Soft Matter



CORRECTION

View Article Online



Cite this: Soft Matter, 2017, **13**. 3457

Correction: Cooperative strings in glassy nanoparticles

Maxence Arutkin, a Elie Raphaël, a James A. Forrest and Thomas Salez*

Correction for 'Cooperative strings in glassy nanoparticles' by Maxence Arutkin et al., Soft Matter, 2017, **13**, 141-146.

DOI: 10.1039/c7sm90062g

rsc.li/soft-matter-journal

The authors would like to correct errors in the legends of the published Fig. 2 and Fig. 3. The correct versions of Fig. 2 and Fig. 3 are shown below.

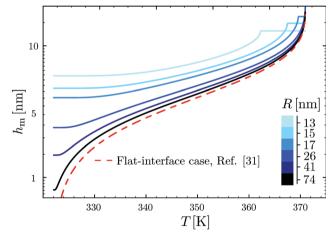


Fig. 2 Predicted surface mobile-layer thicknesses $h_{\rm m}$ of spherical polystyrene nanoparticles as a function of temperature T, according to eqn (16) and (17), for different sphere radii as indicated. We used the bulk glass-transition temperature $T_g^{\text{bulk}} = 371 \text{ K}$, 69 and the onset temperature $T_c = 463 \text{ K}$. 57,70 We fixed the molecular size $\lambda_V = 3.7 \text{ nm}$, and the Vogel temperature $T_V = 322 \text{ K}$, to the values previously obtained for the thin-film geometry. 31 Note that we replaced the +∞ bound by 25 in eqn (16), and checked that it provides sufficiently precise numerical estimates. For comparison, the dashed line indicates the flat-interface result used for the thin-film geometry.³¹

a Laboratoire de Physico-Chimie Théorique, UMR CNRS Gulliver 7083, ESPCI ParisTech, PSL Research University, 75005 Paris, France. E-mail: thomas.salez@espci.fr

^b Perimeter Institute for Theoretical Physics, Waterloo, Ontario N2L 2Y5, Canada

^c Department of Physics & Astronomy and Guelph-Waterloo Physics Institute, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada

d Global Station for Soft Matter, Global Institution for Collaborative Research and Education, Hokkaido University, Sapporo, Hokkaido 060-0808, Japan

370 360 350 ∑ 340 ⊢∞ 330 Ref. [35] 330 Ref. [37] Ref. [40] (anionic) 320 Ref. [40] (surfactant-free) 310 Eq. (19) 50 100 150 200

Correction Soft Matter

Fig. 3 Comparison between experimental data (symbols) for the reduced glass-transition temperature $T_g(R)$ of spherical polystyrene nanoparticles 35,37,40 of radius R, and the theory (line) given by eqn (19) – that invokes eqn (16) through $\mathcal{F}(v) = f\left(2^{-1/3}, v\right)$. The fixed parameters are the bulk glass-transition temperature $T_g^{\text{bulk}} = 371 \text{ K},^{69}$ and the onset temperature $T_c = 463 \text{ K},^{57,70}$ The two adjustable parameters are the molecular size $\lambda_V = 3.7 \text{ nm}$, and the Vogel temperature $T_V = 322 \text{ K}$, that were fixed to the values previously obtained for the thin-film geometry. Note that we replaced the $+\infty$ bound by 25 in eqn (16), and checked that it provides sufficiently precise numerical estimates.

R [nm]

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.