Literaturverzeichnis

Anderson, O. L. and Goto, T. (1989). Measurement of elastic constants of mantlerelated minerals at temperaturs up to 1800 K. *Physics of the Earth and Planetary Interiors*, 55(3-4):241–253. 18 April 1988.

Bass, J. (1995). Elasticity of minerals, glasses, and melts.

Beck, A. E. (1988). Methods for determining thermal conductivity. In Hänel, R., L.Stegen, and Rybach, L., editors, *Handbook of Terrestrial Heat Flow Density Determination*, pages 87–124. Kluwer, Dordrecht.

Berman, R. (1976). *Thermal Conductivity in Solids*. Clareton University Press, Oxford.

Birch, A. and Clark, H. (1940). The thermal conductivity of rocks and its dependence upon temperature and composition. *American Journal of Science*, 238(8, Part 1):529–558.

Boehler, R. (1992). Melting of the fe—feo and the fe—fes systems at high pressure: Constraints on core temperatures. *Earth and Planetary Science Letters*, 111(2-4):217–227.

Boehler, R. (1993). Temperatures in the earth's core from melting-point measurements of iron at high static pressures. *Nature*, 363(6429):534–536.

Boltzmann, L. (1884). Ableitung des Stefanschen Gesetzes, betreffend die Abhängigkeit der Wärmestrahlung von der Temperatur aus der elektromagnetischen Lichttheorie. *Annalen der Physik und Chemie*, 22:291–294.

Buntebarth, G. and Gliko, A. (1994). *Heat Flow in the Earth's Crust and Mantle*, volume 1 of *Advanced Mineralogy*. Springer- Verlag.

Cahill, D. G., Watson, S. K., and Pohl, R. O. (1992). Lower limit to the thermal conductivity of disordered crystals. *Physical Review B*, 46(10):6131–6140.

Clark, S. (1957). Radiative transfer in the Earth's mantle. *Transactions - American Geophysical Union*, 38(6):931–938.

Clauser, C. and Huenges, E. (1995). Thermal Conductivity of Rocks and Minerals. pages 105–126.

Dandekar, D. P. (1968). Variation in the Elastic Constants of Calcite with Temperature. *Journal of Applied Physics*, 39(8):3694–3699.

Debey, P. (1914). *Vorträge über die kinetische Theorie der Materie*. Leipzig- Berlin.

Deer, Howie, and Zussmann (1992). *Carbonates*.

Diment, W. and Pratt, H. (1988). Thermal conductivity of some rock-forming minerals; a tabulation. Technical report, United States Department of the interior geological survey.

Eucken, A. (1911). Über die Temperaturabhängigkeit der Wärmeleitfähigkeit fester Nichtmetalle. *Annalen der Physik*, 4. Folge, 34:185– 221. 16. November 1910.

Exel, R. (1993). *Die Mineralien und Erzlagerstätten Österreichs*. Eigenverlag, Vienna.

Fick, A. (1855). Über Diffusion. *Annalen der Physik*, 94:59–86.

Fourier, J. B. J. (1822). *Théorie analytiqué de la chaleur*. Didot, Paris.

Gerthsen, C. (1997). *Gerthsen Physik*, volume 19. Springer Berlin Heidelberg.

Gibert, B., Schilling, F., Gratz, K., and Tommasi, A. (2005). Thermal diffusivity of olivine single crystals and a dunite at high temperature: Evidence for heat transfer by radiation in the upper mantle. *Physics of The Earth and Planetary Interiors*, 151(1-2):129–141.

Gringull, U. and Sandner, H. (1979). *Wärmeleitung*. Springer Verlag Berlin.

Gueguen, V. and Palciauskas, Y. (1994). *Introduction to the Physics of Rocks*. Princton University Press.

Haussühl, S. (1983). *Kristallphysik*. Physik Verlag, Verlag Chemie, Weinheim.

Hill, R. (1952). *Proc. Phys. Soc. London*, 65:350.

Höfer, M. and Schilling, F. (2002). Heat transfer in quartz, orthoclase, and sanidin at elevated temperatures. *Physics and Chemistry of Minerals*, 29:571–584.

Hofmeister, A. H. (1999). Mantle values of thermal conductivity and the geotherm from phonon lifetimes. *Science*, 283(5408):1699–1706.

Holt, J. (1975). Thermal diffusivity of olivine. *Earth and Planetary Science Letters*, 27(3):404–408.

Horai, K. (1971). The Thermal Conductivity of Rock- Forming Minerals. *Journal of Geophysical Research*, 76(5):1278– 1308. 10.02.1971.

Horai, K. (1991). Thermal conductivity of Hawaiian basalte; a new interpretation of Robertson and Peak's data. *Journal of Geophysical Research*, 96(B3):4125–4132.

Horai, K. and Simmons, G. (1969). Thermal conductivity of rock- forming minerals. *Earth and Planetary Science Letters*, 6:359– 368. 03.06.1969.

Humbert, P. and Pliquet, F. (1972). Propriétés élastiques de carbonates rhombohédriques monocristallins: calcite, magnésite, dolomie. *C. R. Acad. Sc. Paris*, 275(series B):391–394.

Kittel, C. (1986). *Introduction to solid state physics*. John Wiley & Sons, Inc., New York, Chichester, Brisbane, Torornto, Singapore.

Kleber, W. (1983). *Einführung in die Kristallographie*. Verlag Technik Berlin.

Klemens, P. (1969). *Theory of the thermal conductivity of solids*, volume 1 of *Thermal Conductivity*. Academic Press, Cambridge.

Knacke, O., Kubaschewski, O., and Hesselmann, K. (1991). *Thermochemical Properties of inorganic substances*. Springer- Verlag, Berlin, Heidelberg, New York, London, Paris, Tokyo, Hong Kong, Barcelona, Budapest erlag Stahleisen m.b.H. Düsseldorf.

Kristjansson, L. (2002). Iceland spar: The helgustadir calcite locality and its influence on the development of science. *Journal of Geoscience Education*, 50(4):419– 427.

Labhart, T. (1983). *Geologie der Schweiz*. Hallwag Taschenbuch.

Maj, S. (1974). A note on the relationship among phonon conductivity, density, and mean atomic weight for carbonate minerals. *Acta Geophysica Polonica*, 22(3):247–250.

Matthes, S. (1993). *Mineralogie*, volume 4. Aufl. Springer- Verlag.

Nagihara, S., Brooks, J. M., Bernhard, B. B., Cole, G., Summer, N., and Lewis, T. (2002). Applications of marine heat flow data important in oil and gas exploration. *Oil and Gas Journal*, 100(27).

Ney, P. (1956). Zum gegenwärtigen Stand des Magnesitproblems. *Zeitschrift der Deutschen Geologischen Gesellschaft*, 108:203–220.

Nye, J. (1964). *Physical properties of crystals*. Clarendon press, Oxford.

Ohno, I. (1995). Temperature variation of elastic properties of alpha -quartz up to the alpha -beta transition. *Journal of Physics of the Earth*, 43(2):157–169.

Parker, W. J., Jenkins, R. J., Butler, C. P., and Abbott, G. L. (1961). Flash method of determining thermal diffusivity, heat capacity, and thermal conductivity. *Journal of Applied Physics*, 32(9):1679–1684.

Pauly, H. and Bailey, J. C. (1999). Genesis and evolution of the ivigtut cryolite deposit, southwest greenland. *Meddr Grønland, Geosci.*, 37.

Peierls, R. (1929). Zur kinetischen Theorie der Wärmeleitung in Kristallen. *Annalen der Physik*, 395, Folge 5(3):1055– 1101.

Powell, R. and Childs, G. (1972). *American Institute of Physics Handbook*. McGraw- Hill, New York, 3 edition.

Press, F. and Siever, R. (1995). *Allgemeine Geologie*. Spekturm Akademischer Verlag.

Rayleigh, L. (1885). *Theory of Sound*.

Rayleigh, L. (1896). *The Theory of Sound*. The Macmilan Company.

Reuss, A. (1929). Berechnung der Fliesgrenzen von Mischkristallen. *Zeitschrift für Angewandte Mathematik und Mechanik*, 9:49– 58.

Robertson, E. C. (1988). Thermal Properties of rocks. *Open-File Report*, 88-441:106.

Rösler, H. J. (1990). *Lehrbuch der Mineralogie*, volume 5. Deutscher Verlag für Grundstoffindustrie, Leipzig.

Roufosse, M. and Klemens, P. (1973). Thermal Conductivity of Complex Dielectric Crystals. *Phys. Rev. B*, 7(12):5379– 5386.

Roufosse, M. C. and Klemens, P. G. (1974). Lattice Thermal Conductivity of Minerals at High Temperatures. *Journal of Geophysical Research*, 79(5):703–705.

Schilling, F. (1998). Mineralphysik- Ein mineralogischer Ansatz. FU Berlin. S.: 29- 59.

Schilling, F. R. (1997). The effect of fluids on thermal diffusivity of some magmatic rocks. *Physics and Chemistry of the Earth*, 22(1-2):87– 91.

Schilling, F. R. (1999). A transient technique to measure thermal diffusivity at elevated temperatures. *European-Journal-of-Mineralogy*, 11:1115– 1124.

Seipold, U. (1995). The variation of thermal transport properties in the Earth's crust. *Journal of Geodynamics*, 20(2):145–154.

Seipold, U. (1998). Temperature dependence of thermal transport properties of crystalline rocks-a general law. *Tectonophysics*, 291:161–171.

Srivastaval, K. and Singh, R. (1998). A model for temperature variations in sedimentary basins due to random radiogenic heat sources. *Geophysical Journal International*, 135:727–730.

Stanley, S. M. (1994). *Historische Geologie*. Spektrum Akademischer Verlag.

Stefan, J. (1879). Über die Beziehung zwischen der Wärmestrahlung und der Temperatur. *Sitzungsberichte der Mathematisch- Naturwissenschaftlischen Classe*, 79(1- 4):391–428.

Stein, J. and Shankland, T. J. (1981). Radiative thermal conductivity in obsidian and estimates of heat transfer in magma bodies. *Journal of Geophysical Research*, 86(B5):3684–3688, 5 figs, 2 tables, 15 refs.

Suzuki, I., Anderson, O., and Sumino, Y. (1983). Elastic properties of a single-crystal forsterite Mg_2SiO_4, up to 1,200 K. *Physics and Chemistry of Minerals*, 10(1):38–46.

Čermák, V. and Rybach, L. (1982). *Thermal Properties*, volume 1 a of *Landoldt- Börnstein*. Springer Verlag, Berlin- Heidelberg- New York.

Voigt, W. (1928). *Lehrbuch der Kristallphysik*. Teubner, Leipzig.

von Herzen, R. and Maxwell, A. E. (1959). The measurement of thermal conductivity of deep-sea sediments by a needle-probe method. *Journal of Geophysical Research*, 64(10):1557–1563.

Ziman, J. M. (1967). *Electrons and Phonons*. Oxford. corrected sheets of the first Edition.

Zoth, G. and Hänel, R. (1988). Appendix. In R. a. R. Hänel, L. and Stegena, L., editors, *Handbook of Terrestrial Heat Flow Density Determination*, pages 87–124. Kluwer, Dordrecht.

Zubov, V. and Firsova, M. (1962). Elastic constants of quartz near the α- β transition. *Sov. Phys. Crystallogr.*, 7:374– 376.