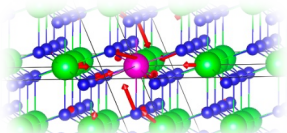


Lineshape (multi-phonon)

- E_{ZPL}
- $\Delta R_{\kappa\alpha}$ or $\Delta F_{\kappa\alpha}$
(obtained from ΔSCF post-process block)



Γ q-point phonons ($\omega_\nu, \mathbf{e}_{\kappa,\nu}$)
(from embedded IFCs block or not)

phonopy
object

- Semi-automatic structure mapping
- Huang-Rhys spectral function $S(\hbar\omega)$
- Phonon mode localization
- Temperature dependent PL spectra following generating function

