Jianlin Liu

List of Publications by Year
in descending order

82	900	471061 17	580395 25
papers	citations	h-index	g-index

90	90	90	843
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tensile fatigue behaviour and life distribution model of the pultruded fibre reinforced composites. Polymers and Polymer Composites, 2022, 30, 096739112210837.	1.0	0
2	Effect of the Water Film Rupture on the Oil Displacement by Supercritical CO₂ in the Nanopore: Molecular Dynamics Simulations. Energy & Fuels, 2022, 36, 4348-4357.	2.5	4
3	A time-dependent Yeoh model to predict the corrosion effect of supercritical CO2 on the HNBR sealing rubber. Journal of Mechanical Science and Technology, 2022, 36, 2461-2470.	0.7	4
4	Bio-inspired optimization design and fluidâ€“solid-thermal multi-field verification analysis of labyrinth seal. Materials and Design, 2022, 220, 110907.	3.3	1
5	Thermal shock fracture associated with a unified fractional heat conduction. European Journal of Mechanics, A/Solids, 2021, 85, 104129.	2.1	14
6	Fracture Prediction for an Advanced High-Strength Steel Sheet Using the Fully Coupled Elastoplastic Damage Model with Stress-State Dependence. Acta Mechanica Solida Sinica, 2021, 34, 263-273.	1.0	2
7	Enhanced CDM model accounting of stress triaxiality and Lode angle for ductile damage prediction in metal forming. International Journal of Damage Mechanics, 2021, 30, 260-282.	2.4	16
8	Effect of yield surface distortion on the failure prediction of Mg alloy sheets. Archive of Applied Mechanics, 2021, 91, 151-167.	1.2	1
9	Axisymmetric model of the sealing cylinder in service: analytical solutions. Journal of Mechanics, 2021, 37, 404-414.	0.7	6
10	Critical role of the bending stiffness of the monolayer black phosphorus in its mechanical behaviors: molecular dynamics simulation. Nanotechnology, 2021, 32, 145701.	1.3	3
11	Thin-film evolution and fingering instability of self-rewetting films flowing down an inclined plane. Physics of Fluids, 2021, 33, 022101.	1.6	7
12	Adhesion Behaviors of Abalone Under the Action of Water Flow. Frontiers in Mechanical Engineering, 2021, 7, .	0.8	3
13	Size effect on heat conduction and associate thermal fracture behavior of thin ceramic plates. Theoretical and Applied Fracture Mechanics, 2021, 113, 102951.	2.1	7
14	The coâ€effect of microstructures and mucus on the adhesion of abalone from a mechanical perspective. Biosurface and Biotribology, 2021, 7, 180-186.	0.6	6
15	A molecular dynamics simulation on the atomic mass sensor made of monolayer diamond. Nanotechnology, 2021, 32, 475501.	1.3	6
16	Effective moduli of rocks predicted by the Kusterâ€“ToksÃ¶z and Moriâ€“Tanaka models. Journal of Geophysics and Engineering, 2021, 18, 539-557.	0.7	14
17	Abnormal deformation and negative pressure of a hard magnetic disc under the action of a magnet. Sensors and Actuators A: Physical, 2021, 332, 113065.	2.0	4
18	Response mechanisms of snails to the pulling force and its potential application in vacuum suction. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 124, 104840.	1.5	3

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19	Size-dependent thermoelasticity of a finite bi-layered nanoscale plate based on nonlocal dual-phase-lag heat conduction and Eringenâ€™s nonlocal elasticity. Applied Mathematics and Mechanics (English) Tj ETQq1 1 0.784314 rgBT /Over		
20	Thermocapillary Fingering of a Gravity-Driven Self-Rewetting Fluid Film Flowing Down a Vertical Slippery Wall. Journal of Fluids Engineering, Transactions of the ASME, 2021, , .	0.8	1
21	Tension and bending of the particle raft driven by a magnet. Colloids and Interface Science Communications, 2021, 45, 100528.	2.0	6
22	Directional motion of the foam carrying oils driven by the magnetic field. Scientific Reports, 2021, 11, 21282.	1.6	3
23	Molecular Dynamics Simulation of the Effects of Methane Hydrate Phase Transition on Mechanical Properties of Deep-Sea Methane Hydrate-Bearing Soil. Advances in Civil Engineering, 2021, 2021, 1-10.	0.4	0
24	Shakedown Behavior of Yellow River Alluvial Silt Stabilized with Ligninâ€“Lime Combined Additive. Journal of Materials in Civil Engineering, 2020, 32, 04019318.	1.3	10
25	Thermal shock fracture of a crack in a functionally gradient half-space based on the memory-dependent heat conduction model. Applied Mathematical Modelling, 2020, 80, 840-858.	2.2	23
26	Oil displacement by supercritical CO2 in a water cut dead-end pore: Molecular dynamics simulation. Journal of Petroleum Science and Engineering, 2020, 188, 106899.	2.1	19
27	Non-classical hygrothermal fracture behavior of a hollow cylinder with a circumferential crack. Engineering Fracture Mechanics, 2020, 224, 106805.	2.0	11
28	A Mechanics Study on the Self-Righting of Abalone from the Substrate. Applied Bionics and Biomechanics, 2020, 2020, 1-9.	0.5	7
29	Effect of slip on the contact-line instability of a thin liquid film flowing down a cylinder. Physical Review E, 2020, 101, 053108.	0.8	7
30	Seed ejection mechanism in an Oxalis species. Scientific Reports, 2020, 10, 8855.	1.6	9
31	Adhesion and peeling of a Fugu coal molecule on a graphene substrate: molecular dynamics simulations. Science China: Physics, Mechanics and Astronomy, 2020, 63, 1.	2.0	0
32	Mechanisms Underlying the Biological Wet Adhesion: Coupled Effects of Interstitial Liquid and Contact Geometry. Journal of Bionic Engineering, 2020, 17, 448-456.	2.7	8
33	A phase field based discrete fracture model (PFDFM) for fluid flow in fractured porous media. Journal of Petroleum Science and Engineering, 2020, 191, 107191.	2.1	4
34	Wettability enhancement of hydrophobic artificial sandstones by using the pulsed microwave plasma jet. Colloids and Interface Science Communications, 2020, 36, 100266.	2.0	12
35	Surface effects on the quasi-periodical free vibration of the nanobeam: semi-analytical solution based on the residue harmonic balance method. Meccanica, 2020, 55, 989-1005.	1.2	2
36	Hygrothermoelastic response in a hollow cylinder considering dual-phase-lag heat-moisture coupling. Zeitschrift Fur Angewandte Mathematik Und Physik, 2020, 71, 1.	0.7	4

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37	Droplet impact induced large deflection of a cantilever. Physics of Fluids, 2019, 31, .	1.6	14
38	Forced vibration of a bubble spring-mass system: Nonlinear analysis and experiment. Applied Mathematical Modelling, 2019, 70, 459-470.	2.2	3
39	The mechanics of abalone crawling on sharp objects without injury. Scientific Reports, 2019, 9, 3881.	1.6	3
40	Modeling and simulation of droplet impact on elastic beams based on SPH. European Journal of Mechanics, A/Solids, 2019, 75, 237-257.	2.1	33
41	Wrinkling number and force of a particle raft in compression. European Physical Journal E, 2019, 42, 147.	0.7	7
42	Capillarity-driven migration of small objects: A critical review. European Physical Journal E, 2019, 42, 1.	0.7	45
43	Quasi-static simulation of droplet morphologies using a smoothed particle hydrodynamics multiphase model. Acta Mechanica Sinica/Lixue Xuebao, 2019, 35, 32-44.	1.5	12
44	Enhancing Sodium Bis(2-ethylhexyl) Sulfosuccinate Injectivity for CO2 Foam Formation in Low-Permeability Cores: Dissolving in CO2 with Ethanol. Energy & Fuels, 2018, 32, 5846-5856.	2.5	31
45	Jurinâ€™s law revisited: Exact meniscus shape and column height. European Physical Journal E, 2018, 41, 46.	0.7	22
46	Insights into adhesion of abalone: A mechanical approach. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 77, 331-336.	1.5	23
47	Foaming ability and stability of silica nanoparticle-based triple-phase foam for oil fire extinguishing: experimental. Soft Materials, 2018, 16, 327-338.	0.8	23
48	Nonlinear Vibration of an Elastic Soft String: Large Amplitude and Large Curvature. Mathematical Problems in Engineering, 2018, 2018, 1-11.	0.6	0
49	Hard to be killed: Load-bearing capacity of the leech Hirudo nipponia. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 86, 345-351.	1.5	14
50	Buckling and Wrinkling: Valuable Topics in Mechanics Class. Journal of Professional Issues in Engineering Education and Practice, 2018, 144, .	0.9	3
51	The load-bearing ability of a particle raft under the transverse compression of a slender rod. Soft Matter, 2017, 13, 2315-2321.	1.2	18
52	Structureâ€“property relationships of cell clusters in biotissues: 2D analysis. Physical Chemistry Chemical Physics, 2017, 19, 11603-11611.	1.3	2
53	Capillary adhesion of a circular plate to solid: Large deformation and movable boundary condition. International Journal of Mechanical Sciences, 2017, 126, 222-228.	3.6	12
54	Zero curvature-surface driven small objects. Applied Physics Letters, 2017, 111, .	1.5	7

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55	Chemical mediated elasto-capillarity of elastic sheets. Soft Matter, 2017, 13, 8048-8054.	1.2	3
56	Towards Understanding Why the Thin Membrane Transducer Deforms: Surface Stress-Induced Buckling. Acta Mechanica Solida Sinica, 2016, 29, 192-199.	1.0	7
57	Nonlinear free vibration of a cantilever nanobeam with surface effects: Semi-analytical solutions. International Journal of Mechanical Sciences, 2016, 113, 184-195.	3.6	31
58	Curvature-driven bubbles or droplets on the spiral surface. Scientific Reports, 2016, 6, 37888.	1.6	24
59	Wetting and elasto-plasticity based sculpture of liquid marbles. European Physical Journal E, 2016, 39, 17.	0.7	21
60	Near-post meniscus-induced migration and assembly of bubbles. Soft Matter, 2016, 12, 2221-2230.	1.2	15
61	Why a mosquito leg possesses superior load-bearing capacity on water: Experimentals. Acta Mechanica Sinica/Lixue Xuebao, 2016, 32, 335-341.	1.5	2
62	Meniscus-induced motion of oil droplets. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 469, 252-255.	2.3	15
63	Stability and local bifurcation of parameter-excited vibration of pipes conveying pulsating fluid under thermal loading. Applied Mathematics and Mechanics (English Edition), 2015, 36, 1017-1032.	1.9	17
64	Capillarity-induced mechanical behaviors of a polymer microtube surrounded by a droplet. AIP Advances, 2014, 4, 127128.	0.6	2
65	Biomimetic mechanics behaviors of the strider leg vertically pressing water. Applied Physics Letters, 2014, 104, .	1.5	12
66	Surface effects at the nanoscale based on Gurtinâ€™s theory: a review. Journal of the Mechanical Behavior of Materials, 2014, 23, 141-151.	0.7	5
67	Towards a Unified Route in Mechanics Based on the Second-Order Real Symmetric Tensor. International Journal of Mechanical Engineering Education, 2014, 42, 166-174.	0.6	0
68	Elastica of a pendant droplet: Analytical solution in two dimension. International Journal of Non-Linear Mechanics, 2014, 58, 184-190.	1.4	9
69	Droplet-induced deformation of a polymer microfiber. Journal of Applied Physics, 2013, 114, 044901.	1.1	4
70	Post-buckling behavior of a double-hinged rod under self-weight. Acta Mechanica Solida Sinica, 2013, 26, 197-204.	1.0	11
71	Stability analysis of kinked DNA with generalized rod model. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 47, 152-156.	1.3	3
72	Droplet-induced abnormal bending of micro-beams. Journal of Adhesion Science and Technology, 2013, 27, 1418-1431.	1.4	2

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73	The Analogy Study Method in Engineering Mechanics. International Journal of Mechanical Engineering Education, 2013, 41, 136-145.	0.6	3
74	Self-folding of a slender microbeam and thin film: an elastica model. Journal of Mechanics of Materials and Structures, 2013, 8, 169-183.	0.4	6
75	Droplet-induced anomalous deformation of a thin micro-plate. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 412, 108-119.	2.3	9
76	A new look on wetting models: continuum analysis. Science China: Physics, Mechanics and Astronomy, 2012, 55, 2158-2166.	2.0	26
77	Explicit solutions for a SWCNT collapse. Archive of Applied Mechanics, 2012, 82, 767-776.	1.2	20
78	Capillary Adhesion of Micro-beams and Plates: A Review. , 2012, , 259-276.		0
79	A New Wetting Mechanism Based upon Triple Contact Line Pinning. Langmuir, 2011, 27, 196-200.	1.6	73
80	Surface effects on the mechanical properties of nanoporous materials. Nanotechnology, 2011, 22, 265714.	1.3	43
81	Theoretical analysis on capillary adhesion of microsized plates with a substrate. Acta Mechanica Sinica/Lixue Xuebao, 2010, 26, 217-223.	1.5	23
82	Abnormal bending of micro-cantilever plate inducecd by a droplet. Acta Mechanica Solida Sinica, 2010, 23, 428-436.	1.0	7