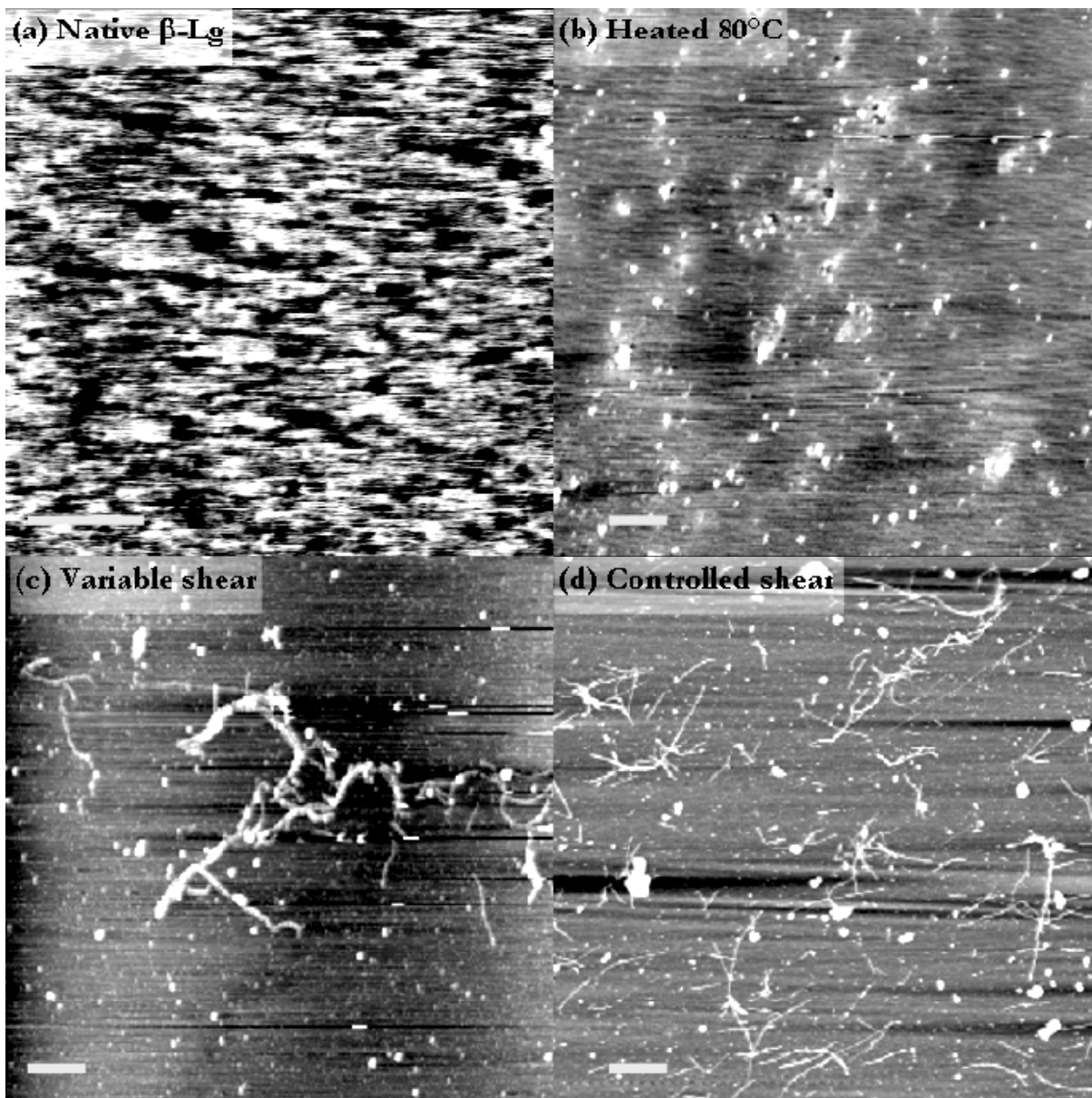


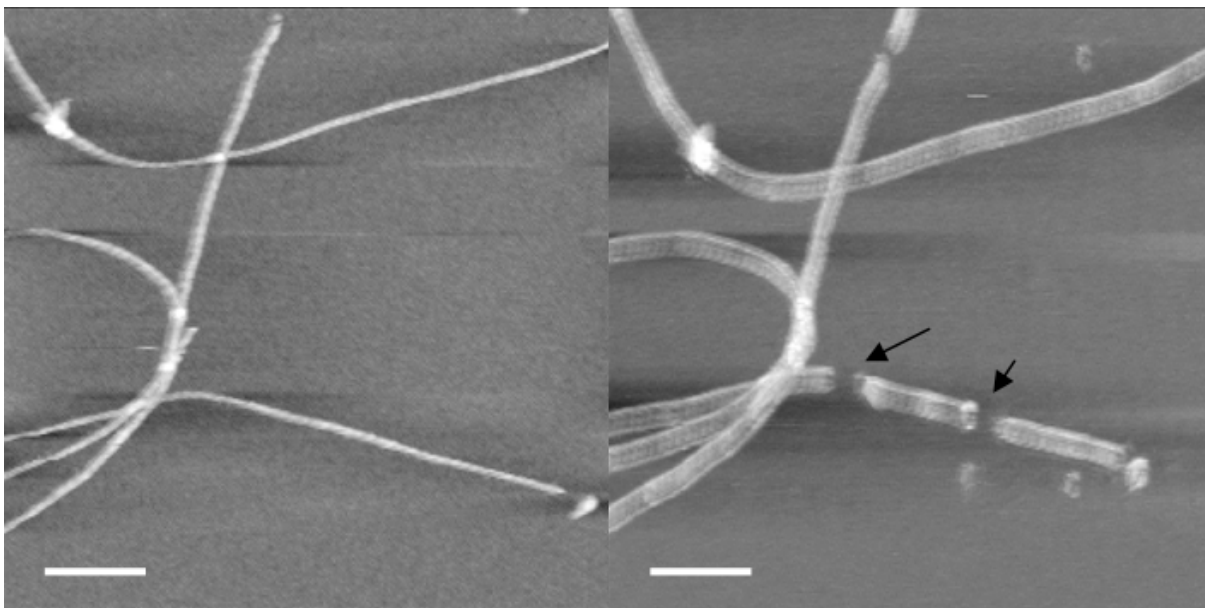
Supplementary Figure 1.

Tapping-mode AFM topographical (height) images of β -Lg in air at 20°C prepared under various conditions, then dried onto mica (a) deposited from solution at 20°C. (b) Heated at 80°C then deposited at 20°C. (c) Sheared with a magnetic stirrer bar at 80°C. (d) Sheared between concentric cylinders at 20°C. The scale bars represents 1 μm .



Supplementary Figure 2.

AFM topographical (height) images of 5 nm high β -Lg amyloid fibrils before (a) and after (b) mechanical manipulation; arrows indicate damage to the fibrils at the positions where measurements took place. Scale bars represent 500 nm.



Supplementary Figure 3.

Schematic depicting (a) an AFM tip stretching a single protein chain from within an amyloid fibril, and (b) an AFM tip ‘unzipping’ a β -sheet from the edge of an amyloid fibril (figures not to scale). The event depicted in (a) results in force curves with a single force peak; the event depicted in (b) results in a plateau force trace.

