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Correction to "Wetting of Flat and Rough Curved Surfaces"

Edward Bormashenko*

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quation 10 in ref 1 should be read as follows

$$\cos(\tilde{\theta} - \theta) = R_{\rm f} \frac{\gamma_{\rm SA} - \gamma_{\rm SL}}{\gamma} \tag{10}$$

where $h'(x = a) = -\tan \tilde{\theta}$, where $\tilde{\theta}$ is the slope of the liquid—air interface at x = a, and $f'(x = a) = -\tan \theta$, where $\tan \theta$ is the slope of the solid substrate in x = a (it is supposed that grooves are small, see Figure 2 in ref 1). It is reasonable to define the apparent contact angle θ^* according to $\theta^* = \tilde{\theta} - \theta$, thus the modified Wenzel equation is recognized in eq 10.

Equation 12 should be read as follows

$$\cos(\tilde{\theta} - \theta) = \frac{\sum_{i=1}^{n} \alpha_{i}(\gamma_{i,SA} - \gamma_{i,SL})}{\gamma}$$
(12)

where $\tilde{\theta}$ and θ are defined similar to as they are defined above in eqs 8 (ref 1) and 10 (see Figure 3 in ref 1). It is reasonable to define the Cassie apparent contact angle θ^* according to $\theta^* = \tilde{\theta} - \theta$, thus the modified Cassie equation is recognized in eq 12, i.e., $\cos \theta^* = \sum_{i=1}^{n} (\alpha_i (\gamma_{i,SA} - \gamma_{i,SL})/\gamma)$.

REFERENCES

(1) E. Bormashenko, E. Wetting of Flat and Rough Curved Surfaces. *J. Phys. Chem. C* **2009**, *113*, 17275–17277.