Erratum: Ballistic and diffusive transport of energy and heat in metals [Phys. Rev. B 79, 184303 (2009)]

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We would like to point out an error in Eq. (13) of our paper; two terms were inadvertently dropped off in the previous derivation. We apologize for this error. This should be corrected as:

$$\delta K_{\text{Cattaneo}}^{>}(t,0) = P_0 e^{-t/2\tau_F} \left[\delta(t) + \frac{\frac{\pi}{2} - \sin c \left(\frac{t}{2\tau_F}\right) - Si\left(\frac{t}{2\tau_F}\right)}{2\pi\sqrt{D_e\tau_F}} \right]$$
(13)

where sinc represents the "sinc function" $\sin c(t) = \sin(t)/t$.

As a consequence, the ballistic contribution in Cattaneo's model shows a slightly different behavior than the one presented in the paper. However, this does not affect the conclusions of the paragraph following Eq. (13). The first term in Eq. (13) mimics the excitation source attenuated with the exponential term. Figure 6(c) should be viewed as:

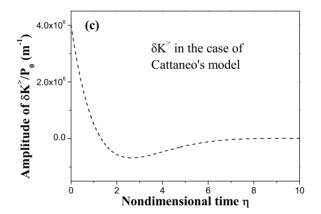


FIG. 6. Temporal behavior of the nondiffusive contribution to the total energy density at the top free surface of gold at room temperature as calculated based on Cattaneo's model.

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