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ERRATUM

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Erratum to: A study of gradient strengthening based on a finite-deformation gradient crystal-plasticity model

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Unfortunately, a parameter representing crystal sizes in the case studies and figure 6 caption were incorrectly published in the original version and they are corrected by this Erratum.

Last paragraph of case study 5 should read as "A sharper rise in the contribution of term (III) (data set *C*) at the onset of plastic flow and at the area of strains below 2% can be also seen for lower *m*".

Third and tenth paragraph of case study 6 should read as

"A complete form of the flow rule Eq. (25) is employed to investigate size-dependent behavior of single crystals which are simulated with different crystal sizes *D* under a large-strain simple-shear loading".

"Such a sharper rise can be observed in the contribution of term (III) (data set *C*) in Fig. 14c, e at lower *m*".

Figure 6 with updated caption is provided below.

The online version of the original article can be found under doi:10.1007/s00161-017-0589-3.

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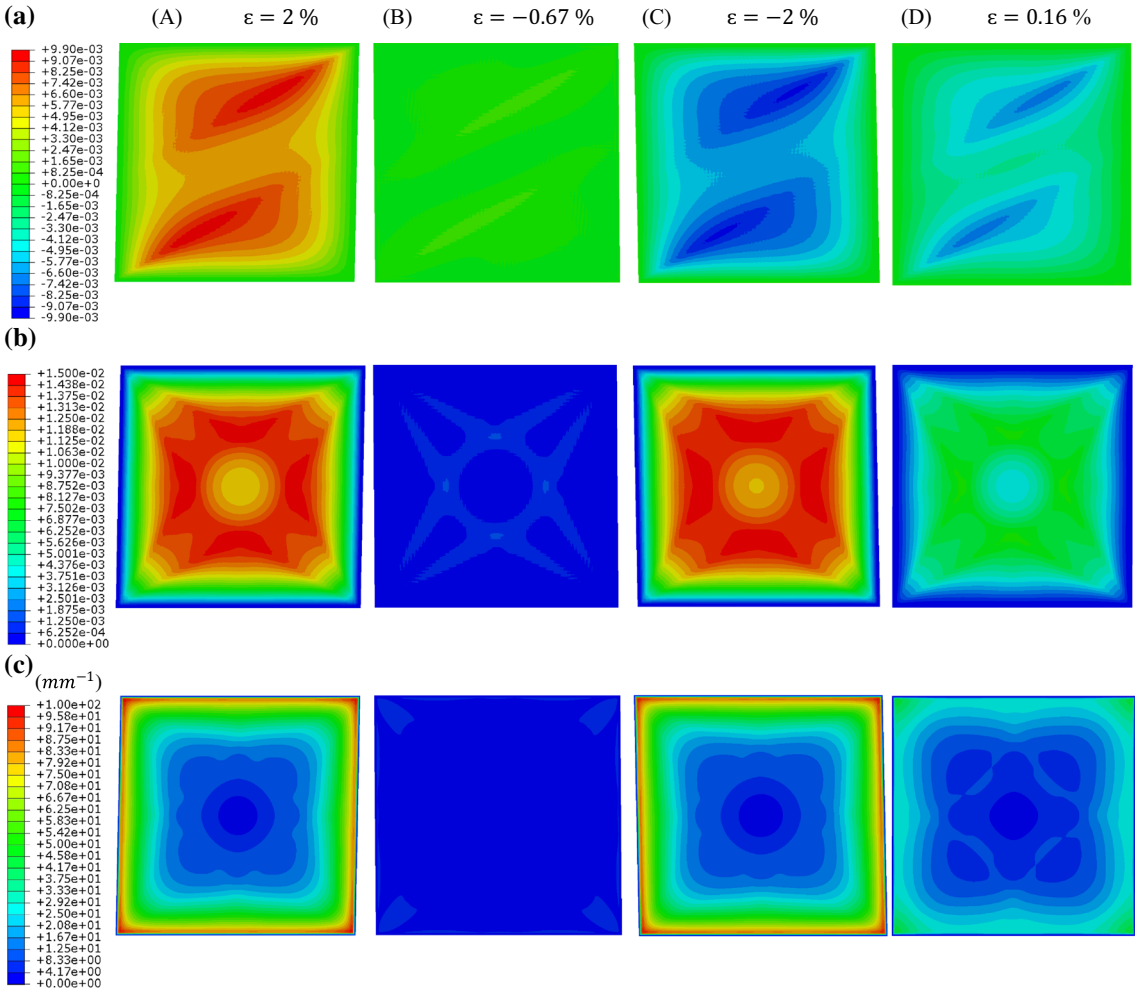

Fig. 6 A cyclic version of loading scenario (2) is applied to the single crystal. Numerical results corresponding to points A–D which have been marked on the stress–strain curve shown in Fig. 5, are presented. Row **a** contours of the directional plastic flow $\int \upsilon^{\alpha} dt$ based on the predefined slip system $\alpha = 1$ (Table 1), row **b** contours of a combination of plastic flows $(\sum_{\alpha}(\int \upsilon^{\alpha} dt)^2)^{0.5}$, $\alpha = 1$–4, row **c** contours of accumulation of dislocation densities $(\sum_{\alpha}(\int \dot{\rho}^{\alpha}_{\vdash} dt)^2)^{0.5}$. ε denotes the total strain