Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: In situ bending deformation of an Au ligament, recorded at a rate of 30 frames

per second and played at 5x speed.

File Name: Supplementary Movie 2

Description: Fast dislocation climb at the final stage of deformation, recorded at a rate of 30

frames per second and played at 0.2x speed.

File Name: Supplementary Movie 3

Description: Positive dislocation climb with the evolution of dislocation core, recorded at a

rate of 30 frames per second and played at 0.125x speed.

File Name: Supplementary Movie 4

Description: Negative dislocation climb with the evolution of dislocation core, recorded at a

rate of 30 frames per second and played at 0.2x speed.

File Name: Supplementary Movie 5

Description: Another example of positive dislocation climb and the evolution of dislocation

core, recorded at a rate of 30 frames per second and played at 0.125x speed.