

Errata: P. Sharma and S. Ganti, “Size-dependent Eshelby’s Tensor for Embedded Nano-inclusions Incorporating Surface/Interface Energies”, Vol. 71, p. 663, 2004

Equations 21(b,c) and 22(b,c) in the published paper contain typographical errors. The error in Equation (21b,c) involves switching of the sign and a factor of 2 while the error in Equation (22b,c) involves switching of the signs. The corrected equations are written below.

Spherical Inclusion

$$\varepsilon_{rr}(r) = -\left[\frac{3K^M \varepsilon^* - 2\tau_o / R_o}{4\mu^M + 3K^M + 2K^s / R_o}\right] \frac{2R_o^3}{r^3} \Big|_{r > R_o}$$

$$\varepsilon_{\theta\theta}(r) = \varepsilon_{\phi\phi}(r) = \left[\frac{3K^M \varepsilon^* - 2\tau_o / R_o}{4\mu^M + 3K^M + 2K^s / R_o}\right] \frac{R_o^3}{r^3} \Big|_{r > R_o}$$

Cylindrical Inclusion

$$\varepsilon_{rr}(r) = -\left[\frac{3K^M \varepsilon^* - \tau_o / R_o}{2\mu^M + 3K^M + K^s / R_o}\right] \frac{R_o^2}{r^2} \Big|_{r > R_o}$$

$$\varepsilon_{\theta\theta}(r) = \left[\frac{3K^M \varepsilon^* - \tau_o / R_o}{2\mu^M + 3K^M + K^s / R_o}\right] \frac{R_o^2}{r^2} \Big|_{r > R_o}$$

Further, in the case of the cylindrical problem, an eigenstrain of $\varepsilon_{rr}^* = \varepsilon_{\theta\theta}^* = \varepsilon^*$ and $\varepsilon_{zz}^* = 0$ was assumed.

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