Supporting information

Porous Spinel $Zn_xCo_{3-x}O_4$ Hollow Polyhedra Templated for High-Rate Lithium-Ion Batteries

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S1

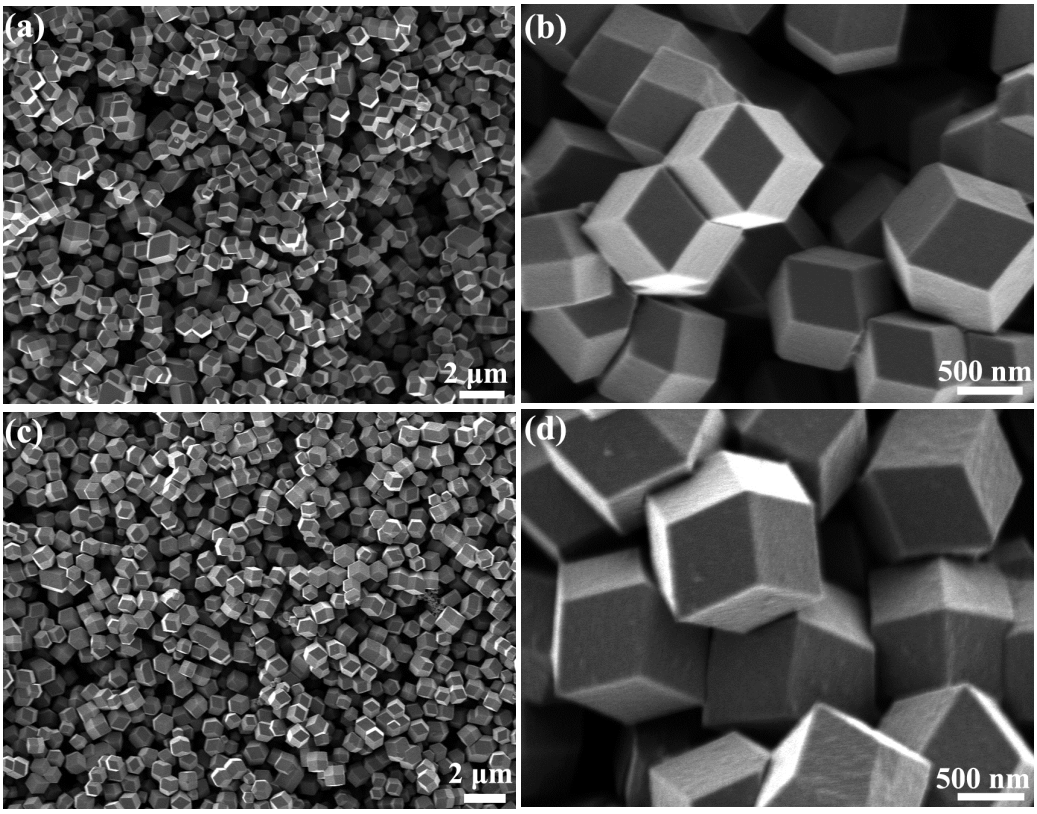
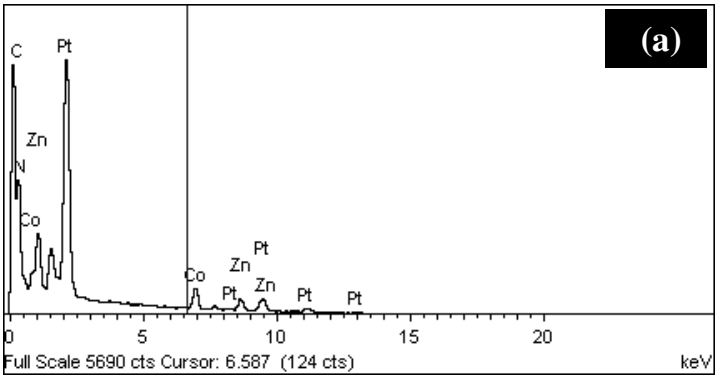
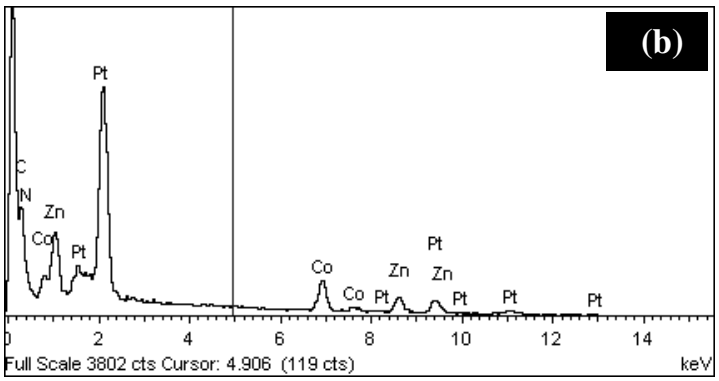


Figure S1. (a) Low- and (b) high-magnified FESEM images of Zn-Co-ZIFs-0.50, (c) low- and (d) high-magnified FESEM images of Zn-Co-ZIFs-0.25.

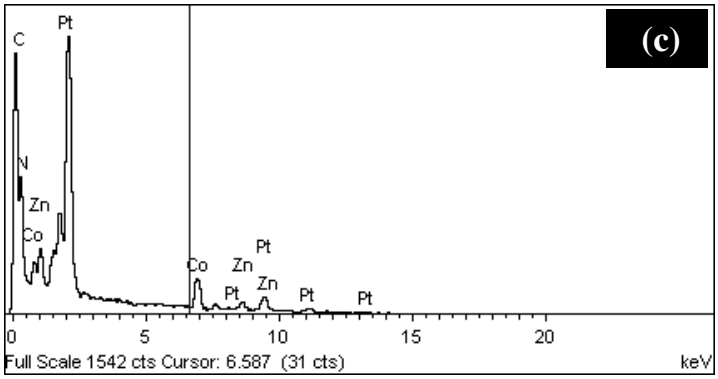
S2



Element	Weight%	Atomic%
C K	36.48	72.66
N K	9.40	16.03
Co K	8.78	3.59
Zn L	8.95	3.28
Pt M	36.39	4.44
Totals	100.00	



Element	Weight%	Atomic%
C K	35.53	72.09
N K	9.35	16.27
Co K	11.28	4.67
Zn L	6.03	2.25
Pt M	37.81	4.72
Totals	100.00	



Element	Weight%	Atomic%
C K	34.44	69.58
N K	10.68	18.49
Co K	12.81	5.26
Zn L	5.90	2.18
Pt M	36.17	4.48
Totals	100.00	

Figure S2. EDS spectra and corresponding element analyses: (a) Zn-Co-ZIFs-0.50, (b) Zn-Co-ZIFs-0.33, and (c) Zn-Co-ZIFs-0.25.

S3

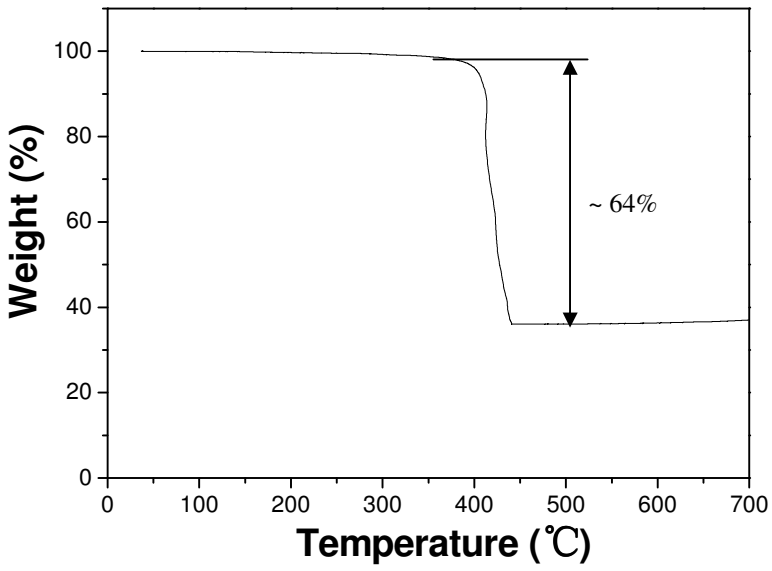
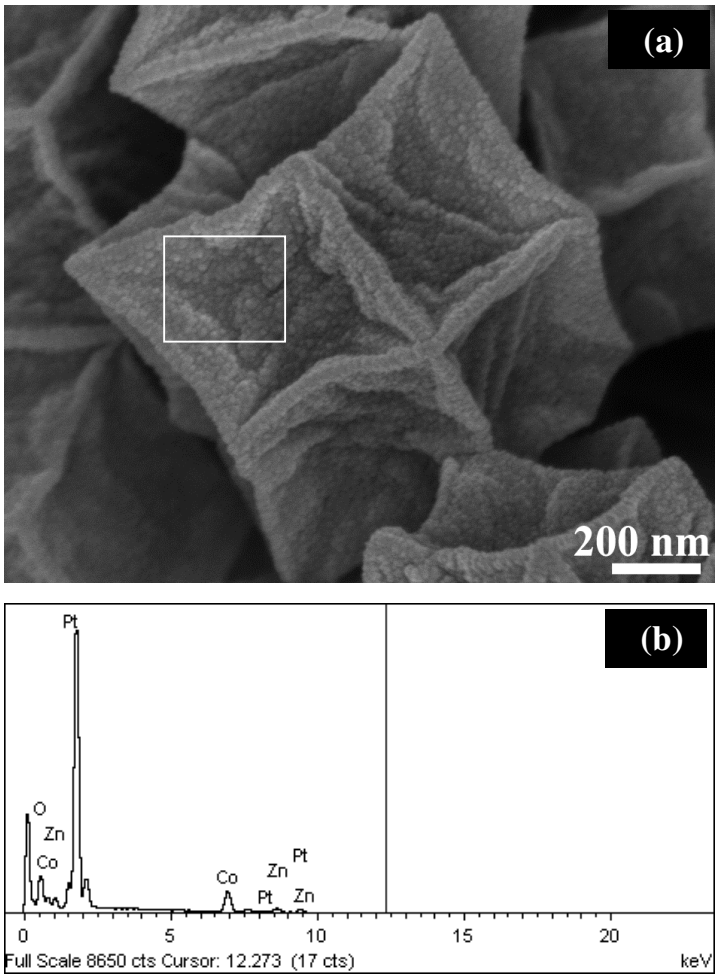


Figure S3. Thermogravimetric analysis (TGA) curve of as-prepared bimetallic Zn-Co-ZIFs-0.33 under air with a ramp of 10 ^{o}C min^{-1}.

S4



Element	Weight%	Atomic%
O K	20.31	55.57
Co K	35.56	26.42
Zn L	18.23	12.20
Pt M	25.90	5.81
Totals	100.00	

Figure S4. (a) FESEM image of $Zn_xCo_{3-x}O_4$ hollow polyhedra obtained by annealing Zn-Co-ZIFs-0.33, and (b) EDS spectra recorded from the white square area in (a). The hollow polyhedra were composed of Zn, Co and O. The signal of Pt came from the conducting layer of Pt used.

S5

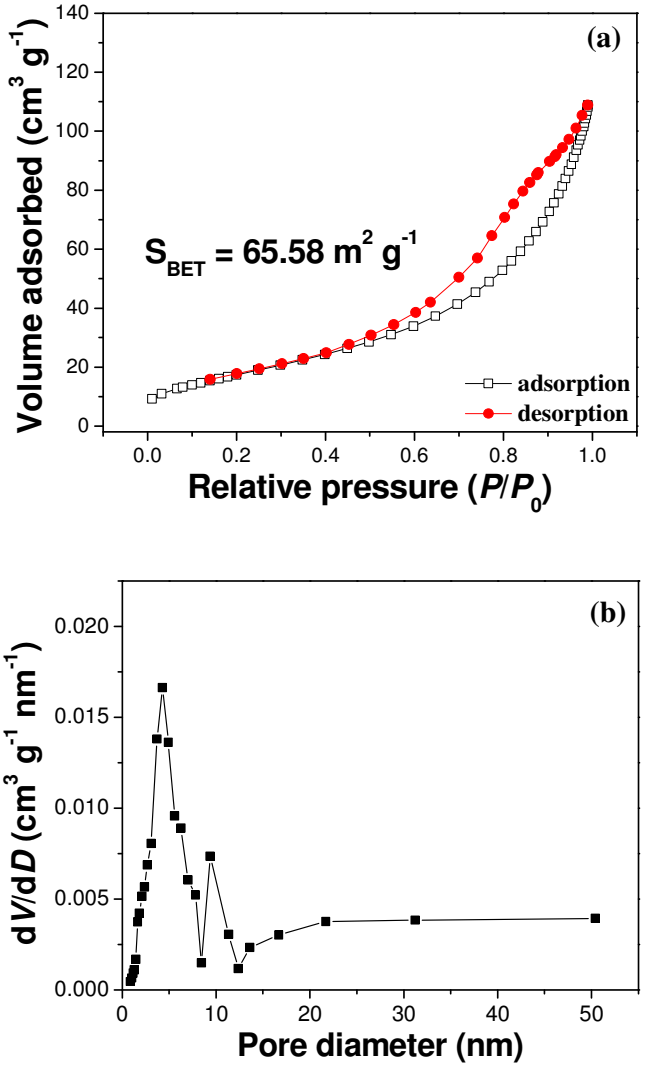


Figure S5. (a) N_2 adsorption/desorption isotherm curve and (b) pore size distribution of of the $Zn_xCo_{3-x}O_4$ hollow dodecahedra.

S6

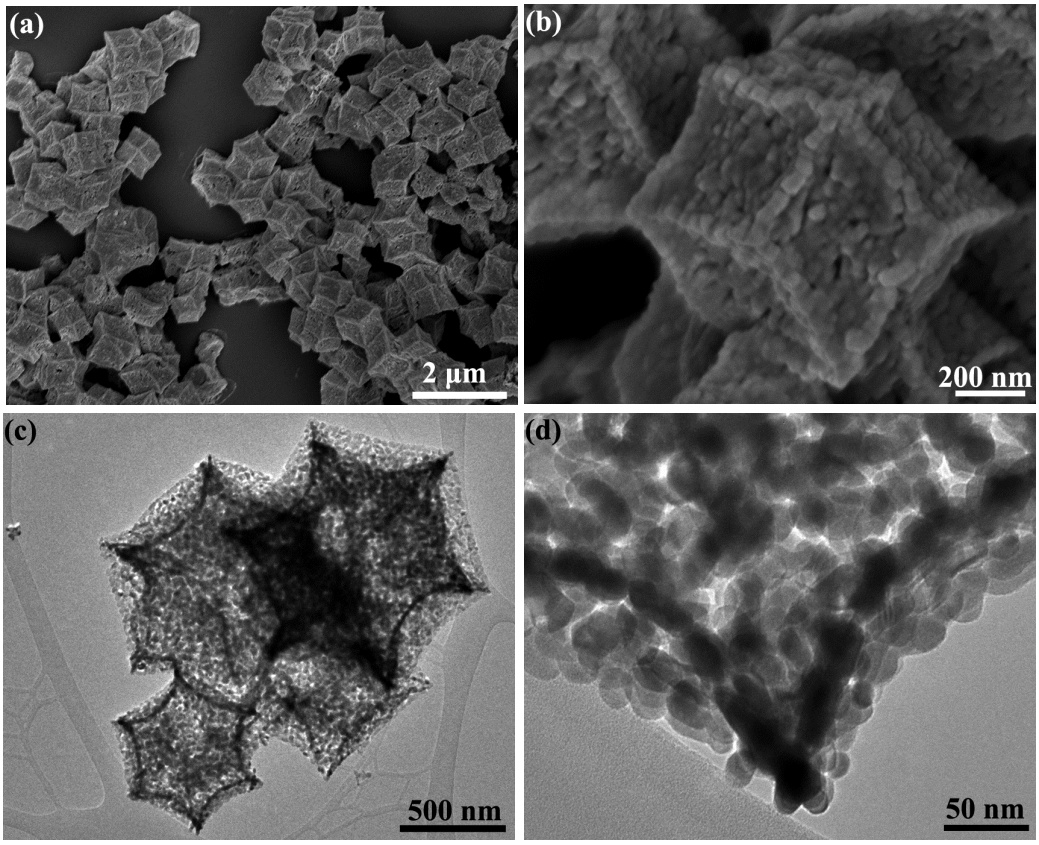


Figure S6. $Zn_xCo_{3-x}O_4$ hollow polyhedra obtained by annealing Zn-Co-ZIFs-0.33 at 500 °C: (a) and (b) FESEM images, (c) and (d) TEM images.

S7

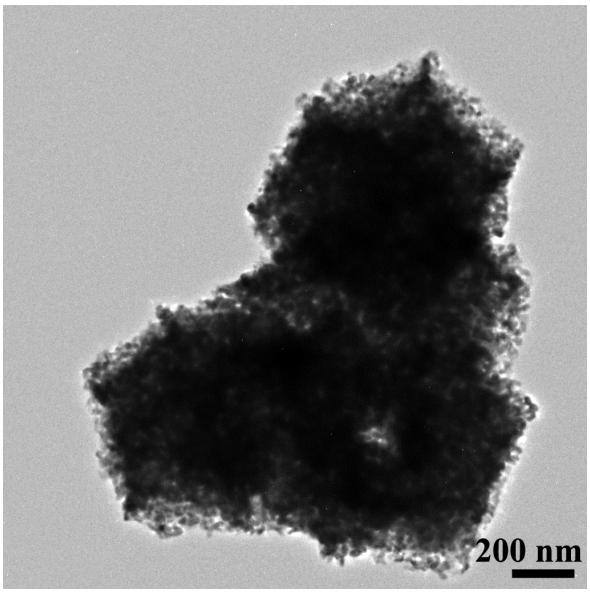


Figure S7. TEM image of $Zn_xCo_{3-x}O_4$ electrode after 50 cycles.