

Precise measurement of the densities of liquid Bi, Sn, Pb and Sb

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2007 J. Phys.: Condens. Matter 19 139001

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Erratum

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L Wang, Q Wang, A Xian and K Lu *J. Phys.: Condens. Matter* **15** 777–783

Published 12 February 2007

Online at stacks.iop.org/JPhysCM/19/139001

In this paper we reported density data of liquid Bi, Sn, Pb and Sb from the melting point to about 1100 K. Recently we found that there were mistakes in fitting the measured data by equations (1) to (4). The correct equations should be:

$$\rho(\text{Bi}) = 10.853 - 15.8 \times 10^{-4}T + 1.68 \times 10^{-7}T^{-2} \quad (1)$$

$$\rho(\text{Sn}) = 7.449 - 10.0 \times 10^{-4}T + 1.49 \times 10^{-7}T^{-2} \quad (2)$$

$$\rho(\text{Pb}) = 11.560 - 16.5 \times 10^{-4}T + 1.85 \times 10^{-7}T^{-2} \quad (3)$$

$$\rho(\text{Sb}) = 6.953 - 4.65 \times 10^{-4}T - 0.964 \times 10^{-7}T^{-2} \quad (4)$$

where ρ is the density of liquid metals in 10^3 kg m^{-3} and T the temperature in K. These errors do not affect the melting point density values. With temperature increasing, deviations between the equations and experimental data increase and reach a value of less than 0.7% at around 1100 K. We apologize for this mistake and any possible inconvenience it caused.