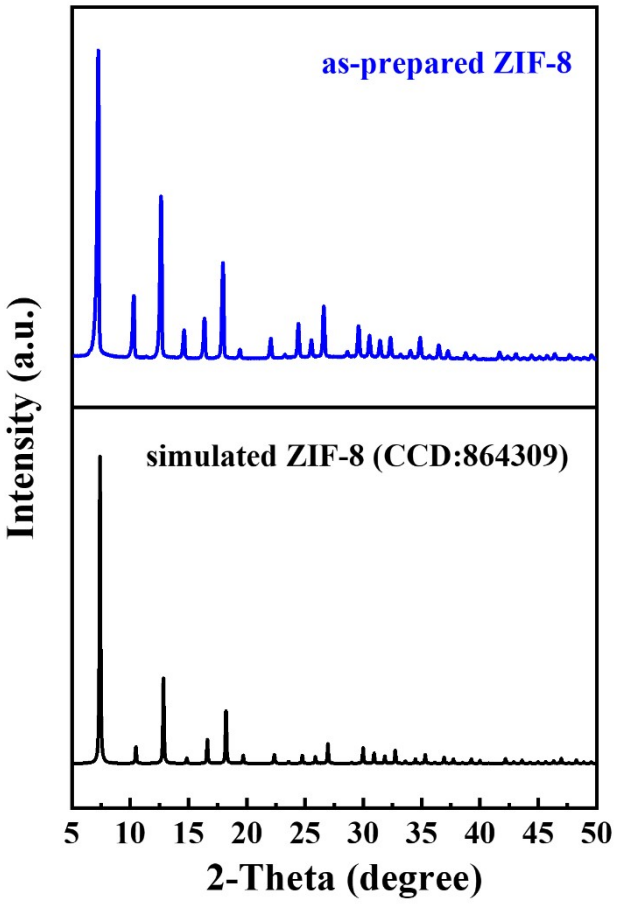

Fig. S2 XRD pattern of as-prepared ZIF-8.

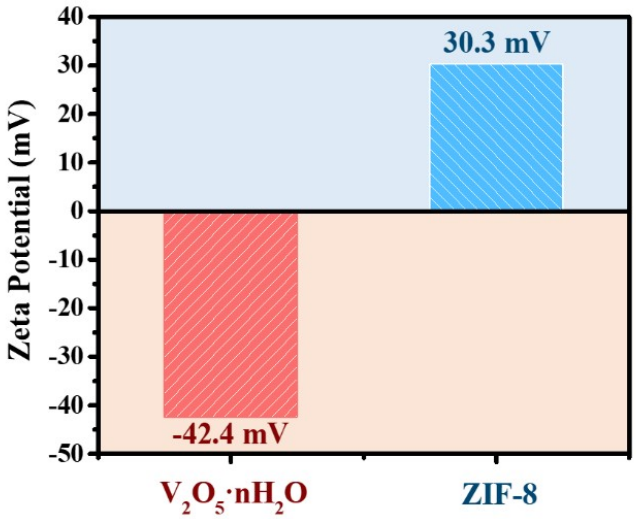

Fig. S3 Zeta potential of $V_2O_5 \cdot nH_2O$ colloidal particles and ZIF-8.

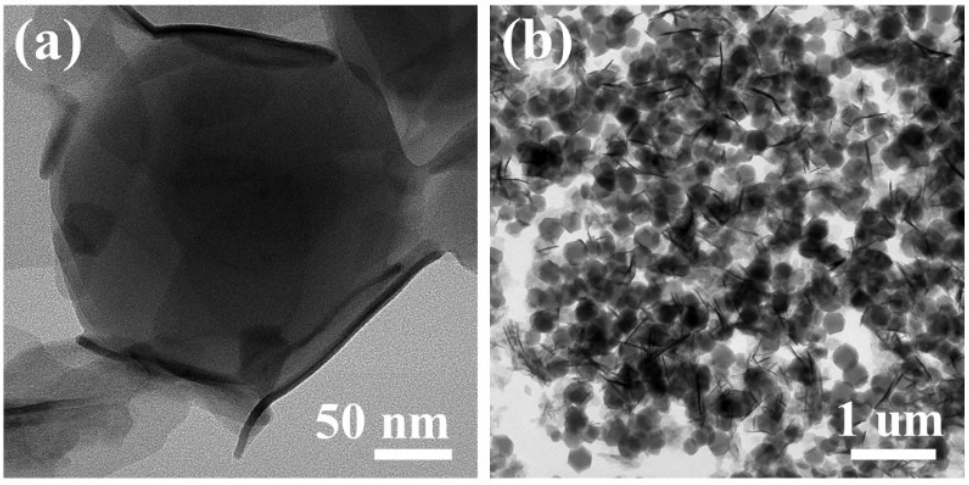

Fig. S4 (a, b) TEM images of V_2O_5@ZIF-8.

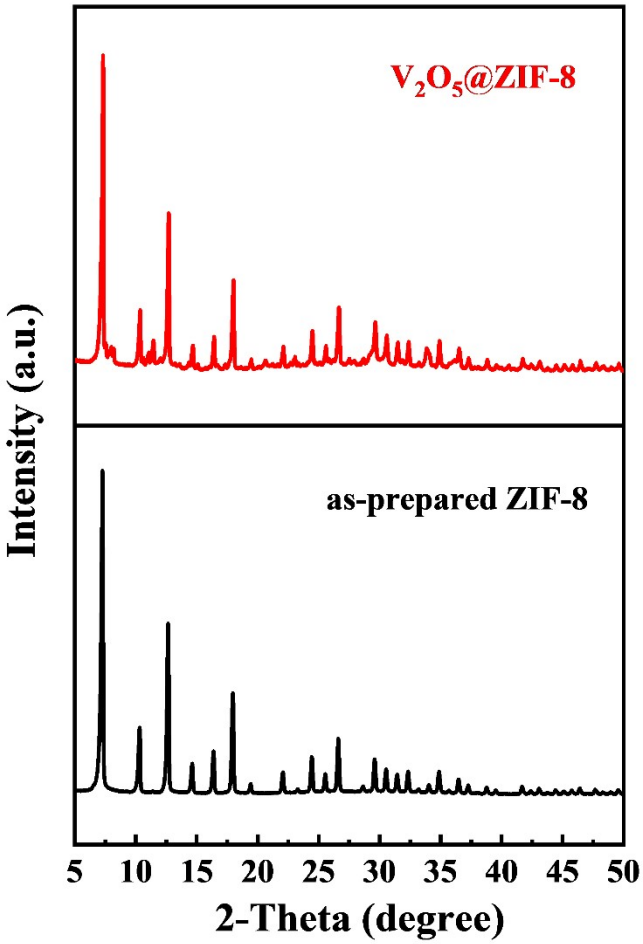

Fig. S5 XRD pattern of V_2O_5@ZIF-8.

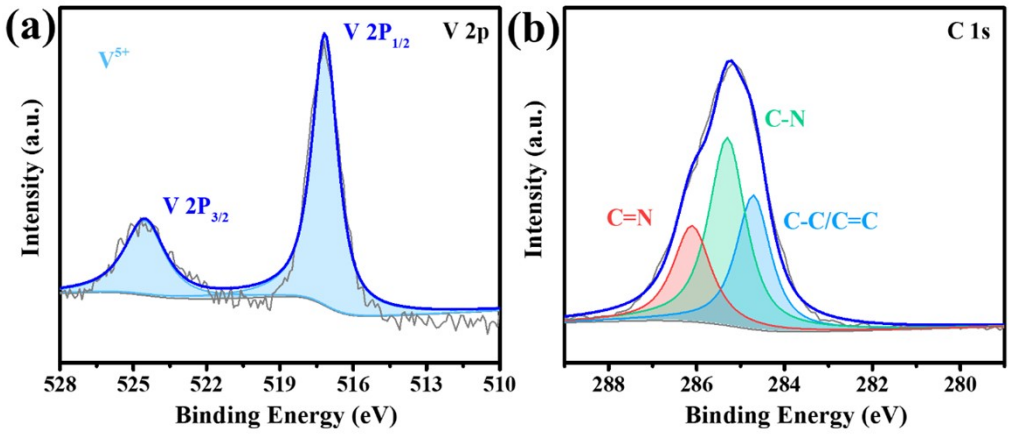

Fig. S6 High-resolution XPS spectra of the (a) V 2p; (b) C 1s of the V_2O_5@ZIF-8.

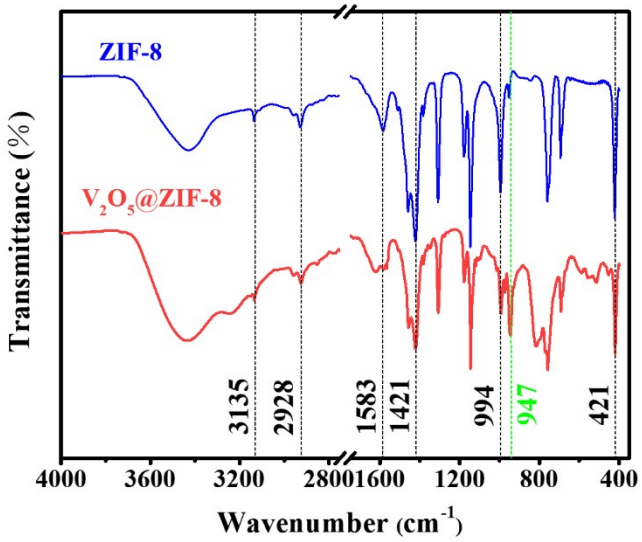

Fig. S7 FT-IR spectra of ZIF-8 and V_2O_5@ZIF-8.

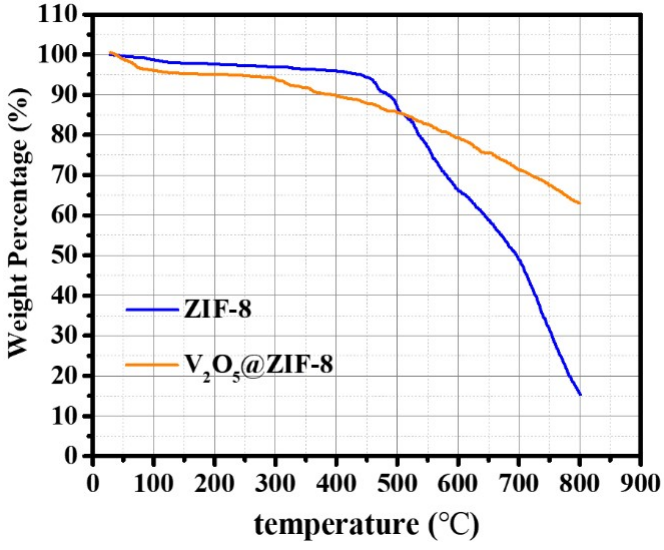

Fig. S8 TGA of ZIF-8 and V_2O_5@ZIF-8 in vacuum.

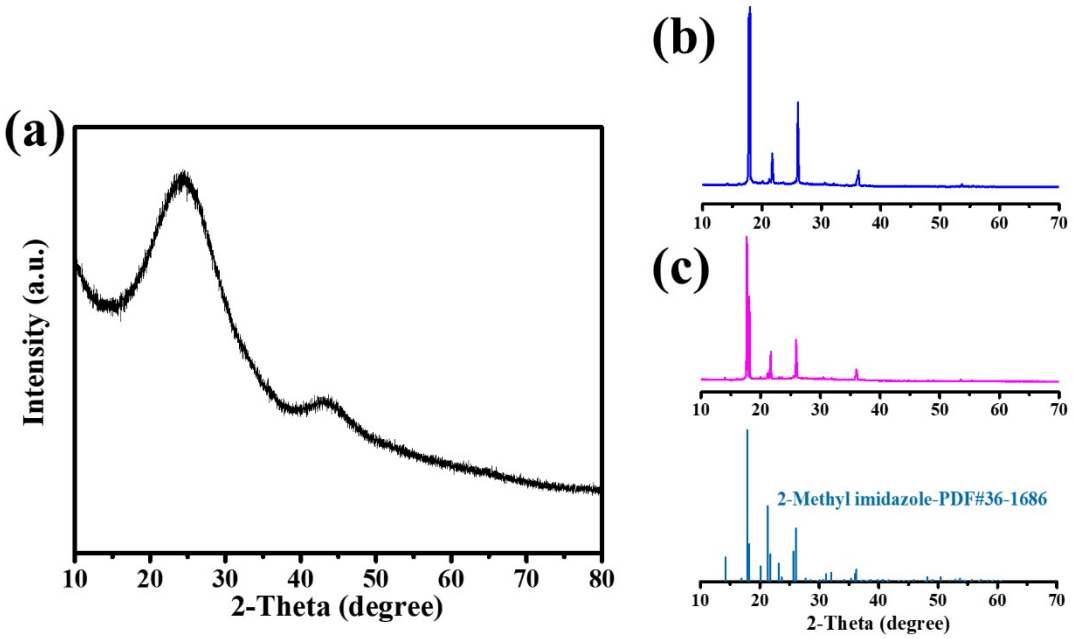

Fig. S9 XRD pattern of the product of (a-b) ZIF-8 and (c) V_2O_5@ZIF-8 after TGA.

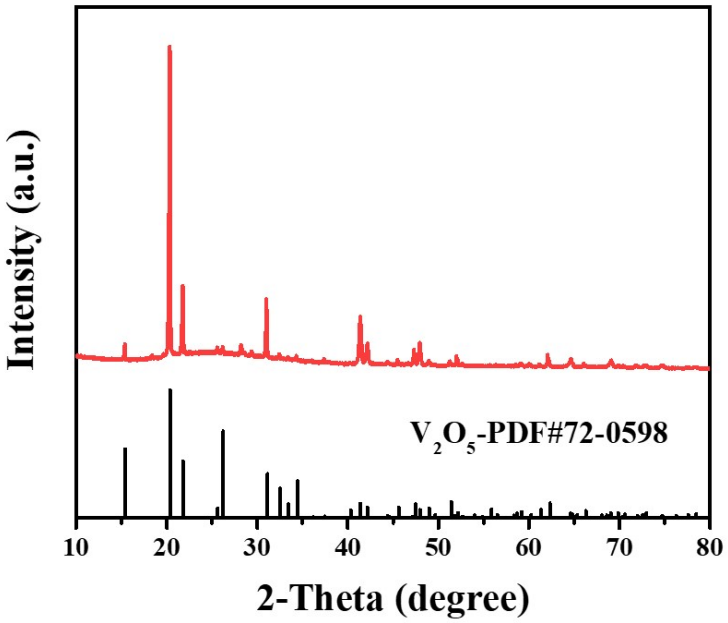

Fig. S10 XRD pattern of the product of VN@C hollow structures at 800 ℃ under air.