miura folds

yoshimaru origami

bellows folds

paper cylinders

rigid paper cylinders

origami flasher by Jeremy Shafer

origami inspired deployable solar array

<http://www2.eng.cam.ac.uk/~sdg/preprint/inflatable.pdf>

The use of origami fold patterns is a promising approach for storing inflatable cylinders.

Advantages include compact stowage, good ventability, potential for straight deployment, and suitability for rapid deployment due to the open cross-section. Furthermore, the plastic deformation along the fold lines provides a resistive force during inflation. Challenges include accurate folding of the booms, the design of a transition from the fold pattern to a fixed connection, and quantifying the reduced strength after deployment due to residual creases and micro-cracking at the fold lines.