The Data in this folder are from this publication:

In press Hofmeister, A.M. *Measurements, Mechanisms, and Models of Heat Transport in Condensed Matter and Planetary Interiors*. Chapter 7. Elsevier, New York.

**See Crystals Database File in metadata folder for complete list of Crystal samples/compositions and references.**

**Data collected at Washington University, St. Louis, MO**

**Supported by NSF Funding – EAR1524495**

Files

Clinochlorite Visible Spectra – JPEG, raw data in Excel

Clinochlorite IR – PRN File

Column 1: Wave number

Column 2: Absorption

* IR modes consisted of 42Au symmetry + 45Bu symmetry
* Raman modes consisted of 39 Ag + 39 Bg
* No inactive vibrational modes
* This does not include O-H modes

|  |  |  |  |
| --- | --- | --- | --- |
| **IR Spectra File Name** | **Sample Thickness (mm)** | **Description** | **Sample Type** |
| PEN1112 | 0.25 | 1000 scans, res = 2, basal, 2000-8500 cm-1, some interference fringes | Clinichlorite |

Diffusivity Data – Excel File

Raw Probe Data

|  |  |  |
| --- | --- | --- |
| **Lava Type** | **Filename** | **Links** |
| Clinochlorite (Penninite) | Hofmeister 5-1-2012 mica samples | N/A |
| SiC 4H | No probe data. From MTI Corp, highly pure | <http://www.mtixtl.com/sic4h.aspx> |
| SiC 6H | No probe data. From MTI Corp, highly pure | <http://www.mtixtl.com/sic6h_1.aspx> |
| SiC ceramic | No probe data. From MTI Corp, highly pure | <http://www.mtixtl.com/hexoloysgsiliconcarbide.aspx> |
| Si wafers | No probe data. Β-SiC, 3C-SiC wafer (fcc cubic), diam = 5um. From Rohm & Haas, Advanced Materials (Grade SC-001). Chemical vapor deposition wafer | N/A |
| PbS (galena) Mexico sulfides | Hofmeister silicates 7-22-10 | N/A |