

Supplemental movie legends

Movie 1.

Title: Simultaneous TIRF imaging and AFM mechanical stimulation on live single cell.

Legend: Time-lapse TIRF images of a VSMC expressing vinculin-GFP shows real-time FA rearrangement due to mechanical stimulation with a FN functionalized probe. Images were acquired during the AFM stimulation experiment at 12 time points. The movie is presented at 2 frames/sec. Image size is 91 x 91 μm .

Keywords: focal adhesions, total internal reflection fluorescence microscopy, atomic force microscopy, mechanical stimulation

Movie 2.

Title: Simultaneous spinning-disk confocal imaging and AFM mechanical stimulation on live single cell.

Legend: Time-lapse spinning-disk confocal images of a VSMC expressing actin-mRFP shows real-time actin fibers rearrangement due to mechanical stimulation with a FN functionalized probe. Images were acquired during the AFM stimulation experiment at 10 time points. The movie is presented at 2 frames/sec. Image size is 91 x 91 μm .

Keywords: actin, spinning-disk confocal microscopy, atomic force microscopy, mechanical stimulation