

Description of Additional Supplementary Files

File name: Supplementary Movie 1

Description: The motion of a living beetle was recorded via a traditional camera and a μ -CE camera. To shorten the playback time, videos of the motion process are played 3 times faster.

File name: Supplementary Movie 2

Description: A paramecium motion video was recorded by the μ -CE camera, and the real-time trajectory reconstruction is performed at a rate of 24 frames per second.