

Differentiation between strain and charge mediated magnetoelectric coupling in $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ $/\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})_{0.7}\text{Ti}_{0.3}\text{O}_3(001)$ Supplementary material

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Fig. S1 shows the PNR curve measured at +4 kV/cm along with SLD profile. The combined SLD profile of all PNR curves is presented in the main paper.

Fig. S2 depicts the initial model adopted to start the fitting. It can be clearly seen from the simulation that the fit is not good.

Magnetization versus applied magnetic field curves are measured at different temperatures as shown in Fig. S3. One can see from the plot that at temperature=270 K, the switch over from normal hysteresis to inverted hysteresis takes place with presence of negative remanence.

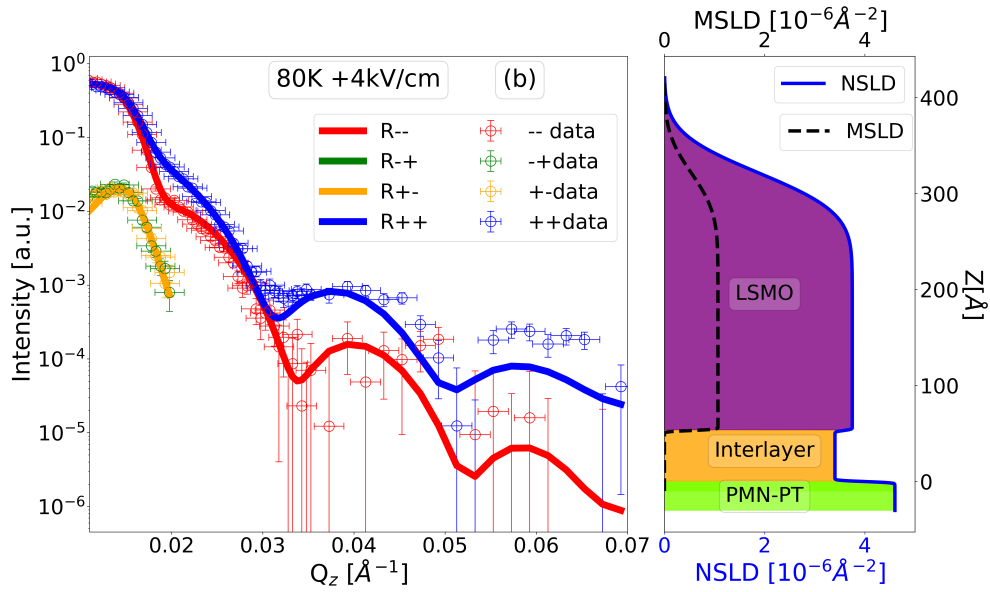


Figure S1. PNR curve with fitting for +4kV/cm at 80 K.

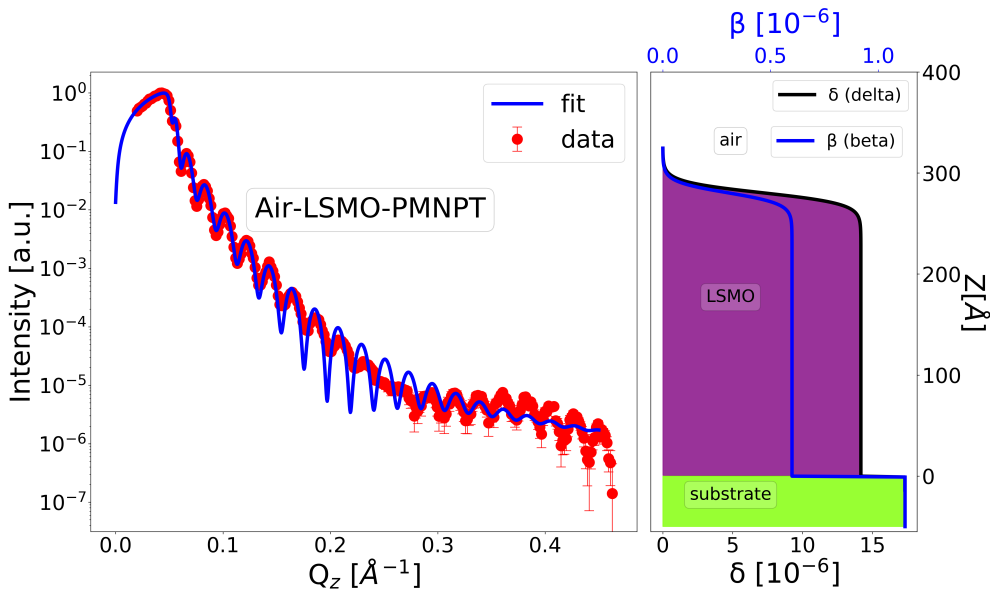


Figure S2. XRR fitting with a model taking into account only LSMO and PMN-PT and no interlayer

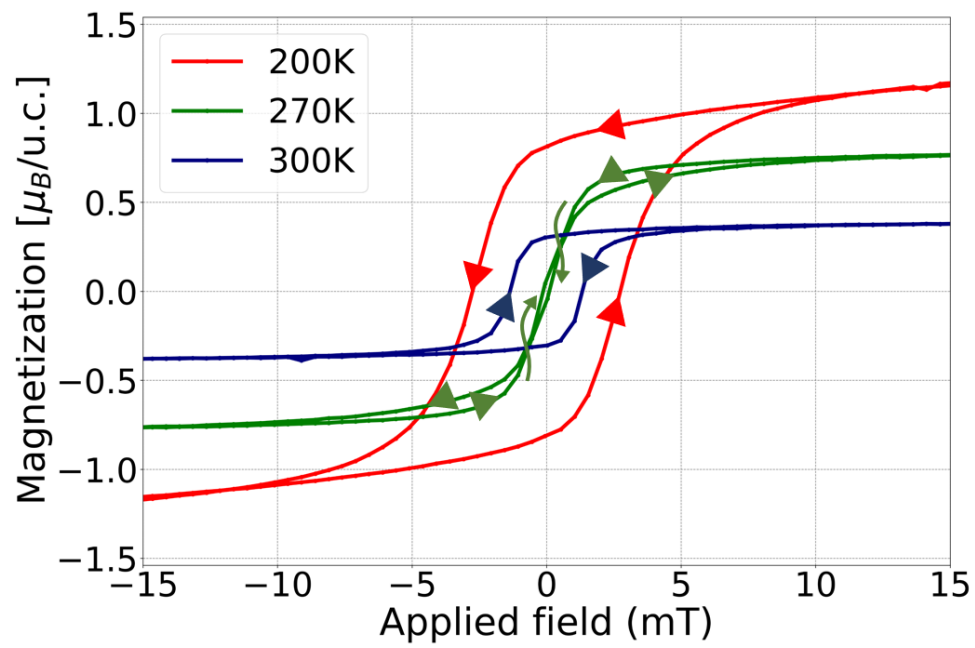


Figure S3. Presence of negative remanence and inverted hysteresis loop from 270K onwards