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A Folding Analysis Method for Origami Based on the Frame with Kinematic Indeterminacy

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Highlights:

- A kinematic analysis method for tracing the folding process of origami in a three-dimensional space
- Directly control the nodal coordinates by external force on the vertices
- An improved type of bar and hinge unit for origami models, demonstrated to be efficient in numerical analysis
- Folding simulation of diverse numerical origami models in the same framework with concise explanations

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