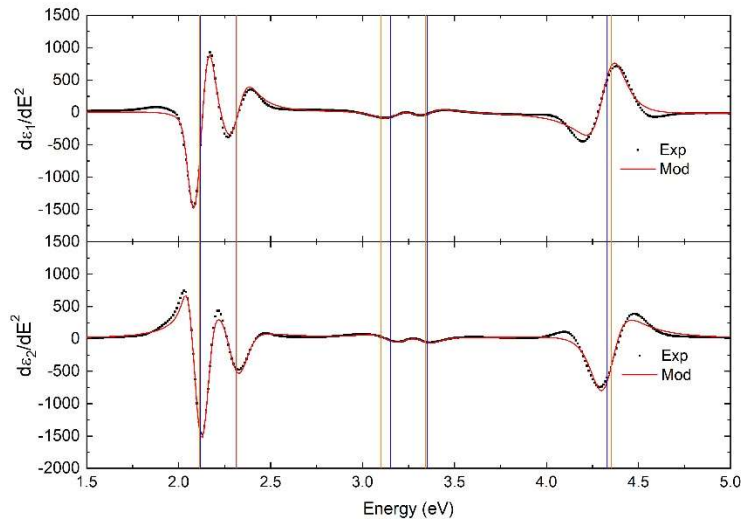


Using Vegard's Law, continuum elasticity theory, and the lattice constants of GaAs, Ge, Sn, and GeSn layer, we can determine the Sn percent is of the GeSn epitaxial layer.



After fitting the pseudodielectric function, the second derivative of the dielectric function for the GeSn layer was used to find the critical points. This included the energy, amplitude, broadening, phase angle, and line shape. The energies for were compared to bulk Ge.