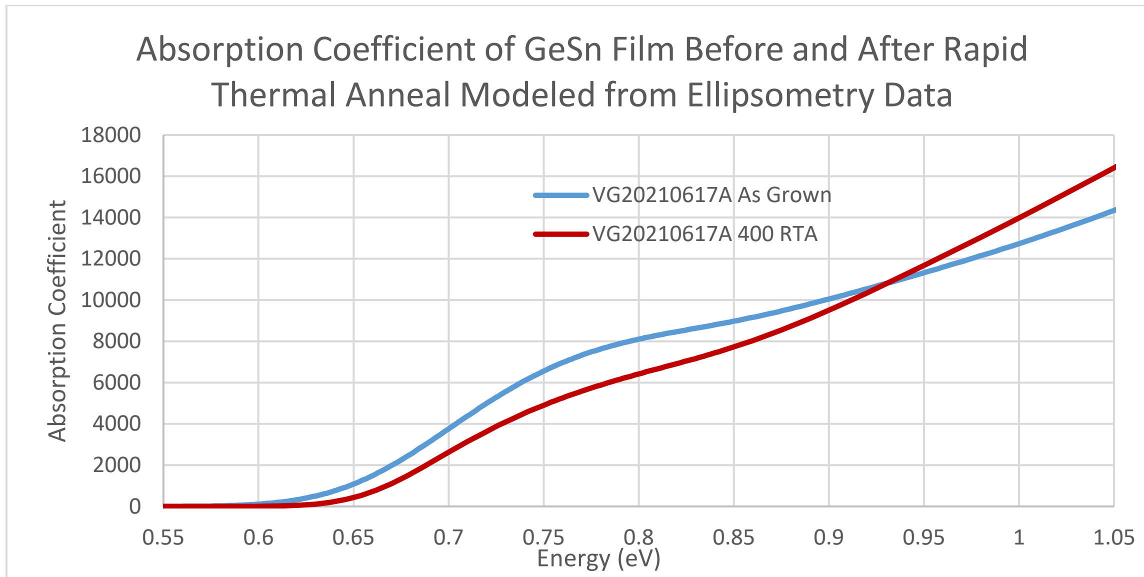

Figure 1. Models of the absorption coefficients near the band edge as collected by spectroscopic ellipsometry of a $Ge_{0.935}Sn_{0.065}$ film grown on a Ge substrate, taken before (blue) and after (red) a 1-minute heating step at 400°C.

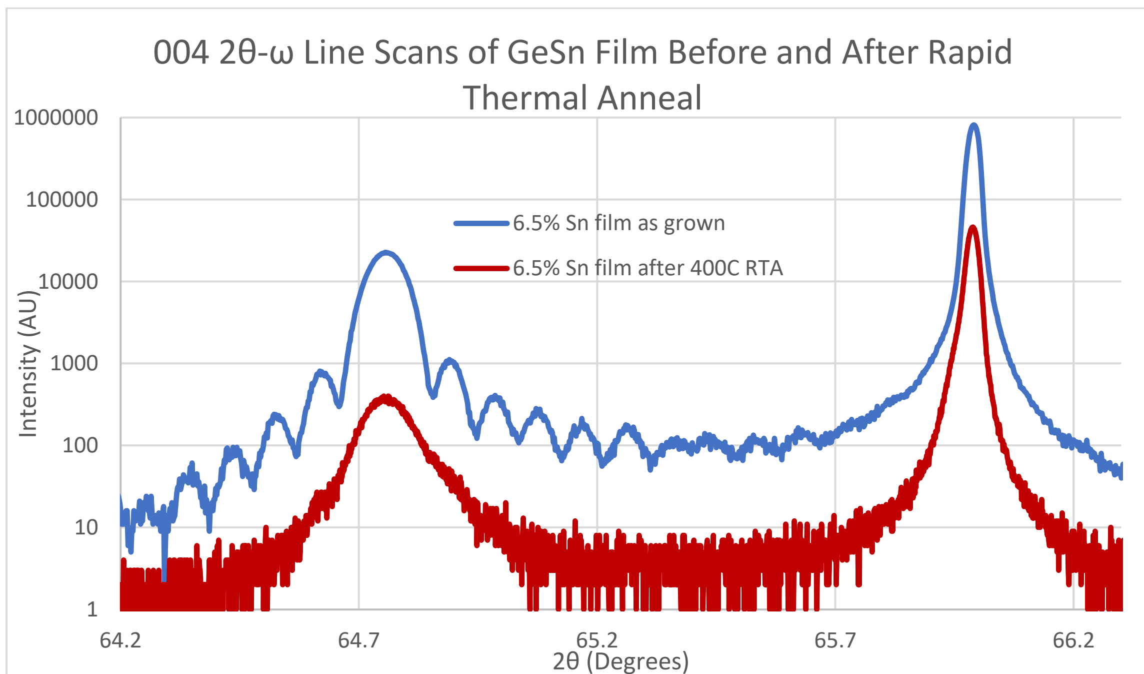

Figure 2. High-resolution x-ray diffraction 004 2θ-ω scans of a $Ge_{0.935}Sn_{0.065}$ film grown on a Ge substrate, taken before (blue) and after (red) a 1-minute heating step at 400°C. Reciprocal space mapping before the anneal (not shown) confirms the film was originally fully strained to the substrate.