We have edited the fourth image in the last row. We thank the reviewer for this attention to detail.

2. “Figure 2. I suggest switching the order of rolled sheet and saddle in this image. The reason is Figure 1 has the order of saddle then rolled sheet. When the authors introduce figure 2 in the main text, the order is also saddle first. So for the first time I read figure 2, I got confused of the arrangement of the pink and green polymer because I did not catch that the order is switched in the figure.”

We have switched the order in Figure 2 according to the reviewer’s helpful advice.

3. “Page 4. Line 2, should be “i.e. delta=d-h=0” right? because you are saying d=h here.”

Yes, we have addressed this typo. We are grateful to the referee for their careful reading.

Responses to Reviewer 2

Comments to the Author:
“A truly remarkable manuscript. It has it all, great results, great illustrations and very well written/rationalized. This is top-notch work and it should be published as is.
The reported table-top experiments are helpful in rationalizing the underlying mechanics of shape morphing; differential growth or else shape-shifting metamaterials. It is timely and will be of interest to a broad readership. The study is carefully lead from start to finish, and goes way beyond the observations made in Fig1. I particularly enjoyed the clever use of the instron to get the force-displacement curves in Fig4b. To satisfy my own curiosity I was wondering if the authors had a sense as to why the bumps from i to ii is sharper than the next. Is that related to friction?”

Author’s Response: We thank the reviewer for the assessment of our work. We believe the decreasing sharpness in the transitions in Fig.4b are due to the decrease in (effective) stiffness as confinement is reduced. We have added this observation to the text in Section 2, paragraph 2 (page 4). It reads:

The slope of the force-displacement curves through these transitions appears to gradually decrease, pointing to a diminishing effective stiffness as δ increases.

Shells are sensitive to initial conditions: for a shell of $R = 30$ and $r \approx 10$ ($\ell_p \approx 3$) that is initially off-center, the effect on $\delta_c$ is on the order of the offset. If the offset is large enough, the wavenumber at $\delta = 0$ decreases (red curve).