

# Li-Yuan Zhang

## List of Publications by Year in descending order

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papers

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citations

687363

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677142

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docs citations

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times ranked

231  
citing authors

#	ARTICLE	IF	CITATIONS
1	Stiffness matrix based form-finding method of tensegrity structures. <i>Engineering Structures</i> , 2014, 58, 36-48.	5.3	96
2	Self-equilibrium and super-stability of truncated regular polyhedral tensegrity structures: a unified analytical solution. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 3323-3347.	2.1	40
3	Analytical form-finding of tensegrities using determinant of force-density matrix. <i>Composite Structures</i> , 2018, 189, 87-98.	5.8	34
4	A unified solution for self-equilibrium and super-stability of rhombic truncated regular polyhedral tensegrities. <i>International Journal of Solids and Structures</i> , 2013, 50, 234-245.	2.7	28
5	A Numerical Method for Simulating Nonlinear Mechanical Responses of Tensegrity Structures Under Large Deformations. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013, 80, .	2.2	27
6	Negative stiffness behaviors emerging in elastic instabilities of prismatic tensegrities under torsional loading. <i>International Journal of Mechanical Sciences</i> , 2015, 103, 189-198.	6.7	26
7	Truncated regular octahedral tensegrity-based mechanical metamaterial with tunable and programmable Poisson's ratio. <i>International Journal of Mechanical Sciences</i> , 2020, 167, 105285.	6.7	25
8	Automatically assembled large-scale tensegrities by truncated regular polyhedral and prismatic elementary cells. <i>Composite Structures</i> , 2018, 184, 30-40.	5.8	24
9	Multilevel structural defects-induced elastic wave tunability and localization of a tensegrity metamaterial. <i>Composites Science and Technology</i> , 2021, 207, 108740.	7.8	22
10	Constructing large-scale tensegrity structures with bar-bar connection using prismatic elementary cells. <i>Archive of Applied Mechanics</i> , 2015, 85, 383-394.	2.2	18
11	Snapping instability in prismatic tensegrities under torsion. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2016, 37, 275-288.	3.6	16
12	Bandgap characteristics of a tensegrity metamaterial chain with defects. <i>Extreme Mechanics Letters</i> , 2020, 36, 100668.	4.1	14
13	Bulge test method for measuring the hyperelastic parameters of soft membranes. <i>Acta Mechanica</i> , 2017, 228, 4187-4197.	2.1	13
14	Why are isolated and collective cells greatly different in stiffness?. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 147, 104280.	4.8	13
15	Stress-driven cell extrusion can maintain homeostatic cell density in response to overcrowding. <i>Soft Matter</i> , 2019, 15, 8441-8449.	2.7	10
16	Chirality Induced by Structural Transformation in a Tensegrity: Theory and Experiment. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2016, 83, .	2.2	9
17	Analytical Form-Finding for Highly Symmetric and Super-Stable Configurations of Rhombic Truncated Regular Polyhedral Tensegrities. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2019, 86, .	2.2	9
18	Dynamics-based optimization of rolling schedule aiming at dual goals of chatter suppression and speed increase for a 5-stand cold tandem rolling mill. <i>Journal of Iron and Steel Research International</i> , 2021, 28, 168-180.	2.8	9

#	ARTICLE	IF	CITATIONS
19	Magnetoelastic Effect-Based Transmissive Stress Detection for Steel Strips: Theory and Experiment. <i>Sensors</i> , 2016, 16, 1382.	3.8	8
20	Micromechanics methods for evaluating the effective moduli of soft neo-Hookean composites. <i>Archive of Applied Mechanics</i> , 2016, 86, 219-234.	2.2	8
21	Constructing various simple polygonal tensegrities by directly or recursively adding bars. <i>Composite Structures</i> , 2020, 234, 111693.	5.8	8
22	Study of a Bimetallic Interfacial Bonding Process Based on Ultrasonic Quantitative Evaluation. <i>Metals</i> , 2018, 8, 329.	2.3	7
23	A tensegrity-based morphing module for assembling various deployable structures. <i>Mechanism and Machine Theory</i> , 2022, 173, 104870.	4.5	5
24	Self-equilibrium and super-stability of rhombic truncated regular tetrahedral and cubic tensegrities using symmetry-adapted force-density matrix method. <i>International Journal of Solids and Structures</i> , 2021, 233, 111215.	2.7	4
25	Directional snapping instability in a bistable tensegrity under uniaxial loads. <i>Composite Structures</i> , 2022, 283, 115153.	5.8	4
26	Enumeration screening method for the design of simple polygonal tensegrities. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2019, 475, 20180812.	2.1	2
27	Relations between cubic equation, stress tensor decomposition, and von Mises yield criterion. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2015, 36, 1359-1370.	3.6	1
28	Flatness evolution of cold-rolled high-strength steel strips during quenching process. <i>Advances in Mechanical Engineering</i> , 2017, 9, 168781401774823.	1.6	1
29	How to Realize Volume Conservation During Finite Plastic Deformation. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017, 84, .	2.2	0