Supplementary material for Synthesis, magnetic, optical, and thermodynamic properties of rocksalt $Li_{1.3}Nb_{0.3}Mn_{0.4}O_2$ cathode material for Li-ion batteries

The molar susceptibility χ_m versus the temperature (Figure S1a) shows an anomaly which is clear in the plot of the inverse of molar susceptibility ($1/\chi_m$) versus the temperature (Figure S1b). Above the transition temperature of 6.48, the curve was fitted with Curie-Weiss law.

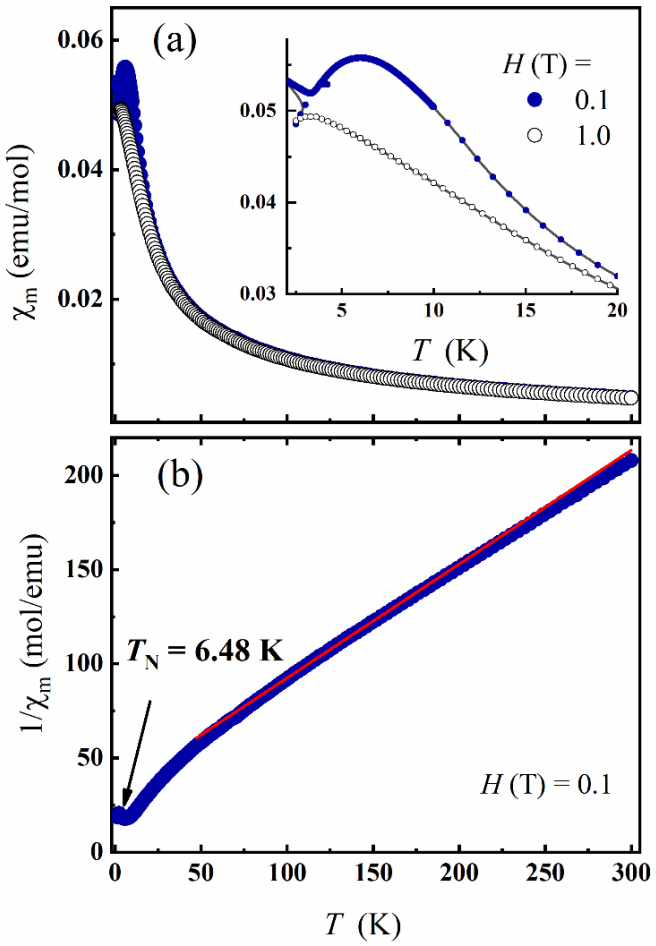

Figure S1. (**a**) The molar susceptibility and versus the temperature at the magnetic field of 0.1, 1 T. (**b**) The inverse of molar susceptibility and versus the temperature of $Li_{1.3}Nb_{0.3}Mn_{0.4}O_2$ at the magnetic field of 0.1 T, the red line indicates the Curie-Weiss fitting.

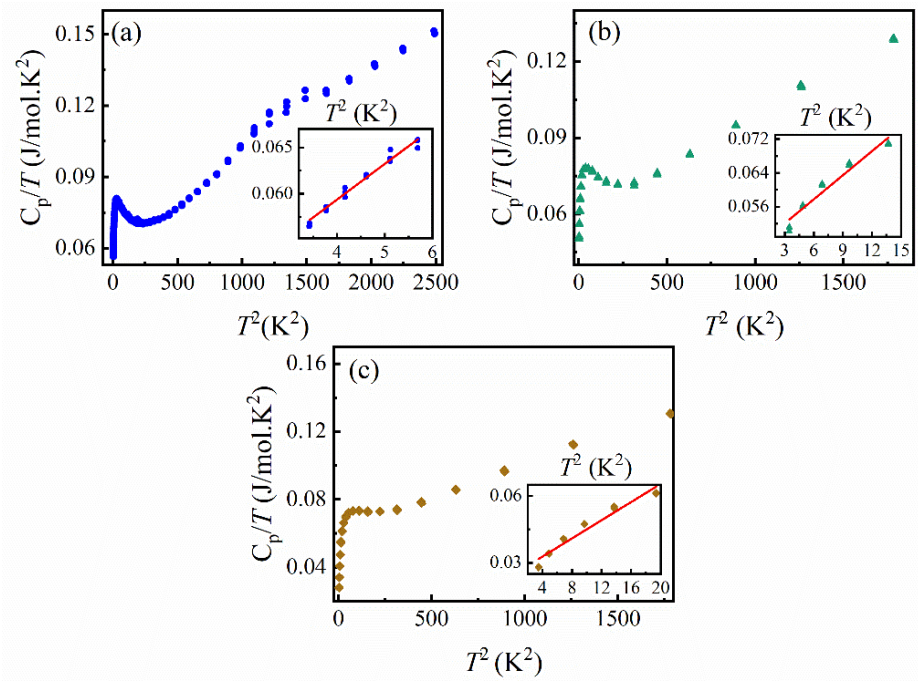

Figure S2. The specific heat per temperature as a function of the square of temperature at (**a**) 0 T, (**b**) 1 T, and (**c**) 9 T, the inset indicates the fitting with equation 2 at low temperatures.