

REFERENCES FOR TABLE VI

- W. B. Pearson, "Handbook of Lattice Spacings and Structures of Metals." Pergamon Press, New York, 1958.
- G. E. Darwin and J. H. Buddery, in "Metallurgy of the Rarer Metals—Number 7. Beryllium" (H. M. Finnieston, ed.). Academic Press, New York, 1959.
- W. Schreiter, "Seltene Metalle." Deutscher Verlag Grundstoffindustrie, Leipzig, 1960.
- T. Lyman, ed., "Metals Handbook," 8th ed., Vol. 1. Am. Soc. for Metals, Metals Park, Ohio, 1961.
- D. E. Gray, ed., "American Institute of Physics Handbook." McGraw-Hill, New York, 1957.
- C. D. Hodgman, ed., "Handbook of Chemistry and Physics," 43rd ed. Chem. Rubber Publ. Co., Cleveland, Ohio, 1961–1962.
- D. F. Gibbons, *Phys. Rev.* **112**, 136 (1958).
- D. B. Fraser and A. C. H. Hallett, *Proc. 7th Intern. Conf. Low Temp. Phys., Toronto, Ont., 1960* p. 689. Univ. of Toronto Press, Toronto, Canada, 1961.
- "Aluminum Data Book." Reynolds Metals Co., Louisville, Kentucky, 1954.
- R. O. A. Hall, *Acta Cryst.* **14**, 1004 (1961).
- B. N. Dutta, *Phys. Stat. Solidi.* **2**, 984 (1962).
- F. H. Spedding, J. J. Hanak, and A. H. Daane, *J. Less-Common Metals* **3**, 110 (1961).
- A. D. McQuillan and M. K. McQuillan, in "Metallurgy of the Rarer Metals—Number 4. Titanium" (H. M. Finnieston, ed.). Academic Press, New York, 1956.
- W. Rostoker, "Metallurgy of Vanadium." Wiley, New York, 1958.
- D. I. Bolef and J. de Klerk, *Phys. Rev.* **129**, 1063 (1963).
- A. H. Sully, in "Metallurgy of the Rarer Metals—Number 3. Manganese" (H. M. Finnieston, ed.). Academic Press, New York, 1955.
- G. Masing, "Lehrbuch der Allgemeinen Metallkunde." Springer, Berlin, 1950.
- G. L. Miller, in "Metallurgy of the Rarer Metals—Number 2. Zirconium" (H. M. Finnieston, ed.), 2nd ed. Academic Press, New York, 1957.
- H. K. Adenstedt, *Trans. Am. Soc. Metals* **44**, 949 (1952).
- G. L. Miller, in "Metallurgy of the Rarer Metals—Number 6. Tantalum and Niobium" (H. M. Finnieston, ed.). Academic Press, New York, 1959.
- T. J. Heal, *Proc. 2nd Intern. Conf. Peaceful Uses At. Energy, Geneva, 1957* Vol. 5, p. 208. Columbia Univ. Press, New York, 1958.
- L. Northcott, in "Metallurgy of the Rarer Metals—Number 5. Molybdenum" (H. M. Finnieston, ed.). Academic Press, New York, 1956.
- S. I. Novikova, *Fiz. Tverd. Tela* **2**, 2341 (1960); *Soviet Phys.—Solid State (English Transl.)* **2**, 2087 (1960).
- V. T. Deshpande and D. B. Sirdeshmukh, *Acta Cryst.* **14**, 355 (1961).
- C. J. Smithells, "Metals Reference Book," 2nd ed. Butterworths, London, 1955.
- F. Barson, S. Legvold, and F. H. Spedding, *Phys. Rev.* **105**, 418 (1957).
- K. A. Gschneidner, Jr., unpublished data (1962).
- D. E. Thomas and E. T. Hayes, "Metallurgy of Hafnium." U.S. Govt. Printing Office, Washington, D.C.
- B. B. Argent and J. G. C. Milne, in "Niobium, Tantalum, Molybdenum and Tungsten" (A. G. Quarrell, ed.), p. 160. Elsevier, Amsterdam, 1961.
- K. C. Li and C. Y. Wang, "Tungsten," 3rd ed. Reinhold, New York, 1955.
- C. T. Sims, C. M. Craighead, and R. I. Jaffee, *Trans. AIME* **203**, 168 (1955).
- B. N. Dutta and B. Dayal, *Phys. Stat. Solidi* **3**, 473 (1963).
- T. Rubin, H. L. Johnston, and H. W. Altman, *J. Phys. Chem.* **66**, 266 (1962).

- R. E. Brocklehurst, J. M. Goode, and L. F. Vassamillet, *J. Chem. Phys.* **27**, 985 (1957).
- J. F. Smith, in "The Metal Thorium," (H. A. Wilhelm, ed.), p. 133. Am. Soc. for Metals, Metals Park, Ohio, 1958.
- A. N. Holden, "Physical Metallurgy of Uranium." Addison-Wesley, Reading, Massachusetts, 1958.
- H. A. C. McKay, J. S. Nairn, and M. B. Waldron, *Proc. 2nd Intern. Conf. Peaceful Uses At. Energy, Geneva, 1957* Vol. 28, p. 299. Columbia Univ. Press, New York, 1958.
- W. N. Miner, A. S. Coffinberry, F. W. Schonfeld, J. T. Waber, R. N. R. Mulford, and R. E. Tate, in "Rare Metals Handbook" (C. A. Hampel, ed.), 2nd ed., p. 336. Reinhold, New York, 1961.

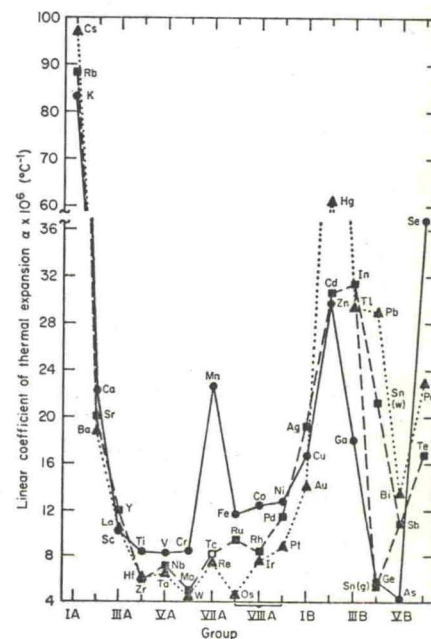


FIG. 9. Linear coefficient of thermal expansion of the elements of the fourth, fifth, and sixth periods of the Periodic Table. Open points are estimated values.

elements the coefficient of expansion increases, slowly at first, reaching a maximum at approximately the configuration s^2d^{10} , i.e., zinc and its congeners. As one moves further along in the respective periods, another minimum is reached when the p level is half filled, i.e., at arsenic, antimony, and