

Description of Additional Supplementary Files

Title: Supplementary Movie 1

Description: Wetting dynamics for DOPC GUVs (magenta) in contact with glycinin condensates (cyan) at 100 mM NaCl (see Fig. 4a,b). Timestamps are given in minutes (hh:mm) where zero time corresponds to the initial contact between the droplet and the condensate after mixing them. The field of view is $32.6 \mu\text{m} \times 25.9 \mu\text{m}$.

Title: Supplementary Movie 2

Description: Z-scan of a GUV-droplet system (DOPC GUV, glycinin at 100 mM) presenting ruffling/fingering of the condensate-membrane interface (see Fig. 6). Field of view is $20.0 \mu\text{m} \times 20.0 \mu\text{m}$.

Title: Supplementary Movie 3

Description: Ruffling/fingering dynamics (DOPC GUV, glycinin at 100 mM); see Fig. 7a,b. Timestamps on the images are given in hours:minutes (hh:mm). The field of view is $26.9 \mu\text{m} \times 26.9 \mu\text{m}$.

Title: Supplementary Movie 4

Description: Ruffling/fingering structures do not fluctuate (DOPC GUV, glycinin at 100 mM). Time is given in hours:minutes:seconds (hh:mm:ss). The field of view is $18.9 \mu\text{m} \times 18.9 \mu\text{m}$.

Title: Supplementary Movie 5

Description: Ruffling/fingering suppression by increasing membrane tension. Micropipette aspiration of a GUV-droplet system (DOPC GUV, glycinin at 100 mM) presenting interfacial ruffling (see Fig. 8). Field of view is $28.9 \mu\text{m} \times 28.9 \mu\text{m}$.