

1952), *i.e.* when one is only dealing with symmetry elements of order 1, 2 or 4 and with the trigonal axis $3_{[111]}$ of the cubic groups, which correspond to permutational or multiplicative changes of coordinates, one can easily impose rotational invariance directly on the elements of the non-tensorial arrays. This is so because purely permutational or multiplicative changes of coordinates connect to each other only elements of a non-tensorial array which are related to the corresponding tensorial components by the same numerical coefficients. Thus the invariance relations between non-tensorial elements are identical in these cases to the invariance relations between the corresponding tensorial components.

We illustrate explicitly the point for the non-tensorial elastic compliance constants S_{ij} in the symmetry group O with generating elements $4(4_z)$ and $3_{[111]}$.

$$4(4_z)x \rightarrow y, y \rightarrow -x, z \rightarrow z \quad 3_{[111]}x \rightarrow y, y \rightarrow z, z \rightarrow x$$

$$\begin{array}{ll} 1 \equiv xx \rightarrow yy \equiv 2 & 1 \equiv xx \rightarrow yy \equiv 2 \\ 2 \equiv yy \rightarrow xx \equiv 1 & 2 \equiv yy \rightarrow zz \equiv 3 \\ 3 \equiv zz \rightarrow 3 & 3 \equiv zz \rightarrow xx \equiv 1 \\ 4 \equiv yz \rightarrow -xz \equiv -5 & 4 \equiv yz \rightarrow zx \equiv 5 \\ 5 \equiv zx \rightarrow zy \equiv 4 & 5 \equiv zx \rightarrow xy \equiv 6 \\ 6 \equiv xy \rightarrow -yx \equiv -6 & 6 \equiv xy \rightarrow yz \equiv 4. \end{array}$$

Elements S_{ij} with *one* 4 or *one* 5 are identically zero owing to $4(4_z)$. The remaining invariance equations read as

follows:

$$\begin{array}{ll} S_{11} \rightarrow S_{22} (S_{22} \rightarrow S_{11}) & S_{11} \rightarrow S_{22} \rightarrow S_{33} \\ S_{12} \rightarrow S_{21} \equiv S_{12} & S_{12} \rightarrow S_{23} \rightarrow S_{31} \equiv S_{13} \\ S_{13} \rightarrow S_{23} (S_{23} \rightarrow S_{13}) & \\ S_{16} \rightarrow -S_{26} (S_{26} \rightarrow -S_{16}) & S_{16} \rightarrow S_{24} \equiv 0, S_{26} \rightarrow S_{34} \equiv 0 \\ S_{33} \rightarrow S_{33} & \\ S_{36} \rightarrow -S_{36} \equiv 0 & \\ S_{44} \rightarrow S_{55} (S_{55} \rightarrow S_{44}) & S_{44} \rightarrow S_{55} \rightarrow S_{66}. \\ S_{45} \rightarrow -S_{54} \equiv -S_{45} \equiv 0 & \\ S_{66} \rightarrow S_{66} & \end{array}$$

The invariant non-tensorial array S_{ij} in group O thus reads

$$\begin{array}{cccccc} S_{11} & S_{12} & S_{12} & 0 & 0 & 0 \\ & S_{11} & S_{12} & 0 & 0 & 0 \\ & & S_{11} & 0 & 0 & 0 \\ & & & S_{44} & 0 & 0 \\ & & & & S_{44} & 0 \\ & & & & & S_{44} \end{array}$$

in accordance with Nye (1985), Table 9, p. 140.

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Surface spherical harmonics and intensity and strain pole figures of cubic textured materials. Erratum.

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Abstract

Expressions given in Tables 2 and 3 of Brakman [*Acta Cryst.* (1987), **A43**, 270–283] are corrected. Table 2, column 2, line 1 should read

$$[S_{HKL}^2 P_{hkl} + S_{\bar{H}\bar{K}\bar{L}}^2 P_{\bar{h}\bar{k}\bar{l}} + S_{K\bar{H}L}^2 P_{k\bar{h}l} + S_{\bar{K}HL}^2 P_{\bar{k}hl}] D^{-1}.$$

Table 3, column 2, line 2 should read

$$\frac{1}{2}[1 + (-1)^{j+m/2}][S_{HKL}^2 + (-1)^j S_{\bar{H}\bar{K}\bar{L}}^2] / (S_{HKL}^2 + S_{\bar{H}\bar{K}\bar{L}}^2).$$

All relevant information is given in the *Abstract*.

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