

## JOURNAL PUBLICATIONS

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(\* Contributed equally)

1. **Xiangxin Dang**, Shujia Chen, Ali Elias Acha, Lei Wu, Damiano Pasini, “Shape and topology morphing of closed surfaces integrating origami and kirigami,” *Science Advances*: In press.
2. Tuo Zhao\*, **Xiangxin Dang\***, Konstantinos Manos, Shixi Zang, Jyotirmoy Mandal, Minjie Chen, Glaucio H. Paulino, “Super-modular chiral origami metamaterials,” *Nature*: In press.
3. **Xiangxin Dang**, Stefano Gonella, Glaucio H. Paulino, “Folding a single high-genus surface into a repertoire of metamaterial functionalities,” *Proceedings of the National Academy of Sciences* **121**(46): e2413370121, 2024.
4. **Xiangxin Dang**, Glaucio H. Paulino, “Axisymmetric blockfold origami: a non-flat-foldable Miura variant with self-locking mechanisms and enhanced stiffness,” *Proceedings of the Royal Society A* **480**: 20230956, 2024. [\[Cover Image\]](#)
5. **Xiangxin Dang**, Lu Lu, Huiling Duan, Jianxiang Wang, “Deployment kinematics of axisymmetric Miura origami: Unit cells, tessellations, and stacked metamaterials,” *International Journal of Mechanical Sciences* **232**: 107615, 2022.
6. **Xiangxin Dang**, Fan Feng, Huiling Duan, Jianxiang Wang, “Theorem on the compatibility of spherical kirigami tessellations,” *Physical Review Letters* **128**: 035501, 2022.
7. Lu Lu, **Xiangxin Dang**, Fan Feng, Pengyu Lv, Huiling Duan, “Conical Kresling origami and its applications to curvature and energy programming,” *Proceedings of the Royal Society A* **478**: 20210712, 2022.
8. **Xiangxin Dang**, Fan Feng, Paul Plucinsky, Richard D. James, Huiling Duan, Jianxiang Wang, “Inverse design of deployable origami structures that approximate a general surface,” *International Journal of Solids and Structures* **234–235**: 111224, 2022.
9. **Xiangxin Dang**, Fan Feng, Huiling Duan, Jianxiang Wang, “Theorem for the design of deployable kirigami tessellations with different topologies,” *Physical Review E* **104**: 055006, 2021.
10. Zexiang Li, **Xiangxin Dang**, Pengyu Lv, Huiling Duan, “Blowing-only opposition control: Characteristics of turbulent drag reduction and implementation by deep learning,” *AIP Advances* **11**(3): 035016, 2021.
11. Fan Feng, **Xiangxin Dang**, Richard D. James, Paul Plucinsky, “The designs and deformations of rigidly and flat-foldable quadrilateral mesh origami,” *Journal of the Mechanics and Physics of Solids* **142**: 104018, 2020.
12. **Xiangxin Dang**, Yingjie Liu, Linjuan Wang, Jianxiang Wang, “Solutions of the elastic fields in a half-plane region containing multiple inhomogeneities with the equivalent inclusion method and the applications to properties of composites,” *Acta Mechanica* **230**: 1529–1547, 2019.