

The influence of droplet size on line tension

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Erratum

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An error occurred in the calculation leading to equation (4.3). The correct form of this formula reads:

$$\eta_{<}(R, \tau_1, \tau_2) = \xi_B \sqrt{\frac{\sigma}{2b}} \left[\tau_1 \log \left(\frac{\tau_1 + \tau_2}{2\tau_1} \right) + \tau_2 \log \left(\frac{\tau_1 + \tau_2}{2\tau_2} \right) \right] \\ + \xi_B \tau_1 \sqrt{\frac{\sigma}{2b}} \left[\frac{(\tau_1 - \tau_2)^2}{(\tau_1 + \tau_2)^2} e^{-2R/\xi_{||1}} + \mathcal{O} \left(\frac{R}{\xi_B} e^{-3R/\xi_{||1}} \right) \right]$$

It follows that the dominant R -dependent contribution to the line tension coefficient η decays as $e^{-2R/\xi_{||1}}$ in the case $\tau_1 < 0$ and the interaction represented by this term is attractive, contrary to what was stated in the published text.