**Supplementary Materials**

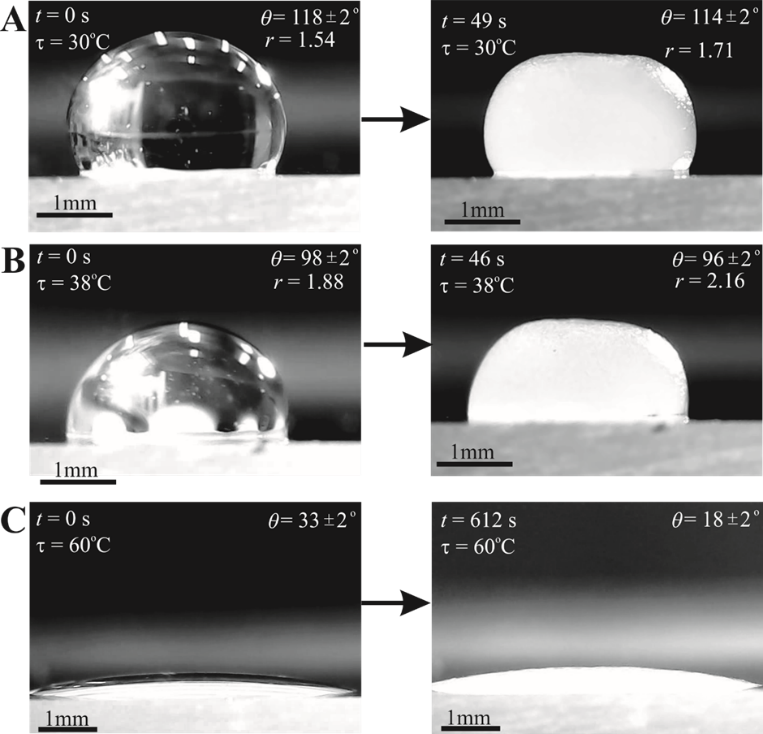


Figure S 2 Effect of substrate temperature on molten wax wetting behavior. Images of 10 µl paraffin wax droplets placed on a slide at different temperatures: (A) 30 ℃, (B) 38 ℃, (C) 60 ℃.

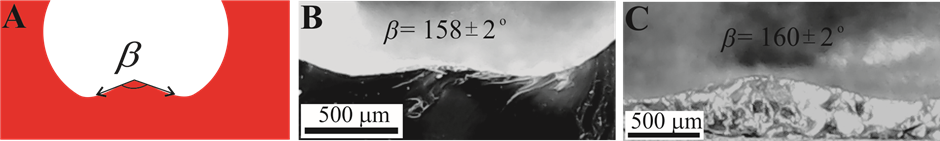


Figure S 1 Opening angle. Images of the opening dimple angle (A) schematic, (B) replica taken from 10 µl paraffin wax droplet, (C) replica taken from 50 µl droplet.

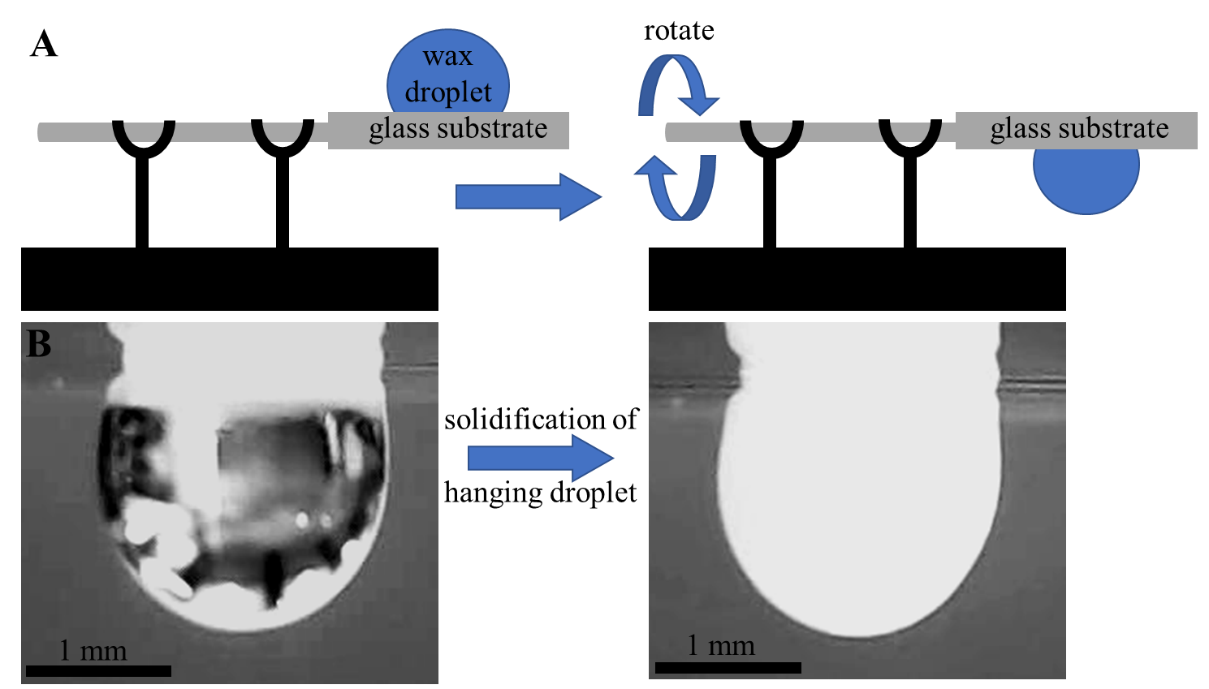


Figure S 3 Effect of gravity on droplet freezing. (A) Schematic representation of the experimental setup. (B) Images of a 10 µl paraffin wax droplet before and after solidification hanging from a glass substrate at τsub=22 ℃.

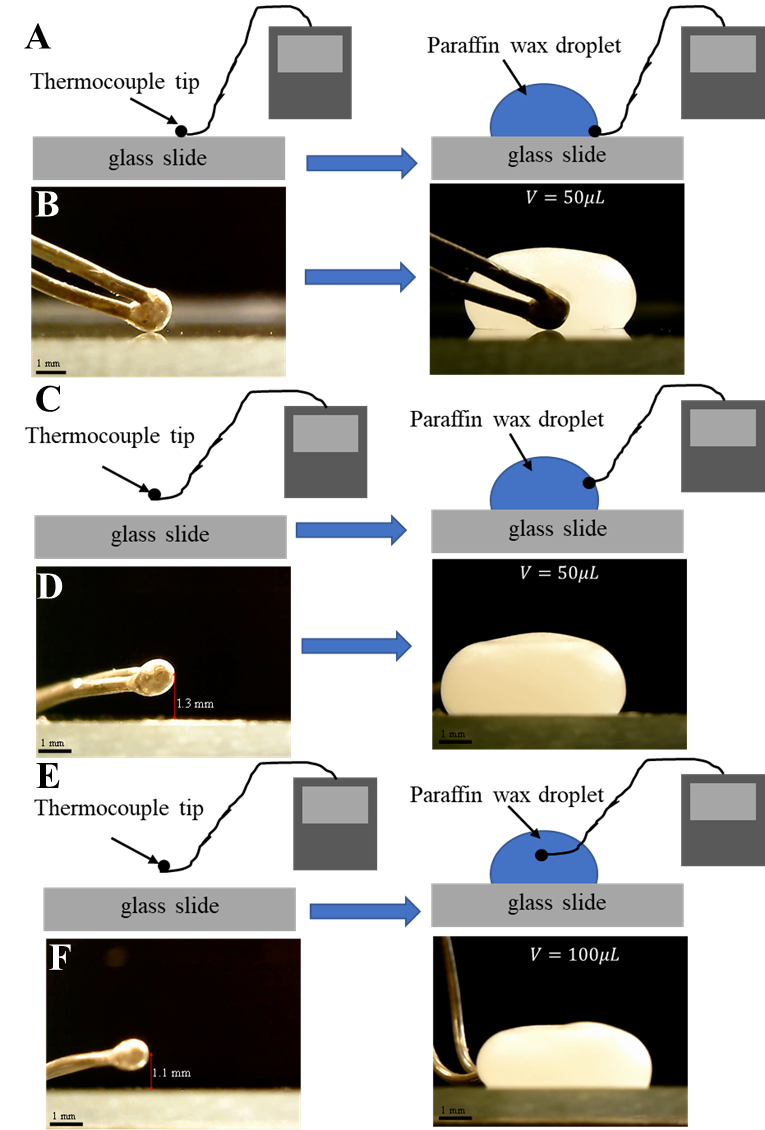


Figure S 4 Thermocouple measurements of the droplet surface temperature. Schematic (A) and image (B) represent the thermocouple tip placed at the three-phase contact line (air/glass/paraffin). Schematic (C) and image (D) represent the thermocouple tip at the air/paraffin interface. Schematic (**E**) and image (**F**) show that the thermocouple tip is surrounded by paraffin wax (near the center of the droplet).

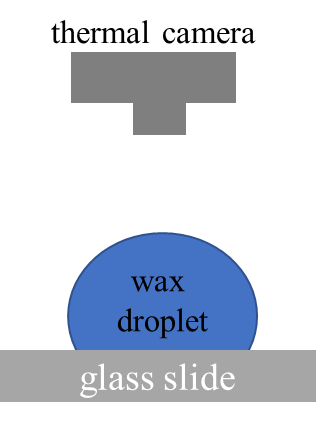


Figure S 5 Schematics of pyrometric temperature measurements.

**Supplementary Files**

* **Video 1S.** Side view of a deforming and solidifying 10 µl paraffin wax droplet.
* **Video 2S**. Side view of a deforming and solidifying 20 µl paraffin wax droplet.
* **Video 3S**. Side view of a deforming and solidifying 50 µl paraffin wax droplet.
* **Video 4S**. Side view of a deforming and solidifying 10 µl paraffin wax droplet hanging upside down from a glass substrate.
* **Video 5S**. Time variation of infrared image of the paraffin wax droplet. 50 µl droplet, view from above, speed 7X.