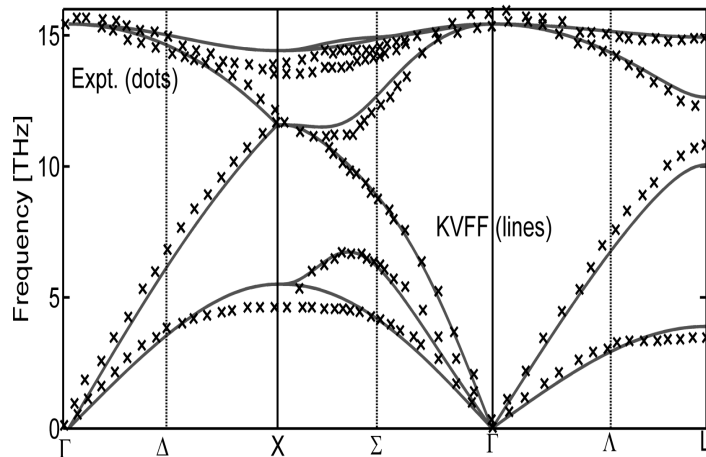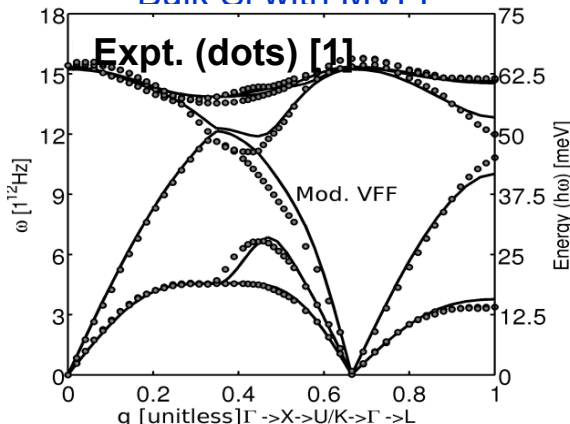**Objective**:

- Document phonon parameters in NEMO5.
- Verified parameters of different materials.
- Enable the phonon dispersion calculation in Bandstructure Lab.
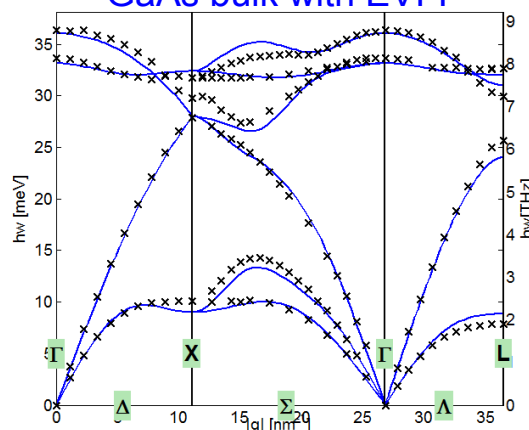
Phonon dispersion documentation:

Bulk Si with New Keating parameters

Expt. (dots)

KVFF (lines)

Bulk Si with MVFF

Expt. (dots) [1]
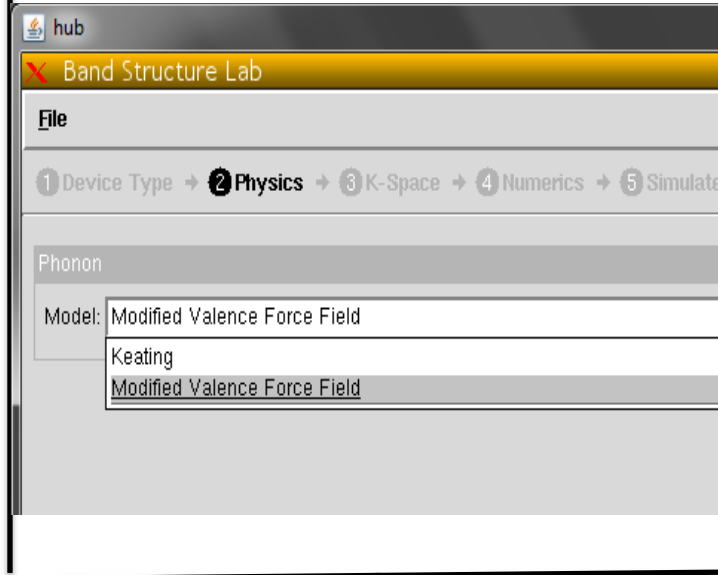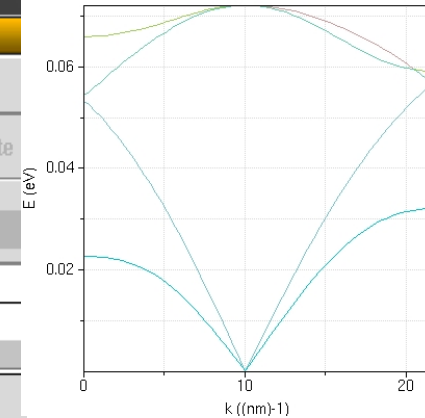
Mod. VFF

GaAs bulk with EVFF

Tool status & Results:

Enable different models in BSL tool.

Bulk Si with MVFF

Impacts:

1. Phonon parameters are well documented in NEMO5.
2. The results in published papers can be reproduced with this tools.