Ido Levy et al., *Structure-property relationship of the magnetic properties of molecular beam epitaxy grown* $(Sb_2Te_3)_{1-x}(MnSb_2Te_4)_x$ *magnetic topological insulators*

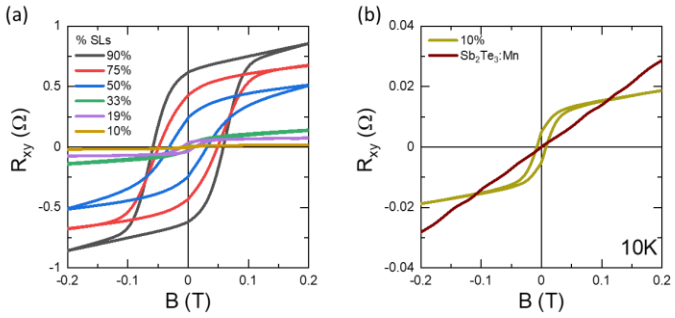

Figure 1: (a) Field dependent Hall resistance (R_{xy}) scans for a selection of samples containing 10-90% SLs. (b) Magnified view of field dependent R_{xy} measurements for the sample with 10% compared to a Mn doped Sb_2Te_3 sample (Sb_2Te_3:Mn).

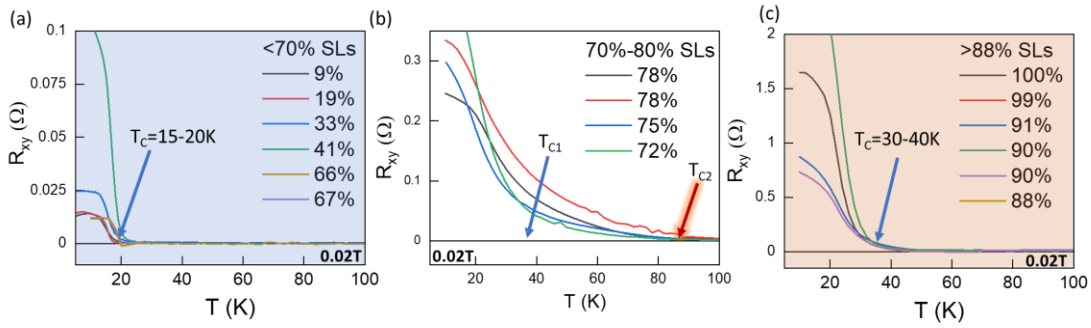

Figure 2: Temperature dependent Hall resistance scans. (a) Samples containing up to 70% SLs, (b) Samples containing 70-80% SLs and (c) Samples containing more than 88% SLs.

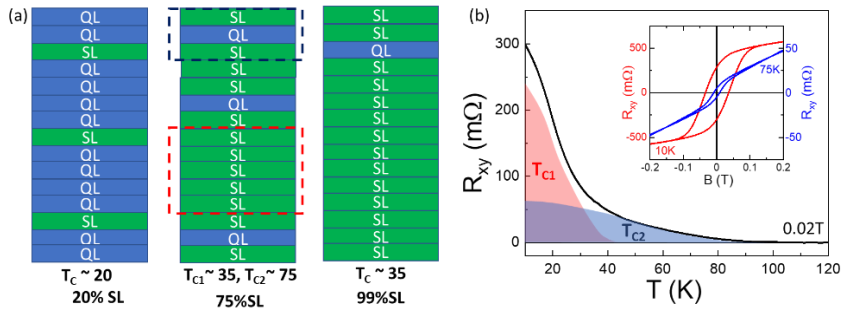

Figure 3: (a) Illustration of SLs/QLs distribution in samples containing 20%, 75% and 99% SLs. The red and blue squares in the middle structure highlight our proposed areas that result in the two T_C values. (b) Temperature dependent Hall resistance (R_{xy}) of a sample with 75% SLs. The plot can be considered as composed of two regions, illustrated by the shaded areas which correspond to the highlighted squares in (a). Inset: Field dependent R_{xy} of the samples at 10K and 75K showing hysteresis in both.