

Errata

Errata for “Full Solution, for Crystal Class 3m, of the Holland-EerNisse Complex Material-Constant Theory of Lossy Piezoelectrics for Harmonic Time Dependence”

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Four of the equations are incorrect as printed in the subject paper [1]. The corrected equations, identified with the same equation numbers as in the original article, appear here.

$$\begin{aligned}
 k s'_{\mu v} T_{v0} - d'_{m\mu} E_{m0} &= \\
 & - \frac{1}{2} \frac{dk}{dT_{\mu 0}} \left(E_{m0} \varepsilon'_{mn} E_{n0} + T_{\gamma 0} s'_{\gamma v} T_{v0} \right), \quad \mu = 1 - 6, \\
 - d'_{nv} T_{v0} + k \varepsilon'_{nm} E_{m0} &= \\
 - \frac{1}{2} \frac{dk}{dT_{n0}} \left(E_{m0} \varepsilon'_{m\ell} E_{\ell 0} + T_{\mu 0} s'_{\mu v} T_{v0} \right), \quad n = 1 - 3. \quad (17)
 \end{aligned}$$

$$\begin{pmatrix} k s'_{\mu v} & -d'_{\mu m} \\ -d'_{nv} & k \varepsilon'_{nm} \end{pmatrix} K = 0. \quad (18)$$

$$\begin{aligned}
 \alpha^{(5)} &= \left(s_{11}^{E'} - s_{12}^{E'} \right)^{-1} \left(d'_{33} s_{13}^{E'} - d'_{31} s_{33}^{E'} \right)^{-1} \\
 & \cdot \left(\frac{2 \left[d_{33}^{\prime 2} \left(s_{11}^{E'} + s_{12}^{E'} \right) - 4 d'_{31} d'_{33} s_{13}^{E'} + 2 d_{31}^{\prime 2} s_{33}^{E'} \right]}{\left(s_{11}^{E'} + s_{12}^{E'} \right) s_{33}^{E'} - 2 \left(s_{13}^{E'} \right)^2} \right)^{-\frac{1}{2}}, \quad (34b)
 \end{aligned}$$

$$F = \begin{pmatrix} T_v \\ E_m \end{pmatrix}, \quad (50)$$

REFERENCES

- [1] J. C. Piquette and E. A. McLaughlin, “Full solution, for crystal class 3m, of the Holland-EerNisse complex material-constant theory of lossy piezoelectrics for harmonic time dependence,” *IEEE Trans. Ultrason., Ferroelect., Freq. Contr.*, vol. 54, no. 6, p. 1250, 2007.

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