

## **Description of Additional Supplementary Files**

**File Name:** Supplementary Movie 1

**Description:** Demonstration of the mechanically actuated spheroidal, saddle, and cylindrical shape.

**File Name:** Supplementary Movie 2

**Description:** Demonstration of sequential snapping of the discrete ribbons in the circular precursor with attached magnetic polymers subject to a uniaxial tension ( $\times 1/8$  speed).

**File Name:** Supplementary Movie 3

**Description:** Demonstration of the kirigami gripper grasping various objects.