Ke Liu

List of Publications by Year
in descending order

17 papers	651 citations	687363 13 h-index	996975 15 g-index
17 all docs	17 docs citations	17 times ranked	563 citing authors

#	Article	IF	Citations
1	Mechanical cloak via data-driven aperiodic metamaterial design. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2122185119.	7.1	27
2	Experimental realization of tunable Poisson's ratio in deployable origami metamaterials. Extreme Mechanics Letters, 2022, 53, 101685.	4.1	19
3	Triclinic Metamaterials by Tristable Origami with Reprogrammable Frustration. Advanced Materials, 2022, 34, .	21.0	14
4	Reprogrammable Kinematic Branches in Tessellated Origami Structures. Journal of Mechanisms and Robotics, 2021, 13, .	2.2	12
5	Robotic surfaces with reversible, spatiotemporal control for shape morphing and object manipulation. Science Robotics, 2021, 6, .	17.6	70
6	Bio-Inspired Origami Metamaterials With Metastable Phases Through Mechanical Phase Transitions. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	8
7	Big influence of small random imperfections in origami-based metamaterials. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, .	2.1	20
8	Kinematics of the Morph Origami Pattern and its Hybrid States. , 2020, , .		0
9	Invariant and smooth limit of discrete geometry folded from bistable origami leading to multistable metasurfaces. Nature Communications, 2019, 10, 4238.	12.8	65
10	Tensegrity topology optimization by force maximization on arbitrary ground structures. Structural and Multidisciplinary Optimization, 2019, 59, 2041-2062.	3.5	26
11	Unraveling tensegrity tessellations for metamaterials with tunable stiffness and bandgaps. Journal of the Mechanics and Physics of Solids, 2019, 131, 147-166.	4.8	40
12	Geometric Mechanics of Origami Patterns Exhibiting Poisson's Ratio Switch by Breaking Mountain and Valley Assignment. Physical Review Letters, 2019, 122, 155501.	7.8	68
13	Integrated Origami-String System. , 2019, , .		1
14	Bar and hinge models for scalable analysis of origami. International Journal of Solids and Structures, 2017, 124, 26-45.	2.7	169
15	Programmable Deployment of Tensegrity Structures by Stimulus-Responsive Polymers. Scientific Reports, 2017, 7, 3511.	3.3	72
16	Reliability-based topology optimization using a new method for sensitivity approximation - application to ground structures. Structural and Multidisciplinary Optimization, 2016, 54, 553-571.	3.5	24
17	Segmental multi-point linearization for parameter sensitivity approximation in reliability analysis. Structural Safety, 2016, 62, 101-115.	5.3	16