## **Supporting Information**

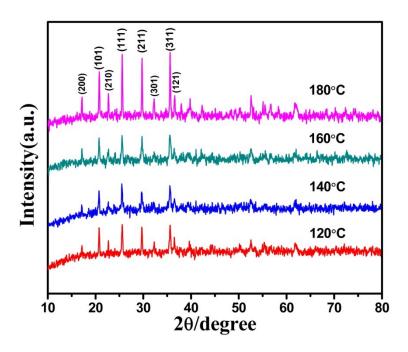


Figure S1. XRD patterns of the LFP/C-5 samples prepared under different reaction temperature.

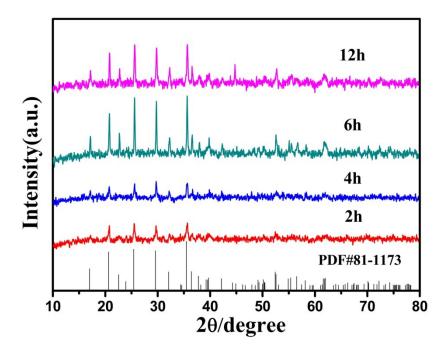


Figure S2. XRD patterns of the LFP/C-5 samples prepared with different reaction time.

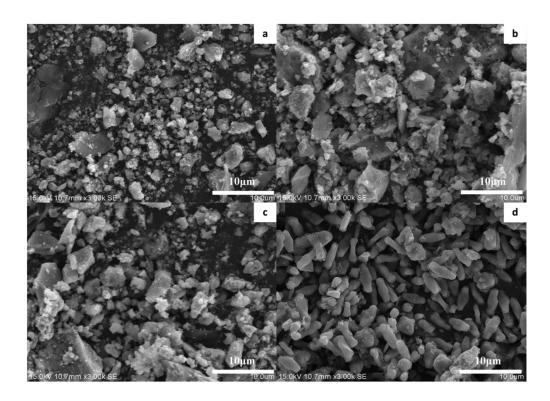


Figure S3. SEM images of LFP/C-5 samples prepared by various reaction temperature: (a)  $120^{\circ}$ C, (b)  $140^{\circ}$ C, (c)  $160^{\circ}$ C and (d)  $180^{\circ}$ C, respectively.

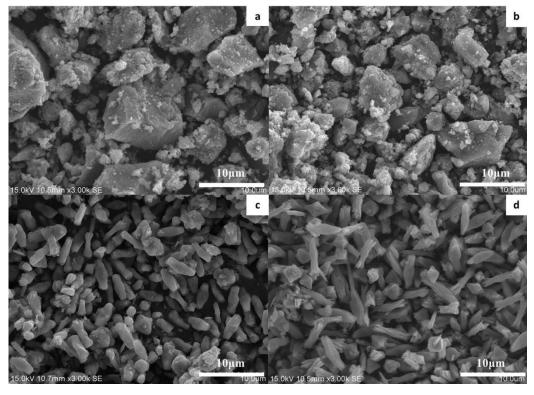


Figure S4. SEM images of LFP/C-5 samples prepared by various reaction time: (a) 2h, (b) 4h, (c) 6h and (d) 12h, respectively.

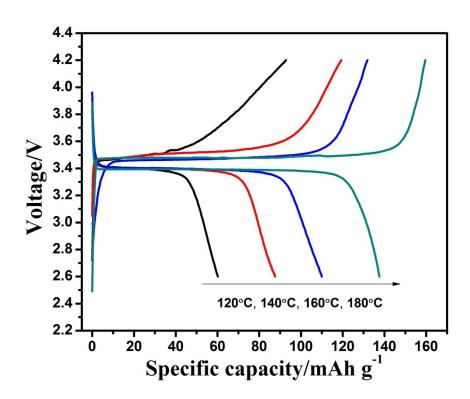


Figure S5. First charge/discharge curves of prepared by different reaction temperature.

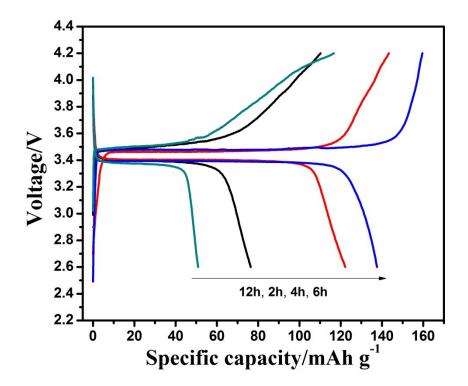


Figure S6. First charge/discharge curves of prepared by different reaction time.