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addenda and errata

Measurement of single-crystal elastic constants by neutron diffraction from polycrystals. Addendum and erratum

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Correction is made to an equation in a paper by Howard & Kisi [*J. Appl. Cryst.* (1999), **32**, 624–633] and additional references are cited.

The equation for $\langle s'_{13} \rangle$, trigonal (classes $3, \bar{3}$), in Table 1 of Howard & Kisi (1999) has been affected by an error in transcription. The sign of the coefficient of s_{25} should be negative. That is, the equation should read

$$\begin{aligned}\langle s'_{13} \rangle = {} & [6(H^2 + HK + K^2)L^2(s_{11} + s_{33} - s_{44}) \\ & + 2(H^2 + HK + K^2)(4H^2 + 4HK + 4K^2 + 3L^2)s_{12} \\ & + (8H^4 + 16H^3K + 24H^2K^2 + 16HK^3 \\ & + 8K^4 + 6H^2L^2 + 6HKL^2 + 6K^2L^2 + 9L^4)s_{13} \\ & - 4(3^{1/2})(2H^3 + 3H^2K - 3HK^2 - 2K^3)Ls_{14} \\ & - 36HKL(H + K)s_{25}]/(4H^2 + 4HK + 4K^2 + 3L^2)^2.\end{aligned}$$

The authors have recently become aware of related work by Singh *et al.* (1998), and by Uchida *et al.* (1996). Singh *et al.* record expressions for $[2G^x_R(hkl)]^{-1}$, G^x_R being the 'X-ray shear modulus', whereas Uchida *et al.* give the 'linear compressibility', $\beta(l_1\, l_2\, l_3)$, and the 'Young modulus', $[E(l_1\, l_2\, l_3)]$. These are related to the compliances we give by

$$\begin{aligned}[2G^x_R(hkl)]^{-1} &= \langle s'_{11} \rangle - \langle s'_{13} \rangle, \\ \beta(l_1\, l_2\, l_3) &= \langle s'_{11} \rangle + 2\langle s'_{13} \rangle, \\ [E(l_1\, l_2\, l_3)]^{-1} &= \langle s'_{11} \rangle.\end{aligned}$$

We confirm that there is agreement between our results and those presented by the other groups.

References

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