

Mechanics of Individual Keratin Bundles in Living Cells

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Supplementary Material

Animation 1: Buckling event in a SW13 cell. The cell was stably transfected with CFP/YFP keratin K8/K18. Shown is inverted gray scale. The time-difference between the two alternating frames is 2s. The scale is 0.053 $\mu\text{m}/\text{pixel}$.

Animation 2: Detail (top-left, marked) of the full-size version in animation 1.

Video 1: Movie showing the dynamics in the cell

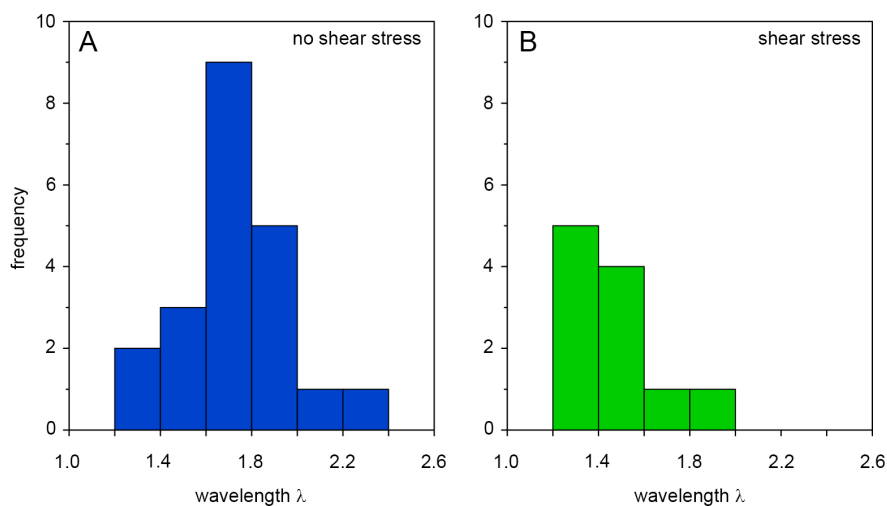


Figure S1: Buckling events and wavelength in non-sheared (left) and sheared (right cells). Please note that these data are extracted from epifluorescence images (not confocal microscopy as the data in the main text). As the resolution is in this case lower than for

confocal microscopy we abstain from an evaluation of the bundle diameters and focus instead on the number of events including the corresponding buckling wavelengths within a given time window. In addition, we focus on larger bundles. Thus, the data show larger wavelengths, which are not directly comparable with our confocal data. Nevertheless, the data nicely show the relative difference between unsheared and sheared cells.