Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Deformation reversal of aligned LCN₁(20,120), LCN₁(40,120), LCN₁(60,120) actuators during cooling processes, and reversible deformation reversal recorded in one cooling/heating cycle for LCN₁(20,120).

File Name: Supplementary Movie 2

Description: Deformation reversal of aligned LCN₂(540%,400%), LCN₂(700%,400%) and

LCN₂(1000%,400%) actuators during cooling.

File Name: Supplementary Movie 3

Description: Twisting-untwisting bidirectional deformation of a -45° aligned LCN₁(60,120) actuator

during cooling.

File Name: Supplementary Movie 4

Description: Unwinding-winding bidirectional deformation of a +45° aligned LCN actuator during

cooling.

File Name: Supplementary Movie 5

Description: Light-induced deformation reversal behavior of polydopamine(PDA)-coated LCN

actuators: PDA-coated LCN₁(20,120) and LCN₂(1000%,400%) actuators.

File Name: Supplementary Movie 6

Description: Light-driven micro-walker of polydopamine-coated LCN₁(20,120).

File Name: Supplementary Movie 7

Description: Light-driven shape change and locomotion of a wave-shaped deformation-reversal

actuator.

File Name: Supplementary Movie 8

Description: Light-driven multimodal locomotion of a single deformation-reversal actuator upon

different light irradiation patterns: locomotion mode I, II and III.

File Name: Supplementary Movie 9

Description: Light-driven multimodal locomotion of a single deformation-reversal actuator upon

different light irradiation patterns: locomotion mode IV and V.