Supporting Information

Experimental realization of coexisting states of rolled-up and wrinkled nanomembranes by strain and etching control

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Figure S1. Etching depth as a function of etching time along with linear fits (dashed lines). Bottom tables show extracted etching depths for measured etching times and batch A and B.

Figure S2. Top view SEM image of sample $h=3.4 \, \mu m$ showing homogeneity of the observed wrinkle wavelength.
Figure S3. Zoomed top view SEM image of sample $h=3.4 \, \mu m$. 
Figure S4 Top view SEM image of sample $h=5.7 \, \mu m$. 
Figure S5 Side view SEM image of sample $h=5.7 \mu m$. 
Figure S6 Side view SEM image of sample $h=10.3 \, \mu m$. 
Figure S7 Zoom of self-similar wrinkles near confining boundary for sample $h=10.3 \, \mu m$. 
Figure S8 Cracked NMs in the sample \( h=20.6 \, \mu m \).
Figure S9 Total deformation of bilayer from batch A calculated with the FEM method for a) $h=2.5 \ \mu m$ b) $h=3.4 \ \mu m$ c) $h=5.7 \ \mu m$ d) $h=10.3 \ \mu m$ and common color scale for deformation. Initial strain was $\varepsilon_1 = -0.25\%$ and $\varepsilon_2 = 0\%$. 