

Temperature dependence of the long-wavelength lattice vibrations of NiO (111) using infrared spectroscopic ellipsometry from 25 K to 500 K

Yoshitha Hettige, NMSU, yoshi93@nmsu.edu

Jaden R. Love, NMSU lovej@nmsu.edu

Carlos A. Armenta NMSU cobhc14@nmsu.edu

Atlantis K. Moses, NMSU akmoses@nmsu.edu

Jose Marquez, NMSU jmrzq98@nmsu.edu

Stefan Zollner, NMSU, zollner@nmsu.edu

Figure 1 shows the measured ellipsometric angles Ψ and Δ between 25 and 500 K with a step size of 25 K. In this presentation, we will discuss the temperature dependence of the phonon parameters (energy and broadening).

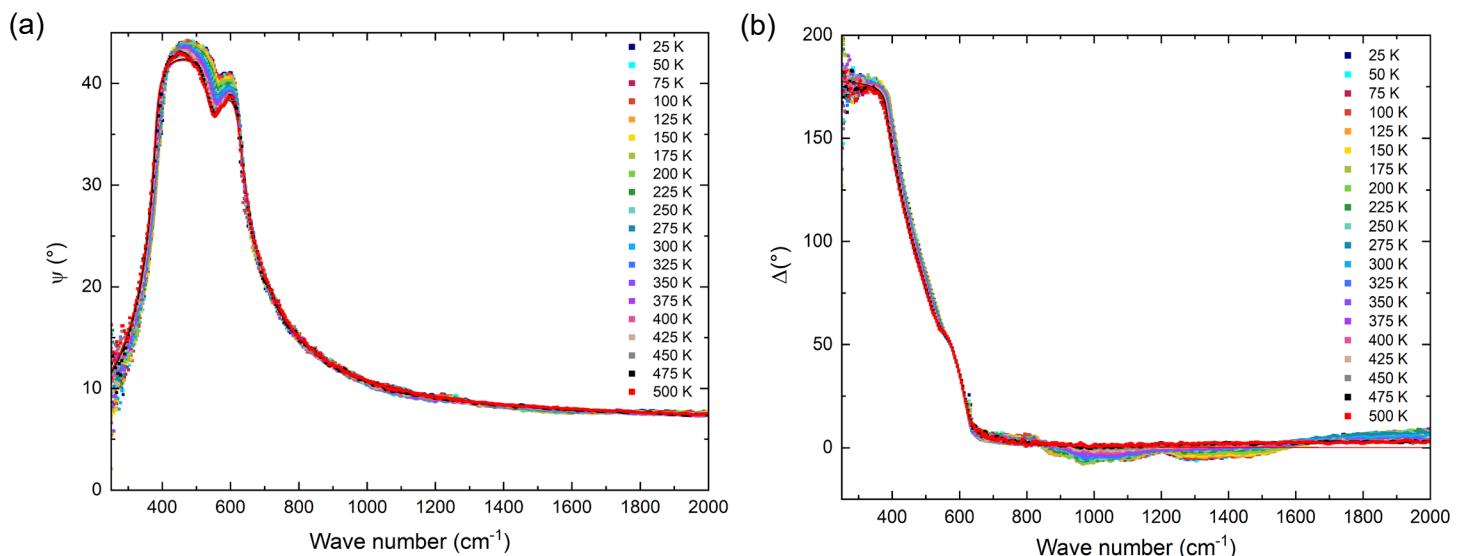


Figure 1: Measured ellipsometric angles: (a): Ψ and (b): Δ of NiO between 25 and 500 K.