

Ga Beam Flux = 1×10^{-7} Torr “Gallium Rich” Regime

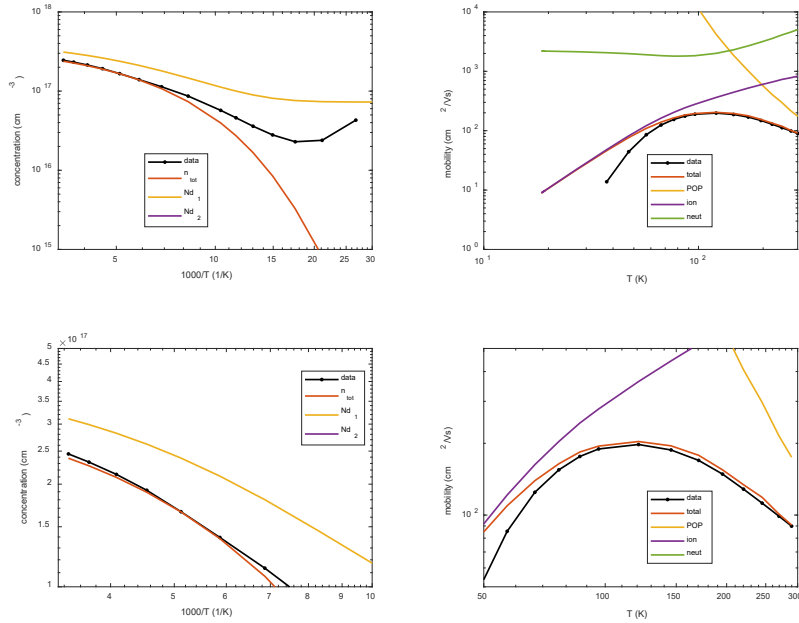


Figure 1: Transport of a gallium rich film and the fits to quantify defects and donors. A donor at 27 meV shows a concentration of $4.25 \times 10^{17} \text{ cm}^{-3}$ and an acceptor of $7.26 \times 10^{16} \text{ cm}^{-3}$.

Ga Beam Flux = 6×10^{-8} Torr “Oxygen Rich” Regime

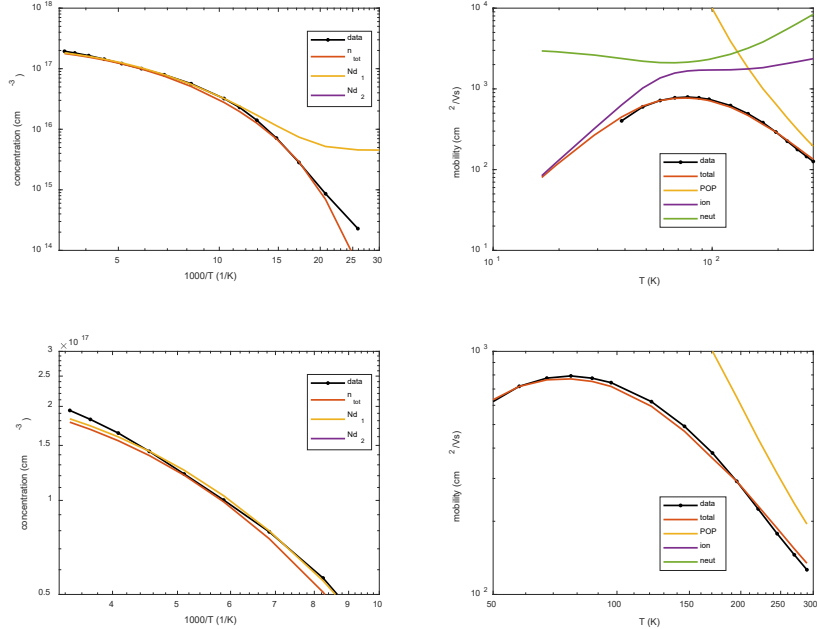


Figure 2: Transport of a gallium rich film and the fits to quantify defects and donors. A donor at 38 meV shows a concentration of $2.6 \times 10^{17} \text{ cm}^{-3}$ and an acceptor of $4.5 \times 10^{15} \text{ cm}^{-3}$.