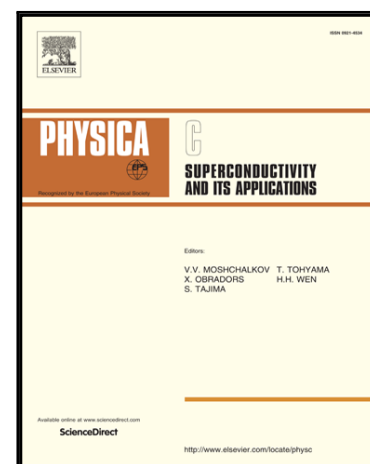


Accepted Manuscript

Phonon dispersion models for MgB₂ with application of pressure

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PII: S0921-4534(17)30077-1
DOI: [10.1016/j.physc.2017.03.007](https://doi.org/10.1016/j.physc.2017.03.007)
Reference: PHYSC 1253137



To appear in: *Physica C: Superconductivity and its applications*

Received date: 26 February 2017
Revised date: 26 March 2017
Accepted date: 29 March 2017

Please cite this article as: Jose A. Alarco , Peter C. Talbot , Ian D.R. Mackinnon , Phonon dispersion models for MgB₂ with application of pressure, *Physica C: Superconductivity and its applications* (2017), doi: [10.1016/j.physc.2017.03.007](https://doi.org/10.1016/j.physc.2017.03.007)

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Highlights

- *Ab initio* DFT MgB₂ phonon dispersion for pressures up to 20 GPa are presented
- Extent of E_{2g} phonon anomaly and thermal energy, T_δ, are pressure dependent
- Phonon anomaly thermal energy equivalent to experimental T_c values for MgB₂
- Computational method to measure T_δ is an effective predictor of T_c

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