

Ke Liu

List of Publications by Year in descending order

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papers

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times ranked

1049
citing authors

#	ARTICLE	IF	CITATIONS
1	Active compliant mechanisms for optimized actuation by LCE-based artificial muscles. <i>Mechanics of Materials</i> , 2024, 189, 104879.	3.7	2
2	Topology optimization of irregular multiscale structures with tunable responses using a virtual growth rule. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2024, 425, 116864.	7.2	8
3	Knotted Artificial Muscles for Bio-Inspired Mimetic Actuation under Deepwater. <i>Advanced Materials</i> , 2024, 36, .	24.7	8
4	Modulate stress distribution with bio-inspired irregular architected materials towards optimal tissue support. <i>Nature Communications</i> , 2024, 15, .	14.1	10
5	Origami engineering. <i>Nature Reviews Methods Primers</i> , 2024, 4, .	25.3	13
6	Shape optimization of non-rigid origami leading to emerging bistability. <i>Mechanics Research Communications</i> , 2023, 132, 104165.	2.1	3
7	Mechanical cloak via data-driven aperiodic metamaterial design. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.7	47
8	Experimental realization of tunable Poisson's ratio in deployable origami metamaterials. <i>Extreme Mechanics Letters</i> , 2022, 53, 101685.	4.2	38
9	Triclinic Metamaterials by Tristable Origami with Reprogrammable Frustration. <i>Advanced Materials</i> , 2022, 34, .	24.7	27
10	Growth rules for irregular architected materials with programmable properties. <i>Science</i> , 2022, 377, 975-981.	38.2	57
11	Reprogrammable Kinematic Branches in Tessellated Origami Structures. <i>Journal of Mechanisms and Robotics</i> , 2021, 13, .	2.9	18
12	Robotic surfaces with reversible, spatiotemporal control for shape morphing and object manipulation. <i>Science Robotics</i> , 2021, 6, .	19.8	97
13	Bio-Inspired Origami Metamaterials With Metastable Phases Through Mechanical Phase Transitions. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2021, 88, .	2.5	16
14	Big influence of small random imperfections in origami-based metamaterials. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2020, 476, .	2.3	24
15	Kinematics of the Morph Origami Pattern and its Hybrid States. , 2020, , .		0
16	Invariant and smooth limit of discrete geometry folded from bistable origami leading to multistable metasurfaces. <i>Nature Communications</i> , 2019, 10, .	14.1	84
17	Tensegrity topology optimization by force maximization on arbitrary ground structures. <i>Structural and Multidisciplinary Optimization</i> , 2019, 59, 2041-2062.	3.6	30
18	Unraveling tensegrity tessellations for metamaterials with tunable stiffness and bandgaps. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 131, 147-166.	5.6	50

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19	Geometric Mechanics of Origami Patterns Exhibiting Poisson's Ratio Switch by Breaking Mountain and Valley Assignment. <i>Physical Review Letters</i> , 2019, 122, .	7.8	90
20	Integrated Origami-String System. , 2019, , .		1
21	Bar and hinge models for scalable analysis of origami. <i>International Journal of Solids and Structures</i> , 2017, 124, 26-45.	2.9	214
22	Programmable Deployment of Tensegrity Structures by Stimulus-Responsive Polymers. <i>Scientific Reports</i> , 2017, 7, .	3.7	83
23	Reliability-based topology optimization using a new method for sensitivity approximation - application to ground structures. <i>Structural and Multidisciplinary Optimization</i> , 2016, 54, 553-571.	3.6	25
24	Segmental multi-point linearization for parameter sensitivity approximation in reliability analysis. <i>Structural Safety</i> , 2016, 62, 101-115.	6.2	17