Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information for

Soft-templated $LiFePO_4$/mesoporous carbon nanosheets (LFP/meso-CNSs) nanocomposite as the cathode material of lithium ion batteries

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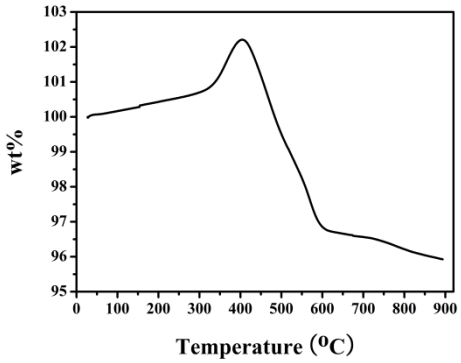

Fig.S1 Thermogravimetric analysis (TGA) curve of LFP/meso-CNSs nanocomposite at a heating rate of 5 °C /min under a flow of air.

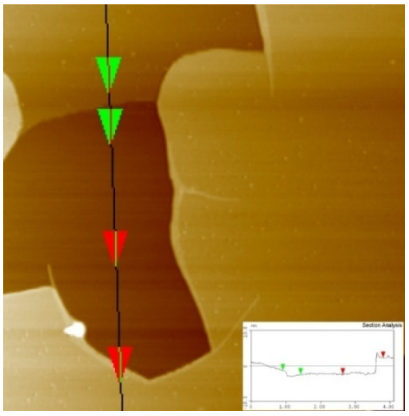

Fig.S2 AFM image of the remaining CNSs obtained by removing LFP from the LFP/meso-CNSs nanocomposite using concentrated HCl solution.

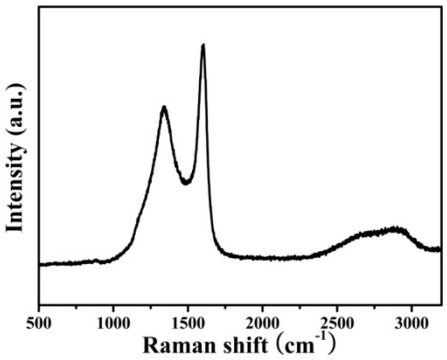

Fig.S3 Raman spectrum of the remaining CNSs obtained by removing LFP from the LFP/meso-CNSs nanocomposite using concentrated HCl solution.

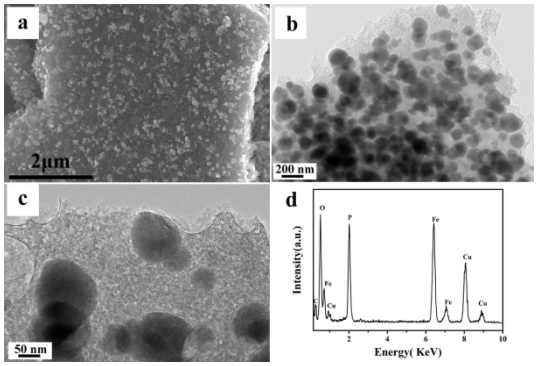

Fig.S4 (a)Typical SEM image, (b-c) TEM images of the LFP/ mesoporous carbon with the ratio of (70wt%/wt30%), (d) Corresponding EDS spectrum

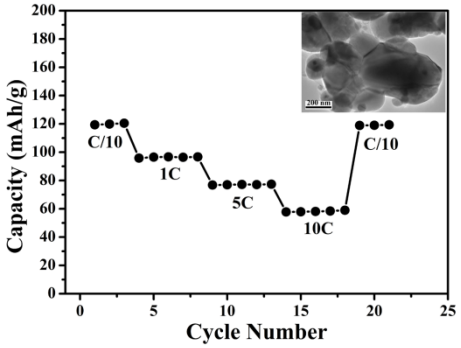

Fig.S5 Rate performance of the bare LFP electrode. The inset is TEM image of the bare LFP.

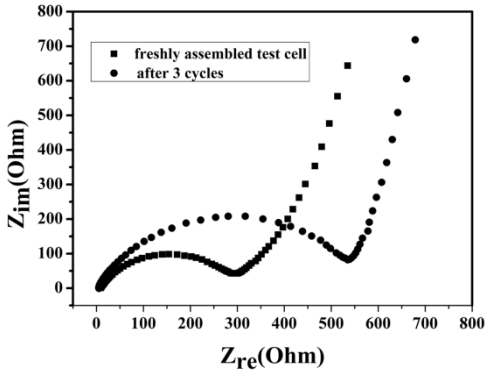

Fig.S6 EIS profiles of the bare LFP electrode in freshly assembled test cell and after 3 cycles.

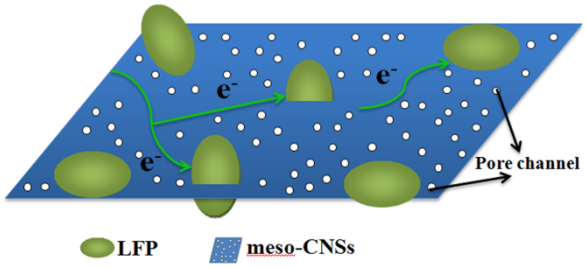

Fig.S7 Schematic representation of soft-templated LFP/meso-CNSs nanocomposite cathode.