Electronic Supplementary Material (ESI) for Journal of Materials Chemistry

Supporting data

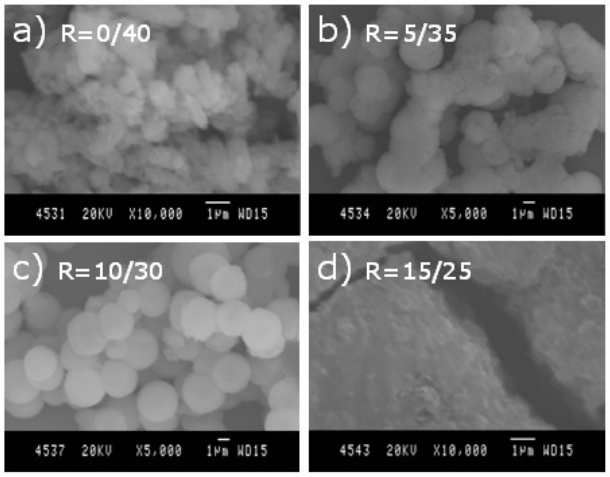

Fig. S1 SEM images of the Li_3PO_4 precursors collected under different volume ratio of PEG600 to H_2O ($R = V_{PEG600}/V_{H2O}$).

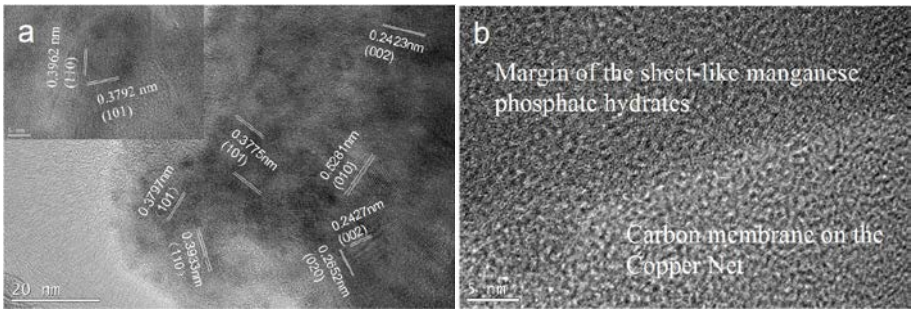

Fig. S2 HRTEM images of the sample prepared at room temperature by mixing LiOH and H_3PO_4 solution in PEG600, then $MnSO_4 \cdot H_2O$ solution was added: a) Li_3PO_4 nanoparticles, b) sheet-like manganese phosphate hydrates.

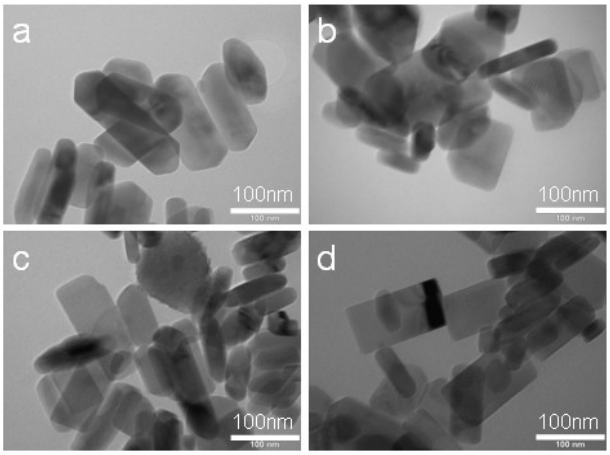

Fig. S3 TEM images of the LMP products which were obtained by mixing LiOH and H_3PO_4 solution in PEG600, then $MnSO_4 \cdot H_2O$ solution was added, the mixture was solvothermally treated at 180 ºC for different time: (a) 2 h, (b) 4 h, (c) 8 h, (d) 16 h without addition of ammonia.

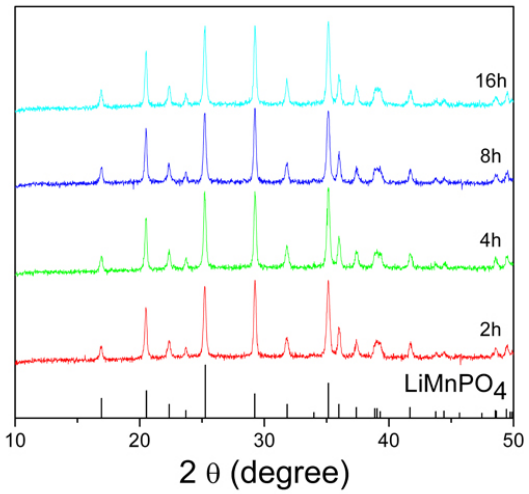

Fig. S4 XRD patterns of the LMP products which were obtained by mixing LiOH and H_3PO_4 solution in PEG600, then $MnSO_4 \cdot H_2O$ solution was added, the mixture was solvothermally treated at 180 ºC for different time: (a) 2 h, (b) 4 h, (c) 8 h, (d) 16 h without addition of ammonia.

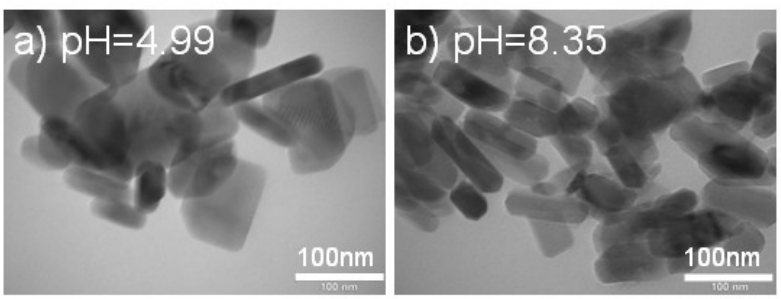

Fig. S5 TEM images of the LMP products collected at: (a) pH value of 4.99 and (b) pH value of 8.35.

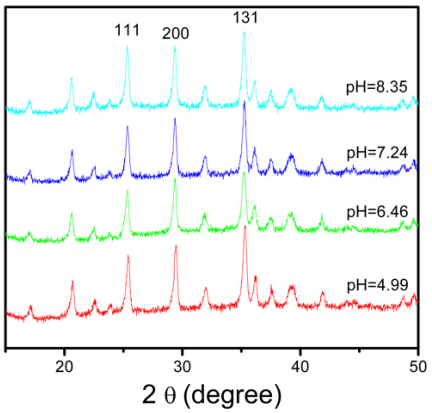

Fig. S6 XRD patterns of the LMP products collected under different pH value.

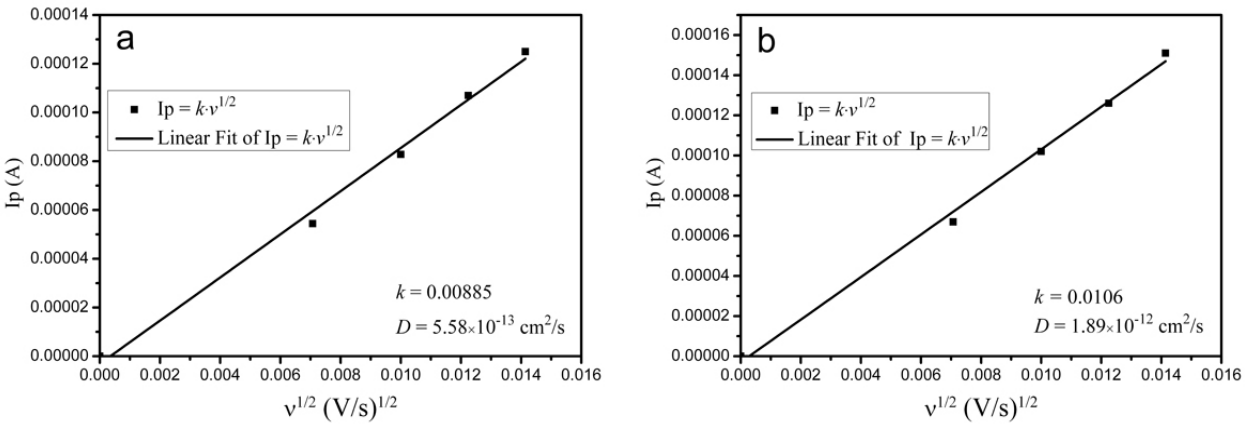

Fig. S7 Linear fit of Ip = $k \cdot v^{1/2}$ obtained form the CV curves of the LMP products collected under different pH value: (a) 4.99, (b) 6.46.