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Correction: Surface induced smectic order in ionic liquids – an X-ray reflectivity study of $[C_{22}C_1im]^+[NTf_2]^-$

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Correction for ‘Surface induced smectic order in ionic liquids – an X-ray reflectivity study of $[C_{22}C_1im]^+[NTf_2]^-$ ’ by Julian Mars et al., *Phys. Chem. Chem. Phys.*, 2017, **19**, 26651–26661.

The following errata were found in the published article. All the data analysis and figures in the original article are correct. Likewise, the results and conclusions remain unaffected.

Model profiles

The first sentence of the second paragraph on page 26654 should read:

“The oscillatory function with periodicity d is expanded in a series

$$\psi(z) = \left(1 - \frac{Z_{HC}}{Z_{IL}}\right) \sum_{j=1}^{\infty} a_j \exp\left(-\frac{z}{\xi_j}\right) \cos\left(2\pi j \frac{z - z_0}{d}\right). \quad (6)$$

with the total number of electrons per $[C_{22}C_1im]^+[NTf_2]^-$ molecule $Z_{IL} = 358$ and per 37 CH₂ hydrocarbon equivalents $Z_{HC} = 37.8$, respectively.⁵⁵

Surface thermodynamics

The sentence containing eqn (10) on page 26654 should read:

“For complete wetting ($\Delta\gamma < 0$)

$$L(\tau) = A \ln\left(\frac{\tau_1}{\tau}\right) \quad (10a)$$

$$\tau_1 = -\frac{\Delta\gamma V_m}{\Delta H_m A} \quad (10b)$$

is found.”

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Surface structure

In Table 1 on page 26657 the decimal point of a single entry is shifted. The entry should read B^b ($115\text{ }^\circ\text{C}$) = 1.93.

Table 1 Model parameters of the XRR best fits (Fig. 5b) using eqn (4)

$T\text{ }(^{\circ}\text{C})$	$L\text{ (nm)}$	$\xi_b^a\text{ (nm)}$	$d\text{ (nm)}$	$z_0\text{ (nm)}$	$\sigma_s\text{ (nm)}$	S^{0b}	S^-	B^b	a_2	$\xi_2\text{ (nm)}$
68	30.0 ± 2.0	4.78	3.73	2.28	0.18	1.71	-98	126	0.15	26
70	16.8 ± 2.2	4.73	3.73	2.29	0.17	1.64	-152	12.6	0.15	18
73	12.5 ± 1.2	4.64	3.73	2.24	0.10	1.62	-189	6.50	0.12	19
87	6.5 ± 0.6	4.21	3.70	2.14	0.18	1.58	-294	2.90	0.15	9
115	2.8 ± 2.5	3.38	3.56	1.89	0.25	1.55	-503	1.93	0.05	20

^a Parameters were fixed to the interpolated bulk values extracted from SAXS.⁶⁷ ^b Parameters were determined by continuity and differential continuity conditions. ξ_s was fixed at 2000 nm.

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