Mini symposium (MS01)

Mechanics of composite origami structures

Organizer:
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Description:
The lightweight composite structures are highly praised for their high specific stiffness, strength, and multifunctional design ability. Smart origami composite structures have broad application prospects in the fields of deformable structures, space-foldable and deployable structures, flexible robots, energy absorption devices, and other intelligent structures. Innovative design strategies can overcome the non-folding defects of rigid composites so that they become foldable, deployable, and deformable. This mini symposium focuses on the mechanics of composite origami structures by means of theory, simulation, and experiment. Topics of interest include, but are not limited to:

- Design and characteristics of ultra-light and high-strength composite origami structures.
- Energy absorption characteristics of composite origami structures.
- Large deformation behavior of composite origami structures.
- Recoverable deformation of composite origami structures.
- Design and microwave absorption of composite origami structures.
- Design and thermal management of composite origami structures.