

# Jiankun Liu

## List of Publications by Year in descending order

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Version: 2024-02-01

64  
papers

1,555  
citations

331670

21  
h-index

330143

37  
g-index

66  
all docs

66  
docs citations

66  
times ranked

946  
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of freeze-thaw cycles on mechanical properties of a silty sand. <i>Engineering Geology</i> , 2016, 210, 23-32.	6.3	179
2	Experimental Study on the Stability of Railroad Silt Subgrade with Increasing Train Speed. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2010, 136, 833-841.	3.0	119
3	Experimental study of the dynamic properties of cement- and lime-modified clay soils subjected to freeze-thaw cycles. <i>Cold Regions Science and Technology</i> , 2010, 61, 29-33.	3.5	109
4	Performance of clay soil reinforced with fibers subjected to freeze-thaw cycles. <i>Cold Regions Science and Technology</i> , 2018, 153, 18-24.	3.5	67
5	Effect of freeze-thaw cycles on triaxial strength properties of fiber-reinforced clayey soil. <i>KSCE Journal of Civil Engineering</i> , 2017, 21, 2128-2140.	1.9	60
6	Numerical modelling of anti-frost heave measures of high-speed railway subgrade in cold regions. <i>Cold Regions Science and Technology</i> , 2017, 141, 28-35.	3.5	56
7	The experiment study of frost heave characteristics and gray correlation analysis of graded crushed rock. <i>Cold Regions Science and Technology</i> , 2016, 126, 44-50.	3.5	51
8	Dynamic behavior of fiber-reinforced soil under freeze-thaw cycles. <i>Soil Dynamics and Earthquake Engineering</i> , 2017, 101, 269-284.	3.8	51
9	Thermal characteristics and declining permafrost table beneath three cooling embankments in warm permafrost regions. <i>Applied Thermal Engineering</i> , 2017, 123, 435-447.	6.0	49
10	Experimental study on the volume and strength change of an unsaturated silty clay upon freezing. <i>Cold Regions Science and Technology</i> , 2019, 157, 1-12.	3.5	47
11	Numerical studies for the thermal regime of a roadbed with insulation on permafrost. <i>Cold Regions Science and Technology</i> , 2002, 35, 1-13.	3.5	45
12	Effect of sunny-shady slopes and strike on thermal regime of subgrade along a high-speed railway in cold regions, China. <i>Engineering Geology</i> , 2018, 232, 182-191.	6.3	44
13	Experimental study on direct shear behavior of frozen soil-concrete interface. <i>Cold Regions Science and Technology</i> , 2014, 104-105, 1-6.	3.5	33
14	Experimental and modeling investigation of the thermal conductivity of fiber-reinforced soil subjected to freeze-thaw cycles. <i>Applied Thermal Engineering</i> , 2016, 108, 824-832.	6.0	33
15	The crystallization and salt expansion characteristics of a silty clay. <i>Cold Regions Science and Technology</i> , 2018, 154, 63-73.	3.5	30
16	Dynamic behavior of clay modified with polypropylene fiber under freeze-thaw cycles. <i>Transportation Geotechnics</i> , 2019, 21, 100282.	4.5	30
17	Impact of cooling on shear strength of high salinity soils. <i>Cold Regions Science and Technology</i> , 2017, 141, 122-130.	3.5	28
18	A two-grid search scheme for large-scale 3-D finite element analyses of slope stability. <i>Computers and Geotechnics</i> , 2014, 62, 203-215.	4.7	27

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19	Ground temperature and deformation analysis for an expressway embankment in warm permafrost regions of the Tibet plateau. <i>Permafrost and Periglacial Processes</i> , 2019, 30, 208-221.	3.4	27
20	One-dimensional compression feature and particle crushability behavior of dry calcareous sand considering fine-grained soil content and relative compaction. <i>Bulletin of Engineering Geology and the Environment</i> , 2021, 80, 4049-4065.	3.5	23
21	A New Approach to Improve Soft Ground in a Railway Station Applying Air-Boosted Vacuum Preloading. <i>Geotechnical Testing Journal</i> , 2015, 38, 373-386.	1.0	23
22	Frost depth prediction for seasonal freezing area in Eastern Turkey. <i>Cold Regions Science and Technology</i> , 2016, 124, 118-126.	3.5	22
23	Dynamic characteristics of warm frozen soil under direct shear test-comparison with dynamic triaxial test. <i>Soil Dynamics and Earthquake Engineering</i> , 2020, 133, 106114.	3.8	21
24	Experimental and numerical investigation on the sunny-shady slopes effect of three cooling embankments along an expressway in warm permafrost region, China. <i>Engineering Geology</i> , 2020, 269, 105545.	6.3	21
25	Freeze-Thaw Cycle Impact on Volumetric and Low-Temperature Shear Behavior of High-Salinity Soils. <i>Journal of Cold Regions Engineering - ASCE</i> , 2019, 33, .	1.1	20
26	Macro- and micro-mechanical characteristics of crushed rock aggregate subjected to direct shearing. <i>Transportation Geotechnics</i> , 2015, 2, 10-19.	4.5	19
27	Performance of Clay Soil Reinforced with Fly Ash and Lignin Fiber Subjected to Freeze-Thaw Cycles. <i>Journal of Cold Regions Engineering - ASCE</i> , 2017, 31, .	1.1	19
28	Frost jacking characteristics of screw piles in seasonally frozen regions based on thermo-mechanical simulations. <i>Computers and Geotechnics</i> , 2017, 91, 27-38.	4.7	18
29	An experimental study on the effects of freeze-thaw cycles on phosphorus adsorption-desorption processes in brown soil. <i>RSC Advances</i> , 2017, 7, 37441-37446.	3.6	17
30	Numerical Simulation of Coupled Water and Salt Transfer in Soil and a Case Study of the Expansion of Subgrade composed by Saline Soil. <i>Procedia Engineering</i> , 2016, 143, 315-322.	1.2	16
31	Frost jacking characteristics of screw piles by model testing. <i>Cold Regions Science and Technology</i> , 2017, 138, 98-107.	3.5	16
32	Applicability evaluation of cast-in-place bored pile in permafrost regions based on a temperature-tracking concrete hydration model. <i>Applied Thermal Engineering</i> , 2019, 149, 484-491.	6.0	16
33	A method for frost jacking prediction of single pile in permafrost. <i>Acta Geotechnica</i> , 2020, 15, 455-470.	5.7	16
34	Fractal dimension, particle shape, and particle breakage analysis for calcareous sand. <i>Bulletin of Engineering Geology and the Environment</i> , 2022, 81, 1.	3.5	16
35	Design and validation of a new dynamic direct shear apparatus for frozen soil. <i>Cold Regions Science and Technology</i> , 2014, 106-107, 207-215.	3.5	14
36	Numerical modeling of the thermal performance of soil containing microencapsulated PCM. <i>Construction and Building Materials</i> , 2021, 298, 123865.	7.2	13

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37	New Approach for Predicting Particle Breakage of Granular Material Using the Grey System Theory. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, .	2.9	12
38	Characterization and evaluation of permafrost thawing using GPR attributes in the Qinghai-Tibet Plateau. <i>Cold Regions Science and Technology</i> , 2018, 151, 302-313.	3.5	11
39	Development of a novel vapor compression refrigeration system (VCRS) for permafrost cooling. <i>Cold Regions Science and Technology</i> , 2021, 181, 103173.	3.5	11
40	Study of the thermal field of a mixture of soil and PCM materials with simulation of the warming effect during a phase change. <i>Construction and Building Materials</i> , 2020, 262, 120818.	7.2	10
41	Effects of microencapsulated phase change material characteristics on the thermal performance and mechanical behaviour of silty clay. <i>Transportation Geotechnics</i> , 2021, 29, 100584.	4.5	10
42	Mechanical characteristics and microstructure study of saline soil stabilized by quicklime after curing and freeze-thaw cycle. <i>Cold Regions Science and Technology</i> , 2022, 201, 103625.	3.5	10
43	Performance of silty sand reinforced with aqueous solution of polyvinyl alcohol subjected to freeze-thaw cycles. <i>Cold Regions Science and Technology</i> , 2020, 174, 103054.	3.5	9
44	Proposed application of a geothermal heat pump technique to address frost damage of embankments in cold regions. <i>Cold Regions Science and Technology</i> , 2022, 195, 103474.	3.5	9
45	Numeric simulation of permafrost degradation in the eastern Tibetan Plateau. <i>Permafrost and Periglacial Processes</i> , 2008, 19, 93-99.	3.4	8
46	A frost heaving mitigation method with the rubber-asphalt-fiber mixture cylinder. <i>Cold Regions Science and Technology</i> , 2020, 169, 102912.	3.5	8
47	Relationships between shear strength parameters and microstructure of alkaline-contaminated red clay. <i>Environmental Science and Pollution Research</i> , 2020, 27, 33848-33862.	5.3	7
48	A Simplified Model for the Phase Composition Curve of Saline Soils Considering the Second Phase Transition. <i>Water Resources Research</i> , 2021, 57, .	4.2	7
49	Prediction of dynamic pore water pressure for calcareous sand mixed with fine-grained soil under cyclic loading. <i>Soil Dynamics and Earthquake Engineering</i> , 2022, 157, 107276.	3.8	7
50	Experimental Study on Salt Expansion Characteristics of Coarse-Grained Sulfate Soils. <i>Journal of Cold Regions Engineering - ASCE</i> , 2020, 34, .	1.1	6
51	Analysis of Slope Stability and Software Development Based on Single-Grid and Two-Grid Finite Element Methods. <i>Geotechnical and Geological Engineering</i> , 2017, 35, 1369-1382.	1.7	5
52	Calculation for Frost Jacking Resistance of Single Helical Steel Piles in Cohesive Soils. <i>Journal of Cold Regions Engineering - ASCE</i> , 2021, 35, .	1.1	5
53	Impacts of organic matter and loading methods on one-dimensional compression behavior of calcareous sand. <i>Marine Georesources and Geotechnology</i> , 2022, 40, 1046-1059.	2.1	5
54	Robust partitioned block preconditioners for large-scale geotechnical applications with soil-structure interactions. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2014, 38, 72-91.	3.3	3

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55	Evaluation and Analysis of Dam Operating Status Using One Clock-Synchronized Dual-Antenna Receiver. <i>Journal of Sensors</i> , 2018, 2018, 1-12.	1.1	3
56	Experimental study on the correlation between the partial and total salt content in saline gravel using ion chromatography. <i>Transportation Geotechnics</i> , 2021, 26, 100424.	4.5	3
57	Influence of specific surface area on sulfate attack-induced expansion of cement-treated aggregates. <i>Bulletin of Engineering Geology and the Environment</i> , 2021, 80, 4841-4854.	3.5	3
58	Nonlinear Analysis for the Cooling Effect of Road Subgrade with Varying Spacings of Thermosyphons in Cold Region. , 2013, , .		2
59	TWO-DIMENSIONAL FRACTAL MODEL FOR ULTIMATE CRUSHING STATE OF COARSE AGGREGATES. <i>Fractals</i> , 2019, 27, 1950109.	3.7	2
60	Experimental Study on the Shear Strength of Fine Sand Reinforced by Grouting and Freezing. <i>Transportation Infrastructure Geotechnology</i> , 2016, 3, 21-35.	3.1	1
61	Modeling the Cutting and Filling Process of Roadbed Construction on Permafrost. , 2002, , 460.		0
62	Bagged Reinforced Concrete Shaft in Saline Soils in Cold Regions. , 2017, , .		0
63	Behavior of Compacted Collapsible Soil After Adding Calcium Chloride. <i>Lecture Notes in Civil Engineering</i> , 2022, , 387-399.	0.4	0
64	Experimental Study on Dynamic Properties of Clay Modified by Aught-Set Solidifying Agent Subjected to Freeze-Thaw Cycles. , 2013, , 86-94.		0