Erratum: Stability and structure of a supercooled liquid mixture in two dimensions [Phys. Rev. E **59**, 5721 (1999)]

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We have recently uncovered an error in Perera and Harrowell [Phys. Rev. E **59**, 5721 (1999)] involving the calculation of the Fourier transform of density-density correlation functions. While this error has affected a number of figures, it does not change any of the conclusions reached in the paper. The corrected Figs. 1, 2, 8, and 9 are provided below. At the temperatures $\{1.0, 0.8, 0.6, 0.55, 0.5, 0.46, 0.4\}$ the values of $\tau_{e,1}$ (in units of τ) are 0.601, 0.899, 1.89, 2.70, 4.86, 22.6, 183, and for $\tau_{e,2}$ (in units of τ) are 1.01, 1.67, 4.23, 6.95, 24.8, 91.0, 703, respectively.
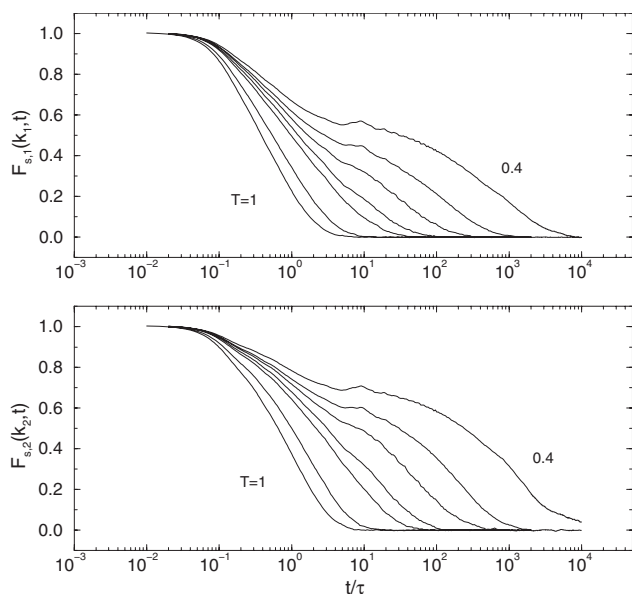

FIG. 1. Incoherent scattering functions $F_{s,1}(k_1,t)$ and $F_{s,2}(k_2,t)$ for the small and large particles, respectively. The wave vectors $k_1 = 6.10\sigma_1^{-1}$ and $k_2 = 5.36\sigma_1^{-1}$ are the first peak positions in the respective partial structure factors. From left to right, the relaxation curves correspond to the following temperatures: $T=1$, 0.8, 0.6, 0.55, 0.5, 0.46, 0.4. Observe that a slower relaxation process appears at $T=0.5$.
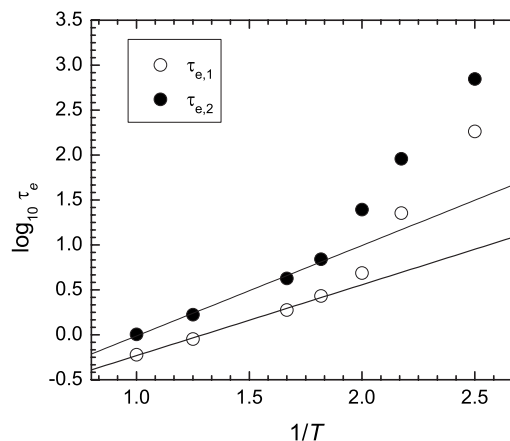

FIG. 2. A log-linear plot of the structural relaxation times $\tau_{e,1}$ and $\tau_{e,2}$, as defined in the text, against $1/T$ for the small and large particles, respectively. Note that there is still a positive deviation from Arrhenius behavior for $T < 0.55$. The solid lines are linear regressions through the data points in the range $T \in [0.55, 1]$.
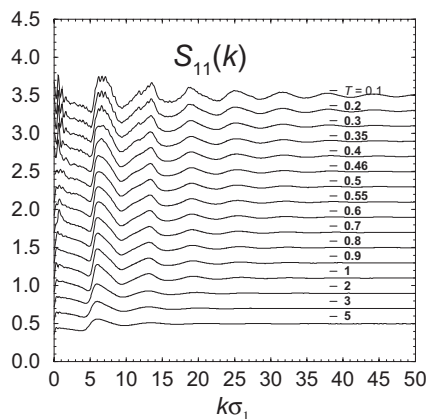

FIG. 8. Partial structure factor $S_{11}(k)$ for the binary mixture. For clarity, each curve below $T=5$ has been displaced vertically by 0.2 units above the higher temperature curve directly proceeding it.
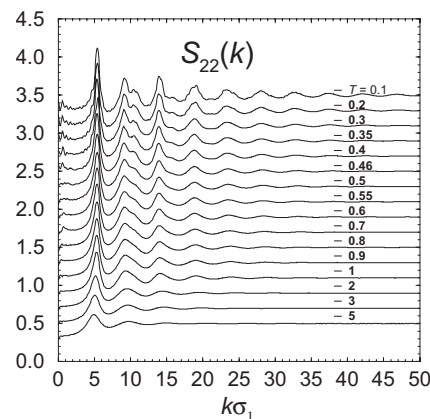

FIG. 9. Partial structure factor $S_{22}(k)$ for the binary mixture. For clarity, each curve below $T=5$ has been displaced vertically by 0.2 units above the higher temperature curve directly proceeding it.