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CORRECTION
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Corrigendum: Polymerized 4-Fold Coordinated Carbonate Melts in the Deep Mantle

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A Corrigendum on

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In the original article, there was a mistype in Equation (2) used to simulate the experimental C-O contribution on $g(r)$ (Figure 3B).

A correction has been made to Section 2, Density Measurements, equation 2:

$$g(r) = \frac{c_C c_O K_C K_O}{Z_{tot}^2 n S_\infty} \frac{A}{\sigma\sqrt{2\pi}} exp\left(-\frac{(r-d)^2}{2\sigma^2}\right) \quad (2)$$

where c_C and c_O are the atomic proportions of carbon and oxygen, K_C and K_O are defined as the average effective atomic number over the experimental q-range (Eggert et al., 2002) and calculated using form factors from Hajdu (1972). Other parameters are as defined in the article.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

REFERENCES

Eggert, J. H., Weck, G., Loubeyre, P., and Mezouar, M. (2002). Quantitative structure factor and density measurements of high-pressure in diamond anvil cells by x-ray diffraction: Argon and water. *Phys. Rev. B* 65:174105. doi: 10.1103/PhysRevB.65.174105

Hajdu F. (1972). Revised parameters of the analytic fits for coherent and incoherent scattered X-ray intensities of the first 36 atoms. *Acta Cryst. A* 28, 250–252.