Electronic Supplementary Material (ESI) for CrystEngComm.
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Supplementary Information

Rapid combustion route to high-performance nanocrystalline cathode materials for Li-ion batteries

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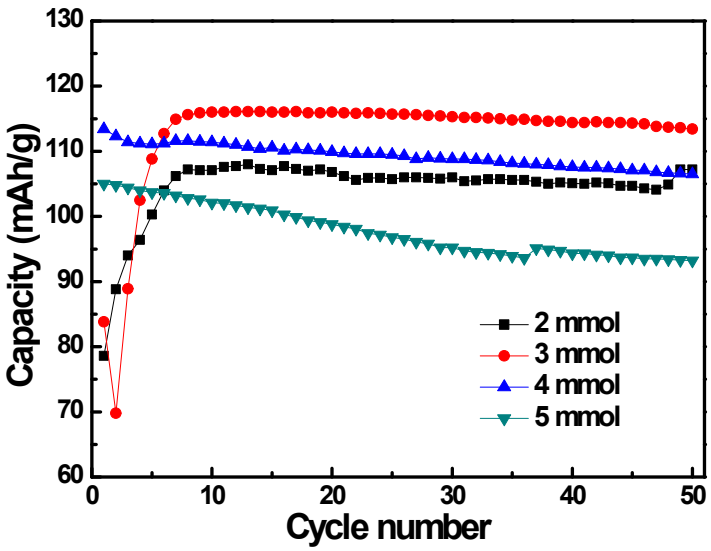

Fig. S1 Cycling performances (charged and discharged at 100 mA/g) of $LiMn_2O_4$ obtained with different amounts of final products using 10 mL solution in one pot.

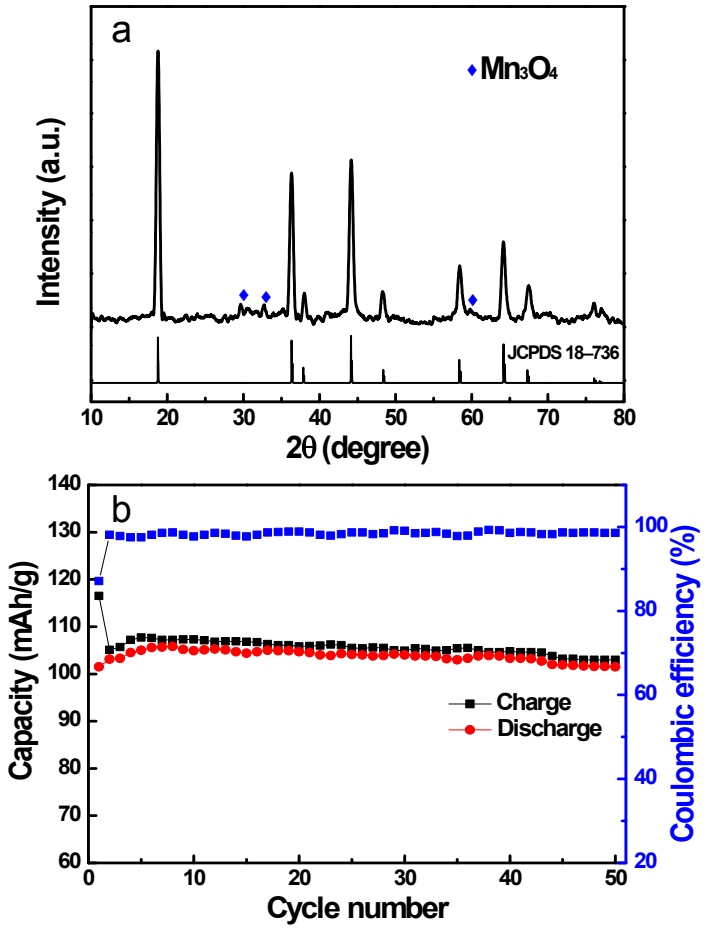

Fig. S2 (a) XRD pattern and (b) cycling performance (charged and discharged at 100 mA/g) of one step LMO750. The standard pattern of $LiMn_2O_4$ (JCPDS 18-736) is shown for reference.

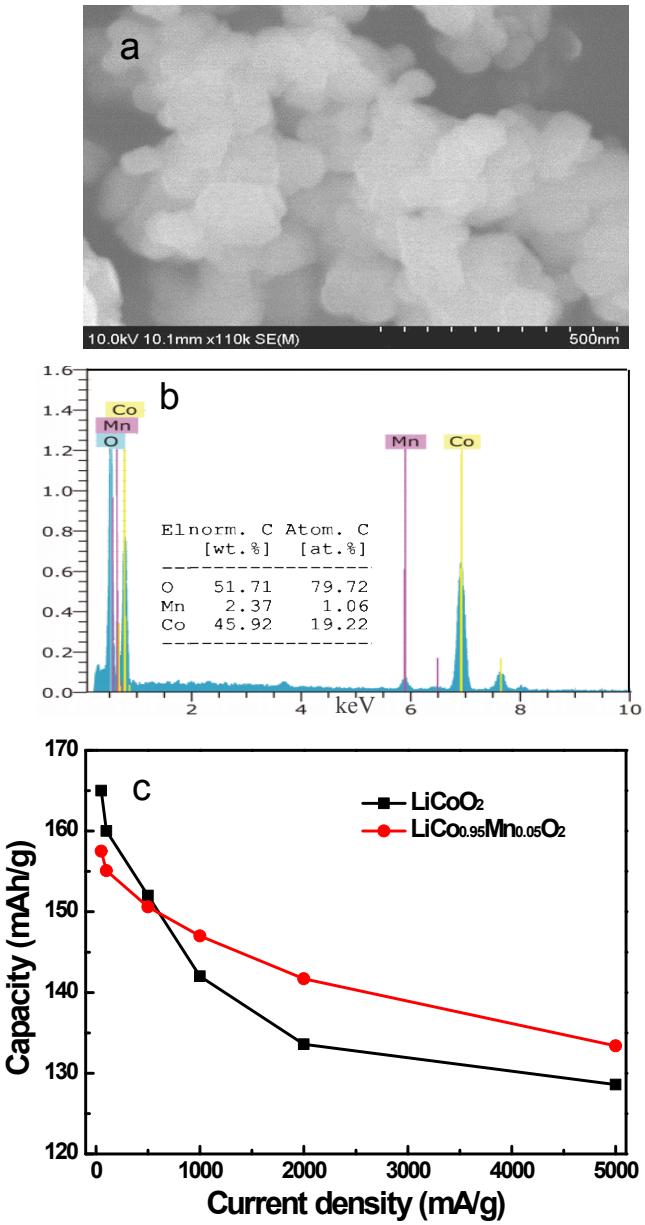

Fig. S3 (a) FESEM and (b) EDS images of $LiCo_{0.95}Mn_{0.05}O_2$, (c) rate capabilities of $LiCoO_2$ and $LiCo_{0.95}Mn_{0.05}O_2$.