

Germanium Vacancy Diamond Zero Phonon Line Temperature Response

Joe Becker

Texas A&M Department of Physics and Astronomy

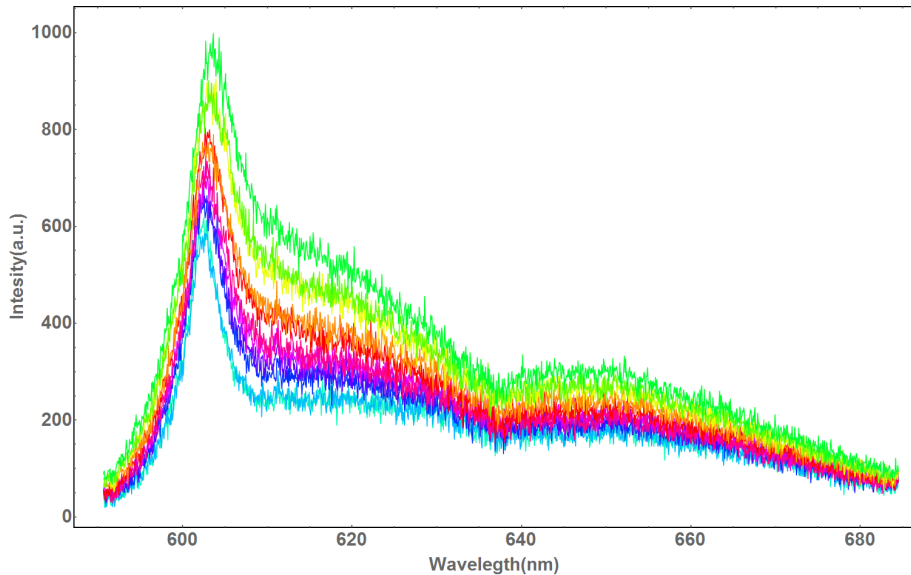
jbecker@physics.tamu.edu

January 26, 2017

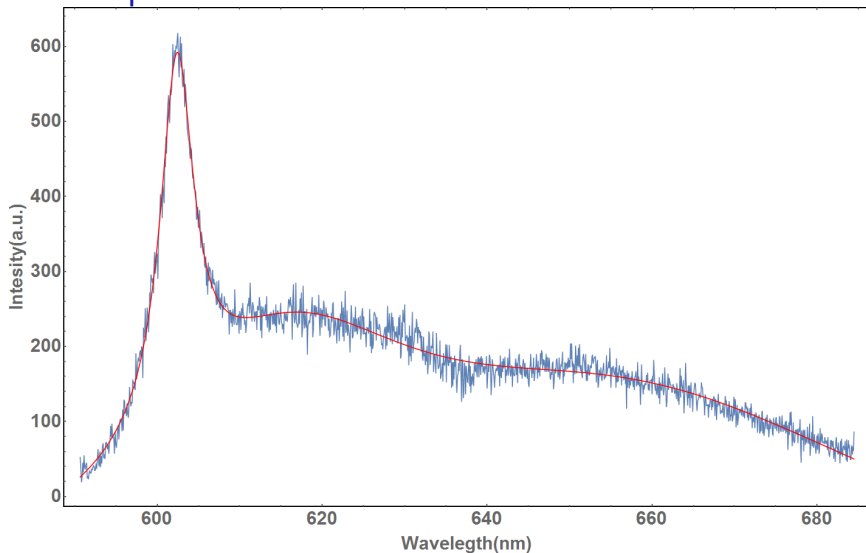


PHYSICS & ASTRONOMY
TEXAS A&M UNIVERSITY

GeV Temperature Spectra

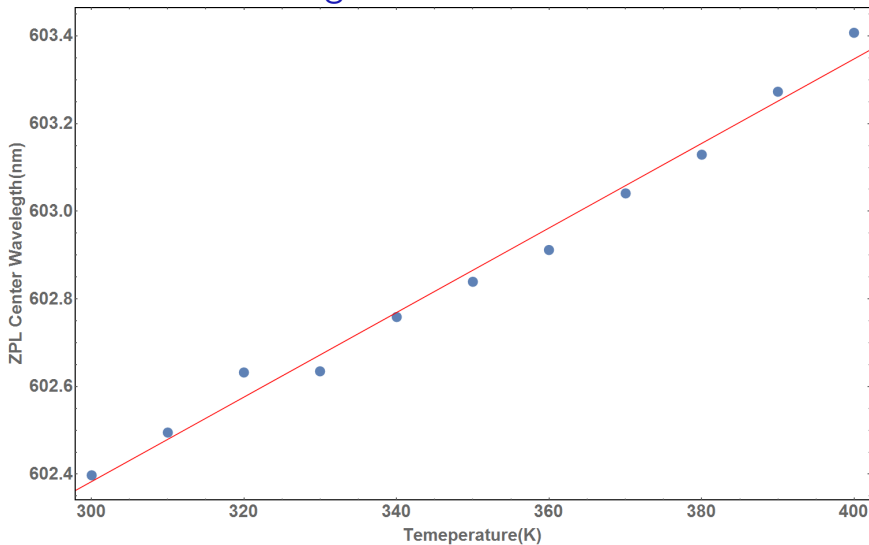


300 K Spectrum Fit



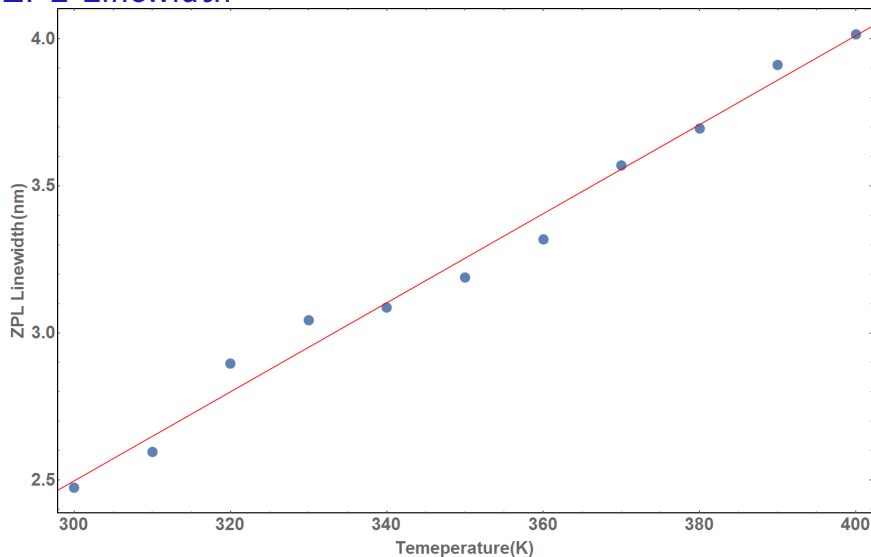
Fit using 3 Lorentzian functions with an error function filter

ZPL Center Wavelength



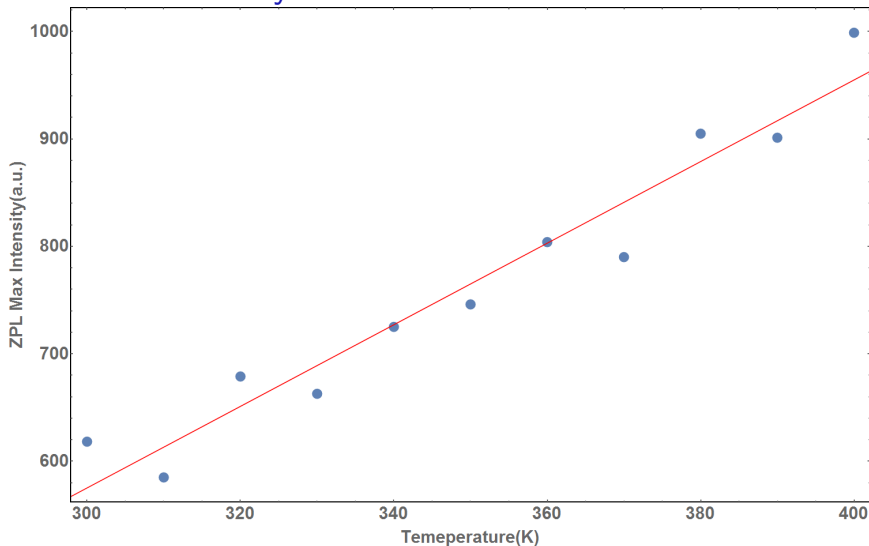
Fit: $y(x) = 599.488 + 0.00965032x$

ZPL Linewidth



Fit: $y(x) = -2.04259 + 0.0151333x$

ZPL Max Intensity



Fit: $y(x) = -565 + 3.8x$