Inorganic Chemistry

Correction to Volume-Based Thermoelasticity: Consequences of the (Near) Proportionality of Isothermal Compressibility to Formula-Unit Volume

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Inorg. Chem. 2010, 49(21), 9978–9984. DOI: 10.1021/ic101398g

Pages 9982 and 9983. The data for Figures 3 and 4 have been obtained by circular argument so that, after simplification, Figure 3 is equivalent to a plot of $V_u^{4/3}/\beta$ against $V_u^{1/3}$, while Figure 4 is equivalent to a plot of β against V_u . Thus, these plots (each with different statistical properties) simply reduce to alternative tests of the quality of the relation between β and V_u but not of the relevance of the Born–Landé or Born–Mayer equations for lattice-energy evaluation. The general conclusion that the Born–Mayer equation is more suitable remains supported by the literature.^{1,2} A more detailed explanation of the correction is available from any of the coauthors (h.d.b. jenkins@warwick.ac.uk, leslieglasser@yahoo.co.uk, joe.lee@ manchester.ac.uk).

REFERENCES

 Waddington, T. C. Adv. Inorg. Radiochem. 1959, 1, 157-221.
Johnson, D. A. Some Thermodynamic Aspects of Inorganic Chemistry, 2nd ed.; Cambridge University Press: Cambridge, U.K., 1982.

Published: April 12, 2012

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