

Fig. 1: X ray diffraction reciprocal space maps of (004) (a-f) and (224) reflections (g-l) of InAs QWs along the $[110]$ direction (a-c, g-i) and along the $[-110]$ direction (d-f, j-l) with $t = 300$ nm (a,d,g,j) , 150 nm, (b,e,h,k) and 50 nm (c,f,i,l).

Substrate, $\text{In}_{0.81}\text{Al}_{0.19}\text{As}$, $\text{In}_{0.84}\text{Al}_{0.16}\text{As}$, and InAs peaks are labelled as S, L1, L2 and L3, respectively.

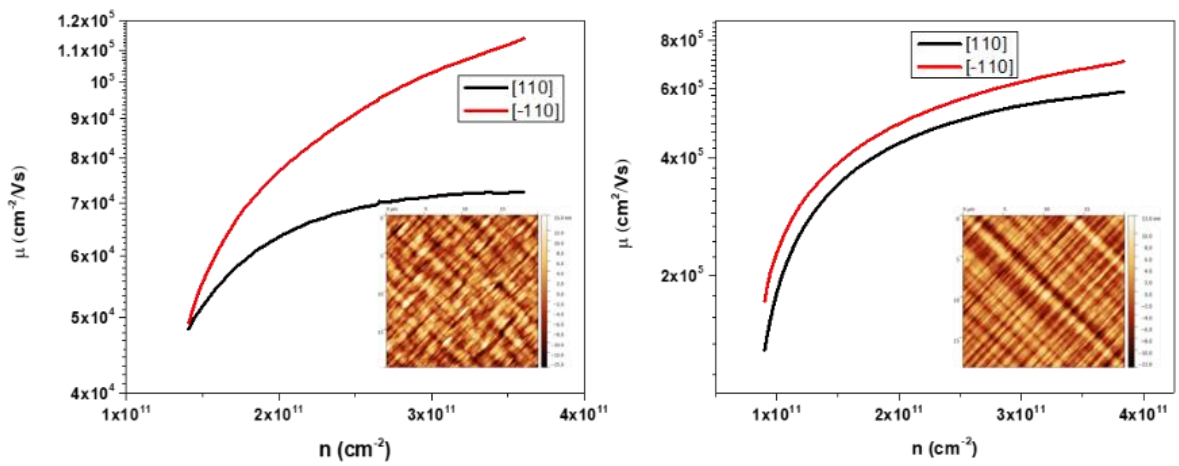


Fig. 2: Mobility vs. charge density along $[110]$ and $[-110]$ for $t = 50\text{nm}$ (left) and 300nm (right). Inset: corresponding AFM images of top surfaces.