Electronic Supplementary Material (ESI) for RSC Advances.

Supporting information

$LaPO_4$-coated $Li_{1.2}Mn_{0.56}Ni_{0.16}Co_{0.08}O_2$ as cathode materials with enhanced Coulombic efficiency and rate capability for lithium ion batteries

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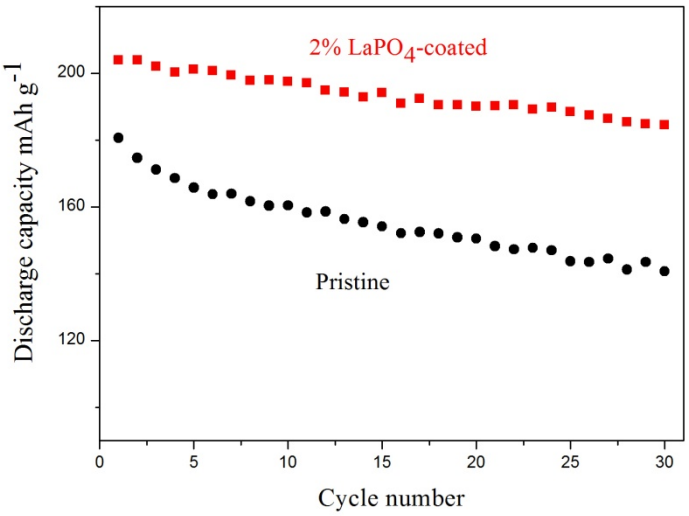

Fig.S1 Capacity retention of the pristine $Li_{1.2}Mn_{0.56}Ni_{0.16}Co_{0.08}O_2$ and 2% $LaPO_4$ coated $Li_{1.2}Mn_{0.56}Ni_{0.16}Co_{0.08}O_2$ electrodes at 55 °C in a potential region between 2.0 and 4.7V at 1 C.

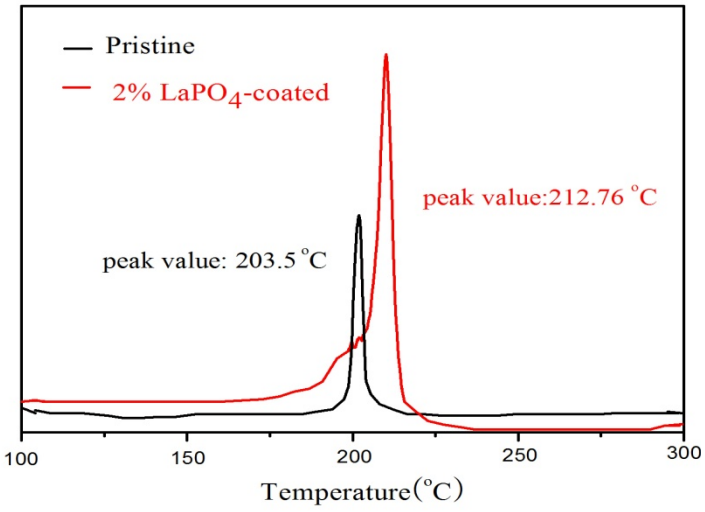

Fig.S2 The DSC curves of the $Li_{1.2}Mn_{0.56}Ni_{0.16}Co_{0.08}O_2$ before and after the surface modification with 2 % $LaPO_4$ after charging to 4.7 V (*vs*. Li/Li^+) in the first cycle.