

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: A side view of the actuation motions of BLCE1002, BLCE796 and BLCE512 films with one end fixed, under the stimulation of 980, 808 and 520 nm light respectively.

File Name: Supplementary Movie 2

Description: A side view of the shape deformations of TLCE film under the stimulation of 808 and 980 nm NIR light respectively.

File Name: Supplementary Movie 3

Description: A top view of the actuation motions of a two-way switch under the control of 808 and 980 nm NIR light

File Name: Supplementary Movie 4

Description: A side and top view of a TLCE-based dual-motion-mode shape morpher under the control of 808 and 980 nm NIR light.

File Name: Supplementary Movie 5

Description: "A side and top view of a two-way walker moving left and right upon on-off irradiation of 808 and 980 nm NIR light.

File Name: Supplementary Movie 6

Description: A top view of a multi-directional walker robot moving forward, backward, left and right upon on-off irradiation of 808, 980 and 520 nm light.

File Name: Supplementary Movie 7

Description: A top view of a walker robot realizing parallel parking upon on-off irradiation of 808, 520 and 980 nm light.