

Electronic Supplementary Material (ESI)

Understanding Desiccation Patterns of Blood Sessile Drops

Ruoyang Chen^a, Liyuan Zhang^{a,}, Duyang Zang^b, Wei Shen^{a,*}*

^a Department of Chemical Engineering, Monash University, Clayton, Victoria 3800,
Australia

^b Functional Soft Matter & Materials Group (FS2M), Key Laboratory of Space Applied
Physics and Chemistry of Ministry of Education, School of Science, Northwestern
Polytechnical University, Shaanxi 710129, China

Corresponding Author

*E-mails: liyuan.zhang@monash.edu; wei.shen@monash.edu

1. Supplementary figures

Fig. S1 illustrates the morphological evolution of the blood sessile drop desiccating on the surface of an ultra-clean glass microscope slide, clearly showing that the crack initiation and growth are time- and location-dependent. Fig. S1 also indicates that the small size of flaw remains for a short time before cracking, which is in agreement with the eq. (2) and (3).

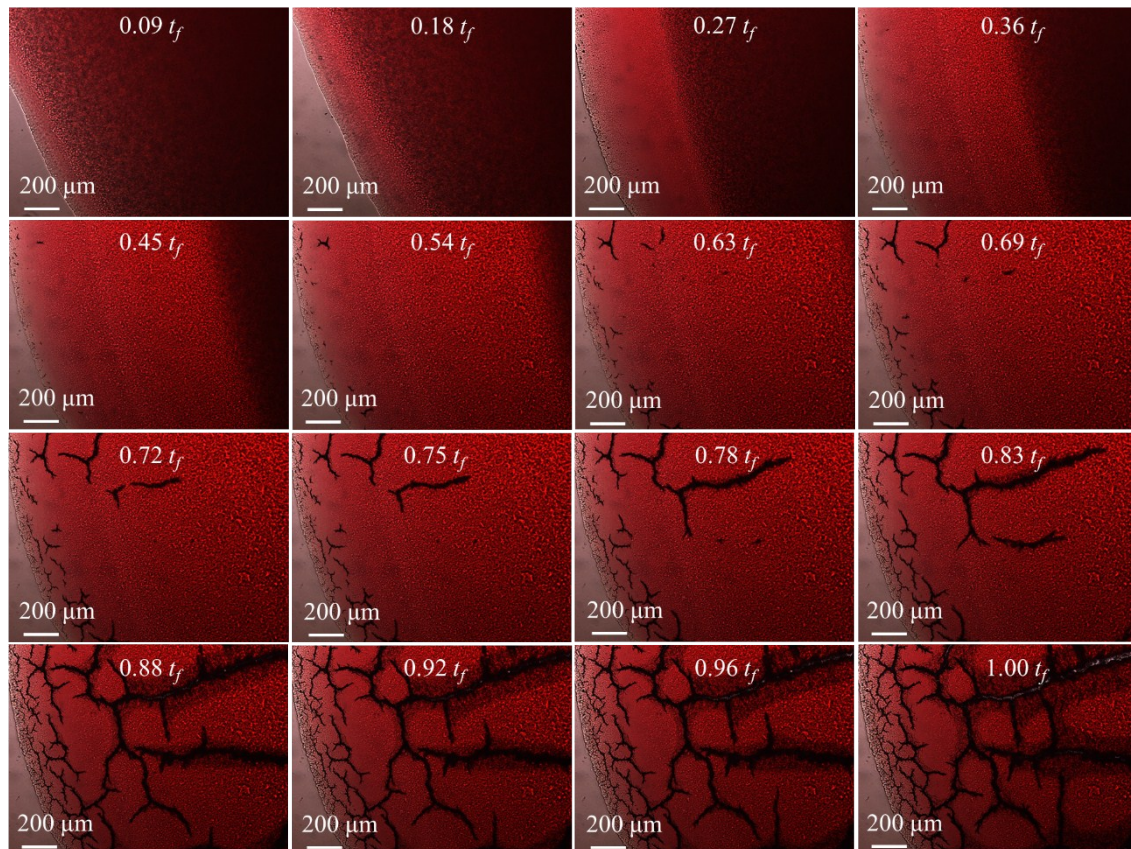


Fig. S1 Morphological evolution of the blood sessile drop desiccating on the glass substrate under a controlled environment of 23.0 ± 0.5 °C, at $50.0 \pm 0.5\%$ relative humidity (RH).

2. Supplementary video

Video S1. Morphological evolution of the peripheral region of the blood sessile drop during desiccation; magnification: X1000; speed of video: X32.