

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Pneumatic actuation of the spherical actuator, Pneu-net actuator, and petal-like actuator.

File Name: Supplementary Movie 2

Description: Load-bearing performance of the petal-like actuator under pneumatic actuation.

File Name: Supplementary Movie 3

Description: Grasping of an egg yolk and a solid object by the assembled Pneu-net gripper.

File Name: Supplementary Movie 4

Description: Amphibious locomotion of the walker during transition from an underwater environment to air.

File Name: Supplementary Movie 5

Description: Peristaltic locomotion of the worm-like robot in a confined fluid-containing tube.

File Name: Supplementary Movie 6

Description: Payload transport by the worm-like robot in a confined fluid-containing tube.