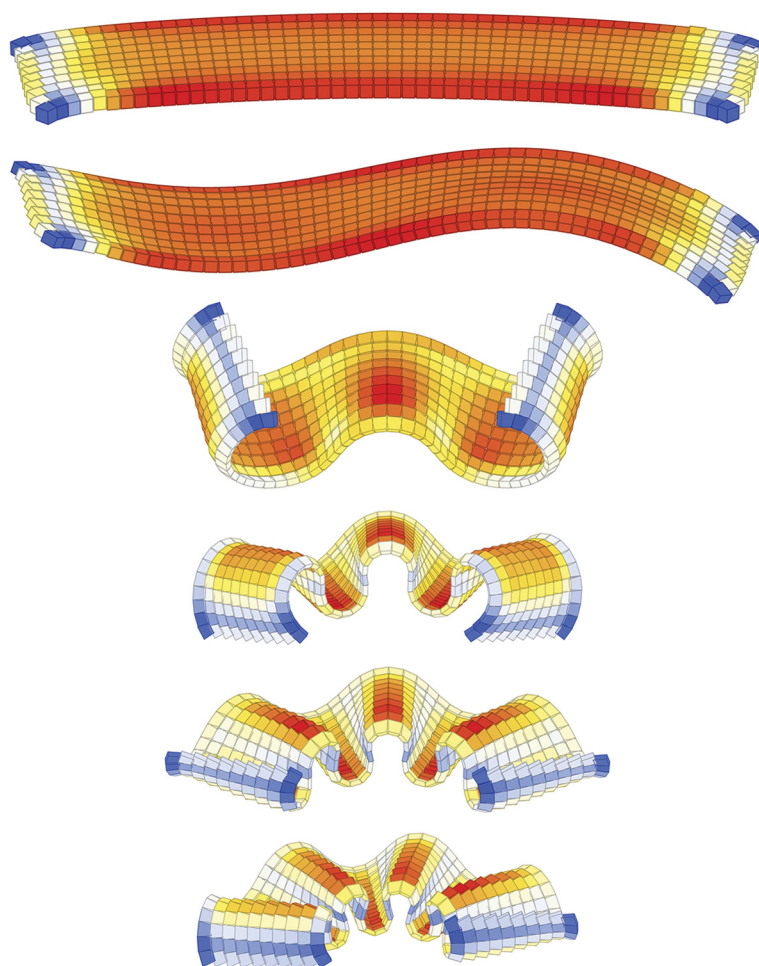




Showcasing research from Professor Greg Grason's laboratory, Department of Polymer Science & Engineering, University of Massachusetts, Amherst, Massachusetts, USA.

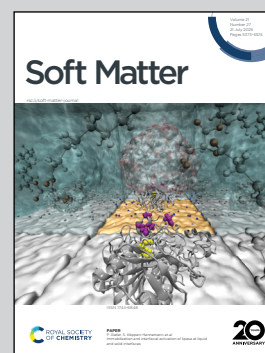
Self-limiting states of polar misfits: frustrated assembly of warped-jigsaw particles

Simulated ground-state morphologies of the “warped-jigsaw” particle assembly model showing how local properties of frustrated particle shape and interaction propagate to well-defined features at the multi-particle scale. Local particle misfits in the form of preferred in-plane row curvature in 2D lattice assembly give rise to gradients of internal-stress that trigger complex morphological responses, such as emergent mesoscopic polarity, self-limiting domain sizes and instabilities to complex 3D equilibria.

Image reproduced by permission of Gregory M. Grason and Michael Wang from *Soft Matter*, 2025, **21**, 5423.

Image credit: Michael Wang

As featured in:



See Michael Wang and Gregory M. Grason, *Soft Matter*, 2025, **21**, 5423.