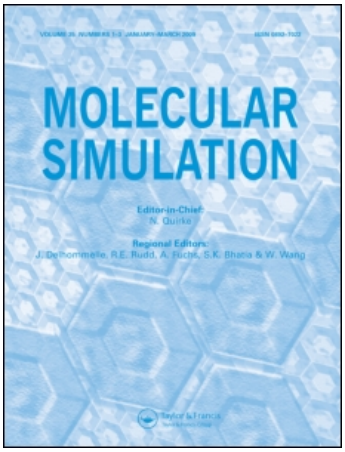

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Comparison of simple perturbation-theory estimates for the liquid–solid and the liquid–vapor interfacial free energies of Lennard-Jones systems

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Tables 2 and 3 in the published paper contained a few typographical errors, corrected below. Moreover the critical temperature of the truncated and shifted Lennard-Jones potential is $T_c = 1.08$ [1,2] not $T_c = 0.935$ [3], which is the critical temperature of the truncated force-shifted Lennard-Jones. Our calculations were not affected by these errors.

Table 2. Comparison with literature data for the surface tension of various Lennard-Jones models.

$\Delta\rho$	ρ_l	ρ_v	T / T_c [T, T_c]	γ_{LJ}	γ_{TS}	*Source*
0.46 ± 0.02	0.5794	0.1030	0.93 [1.0, 1.08]	–	0.082 ± 0.008	[7]
0.46 ± 0.02	0.5694	0.0987	0.93 [1.0, 1.08]		0.076 ± 0.002	[10]
0.46 ± 0.02	0.565	0.103	0.93 [1.0, 1.08]	–	0.088 ± 0.007	[4]
0.46 ± 0.02	0.564	0.0996	0.91 [1.2, 1.31]	0.124 ± 0.001[a]	− 0.004[d]	
0.55 ± 0.02	0.6213	0.0068	0.88 [0.95, 1.08]	–	0.154 ± 0.003	[10]
0.55 ± 0.02	0.6147	0.0663	0.86 [1.127, 1.131]	0.224 ± 0.001[b]	− 0.003[d]	
0.59 ± 0.01	0.6505	0.0518	0.85 [0.92, 1.08]	–	0.197 ± 0.016	[7]
0.59 ± 0.01	0.6410	0.05485	0.84 [1.1, 1.31]	0.343 ± 0.002[c]	0.08[d]	
0.62 ± 0.02	0.6619	0.0454	0.83 [0.90, 1.08]	–	0.223 ± 0.003	[10]
0.62 ± 0.02	0.662	0.0439	0.83 [0.90, 1.08]	–	0.224 ± 0.009	[4]
0.62 ± 0.02	0.671	0.040	0.83 [0.90, 1.08]	–	0.23 ± 0.02	[11]
0.62 ± 0.02	0.6644	0.0444	0.83 [0.90, 1.08]	–	0.227 ± 0.016	[7]
0.62 ± 0.02	0.672	0.0404	0.80 [1.05, 1.31]	0.46 ± 0.03[a]	0.17[d]	

$\Delta\rho$ (in reduced units) is the density difference between ρ_l (liquid) and ρ_v (vapor). T is the temperature for each $\Delta\rho$. $T_c = 1.312$ for the full Lennard-Jones [9] and $T_c = 1.08$ [1,2] for the truncated and shifted LJ potential, $\gamma_{TS=} \gamma_{LJ} + \gamma_{LR1} + \gamma_{LR2}$. The numerical data for γ_{LV} of the full Lennard-Jones potential come from [6] (superscript a), [7] (superscript b) and [8] (superscript c). Our data are indicated by superscript d.

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Table 3. Continuation of Table 2, but in a different density and temperature range.

$\Delta\rho$	ρ_l	ρ_v	T / T_c [T, T_c]	γ_{LJ}	γ_{TS}	*Source*
0.67 ± 0.03	0.6973	0.0307	0.79 [0.85, 1.08]	–	0.303 ± 0.003	[10]
0.67 ± 0.03	0.706	0.027	0.79 [0.85, 1.08]	–	0.29 ± 0.07	[11]
0.67 ± 0.03	0.701	0.0294	0.76 [1.00, 1.31]	0.56 ± 0.02[a]	0.22[d]	
0.71 ± 0.01	0.7306	0.0196	0.74 [0.80, 1.08]	–	0.408 ± 0.018	[7]
0.71 ± 0.01	0.7315	0.195	0.74 [0.80, 1.08]	–	0.39 ± 0.01	[4]
0.71 ± 0.01	0.731	0.02	0.74 [0.80, 1.08]	–	0.39 ± 0.07	[11]
0.71 ± 0.01	0.7287	0.02	0.74 [0.80, 1.08]	–	0.388 ± 0.04	[10]
0.71 ± 0.01	0.730	0.020	0.72 [0.95, 1.31]	0.61 ± 0.01[a]	0.23[d]	
0.74 ± 0.01	0.7580	0.0132	0.69 [0.75, 1.08]	–	0.480 ± 0.003	[10]
0.74 ± 0.01	0.761	0.014	0.69 [0.75, 1.08]	–	0.46 ± 0.05	[11]
0.74 ± 0.01	0.746	0.0147	0.69 [0.90, 1.31]	0.679[b]	0.27[d]	
0.77 ± 0.01	0.7749	0.0088	0.67 [0.72, 1.08]	–	0.544 ± 0.018	[7]
0.77 ± 0.01	0.777	0.009	0.67 [0.72, 1.08]	–	0.55	[5]
0.77 ± 0.01	0.7764	0.0093	0.67 [0.72, 1.08]	–	0.55 ± 0.01	[4]
0.77 ± 0.01	0.787	0.006	0.65 [0.70, 1.08]	–	0.57 ± 0.04	[11]
0.77 ± 0.01	0.776	0.0096	0.65 [0.85, 1.31]	0.837 ± 0.002[c]	0.39[d]	

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