Erratum


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A B S T R A C T


We have recently noticed a few misprints in Ref. [1], which, on the other hand, do not affect the physical results. The misprints are:

- Eq. (14) should be replaced by
\[ \frac{S_{\text{ex}}^{\text{solid}}}{k_B} = d \ln \left[ 1 - \left( \frac{\hat{\eta}}{\alpha \eta_{\text{cp}}^t} \right)^{1/d} \right] + d \ln 2. \]

- Two lines below Eq. (14) of Ref. [1], \( a_{\text{ex}}^{\text{solid}} = u_{\text{ex}}^{\text{solid}} + T S_{\text{ex}}^{\text{solid}} \) should be replaced by \( a_{\text{ex}}^{\text{solid}} = u_{\text{ex}}^{\text{solid}} - T S_{\text{ex}}^{\text{solid}}. \)

- Twelve lines below Fig. 3 of Ref. [1], \( \mu_{\text{ex}}^{\text{fluid}} (\hat{\eta}) = \mu_{\text{ex}}^{\text{solid}} (\hat{\eta}_m) \) should be replaced by \( \mu_{\text{ex}}^{\text{fluid}} (\hat{\eta}) = \mu_{\text{ex}}^{\text{solid}} (\hat{\eta}_m). \)

- The sixth and eighth columns of Table 2 of Ref. [1] need slight changes. The complete correct table is displayed as Table 1 of this Erratum.

- The shaded region in Fig. 3 of Ref. [1] should be slightly narrower. The correct figure is displayed as Fig. 1 of this Erratum.

- In Ref. [20b] of Ref. [1], 0161008 should be replaced by 016108.

Table 1
Values of the HS close-packing fraction \( \eta_{\text{cp}} \), the wavenumber \( k_0 \), the nearest-neighbor distance \( r_0 \), the (scaled) spinodal instability packing fraction \( \hat{\eta}_0 \), the (scaled) freezing packing fraction \( \hat{\eta}_f \), the (scaled) packing fraction \( \hat{\eta}_m \) at the condition of marginal stability and the (scaled) melting packing fraction \( \hat{\eta}_m \).

<table>
<thead>
<tr>
<th>( d )</th>
<th>( \eta_{\text{cp}} )</th>
<th>( r_0/\sigma )</th>
<th>( \hat{\eta}_0 )</th>
<th>( \hat{\eta}_f )</th>
<th>( \hat{\eta}_m )</th>
<th>( \hat{\eta}_m )</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>1</td>
<td>4.49</td>
<td>1.40</td>
<td>2.30</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>2</td>
<td>( \sqrt{3} \pi /6 \pm 0.91 )</td>
<td>5.14</td>
<td>1.37</td>
<td>1.89</td>
<td>0.90</td>
<td>0.95</td>
</tr>
<tr>
<td>3</td>
<td>( \sqrt{7} /2 \pm 0.74 )</td>
<td>5.76</td>
<td>1.34</td>
<td>1.45</td>
<td>0.63</td>
<td>0.69</td>
</tr>
<tr>
<td>4</td>
<td>( \pi^2 /16 \pm 0.62 )</td>
<td>6.38</td>
<td>1.32</td>
<td>1.07</td>
<td>0.37</td>
<td>0.41</td>
</tr>
<tr>
<td>5</td>
<td>( \sqrt{7} /2 \pm 0.47 )</td>
<td>6.99</td>
<td>1.30</td>
<td>0.76</td>
<td>0.22</td>
<td>0.26</td>
</tr>
</tbody>
</table>

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Excess free energy per particle in the three-dimensional PS solid, $a_{\text{ex}}^\text{solid}/k_B T$ (solid line), and PS fluid, $a_{\text{ex}}^\text{fluid}/k_B T$ (dashed line), in the high-temperature limit. The excess internal energy, $u_{\text{ex}}^\text{solid}/k_B T$ (dotted line), and the excess entropy, $s_{\text{ex}}^\text{solid}/k_B$ (dashed–dotted line), of the PS solid are also plotted. The shaded area represents the fluid–solid coexistence region.

References