
ERRATA

Erratum: Microscopic expressions for interfacial bending constants and spontaneous curvature
[Phys. Rev. A 44, 8417 (1991)]

V. Romero-Rochín, C. Varea, and A. Robledo

PACS number(s): 64.70. - p, 05.70.Fh, 82.70. - y, 99.10. + g

The following misprints occurred in our paper.

- (1) The sign of the external field term $v(\mathbf{r})$ in Eq. (4) is wrong.
 (2) The entire tensor in the third line of Eq. (5) should be transposed; it should read

$$+ \left[\nabla \times [B \nabla \rho \times \nabla \nabla \rho - 1 \times B (\nabla \rho \cdot \nabla) \nabla \rho] \right]^\dagger .$$

- (3) A portion of Eq. (6b) is missing; it should read

$$\sigma_{\mu\nu}^T = (\mu\rho - v\rho - f) t_\mu^i t_\nu^j \delta_{ij} + t_\mu^i t_\nu^j \sigma_{ij}^{(2)} + t_\mu^i t_\nu^j \sigma_{ij}^{(4)} .$$

- (4) In the paragraph following Eq. (6c), sixth line, the curvature tensor should read $K_{\mu\nu} = t_\mu^i t_\nu^j \partial_i n_j$.

- (5) In the same paragraph, seventh line, the first curvature should read $J = -\nabla \cdot \mathbf{n}$.

- (6) In Eq. (7), and in the paragraph above it, the external field term is missing; there, μ should be replaced by $\mu - v(\mathbf{r})$.

- (7) In Eq. (7) the sign for J should be changed.

- (8) Equation (8c) is incorrect, not a misprint; the correct way of identifying the spontaneous curvature is given by

$$\kappa c_0 = - \int d\mathbf{r}_n B(\mathbf{r}_n) \partial_n \rho \partial_n^2 \rho ,$$

whereas Eq. (8c) is an approximation requiring $B(\mathbf{r}_n) \partial_n \rho$ to be constant through the interfacial region.

- (9) In Eq. (14) the coefficient in front of the integrals reads

$$\frac{1}{2kT} ;$$

it should read

$$\frac{kT}{2} .$$

- (10) In Eq. (14) the coefficient of the second line reads

$$\frac{1}{(2)(4!)} ;$$

it should read

$$\frac{3}{(8)(4!)} .$$

- (11) In Eq. (15a) the coefficient in front of the integrals reads

$$-\frac{1}{4kT} ;$$

it should read

$$-\frac{kT}{4} .$$

- (12) In Eq. (15b) the coefficient in front of the integrals reads

$$\frac{1}{(3)(4!)kT} ;$$

it should read

$$\frac{kT}{32} .$$

The results of the paper are not affected.