

Supporting Information

Impact of Viscous Droplets on Superamphiphobic Surfaces

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Supplemental figures

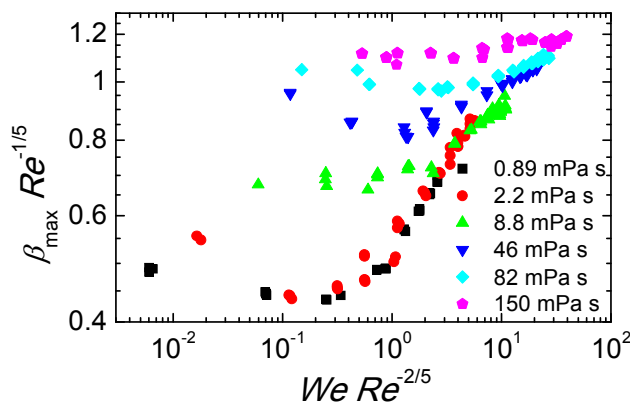


Fig. S1. Plot of $\beta_{\max} Re^{-1/5}$ as a function of $We Re^{-2/5}$ as described in the scaling model of Laan *et al.*¹ for our experimental data on the superamphiphobic surface.

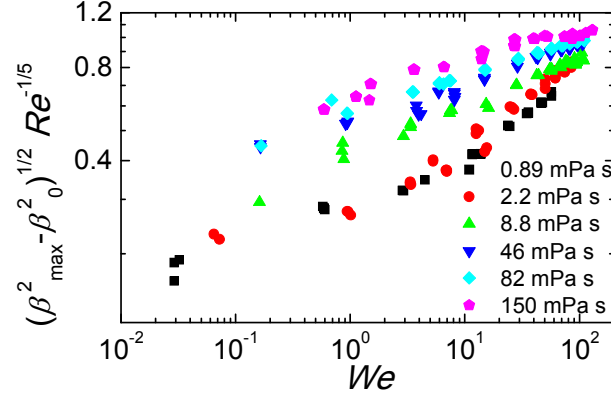


Fig. S2. Plot of $(\beta_{\max}^2 - \beta_0^2)^{1/2} Re^{-1/5}$ as a function of We as described in the scaling model of Lee *et al.*² for our experimental data on the superamphiphobic surface.

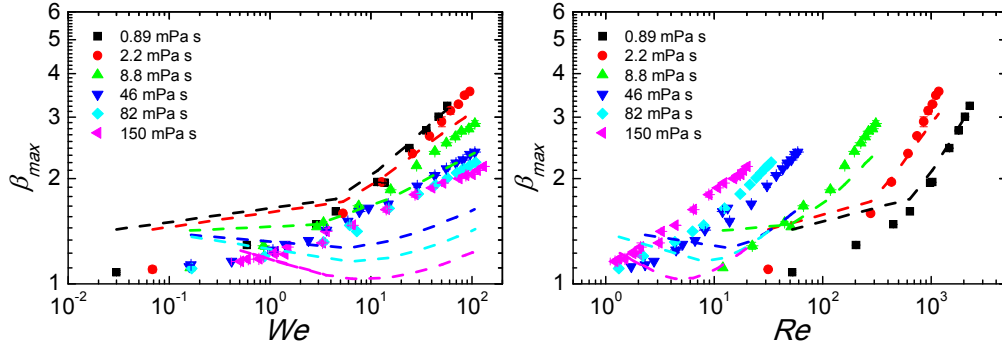


Fig. S3. Comparison of the predicted $\beta_{\max}$ by the theoretical model of Pasandideh-Fard *et al.*³ described in Ref. 3 with our experimental result on the superamphiphobic surface as a function of We (left) and Re (right).

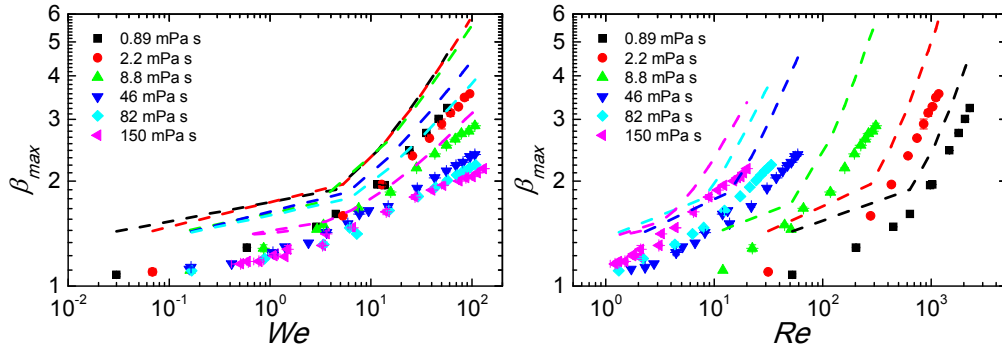


Fig. S4. Comparison of the predicted $\beta_{\max}$ by the theoretical model of Li *et al.*⁴ described in Ref. 4 with our experimental result on the superamphiphobic surface as a function of We (left) and Re (right).

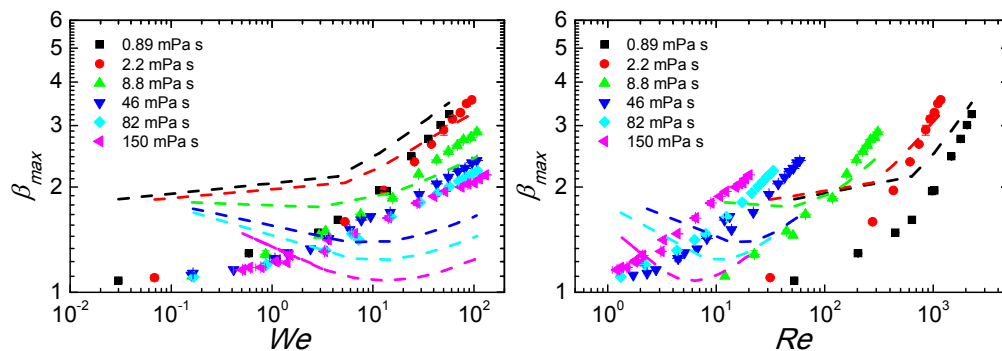


Fig. S5. Comparison of the predicted β_{max} by the theoretical model of Ukiwe et al.⁵ described in Ref. 5 with our experimental result on the superamphiphobic surface as a function of We (left) and Re (right).

References

1. Laan, N.; de Bruin, K. G.; Bartolo, D.; Josserand, C.; Bonn, D., Maximum Diameter of Impacting Liquid Droplets. *Physical Review Applied* **2014**, 2, (4), 044018.
2. Lee, J. B.; Laan, N.; de Bruin, K. G.; Skantzaris, G.; Shahidzadeh, N.; Derome, D.; Carmeliet, J.; Bonn, D., Universal rescaling of drop impact on smooth and rough surfaces. *Journal of Fluid Mechanics* **2015**, 786, R4.
3. Pasandideh - Fard, M.; Qiao, Y. M.; Chandra, S.; Mostaghimi, J., Capillary effects during droplet impact on a solid surface. *Physics of Fluids* **1996**, 8, (3), 650-659.
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5. Ukiwe, C.; Kwok, D. Y., On the Maximum Spreading Diameter of Impacting Droplets on Well-Prepared Solid Surfaces. *Langmuir* **2005**, 21, (2), 666-673.