

Supplementary Information

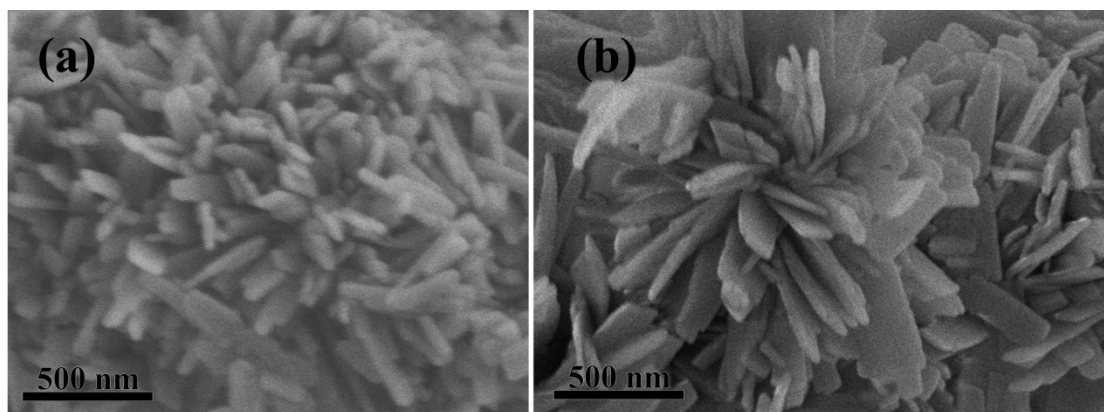


Figure S1 SEM images of (a) the hydrothermally synthesized LiMnPO₄ samples under the effect of 0.21 g KOH and 0.4 g K₂SO₄, and (b) hydrothermally synthesized flower-like LiMnPO₄ nanostructures self-assembled by nanosheets under the effect of 0.21 g KOH without any K₂SO₄. Due to the fast bounding of K⁺ ion on (100) planes, the growth along the [100] direction is also strongly suppressed, and the primary LiMnPO₄ blocks change from (010) nanosheets to [001] rod-like nanoplates.

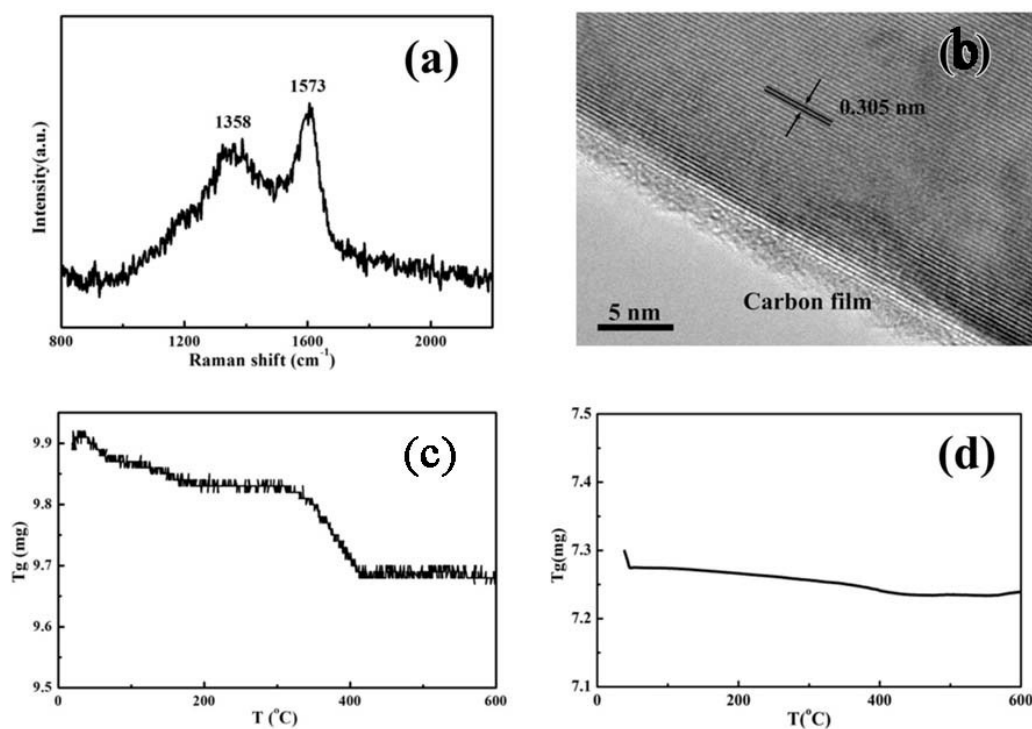


Figure S2 (a) Raman spectra, (b) HRTEM image, and (c) TG curve of the carbon-coated stamen-like LiMnPO₄ nanostructures, and (d) TG curve of the stamen-like LiMnPO₄ nanostructures before carbon coated