Corrigendum


A recent paper by Bressan et al. (2003) has identified a discrepancy in the theory in Soler & van Gelder (1991). This identification has led us to reanalyse carefully our previous work. This time we counted on the opportune independent collaboration of Mr Jen-Yu Han, a Doctoral student of the second author. Mr Han discovered some further typos and potential errors of interpretation in the equations previously published by Soler & van Gelder (1991) that for rigorousness should be clarified. The revisions are as follows.

Owing to the symmetry of the second-rank stress tensor $\varepsilon$, there are multiple choices for the elements of the matrix $[D]$ in eq. (8). Although the published values of matrix $[D]$ are correct, they do not validate eq. (12). One way to amend this problem is to modify the values for the matrix $[D]$ in eq. (8) as:

$$[D]_{6\times9} = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0.5 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0.5 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0.5 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0.5 \\ \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0.5 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0.5 \\
\end{bmatrix}.$$

Given the above modified elements of $[D]$, the transpose symbol ‘$t$’ in eqs (12) and (14) should be substituted by the pseudo inverse symbol ‘$+$’. Therefore these two equations become, respectively:

$$v_d[e'] = [D][T][vec[e'] = [D][T][D]^+ v_d[e']$$

and

$$[V] = [D][T][D]^+.$$

Since eq. (38) is defined to be associated with the vector of rotations of the eigenvalues $\{\Omega^p\}$, eq. (39) should be:

$$[F] = [D][S' \otimes S'][G]$$

and consequently, eq. (43) should also be revised as:

$$\beta = [F]^{-1}(d\varepsilon) = [G][S' \otimes S][D]^+[d\varepsilon].$$

REFERENCES
