Electronic Supplementary Material (ESI) for RSC Advances.

Supporting information

Trace Fe^{3+} mediated synthesis of micro/nano structures $LiFePO_4$ towards electrochemical performance for Lithium-ion Batteries

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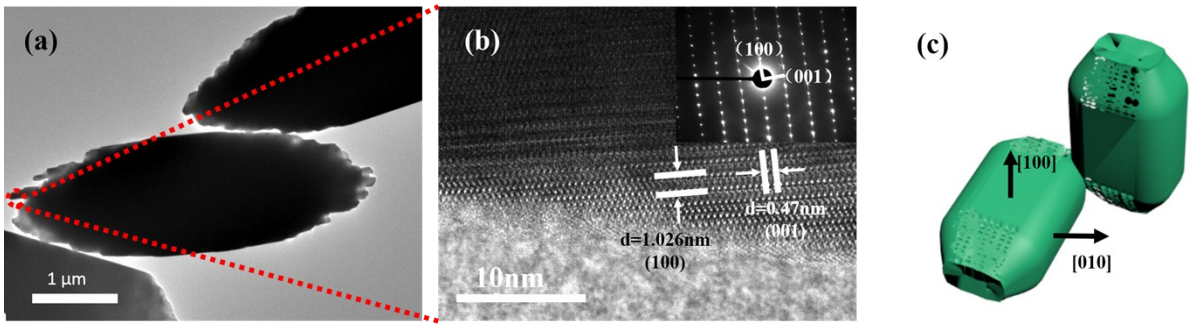

Fig. S1. (a) The TEM image of LFP-4 (b) The SAED pattern and HRTEM image of the side location of bulk $LiFePO_4$ (c) Schematic illustration of LFP-4

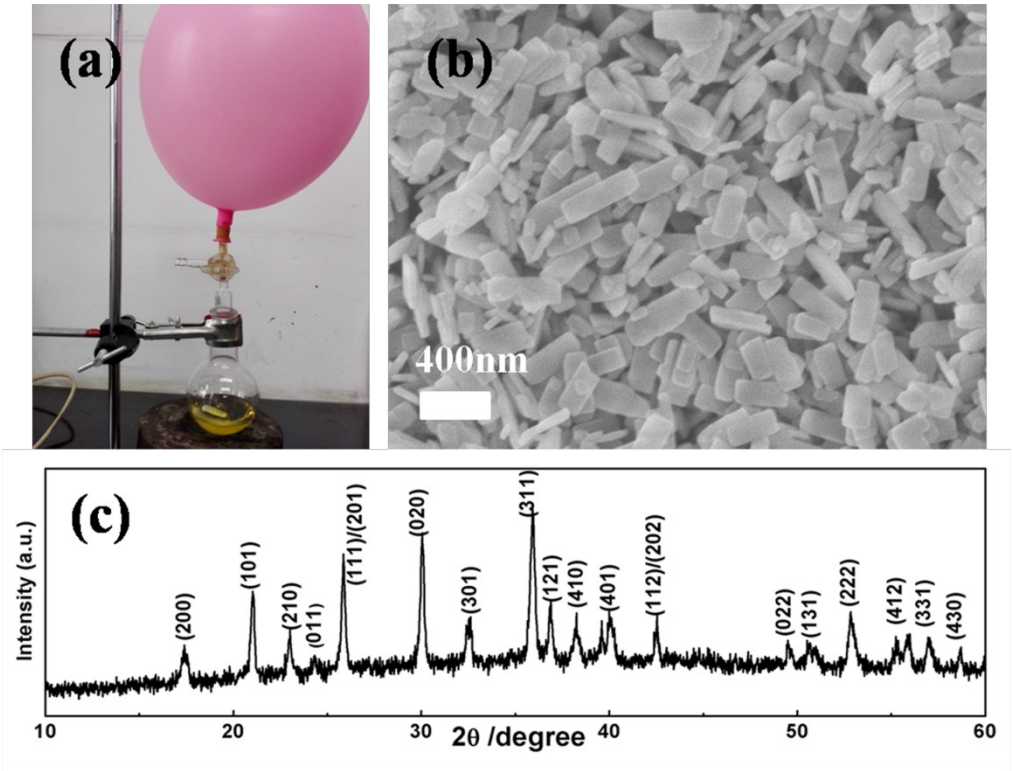

Fig. S2 (a) The equipments of $FeSO_4$-EG solution stirred under an inert circumstance.(b) SEM images of LFP-5 (c) XRD patterns of the samples

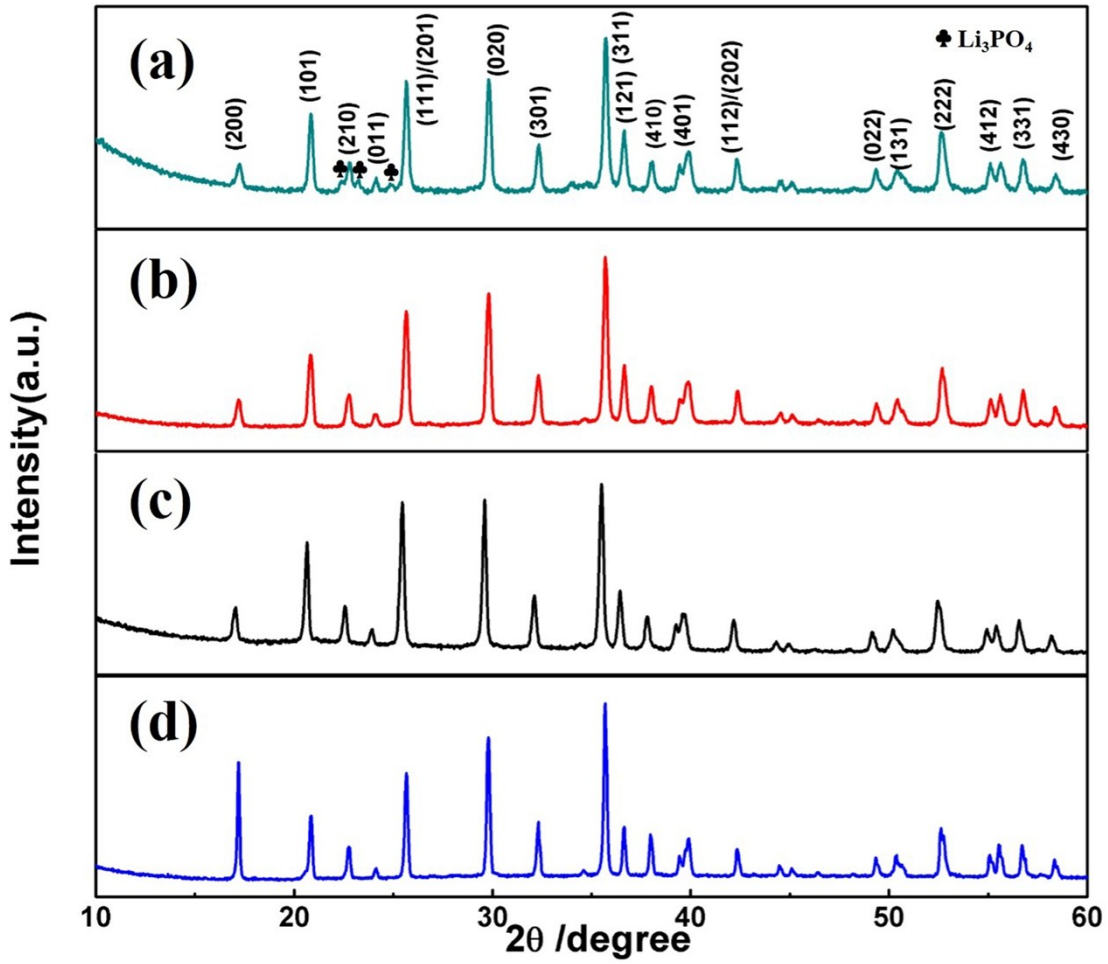

Fig. S3. XRD patterns of the samples: (a) LFP-1A (b) LFP-2A (c) LFP-3A and (d) LFP-4A.

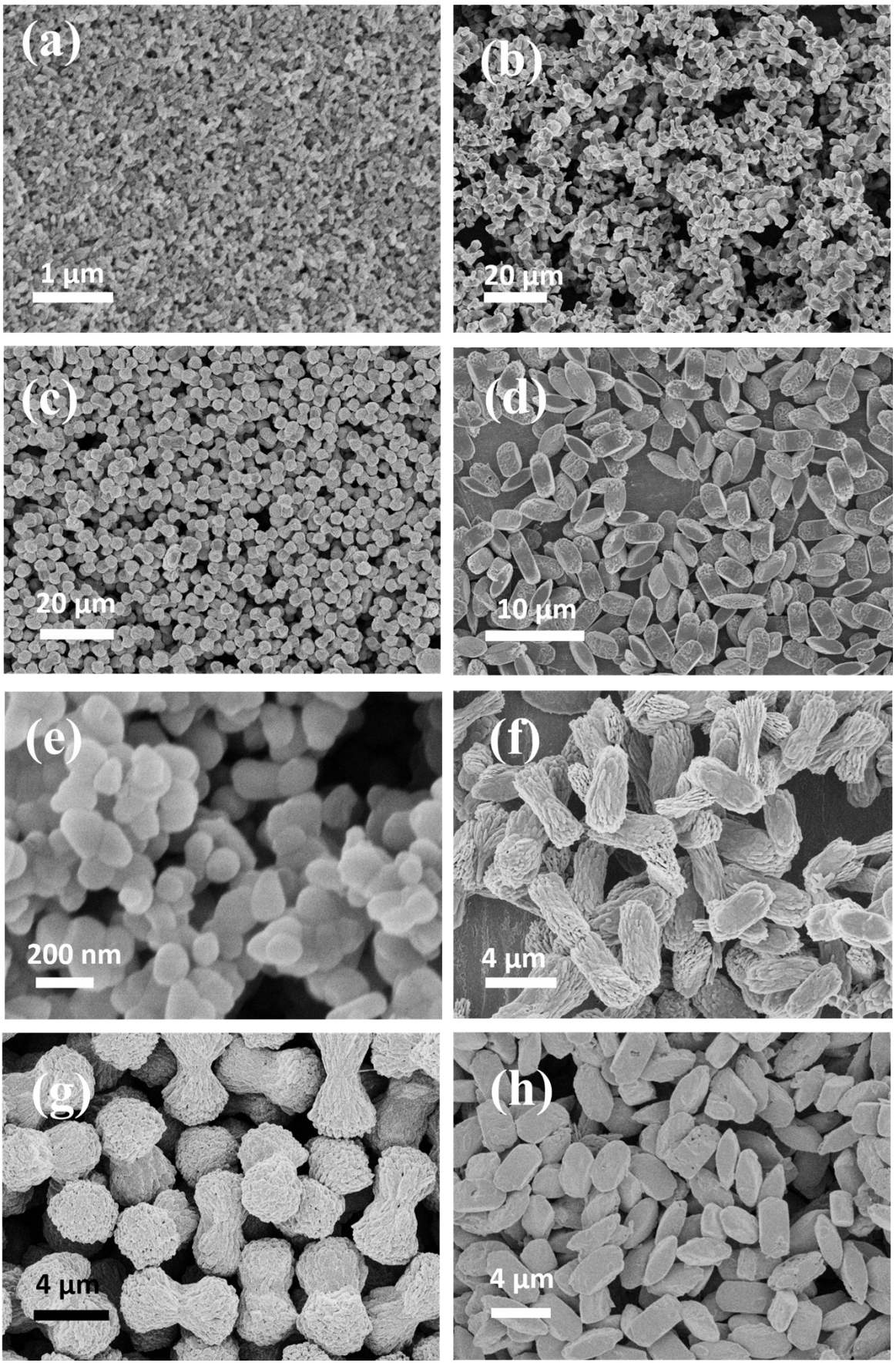

Fig. S4. The lower magnification SEM images(a)LFP-1 (b)LFP-2 (c)LFP-3 (d)LFP-4 and carbon coating $LiFePO_4$ samples (e)LFP-1A (f)LFP-2A (g)LFP-3A (h) LFP-4A