Electronic Supplementary Information

Droplet evaporation characteristics on transparent heaters with different wettabilities

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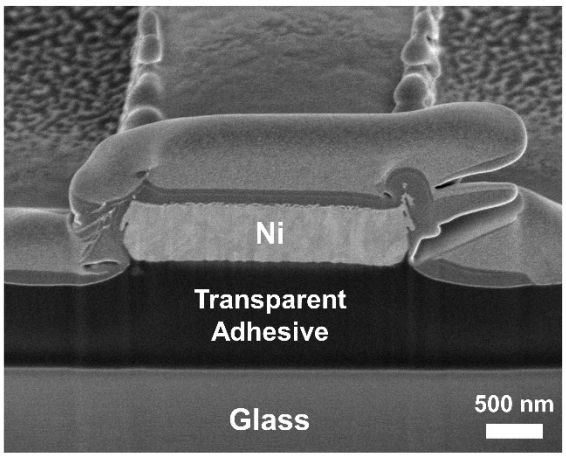

Fig. S1. Cross-sectional FE-SEM image of the Ni mesh structure on glass.

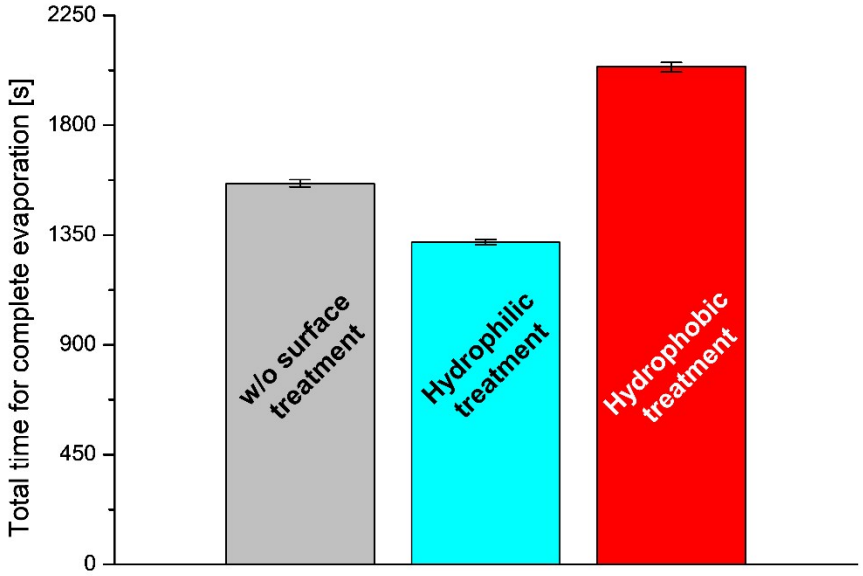

Fig. S2. Complete evaporation times of water droplets on the surfaces of Ni mesh-based transparent heaters with different wetting properties at room temperature.

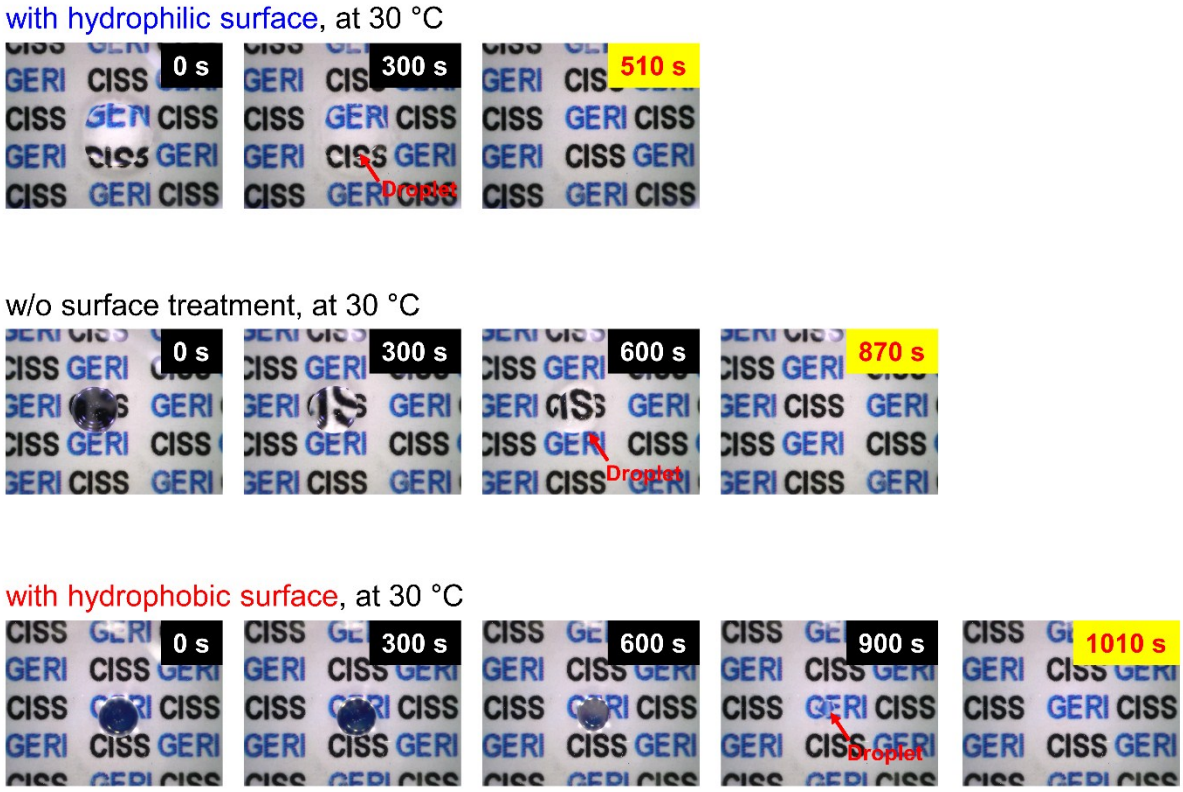

Fig. S3. Evaporation process of water droplets on the surfaces of the Ni mesh-based transparent heaters with different wetting properties at 30 ℃.

Fig. S4 Evaporation process of water droplets on the surfaces of the Ni mesh-based transparent heaters with different wetting properties at 45 °C.

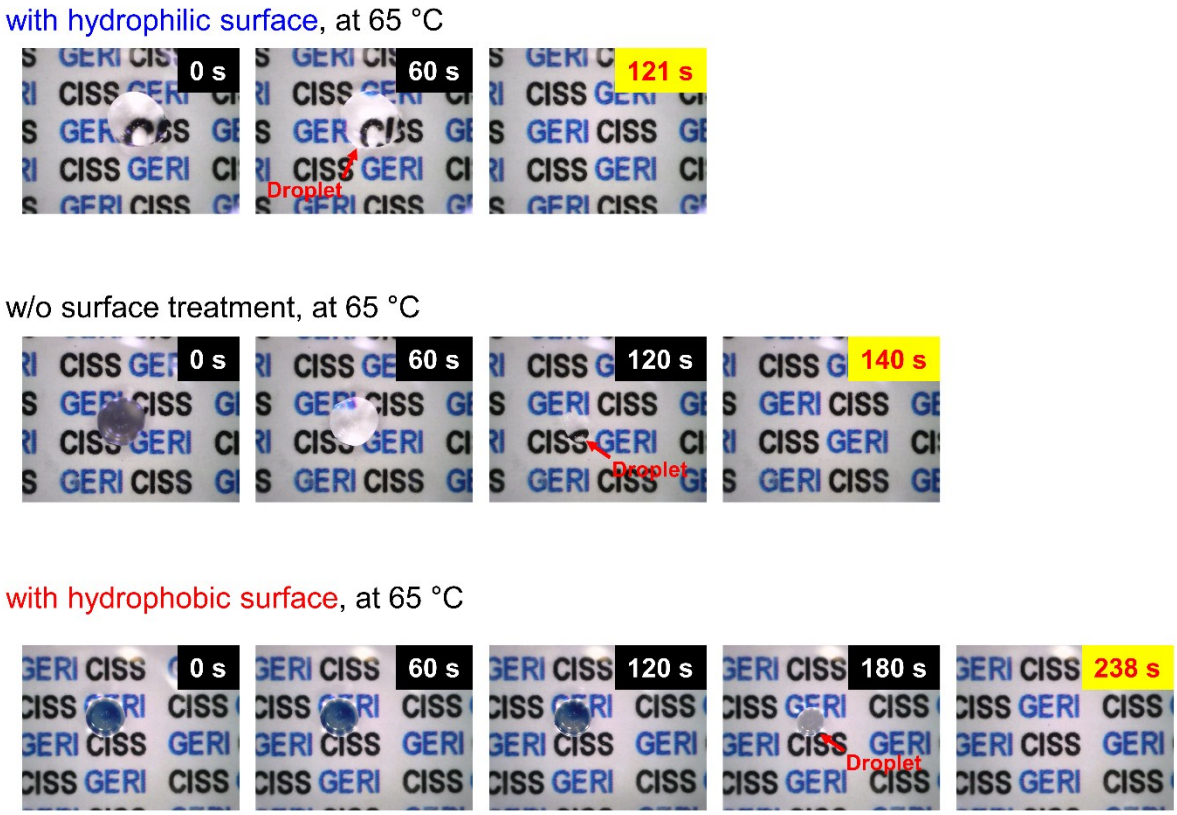

Fig. S5 Evaporation process of water droplets on the surfaces of the Ni mesh-based transparent heaters with different wetting properties at 65 °C.

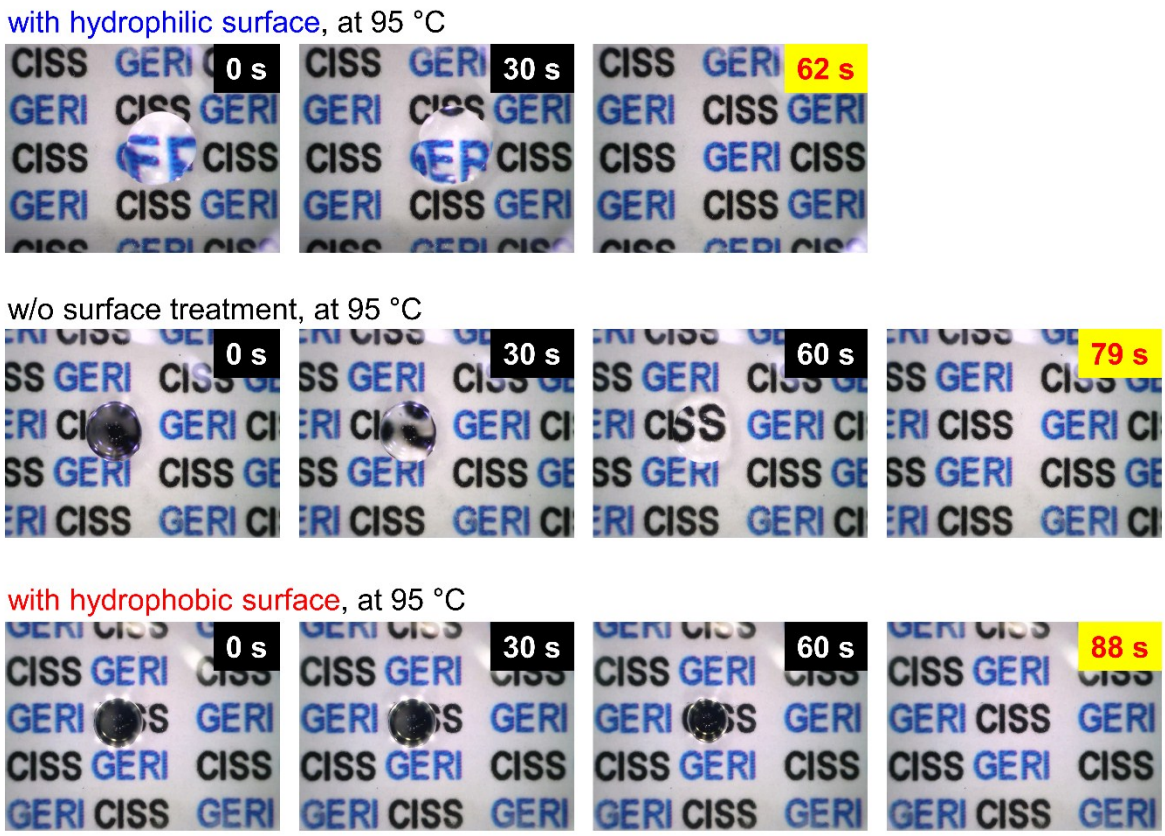

Fig. S6 Evaporation process of water droplets on the surfaces of the Ni mesh-based transparent heaters with different wetting properties at 95 ℃.

Table S1. Total times for the complete water droplet evaporation on Si substrates with different wetting properties and heating temperatures.

Temperature	w/o surface treatment (CA < 10°)	Hydrophilic treatment (CA = 76°)	Hydrophobic treatment (CA = 107°)
Room Temperature	1,487 s	1,267 s	1,947 s
45 °C	286 s	223 s	368 s
80 °C	110 s	91 s	163 s