Xiao-ting He

List of Publications by Year
in descending order

67 papers	872 citations	471509 17 h-index	580821 25 g-index
67 all docs	67 docs citations	67 times ranked	330 citing authors

#	Article	IF	Citations
1	Convergence analysis of a finite element method based on different moduli in tension and compression. International Journal of Solids and Structures, 2009, 46, 3734-3740.	2.7	67
2	A review on the research of mechanical problems with different moduli in tension and compression. Journal of Mechanical Science and Technology, 2010, 24, 1845-1854.	1.5	67
3	Stochastic nonlinear vibration and reliability of orthotropic membrane structure under impact load. Thin-Walled Structures, 2017, 119, 247-255.	5.3	40
4	Applying the equivalent section method to solve beam subjected to lateral force and bending-compression column with different moduli. International Journal of Mechanical Sciences, 2007, 49, 919-924.	6.7	31
5	Application of the Kirchhoff hypothesis to bending thin plates with different moduli in tension and compression. Journal of Mechanics of Materials and Structures, 2010, 5, 755-769.	0.6	29
6	A theoretical study of a clamped punch-loaded blister configuration: The quantitative relation of load and deflection. International Journal of Mechanical Sciences, 2010, 52, 928-936.	6.7	28
7	General perturbation solution of large-deflection circular plate with different moduli in tension and compression under various edge conditions. International Journal of Non-Linear Mechanics, 2013, 55, 110-119.	2.6	25
8	Glycyrrhetinic acid-modified nanoparticles for drug delivery: Preparation and characterization. Science Bulletin, 2009, 54, 3121-3126.	1.7	22
9	Closed-form solution of well-known Hencky problem without small-rotation-angle assumption. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2016, 96, 1434-1441.	1.6	22
10	Nonlinear large deflection problems of beams with gradient: A biparametric perturbation method. Applied Mathematics and Computation, 2013, 219, 7493-7513.	2.2	21
11	A practical method for simultaneous determination of Poisson's ratio and Young's modulus of elasticity of thin films. Journal of Mechanical Science and Technology, 2011, 25, 3165-3171.	1.5	20
12	Large-deflection axisymmetric deformation of circular clamped plates with different moduli in tension and compression. International Journal of Mechanical Sciences, 2012, 62, 103-110.	6.7	20
13	Theoretical study of adhesion energy measurement for film/substrate interface using pressurized blister test: Energy release rate. Measurement: Journal of the International Measurement Confederation, 2013, 46, 2278-2287.	5.0	20
14	An analytical solution of bending thin plates with different moduli in tension and compression. Structural Engineering and Mechanics, 2010, 36, 363-380.	1.0	20
15	Power series solution of circular membrane under uniformly distributed loads: investigation into Hencky transformation. Structural Engineering and Mechanics, 2013, 45, 631-641.	1.0	20
16	Study on Dynamic Response of Rectangular Orthotropic Membranes Under Impact Loading. Journal of Adhesion Science and Technology, 2012, 26, 1467-1479.	2.6	19
17	Closed-form solution of elastic circular membrane with initial stress under uniformly-distributed loads: Extended Hencky solution. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2015, 95, 1335-1341.	1.6	18
18	A Theoretical Study of Thin Film Delamination Using Clamped Punch-Loaded Blister Test: Energy Release Rate and Closed-Form Solution. Journal of Adhesion Science and Technology, 2011, 25, 2063-2080.	2.6	17

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19	Simplified theory and analytical solution for functionally graded thin plates with different moduli in tension and compression. Mechanics Research Communications, 2016, 74, 72-80.	1.8	17
20	A theoretical study of an improved capacitive pressure sensor: Closed-form solution of uniformly loaded annular membranes. Measurement: Journal of the International Measurement Confederation, 2017, 111, 84-92.	5.0	17
21	An elasticity solution of functionally graded beams with different moduli in tension and compression. Mechanics of Advanced Materials and Structures, 2018, 25, 143-154.	2.6	17
22	A Revisit of the Boundary Value Problem for Föppl–Hencky Membranes: Improvement of Geometric Equations. Mathematics, 2020, 8, 631.	2.2	16
23	Application of a biparametric perturbation method to large-deflection circular plate problems with a bimodular effect under combined loads. Journal of Mathematical Analysis and Applications, 2014, 420, 48-65.	1.0	14
24	One-Dimensional and Two-Dimensional Analytical Solutions for Functionally Graded Beams with Different Moduli in Tension and Compression. Materials, 2018, 11, 830.	2.9	14
25	Theoretical study on shaft-loaded blister test technique: Synchronous characterization of surface and interfacial mechanical properties. International Journal of Adhesion and Adhesives, 2014, 51, 128-139.	2.9	13
26	Analytical Solutions for Bending Curved Beams with Different Moduli in Tension and Compression. Mechanics of Advanced Materials and Structures, 2015, 22, 325-337.	2.6	13
27	Biparametric perturbation solutions of large deflection problem of cantilever beams. Applied Mathematics and Mechanics (English Edition), 2006, 27, 453-460.	3.6	12
28	Large Displacement Analysis of Rectangular Orthotropic Membranes Under Stochastic Impact Loading. International Journal of Structural Stability and Dynamics, 2016, 16, 1640007.	2.4	11
29	Application of perturbation idea to well-known Hencky problem: A perturbation solution without small-rotation-angle assumption. Mechanics Research Communications, 2017, 83, 32-46.	1.8	11
30	A biparametric perturbation method for the Föppl–von Kármán equations of bimodular thin plates. Journal of Mathematical Analysis and Applications, 2017, 455, 1688-1705.	1.0	11
31	Theoretical Study on Synchronous Characterization of Surface and Interfacial Mechanical Properties of Thin-Film/Substrate Systems with Residual Stress Based on Pressure Blister Test Technique. Polymers, 2018, 10, 49.	4.5	11
32	Bending analysis of functionally graded curved beams with different properties in tension and compression. Archive of Applied Mechanics, 2019, 89, 1973-1994.	2.2	11
33	Vibration Analysis of Piezoelectric Cantilever Beams with Bimodular Functionally-Graded Properties. Applied Sciences (Switzerland), 2020, 10, 5557.	2.5	11
34	An electroelastic solution for functionally graded piezoelectric material beams with different moduli in tension and compression. Journal of Intelligent Material Systems and Structures, 2018, 29, 1649-1669.	2.5	10
35	A Theoretical Study on an Elastic Polymer Thin Film-Based Capacitive Wind-Pressure Sensor. Polymers, 2020, 12, 2133.	4.5	10
36	Application of Multi-Parameter Perturbation Method to Functionally-Graded, Thin, Circular Piezoelectric Plates. Mathematics, 2020, 8, 342.	2.2	10

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37	Non-Linear Bending of Functionally Graded Thin Plates with Different Moduli in Tension and Compression and Its General Perturbation Solution. Applied Sciences (Switzerland), 2018, 8, 731.	2.5	9
38	A New Solution to Well-Known Hencky Problem: Improvement of In-Plane Equilibrium Equation. Mathematics, 2020, 8, 653.	2.2	9
39	A Multi-Parameter Perturbation Solution for Functionally Graded Piezoelectric Cantilever Beams under Combined Loads. Materials, 2018, 11, 1222.	2.9	8
40	Large Deflection Analysis of Axially Symmetric Deformation of Prestressed Circular Membranes under Uniform Lateral Loads. Symmetry, 2020, 12, 1343.	2.2	8
41	One-Dimensional Theoretical Solution and Two-Dimensional Numerical Simulation for Functionally-Graded Piezoelectric Cantilever Beams with Different Properties in Tension and Compression. Polymers, 2019, 11, 1728.	4.5	7
42	Axisymmetric Large Deflection Elastic Analysis of Hollow Annular Membranes under Transverse Uniform Loading. Symmetry, 2021, 13, 1770.	2.2	7
43	NONLINEAR INSTABILITY OF DISHED SHALLOW SHELLS UNDER UNIFORMLY DISTRIBUTED LOAD. International Journal of Structural Stability and Dynamics, 2012, 12, 1250035.	2.4	6
44	Nonlinear Free Vibration Analysis of Axisymmetric Polar Orthotropic Circular Membranes under the Fixed Boundary Condition. Mathematical Problems in Engineering, 2014, 2014, 1-8.	1.1	5
45	Application of biparametric perturbation method to functionally graded thin plates with different moduli in tension and compression. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2019, 99, e201800213.	1.6	5
46	A Closed-Form Solution of Prestressed Annular Membrane Internally-Connected with Rigid Circular Plate and Transversely-Loaded by Central Shaft. Mathematics, 2020, 8, 521.	2.2	5
47	A Closed-Form Solution for the Boundary Value Problem of Gas Pressurized Circular Membranes in Contact with Frictionless Rigid Plates. Mathematics, 2020, 8, 1017.	2.2	5
48	Free Damping Vibration of Piezoelectric Cantilever Beams: A Biparametric Perturbation Solution and Its Experimental Verification. Applied Sciences (Switzerland), 2020, 10, 215.	2.5	5
49	Closed-Form Solution for Circular Membranes under In-Plane Radial Stretching or Compressing and Out-of-Plane Gas Pressure Loading. Mathematics, 2021, 9, 1238.	2.2	5
50	A Two-Dimensional Thermoelasticity Solution for Bimodular Material Beams under the Combination Action of Thermal and Mechanical Loads. Mathematics, 2021, 9, 1556.	2.2	5
51	Theoretical Study on Thermal Stresses of Metal Bars with Different Moduli in Tension and Compression. Metals, 2022, 12, 347.	2.3	5
52	One- and Two-Dimensional Analytical Solutions of Thermal Stress for Bimodular Functionally Graded Beams under Arbitrary Temperature Rise Modes. Mathematics, 2022, 10, 1756.	2.2	5
53	An Electroelastic Solution for Functionally Graded Piezoelectric Circular Plates under the Action of Combined Mechanical Loads. Materials, 2018, 11, 1168.	2.9	4
54	A Multi-Parameter Perturbation Solution and Experimental Verification for Bending Problem of Piezoelectric Cantilever Beams. Polymers, 2019, 11, 1934.	4.5	4

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55	Closed-Form Solution of a Peripherally Fixed Circular Membrane under Uniformly Distributed Transverse Loads and Deflection Restrictions. Mathematical Problems in Engineering, 2018, 2018, 1-9.	1.1	3
56	Closed-Form Solution and Experimental Verification for the Axisymmetric Deformation Problem of Blistering Circular Thin Polymer Films under Uniformly Distributed Gas Pressure. Polymers, 2020, 12, 1130.	4.5	3
57	Steady Fluidâ€"Structure Coupling Interface of Circular Membrane under Liquid Weight Loading: Closed-Form Solution for Differential-Integral Equations. Mathematics, 2021, 9, 1105.	2.2	3
58	Large Deformation Problem of Bimodular Functionally-Graded Thin Circular Plates Subjected to Transversely Uniformly-Distributed Load: Perturbation Solution without Small-Rotation-Angle Assumption. Mathematics, 2021, 9, 2317.	2.2	3
59	Large Deflection Analysis of Peripherally Fixed Circular Membranes Subjected to Liquid Weight Loading: A Refined Design Theory of Membrane Deflection-Based Rain Gauges. Materials, 2021, 14, 5992.	2.9	3
60	Revisiting the Boundary Value Problem for Uniformly Transversely Loaded Hollow Annular Membrane Structures: Improvement of the Out-of-Plane Equilibrium Equation. Mathematics, 2022, 10, 1305.	2.2	3
61	Nonlinear large deformation problem of rectangular thin plates and its perturbation solution under cylindrical bending: Transform from plate/membrane to beam/cable. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2022, 102, .	1.6	3
62	A Closed-Form Solution without Small-Rotation-Angle Assumption for Circular Membranes under Gas Pressure Loading. Mathematics, 2021, 9, 2269.	2.2	2
63	Application of Variational Method to Stability Analysis of Cantilever Vertical Plates with Bimodular Effect. Materials, 2021, 14, 6129.	2.9	2
64	A Further Theoretical Study of Capacitive Pressure Sensors Based on Thin Film Elastic Deflection and Parallel Plate Capacitor: Refined Closed-Form Solution and Numerical Calibration. Sensors, 2022, 22, 2848.	3.8	2
65	A perturbation solution of von-KÃ¡rmÃ¡n circular plates with different moduli in tension and compression under concentrated force. Mechanics of Advanced Materials and Structures, 2016, 23, 318-327.	2.6	1
66	A semi-analytical method for free vibration of semi-closed shells of revolution with variable curvature. JVC/Journal of Vibration and Control, 2023, 29, 2198-2213.	2.6	1
67	A Refined Closed-Form Solution for the Large Deflections of Alekseev-Type Annular Membranes Subjected to Uniformly Distributed Transverse Loads: Simultaneous Improvement of Out-of-Plane Equilibrium Equation and Geometric Equation. Mathematics, 2022, 10, 2121.	2.2	1