

Supporting Information

MOF-Derived ZnS/NC yolk-shell Composites for Highly Reversible Lithium Storage

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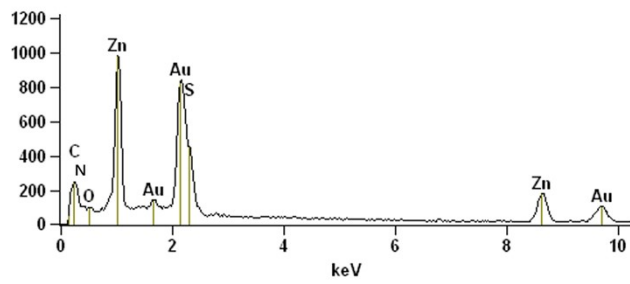


Fig. S1 EDS results of ZnS@NC.

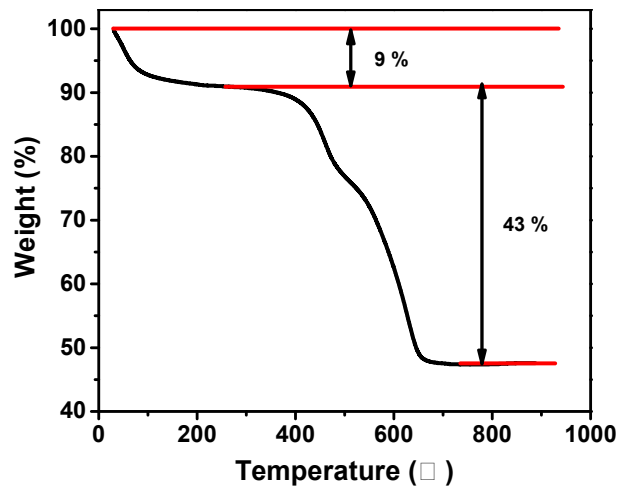


Fig. S2 TG curve of ZnS@NC.

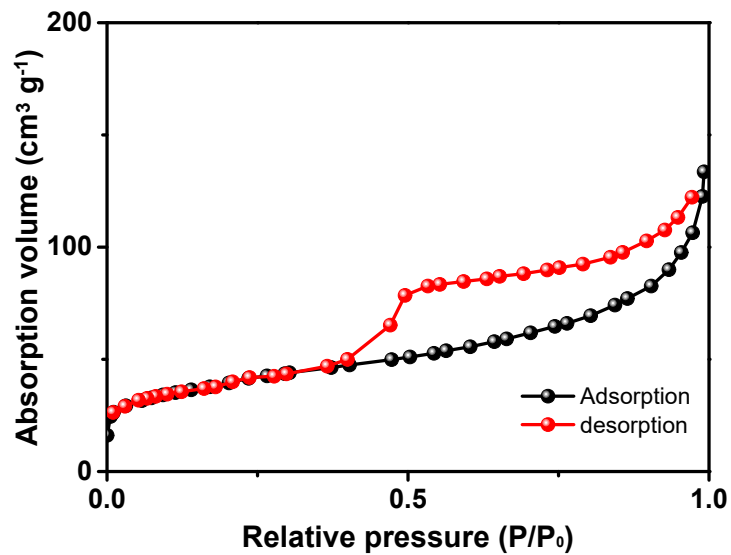


Fig. S3 N₂ adsorption-desorption isotherm (77K) of ZnS@NC.

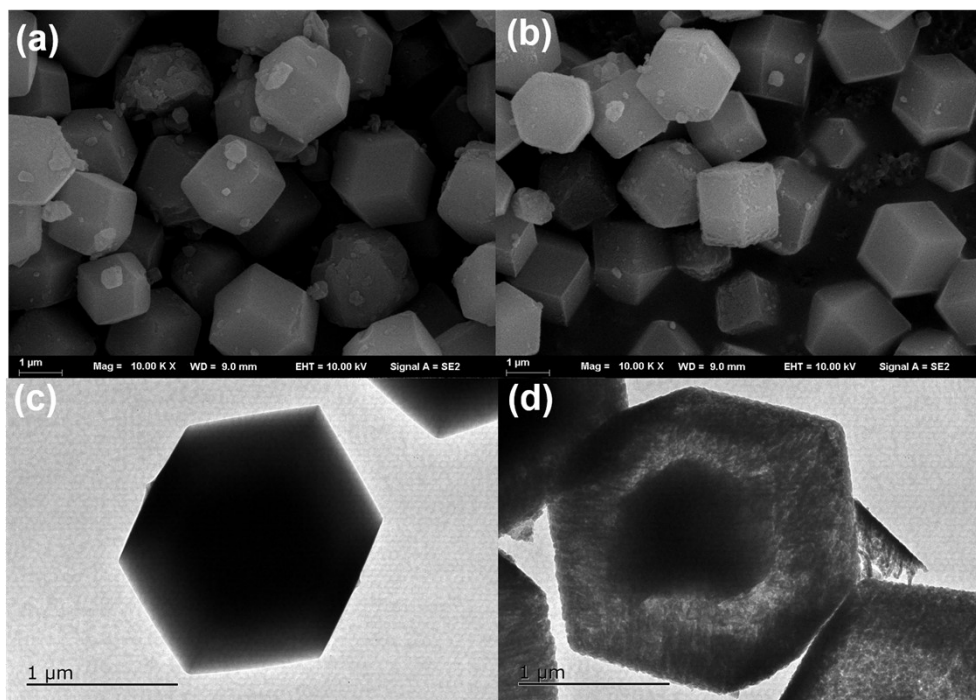


Fig. S4 SEM images of samples. (a) ZIF-8, (b) ZnS@ZIF-8. TEM images of samples. (c) ZIF-8, (d) ZnS@ZIF-8.

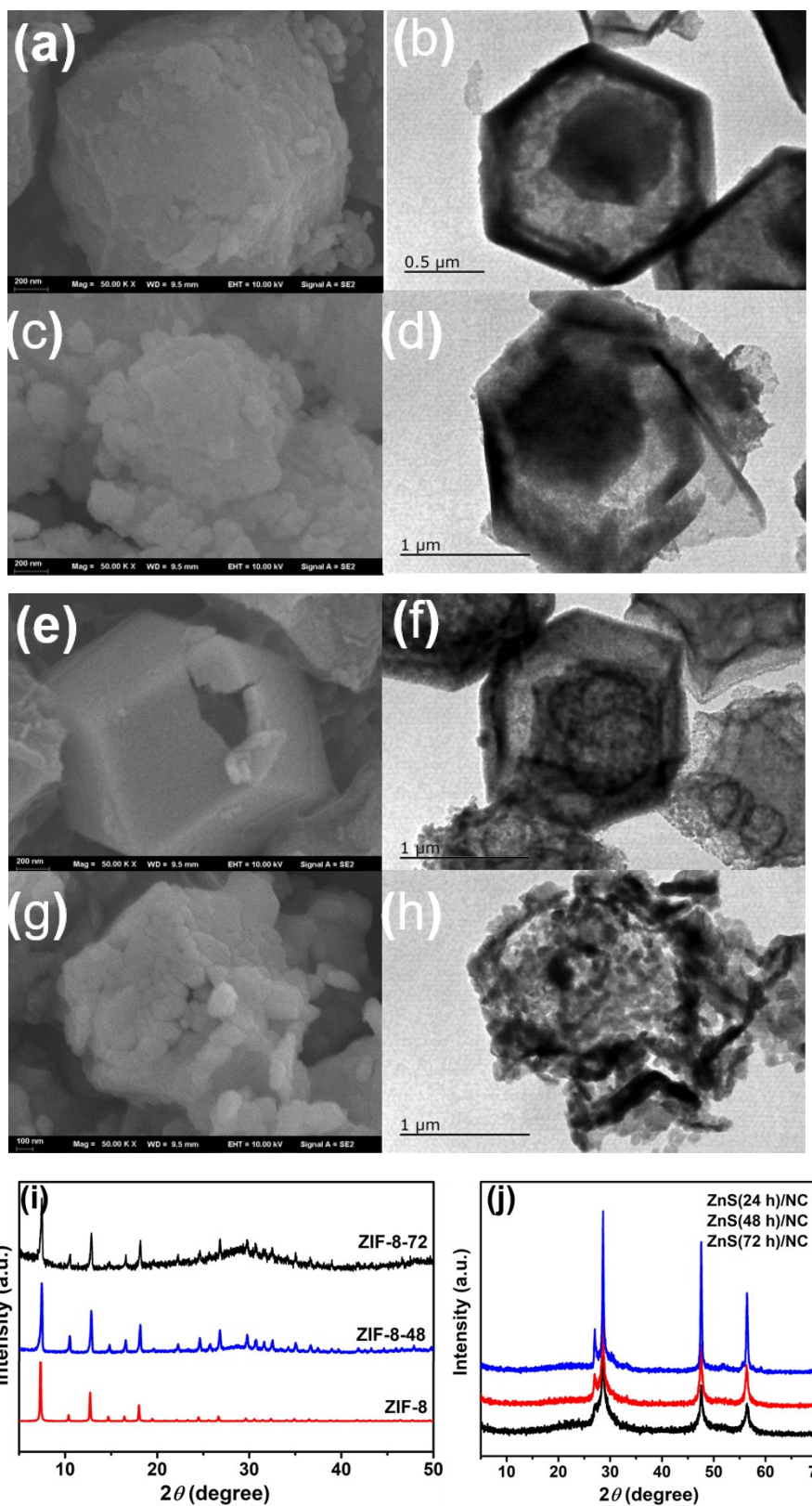


Fig. S5 SEM image of (a) ZnS(48 h)@ZIF-8, (c) ZnS(72 h)@ZIF-8, (e) ZnS(48 h)/NC, (g) ZnS(72 h)/NC.

TEM images of (b) ZnS(48 h)@ZIF-8, (d) ZnS(72 h)@ZIF-8, (f) ZnS(48 h)/NC, (h) ZnS(72 h)/NC.

XRD patterns of (i) ZnS(48 h)@ZIF-8, ZnS(72 h)@ZIF-8 and ZIF8. (j) ZnS(48 h)/NC, ZnS(72 h)/NC and ZnS(24 h)/NC.

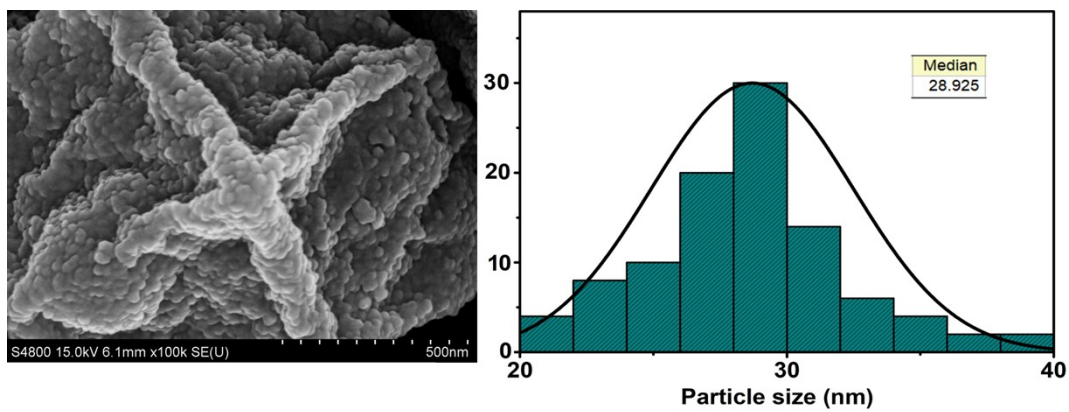


Fig. S6 The size distribution diagram of ZnS particles

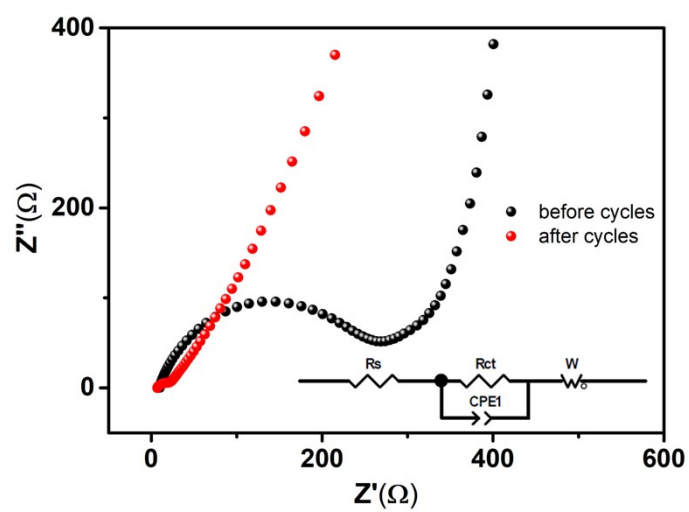


Fig. S7 Impedance spectrum of ZnS/NC