ERRATUM

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Erratum to: Thermodynamic approach to generalized continua

Published online: 24 January 2014
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Erratum to: Continuum Mech. Thermodyn. (2013) 118
DOI 10.1007/s00161-013-0311-z

The evolution equations for the internal variables ψ_{ij} and β_{ij} in formula (5) on p. 4 are mistyped in the published article. The correct expressions are

$$\dot{\psi}_{ij} + f_{ij} = 0, \quad \dot{\beta}_{ij} + g_{ij} = 0.$$

There are some consequent sign mistakes in the following.

On p. 4 Eq. (9) for the derivative constraints and Eq. (10) for the entropy imbalance should be corrected as

$$\partial_k \dot{\psi}_{ij} + \partial_k f_{ij} = 0, \quad \partial_k \dot{\beta}_{ij} + \partial_k g_{ij} = 0,$$

and

$$\begin{aligned} & \rho_0 \dot{s} + \partial_j J_j - \Lambda_{ji} (\dot{F}_{ij} - \partial_j v_i) - \lambda_i (\rho_0 \dot{v}_i - \partial_j t_{ij}) - \kappa (\rho_0 \dot{e} + \partial_i q_i - t_{ij} \partial_j v_i) \\ & + A_{ji} (\dot{\psi}_{ij} + f_{ij}) + \mathcal{A}_{kji} (\partial_k \dot{\psi}_{ij} + \partial_k f_{ij}) \\ & + B_{ji} (\dot{\beta}_{ij} + g_{ij}) + \mathcal{B}_{kji} (\partial_k \dot{\beta}_{ij} + \partial_k g_{ij}) \geq 0. \end{aligned}$$

The online version of the original article can be found under doi:[10.1007/s00161-013-0311-z](https://doi.org/10.1007/s00161-013-0311-z).

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On p. 8 Eq. (50) are written correctly as

$$\overset{\diamond}{\psi}_{ij} + f_{ij} = 0, \quad \overset{\diamond}{\beta}_{ij} + g_{ij} = 0. \quad (1)$$

Further on the sign error appears on p. 11 in formula (69) for the entropy production of standard linear solid, which should be replaced by

$$T\sigma = (t_{ij} - \rho \partial_{\varepsilon_{ij}} w) \dot{\varepsilon}_{ij} + \partial_{\psi_{ij}} w \rho f^{ij} \geq 0.$$

Finally, formula (86) on p. 13 of entropy production should be written as

$$T\sigma = (t_{ij} - \rho \partial_{\varepsilon_{ij}} w) \dot{\varepsilon}_{ij} - (\partial_{\psi_{ij}} w - \partial_k (\partial_{\partial_k \psi_{ij}} w)) \rho \overset{\diamond}{\psi}_{ij} - (\partial_{\beta_{ij}} w - \partial_k (\partial_{\partial_k \beta_{ij}} w)) \rho \overset{\diamond}{\beta}_{ij} \geq 0. \quad (2)$$