## **Electronic Supplementary Information (ESI)**

## Size-tunable tavorite LiFe(PO<sub>4</sub>)(OH) microspheres with a

## core-shell structure

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**Fig. S1** (a) XRD pattern and (b) FE-SEM image of a sample by a hydrothermal process (distilled water was used as the reaction medium, but all other conditions of reaction were the same as the solvothermal process)



**Fig. S2** (a) High magnification image of the shell region of C3-LFP(OH) shown in (b). (d) Selected-area electron diffraction (SAED) pattern of the region shown in (c).



Fig. S3 FE-SEM image of a cracked C3-LFP(OH) particle after being reacted at 160 °C for 48 h.



**Fig. S4** (a) Charge/discharge curves for (a) C0-LFP(OH), (b) C1-LFP(OH), (c) C2- LFP(OH), and (d) C3-LFP(OH) in the ranges 3.0–4.35 V vs. Li/Li<sup>+</sup> at various C-rates.