

Electronic Supplementary Information

A Facile Route to Synthesize Multiporous MnCo_2O_4 and CoMn_2O_4 Spinel Quasi-Hollow Spheres with Improved Lithium Storage Properties

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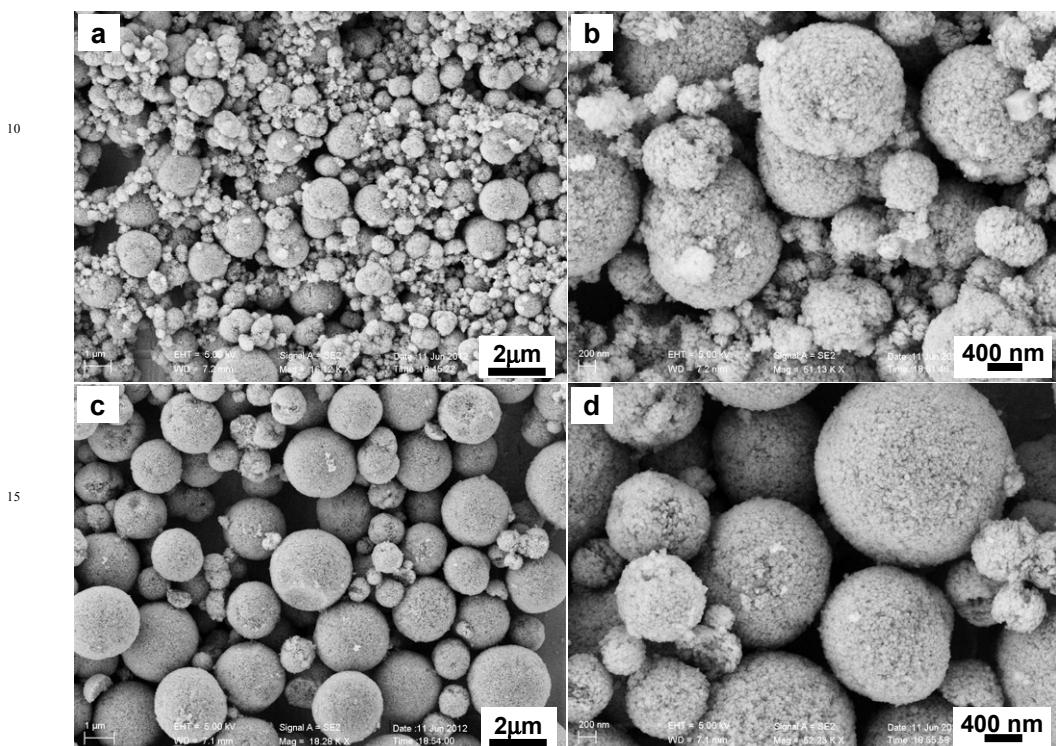


Figure S1. Low and high magnification FESEM images of the $\text{Mn}_{0.33}\text{Co}_{0.67}\text{CO}_3$ (a,b) and $\text{Co}_{0.33}\text{Mn}_{0.67}\text{CO}_3$ (c,d) precursors synthesized in distilled water at 200 °C for 20 h.

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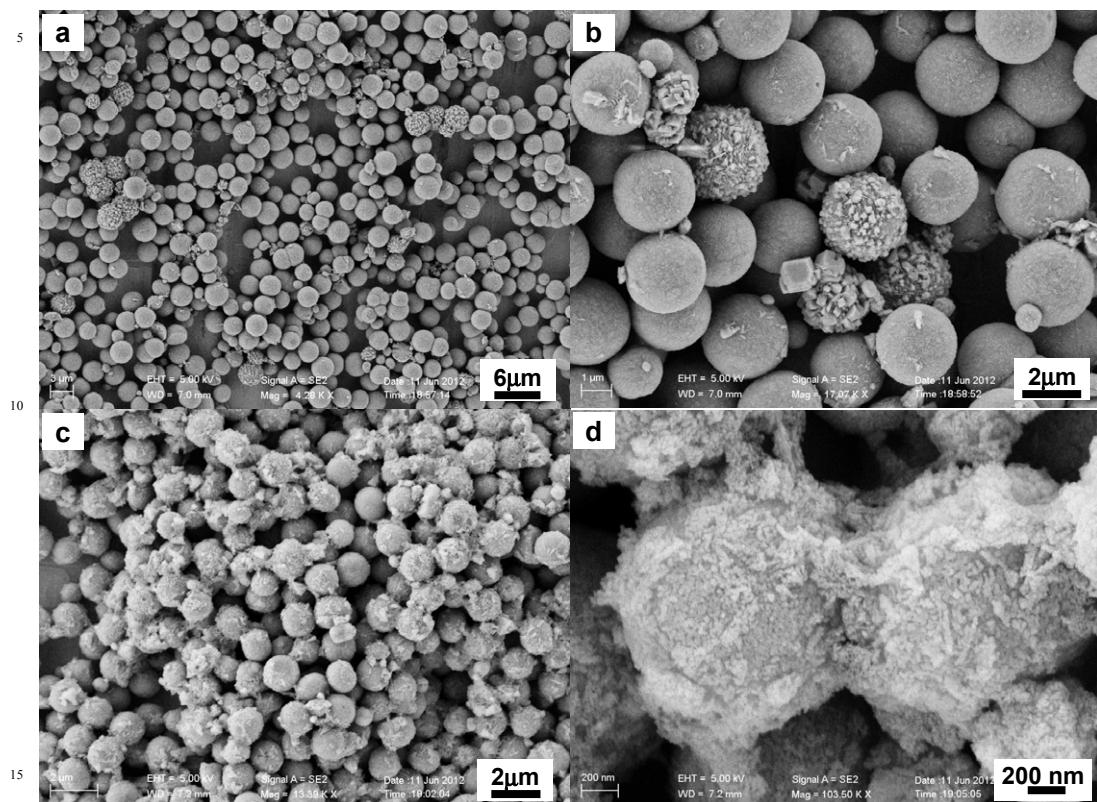


Figure S2. Low and high magnification FESEM images of the Mn_{0.33}Co_{0.67}CO₃ (a,b) and Co_{0.33}Mn_{0.67}CO₃ (c,d) precursors synthesized solvothermally at 180 °C for 20 h.

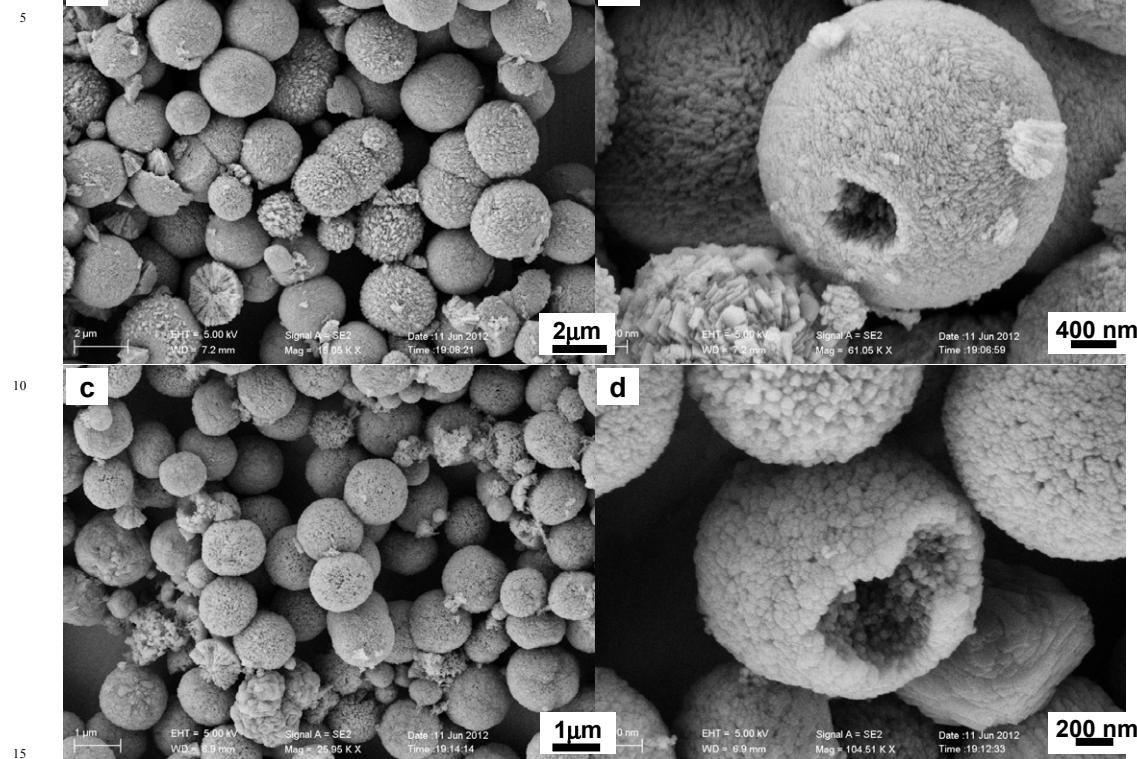


Figure S3. Low and high magnification FESEM images of the $\text{Mn}_{0.33}\text{Co}_{0.67}\text{CO}_3$ (a,b) and $\text{Co}_{0.33}\text{Mn}_{0.67}\text{CO}_3$ (c,d) precursors synthesized solvothermally at 220°C for 20 h.

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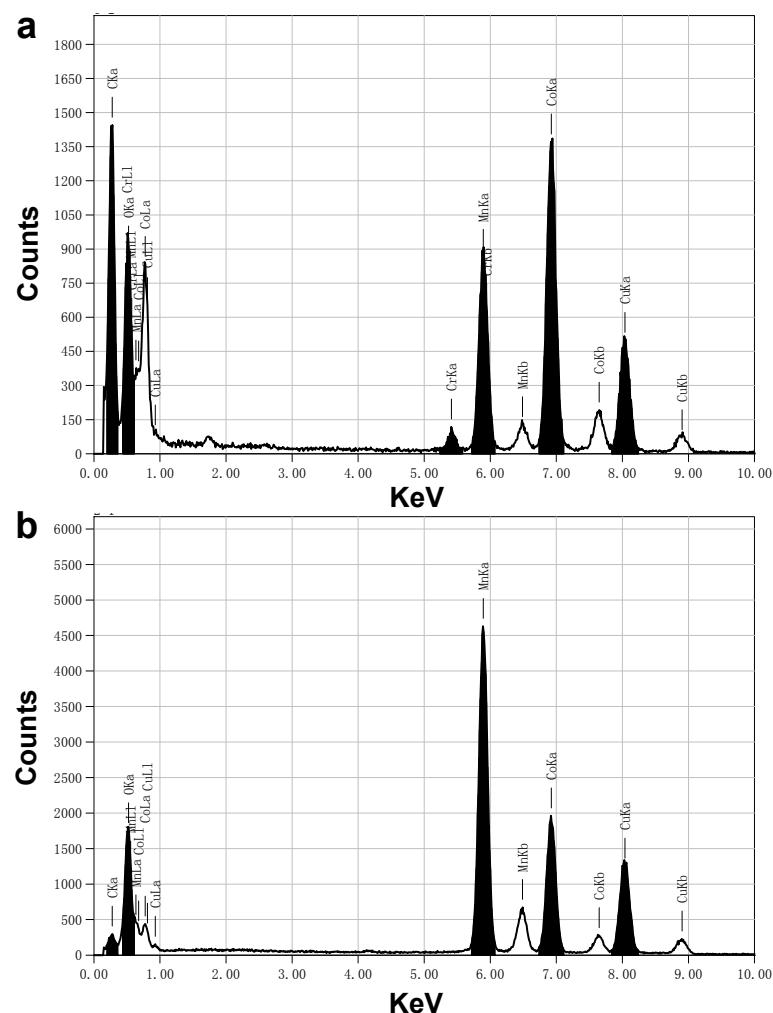


Figure S4. EDX spectrum of the MnCo₂O₄ (a) and CoMn₂O₄ (b) hollow microspheres.

Table S1.The ratio of Co(II)/Co(III) and Mn(II)/Mn(III) in the products based on the area of peaks after a Gaussian fitting method .

Composite	the ratio of Co(II)/Co(III)	the ratio of Mn(II)/Mn(III)	the ratio of O/M
MnCo ₂ O ₄	0.81	1.70	1.36
CoMn ₂ O ₄	2.30	0.36	1.51

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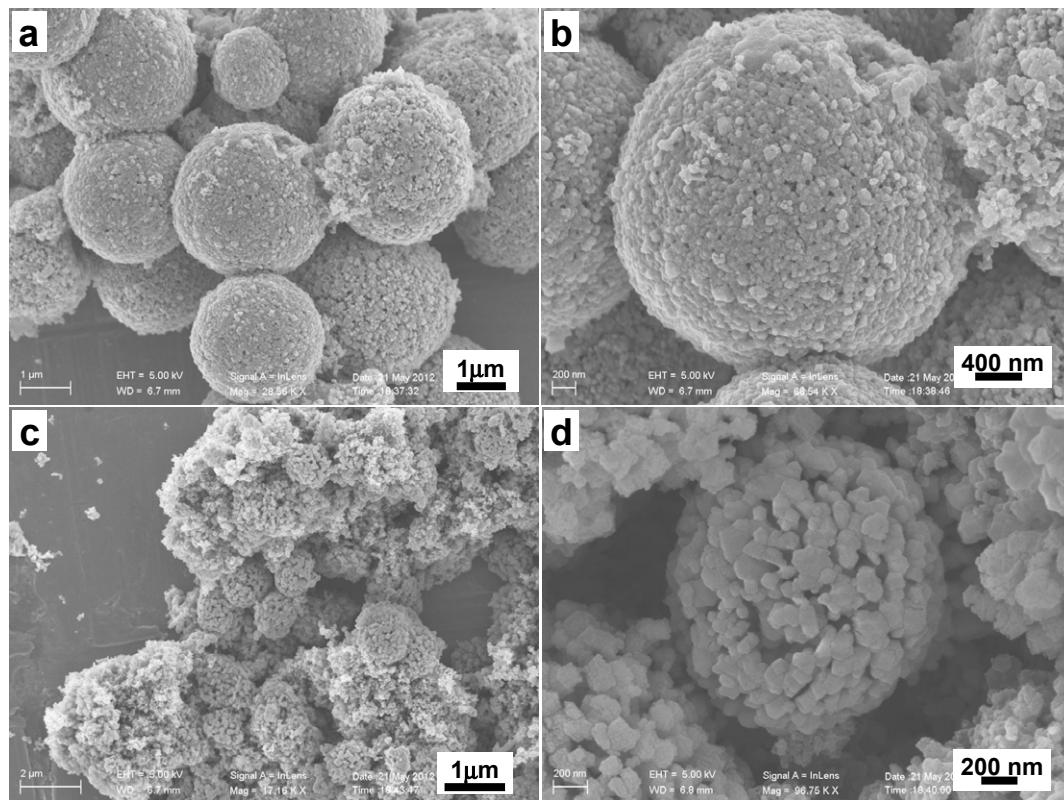


Figure S5. FESEM images of the electrode made of MnCo₂O₄ (a,b) and CoMn₂O₄ (c,d) after 100 cycles testing at 400 mA g⁻¹, respectively.

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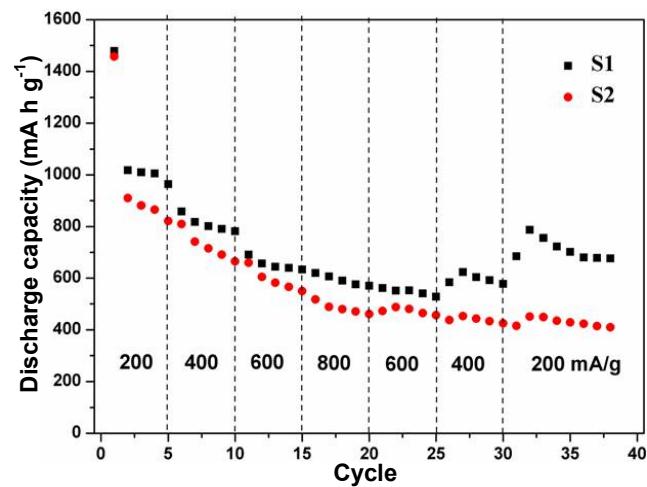


Figure S6. Rate performance of MnCo_2O_4 (S1) and CoMn_2O_4 (S2) electrodes.

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