

Description of Additional Supplementary Files

Title: Supplementary Movie 1

Description: Vertical, directional, and obstacle jump on the water surface.

This video shows the jumping robots designed with a high Weber number ($We = 131$) overcoming the obstacle (height = 220 mm), jumping up to 545 mm in the vertical direction, and jumping forward 556 mm in the lateral direction.

Title: Supplementary Movie 2

Description: Comparison of jumping robots with various Weber numbers

This video shows the difference in jumping performance and sequences during take-off of jumping robots with different Weber numbers. The robots are designed to have a specific range of Weber numbers ($1 < We < 10$, $10 < We < 100$, $100 < We$) through the shape of the legs and the size of the robots.