

Supporting Information

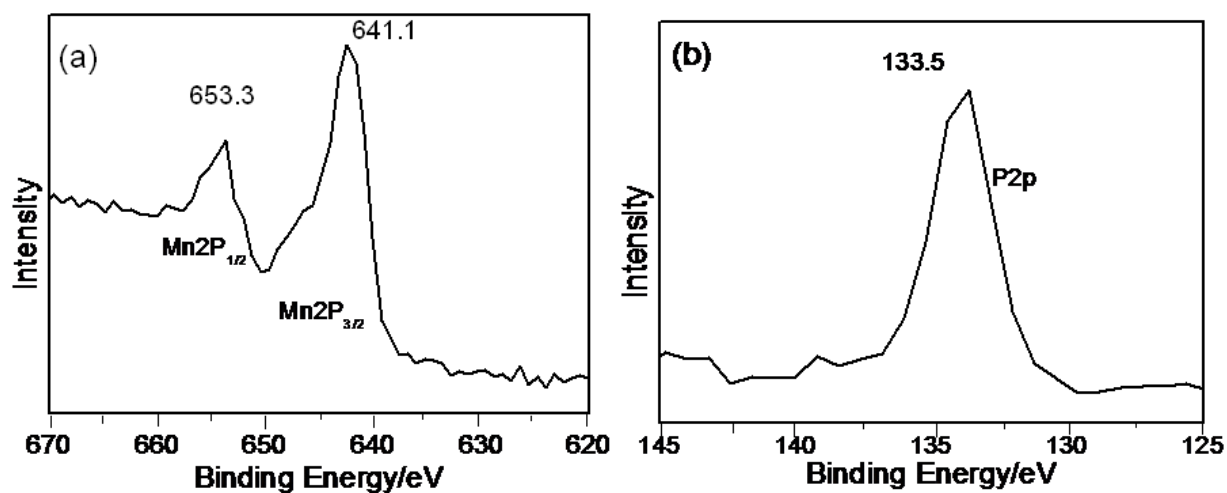


Figure S1. XPS spectra of LiMnPO₄ nanocrystals showing the Mn 2p_{1/2} and 2p_{3/2} as 653.3 and 641.1 eV, respectively.

Sl.No	Temperature (°C)	Precursor concentration (M)	Crystallite size (nm)
1	250, 275	0.015	7
2	325	0.015	8
3	375	0.015	12
4	400	0.005-0.025	13-15

Table S1. The average crystallite size of the LiMnPO₄ NCs calculated by the XRD data using Scheerer's equation.

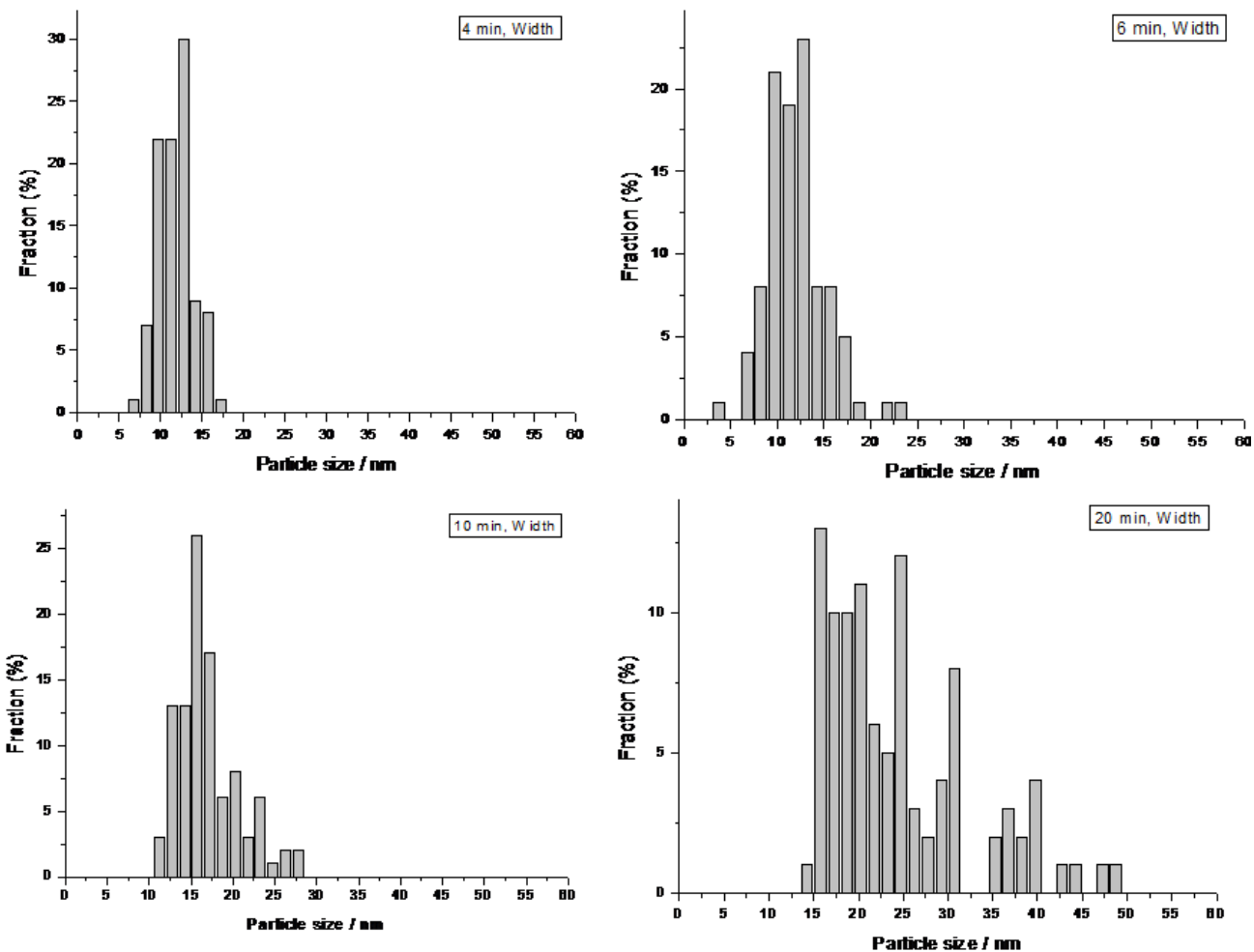


Figure S2. Histograms of LiMnPO_4 NCs synthesized at different reaction time.

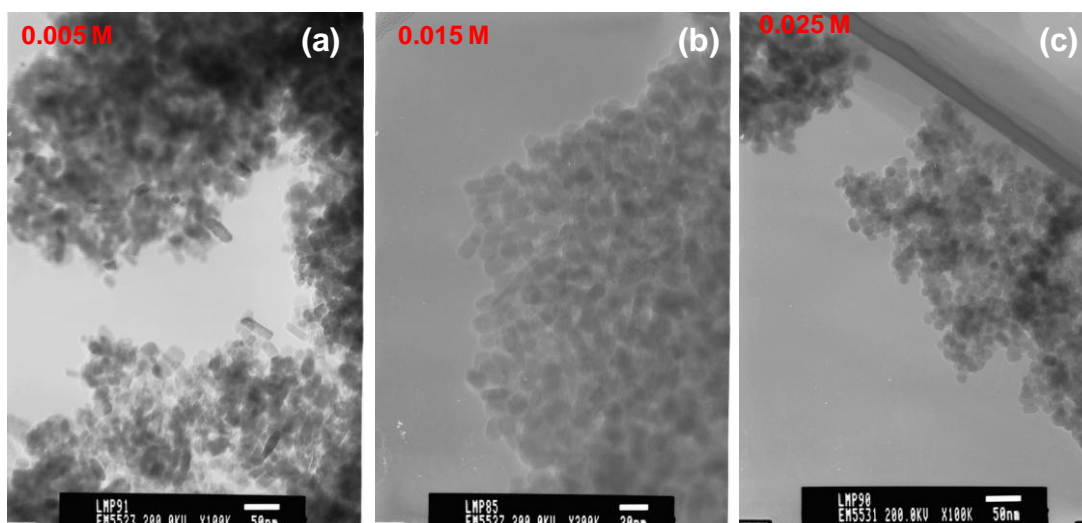


Figure S3. TEM images of LiMnPO_4 NCs synthesized using different precursor concentration.

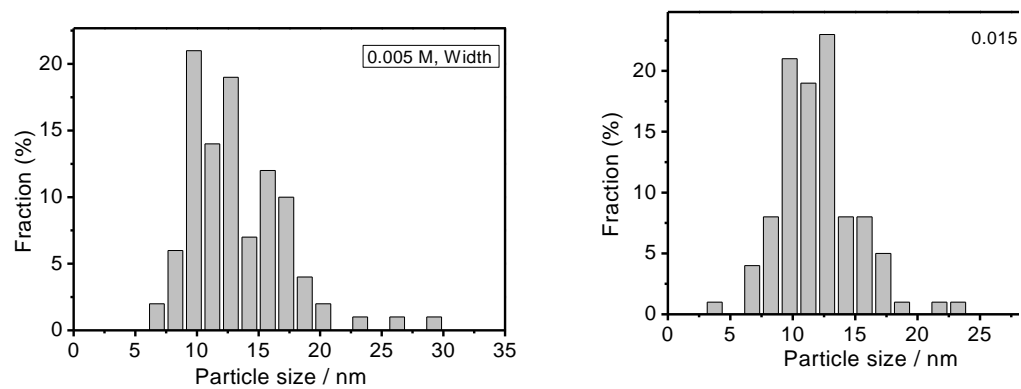


Figure S4. Histograms of LiMnPO₄ NCs synthesized using different precursor concentration

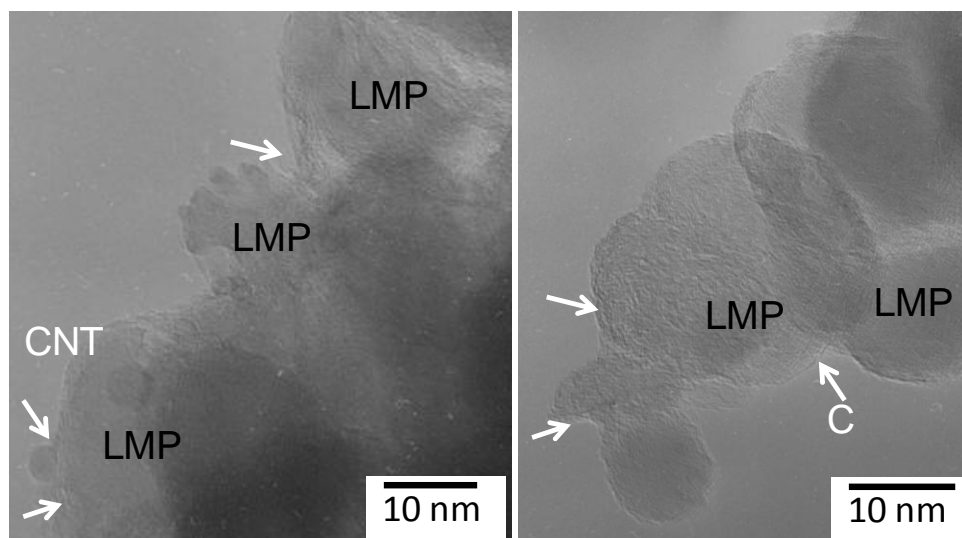


Figure S5. TEM images of carbon coated LiMnPO₄ after ball milling carbon coating.

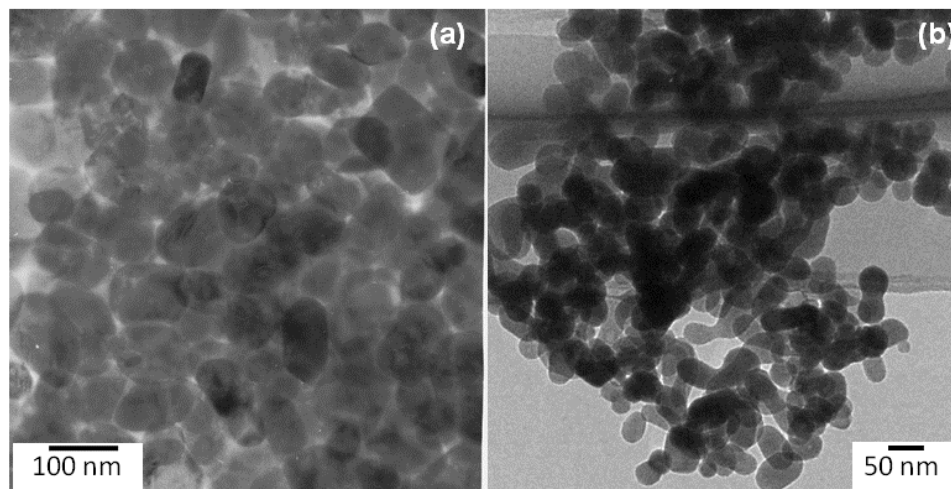


Figure S6. TEM images of LiMnPO₄ with average particle size 80 nm (a) and 60 nm (b).