

Corrigendum

Corrigendum to “Influence of roughness on spontaneous air-water imbibition in fractures: Insights from mathematical model analysis” [Capillarity 2025, 16(3): 87-94]

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Cited as:

Cheng, H., Lai, R., Liu, J., Zhao, X., Yuan, Y., Wang, F. Corrigendum to “Influence of roughness on spontaneous air-water imbibition in fractures: Insights from mathematical model analysis” [Capillarity 2025, 16(3): 87-94]. Capillarity, 2025, 17(1): 37-37. <https://doi.org/10.46690/capi.2025.10.04>

The authors regret the errors found in the published paper (Cheng et al., 2025). These corrections do not affect the conclusions of the article. The corrections are as follows:

1. Section “2. Mathematical model”

- 1) The third line below Eq. (1): The word “actual” is corrected to “smooth-surface”.
- 2) The variable “ x ” in Eq. (2) is corrected to “ τ ”.
- 3) The variable “ \mathcal{L} ” in Eq. (4) is corrected to “ \mathcal{L}^{D_f} ”.
- 4) Eq. (6) corrected to “ $\cos \theta_S = r \cos \theta_R$ ”. The word “actual dynamic” above Eq. (6) should be corrected to “smooth-surface,” and “static equilibrium” should be corrected to “rough-surface.”

2. Section “4. Effect of roughness on spontaneous imbibition”

- 1) Third paragraph, line 2 and line 5: the word “apparent”

corrected to “smooth-surface”.

- 2) Third paragraph, line 4: the word “intrinsic” corrected to “smooth-surface”, and “ θ_S ” corrected to “ θ_R ”.
- 3) Third paragraph, line 6: due to the correction of Eq. (6), “ $\cos \theta_R = r \cos \theta_S$ ” corrected to “ $\cos \theta_S = r \cos \theta_R$ ”.
- 4) Last paragraph, line 7: “becomes more pronounced” corrected to “shows little change.”

The authors sincerely apologize for any inconvenience caused.

References

Cheng, H., Lai, R., Liu, J., et al. Influence of roughness on spontaneous air-water imbibition in fractures: Insights from mathematical model analysis. Capillarity, 2025, 16(3): 87-94.