

Yan Chen

List of Publications by Year in descending order

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83
papers

2,922
citations

184648

27
h-index

170870

51
g-index

91
all docs

91
docs citations

91
times ranked

1385
citing authors

#	ARTICLE	IF	CITATIONS
1	Sarrus-inspired deployable polyhedral mechanisms. <i>Mechanism and Machine Theory</i> , 2024, 193, 105564.	4.7	2
2	Mountain-valley crease reconfiguration of 4-crease origami vertices and tessellations. <i>International Journal of Mechanical Sciences</i> , 2024, 273, 109224.	6.8	1
3	The rigid and flat-foldable kirigami cubes. <i>International Journal of Mechanical Sciences</i> , 2024, , 109605.	6.8	0
4	An origami metamaterial with distinct mechanical properties in three orthotropic directions. <i>International Journal of Mechanical Sciences</i> , 2024, 283, 109713.	6.8	0
5	Programming the mechanical properties of double-corrugated metamaterials by varying mountain-valley assignments. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2024, 382, .	3.5	0
6	Programming curvatures by unfolding of the triangular Resch pattern. <i>International Journal of Mechanical Sciences</i> , 2023, 238, 107861.	6.8	4
7	Thick-panel origami-based parabolic cylindrical antenna. <i>Mechanism and Machine Theory</i> , 2023, 182, 105233.	4.7	15
8	Deployable origami polyhedrons with one-DOF radial motion. <i>Mechanism and Machine Theory</i> , 2023, 184, 105293.	4.7	9
9	Engineering zero modes in transformable mechanical metamaterials. <i>Nature Communications</i> , 2023, 14, .	13.0	29
10	Design and deformation analysis of an inflatable metallic cylinder based on the Kresling origami pattern. <i>Thin-Walled Structures</i> , 2023, 188, 110859.	5.3	13
11	Multi- π Stability of the Extensible Origami Structures. <i>Advanced Science</i> , 2023, 10, .	12.3	7
12	Linkage-based three-dimensional kinematic metamaterials with programmable constant Poisson's ratio. <i>Materials and Design</i> , 2023, 233, 112249.	7.1	8
13	A transformable anisotropic 3D penta-mode metamaterial. <i>Materials and Design</i> , 2023, 234, 112306.	7.1	4
14	Design of Single Degree-of-Freedom Triangular Resch Patterns with Thick-panel Origami. <i>Mechanism and Machine Theory</i> , 2022, 169, 104650.	4.7	13
15	3D Programmable Metamaterials Based on Reconfigurable Mechanism Modules. <i>Advanced Functional Materials</i> , 2022, 32, 2109865.	16.3	21
16	A 3D modular meta-structure with continuous mechanism motion and bistability. <i>Extreme Mechanics Letters</i> , 2022, 51, 101584.	4.1	5
17	Geometric design, deformation mode, and energy absorption of patterned thin-walled structures. <i>Mechanics of Materials</i> , 2022, 168, 104269.	3.3	48
18	One-DOF Origami Boxes with Rigid and Flat Foldability. <i>Mechanisms and Machine Science</i> , 2022, , 80-88.	0.0	2

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19	Folding arrays of uniform-thickness panels to compact bundles with a single degree of freedom. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2022, 478, .	2.1	14
20	A Humidity-Powered Soft Robot with Fast Rolling Locomotion. <i>Research</i> , 2022, 2022, .	5.8	21
21	The Tessellation Rule and Properties Programming of Origami Metasheets Built with a Mixture of Rigid and Non-Rigid Square-Twist Patterns. <i>Engineering</i> , 2022, 17, 82-92.	7.3	10
22	Deformation characteristics and mechanical properties tuning of a non-rigid square-twist origami structure with rotational symmetry. <i>Thin-Walled Structures</i> , 2022, 179, 109570.	5.3	12
23	Theoretical characterization of a non-rigid-foldable square-twist origami for property programmability. <i>International Journal of Mechanical Sciences</i> , 2021, 189, 105981.	6.8	29
24	A multi-area fatigue damage model of composite honeycomb sandwich panels under three-point bending load. <i>Composite Structures</i> , 2021, 261, 113603.	5.9	12
25	A theoretical design of a bellow-shaped statically balanced compliant mechanism. <i>Mechanism and Machine Theory</i> , 2021, 161, 104295.	4.7	3
26	Energy absorption of sandwich structures with a kirigami-inspired pyramid foldcore under quasi-static compression and shear. <i>Materials and Design</i> , 2021, 206, 109808.	7.1	21
27	Compliant curved-crease origami-inspired metamaterials with a programmable force-displacement response. <i>Materials and Design</i> , 2021, 207, 109859.	7.1	18
28	Thick-panel Origami Cube. <i>Mechanism and Machine Theory</i> , 2021, 164, 104411.	4.7	25
29	Deployable Structures: Structural Design and Static/Dynamic Analysis. <i>Journal of Elasticity</i> , 2021, 146, 199-235.	1.9	40
30	Programmable stiffness and shape modulation in origami materials: Emergence of a distant actuation feature. <i>Applied Materials Today</i> , 2020, 19, 100537.	4.4	52
31	Mobile assembly of two Bennett linkages and its application to transformation between cuboctahedron and octahedron. <i>Mechanism and Machine Theory</i> , 2020, 145, 103698.	4.7	16
32	Origami cubes with one-DOF rigid and flat foldability. <i>International Journal of Solids and Structures</i> , 2020, 207, 250-261.	2.7	15
33	A double spherical 6R linkage with spatial crank-rocker characteristics inspired by kirigami. <i>Mechanism and Machine Theory</i> , 2020, 153, 103995.	4.7	7
34	Helical structures with switchable and hierarchical chirality. <i>Applied Physics Letters</i> , 2020, 116, .	3.2	8
35	Rigid foldability and mountain-valley crease assignments of square-twist origami pattern. <i>Mechanism and Machine Theory</i> , 2020, 152, 103947.	4.7	33
36	The behavior of a functionally graded origami structure subjected to quasi-static compression. <i>Materials and Design</i> , 2020, 189, 108494.	7.1	58

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37	Foldable Hexagonal Structures Based on the Threefold-Symmetric Bricard Linkage. <i>Journal of Mechanisms and Robotics</i> , 2020, 12, .	2.3	9
38	Folding of Tubular Waterbomb. <i>Research</i> , 2020, 2020, 1735081.	5.8	31
39	A plane linkage and its tessellation for deployable structure. <i>Mechanism and Machine Theory</i> , 2019, 142, 103605.	4.7	12
40	Mobile assemblies of four-spherical-4R-integrated linkages and the associated four-crease-integrated rigid origami patterns. <i>Mechanism and Machine Theory</i> , 2019, 142, 103613.	4.7	22
41	Quasi-static large deformation compressive behaviour of origami-based metamaterials. <i>International Journal of Mechanical Sciences</i> , 2019, 153-154, 194-207.	6.8	98
42	Vertex-Splitting on a Diamond Origami Pattern. <i>Journal of Mechanisms and Robotics</i> , 2019, 11, .	2.3	21
43	Elastic buckling shape control of thin-walled cylinder using pre-embedded curved-crease origami patterns. <i>International Journal of Mechanical Sciences</i> , 2019, 151, 322-330.	6.8	43
44	Quasi-static axial crushing of hexagonal origami crash boxes as energy absorption devices. <i>Mechanical Sciences</i> , 2019, 10, 133-143.	1.0	42
45	Transformation of polyhedrons. <i>International Journal of Solids and Structures</i> , 2018, 138, 193-204.	2.7	21
46	Mobile assemblies of Bennett linkages from four-crease origami patterns. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2018, 474, 20170621.	2.1	9
47	An origami-inspired structure with graded stiffness. <i>International Journal of Mechanical Sciences</i> , 2018, 136, 134-142.	6.8	144
48	Gait analysis and control of a deployable robot. <i>Mechanism and Machine Theory</i> , 2018, 120, 107-119.	4.7	17
49	One-DOF transformation between tetrahedron and truncated tetrahedron. <i>Mechanism and Machine Theory</i> , 2018, 121, 169-183.	4.7	18
50	Peak stress relief of cross folding origami. <i>Thin-Walled Structures</i> , 2018, 123, 155-161.	5.3	7
51	Energy Absorption of Origami Crash Box: Numerical Simulation and Theoretical Analysis. , 2018, , .		3
52	Design of One-DOF Triangular Resch Pattern With Thick-Panel Origami. , 2018, , .		1
53	The diamond thick-panel origami and the corresponding mobile assemblies of plane-symmetric Bricard linkages. <i>Mechanism and Machine Theory</i> , 2018, 130, 585-604.	4.7	34
54	Twist of Tubular Mechanical Metamaterials Based on Waterbomb Origami. <i>Scientific Reports</i> , 2018, 8, 9522.	3.4	51

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55	Rigid Foldability of Generalized Triangle Twist Origami Pattern and Its Derived 6R Linkages. <i>Journal of Mechanisms and Robotics</i> , 2018, 10, .	2.3	28
56	The effect of mountain-valley folds on the rigid foldability of double corrugated pattern. <i>Mechanism and Machine Theory</i> , 2018, 128, 461-474.	4.7	25
57	An Extended Family of Rigidly Foldable Origami Tubes. <i>Journal of Mechanisms and Robotics</i> , 2017, 9, .	2.3	39
58	Kinematic study of the general plane-symmetric Bricard linkage and its bifurcation variations. <i>Mechanism and Machine Theory</i> , 2017, 116, 89-104.	4.7	52
59	Rigid-foldable tubular arches. <i>Engineering Structures</i> , 2017, 145, 246-253.	5.3	23
60	A Deployable Robot Based on the Bricard Linkage. <i>Lecture Notes in Electrical Engineering</i> , 2017, , 737-747.	0.0	3
61	Geometrically Graded Origami Tubes. , 2016, , .		1
62	One-DOF Superimposed Rigid Origami with Multiple States. <i>Scientific Reports</i> , 2016, 6, 36883.	3.4	28
63	Truss transformation method to obtain the non-overconstrained forms of 3D overconstrained linkages. <i>Mechanism and Machine Theory</i> , 2016, 102, 149-166.	4.7	24
64	Symmetric waterbomb origami. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016, 472, 20150846.	2.1	93
65	Quasi-static axial crushing of thin-walled tubes with a kite-shape rigid origami pattern: Numerical simulation. <i>Thin-Walled Structures</i> , 2016, 100, 38-47.	5.3	103
66	Deployable Prismatic Structures With Rigid Origami Patterns. <i>Journal of Mechanisms and Robotics</i> , 2016, 8, .	2.3	51
67	Axial Crushing of Thin-Walled Tubes With Kite-Shape Pattern. , 2015, , .		1
68	Deformation of the Miura-ori patterned sheet. <i>International Journal of Mechanical Sciences</i> , 2015, 99, 130-142.	6.8	121
69	Reconfigurable mechanism generated from the network of Bennett linkages. <i>Mechanism and Machine Theory</i> , 2015, 88, 49-62.	4.7	25
70	Deployable Prismatic Structures With Origami Patterns. , 2014, , .		8
71	Kinematic Study of the Original and Revised General Line-Symmetric Bricard 6R Linkages. <i>Journal of Mechanisms and Robotics</i> , 2014, 6, .	2.3	18
72	Spreading of giant liposomes on anisotropically patterned substrates. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 419, 1-6.	4.8	1

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73	A 6R linkage reconfigurable between the line-symmetric Bricard linkage and the Bennett linkage. Mechanism and Machine Theory, 2013, 70, 278-292.	4.7	41
74	Light-weight thin-walled structures with patterned windows under axial crushing. International Journal of Mechanical Sciences, 2013, 66, 239-248.	6.8	103
75	The Rigid Origami Patterns for Flat Surface. , 2013, , .		6
76	Axial crushing of thin-walled structures with origami patterns. Thin-Walled Structures, 2012, 54, 65-71.	5.3	214
77	Bifurcation of a special line and plane symmetric Bricard linkage. Mechanism and Machine Theory, 2011, 46, 515-533.	4.7	59
78	Giant liposome spreading on a silicon wall. Journal of Applied Physics, 2011, 110, 034904.	2.3	1
79	A high-dexterity low-degree-of-freedom hybrid manipulator structure for robotic lion dance. Journal of Zhejiang University: Science A, 2010, 11, 240-249.	2.4	0
80	PHENOMENOLOGICAL MODELING FOR PORE OPENING, CLOSURE AND RUPTURE OF THE GUV MEMBRANE. International Journal of Applied Mechanics, 2009, 01, 327-338.	2.2	2
81	Two-fold symmetrical 6R foldable frame and its bifurcations. International Journal of Solids and Structures, 2009, 46, 4504-4514.	2.7	70
82	Threefold-symmetric Bricard linkages for deployable structures. International Journal of Solids and Structures, 2005, 42, 2287-2301.	2.7	181
83	Motion Structures. , 0, , .		25