Electronic supplementary information for

Hierarchical donut-shaped $LiMn_2O_4$ as advanced cathode material for lithium-ion batteries with excellent rate capability and long cycle life†

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Fig. S1 N_2 adsorption-desorption isotherms of the DS-LMO. The inset shows the BJH pore-size distribution of the DS-LMO.

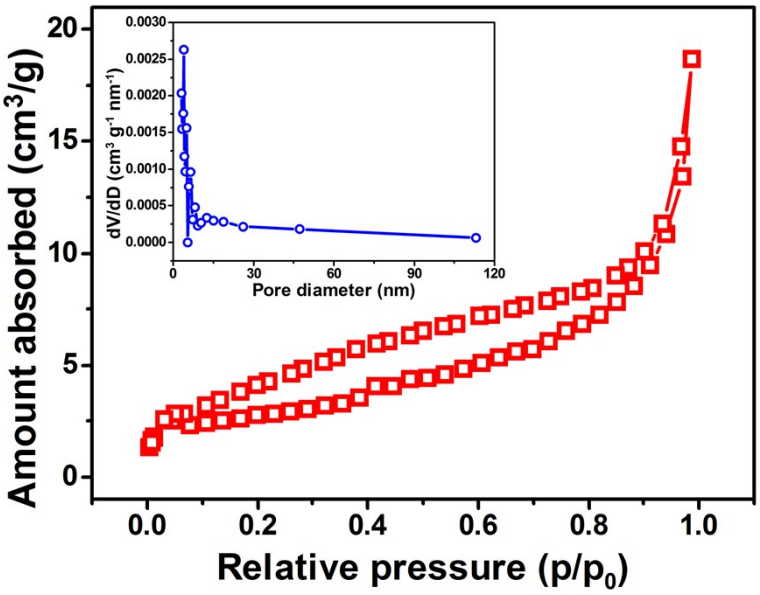

Fig. S2 The first charge/discharge profiles of DS-LMO at C/2 (the inset is CV plot at 0.05 mV s^{-1}).

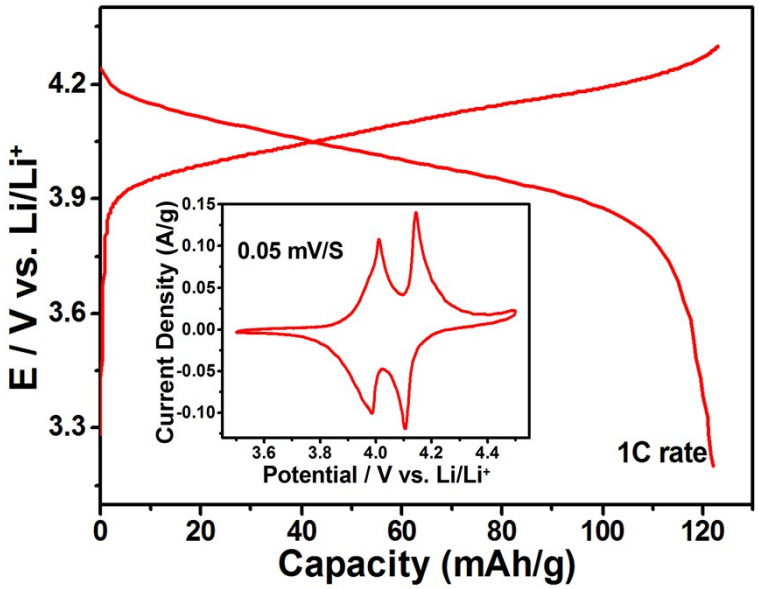

Fig. S3 Discharge curves of DS-LMO at different discharge rates of 1 C (140 mA g^{-1}) to 55 C (7700 mA g^{-1}).

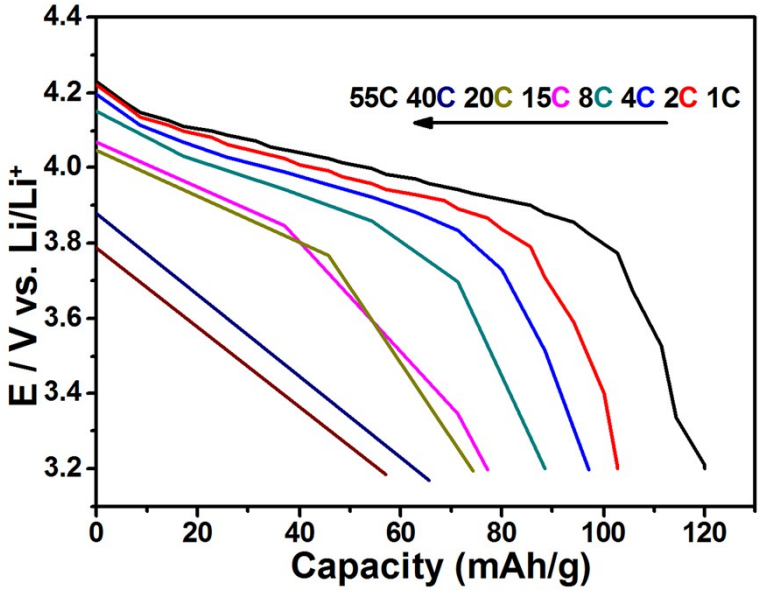

Fig. S4 Comparison of the rate capabilities of DS-LMO, LMO nanowires,[27] LMO nanotubes,[28] LMO microcubes[29] and LMO nanocones.[34]

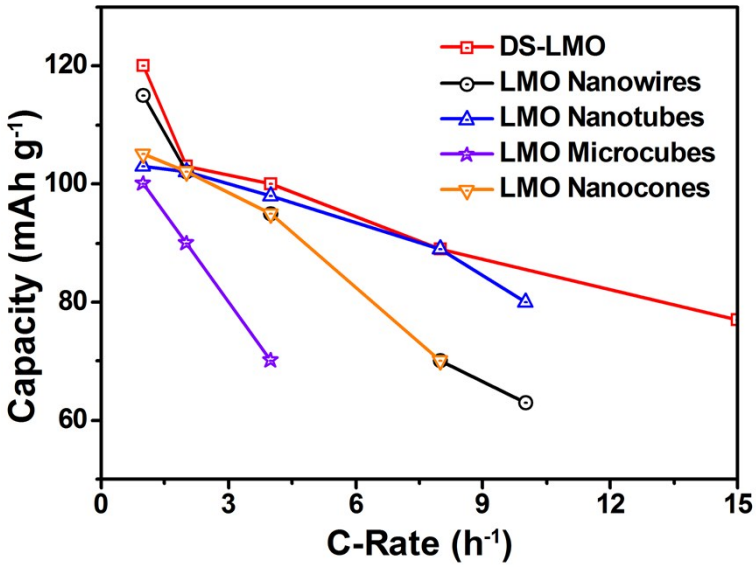

Fig. S5 TEM image for DS-LMO after 500 cycles at discharge rates of 10 C.