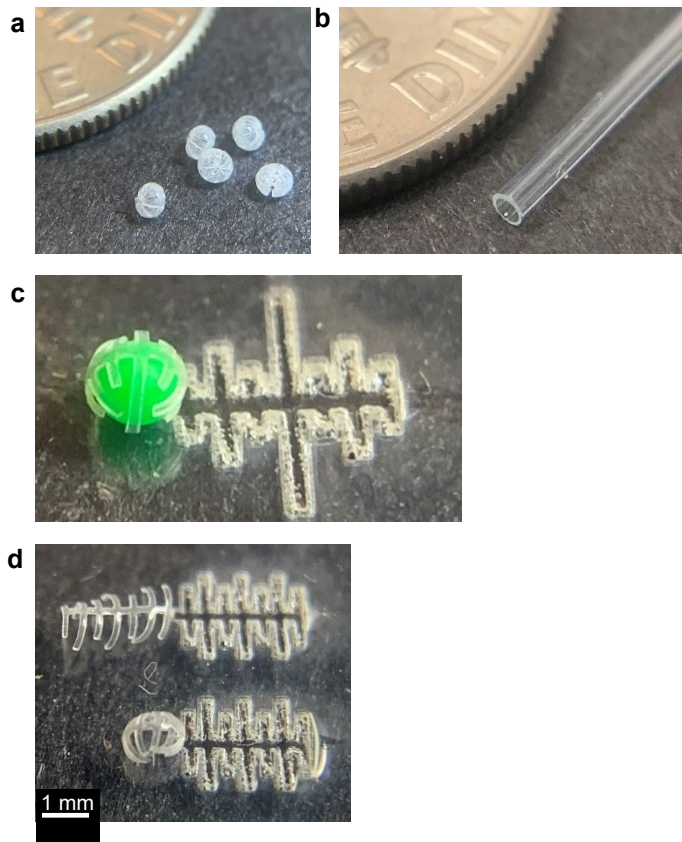


**Supplementary Figure S1. Cross-sectional view of laser engraver cutting profile. The cut-width (kerf) is about 100 μm. The cut-depth is about 70 μm.**



**Supplementary Figure S2. a), b), c) Self-folding 3D microstructures after being stored in air for 11 months. No sign of deformation can be observed. d) The self-folding film was produced 12 months ago. The bottom pattern was engraved and released about 11 months ago, retaining its original shape. The top pattern was engraved about 11 months ago and released a week ago, demonstrating a loss of self folding behavior due to stress relaxation**