

Review of the original derivation of the Boltzmann equation and its extension to an infinite-range intermolecular potential

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The original derivation of the Boltzmann equation is reviewed by paying attention to the scale parameters and the limiting parameters in its derivation. The Boltzmann equation for an infinite-range potential is discussed on the basis of the review. The contribution of intrinsic gravitational force between molecules is evaluated along this line.

References

- [1] Y. Sone, *Molecular gas dynamics*, Birkäuser Boston, (2007)
- [2] Y. Sone, Supplement to *Molecular gas dynamics* (Birkäuser, 2007), Kyoto University Research Information Repository (2011)
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