

# Yong Liu

## List of Publications by Year in descending order

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Version: 2024-02-01

118  
papers

2,502  
citations

185998

28  
h-index

264894

42  
g-index

119  
all docs

119  
docs citations

119  
times ranked

1062  
citing authors

#	ARTICLE	IF	CITATIONS
1	Probabilistic stability analyses of undrained slopes by 3D random fields and finite element methods. <i>Geoscience Frontiers</i> , 2018, 9, 1657-1664.	4.3	105
2	Modified linear estimation method for generating multi-dimensional multi-variate Gaussian field in modelling material properties. <i>Probabilistic Engineering Mechanics</i> , 2014, 38, 42-53.	1.3	102
3	Meso-scale investigations on the effective thermal conductivity of multi-phase materials using the finite element method. <i>International Journal of Heat and Mass Transfer</i> , 2020, 151, 119383.	2.5	101
4	Effect of in situ water content variation on the spatial variation of strength of deep cement-mixed clay. <i>Geotechnique</i> , 2019, 69, 391-405.	2.2	99
5	Determination of representative strength of deep cement-mixed clay from core strength data. <i>Geotechnique</i> , 2017, 67, 350-364.	2.2	87
6	Main frequency band of blast vibration signal based on wavelet packet transform. <i>Applied Mathematical Modelling</i> , 2019, 74, 569-585.	2.2	77
7	Effect of spatial variation of strength and modulus on the lateral compression response of cement-admixed clay slab. <i>Geotechnique</i> , 2015, 65, 851-865.	2.2	64
8	A three-dimensional large-deformation random finite-element study of landslide runout considering spatially varying soil. <i>Landslides</i> , 2021, 18, 3149-3162.	2.7	58
9	Effects of the lattice leg on cavities and bearing capacity of deeply embedded spudcans in clay. <i>Geotechnique</i> , 2017, 67, 1-17.	2.2	54
10	Effect of spatial variability on short- and long-term behaviour of axially-loaded cement-admixed marine clay column. <i>Computers and Geotechnics</i> , 2018, 94, 150-168.	2.3	52
11	A large-deformation random finite-element study: failure mechanism and bearing capacity of spudcan in a spatially varying clayey seabed. <i>Geotechnique</i> , 2020, 70, 392-405.	2.2	47
12	Probabilistic stability analyses of multi-stage soil slopes by bivariate random fields and finite element methods. <i>Computers and Geotechnics</i> , 2020, 122, 103529.	2.3	47
13	Coupled thermal-hydraulic modeling of artificial ground freezing with uncertainties in pipe inclination and thermal conductivity. <i>Acta Geotechnica</i> , 2022, 17, 257-274.	2.9	44
14	Optimal water-cement ratio of cement-stabilized soil. <i>Construction and Building Materials</i> , 2022, 320, 126211.	3.2	44
15	An experimental study of a novel liquid carbon dioxide rock-breaking technology. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2020, 128, 104244.	2.6	43
16	Estimating the thermal conductivity of soils using six machine learning algorithms. <i>International Communications in Heat and Mass Transfer</i> , 2022, 136, 106139.	2.9	42
17	Probabilistic investigation on defective jet-grouted cut-off wall with random geometric imperfections. <i>Geotechnique</i> , 2019, 69, 420-433.	2.2	40
18	Bounding Surface Cam-Clay Model with Cohesion for Cement-Admixed Clay. <i>International Journal of Geomechanics</i> , 2017, 17, .	1.3	39

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19	Rock-soil slope stability analysis by two-phase random media and finite elements. <i>Geoscience Frontiers</i> , 2018, 9, 1649-1655.	4.3	39
20	Propagation of corrosion and corrosion patterns of bars embedded in RC beams stored in chloride environment for various periods. <i>Construction and Building Materials</i> , 2017, 145, 147-156.	3.2	37
21	Translation random field with marginal beta distribution in modeling material properties. <i>Structural Safety</i> , 2016, 61, 57-66.	2.8	36
22	Dynamic prediction of mechanized shield tunneling performance. <i>Automation in Construction</i> , 2021, 132, 103958.	4.8	36
23	Experimental investigations on the mechanical behavior of iron tailings powder with compound admixture of cement and nano-clay. <i>Construction and Building Materials</i> , 2020, 254, 119259.	3.2	34
24	A large deformation finite element analysis of uplift behaviour for helical anchor in spatially variable clay. <i>Computers and Geotechnics</i> , 2022, 141, 104542.	2.3	34
25	A statistical model for the unconfined compressive strength of deep-mixed columns. <i>Geotechnique</i> , 2016, 66, 351-365.	2.2	33
26	A direct assessment for the stiffness development of artificially cemented clay. <i>Geotechnique</i> , 2019, 69, 741-747.	2.2	33
27	Effects of material and drilling uncertainties on artificial ground freezing of cement-admixed soils. <i>Canadian Geotechnical Journal</i> , 2017, 54, 1659-1671.	1.4	32
28	Bender element measurement of small strain shear modulus of cement-treated marine clay – Effect of test setup and methodology. <i>Construction and Building Materials</i> , 2018, 172, 433-447.	3.2	32
29	Artificial Ground Freezing In Tunnelling Through Aquifer Soil Layers: a Case Study in Nanjing Metro Line 2. <i>KSCE Journal of Civil Engineering</i> , 2018, 22, 4136-4142.	0.9	31
30	Geotechnical stability analysis considering strain softening using micro-polar continuum finite element method. <i>Journal of Central South University</i> , 2021, 28, 297-310.	1.2	31
31	Small-Strain Shear Modulus of Cement-Treated Marine Clay. <i>Journal of Materials in Civil Engineering</i> , 2020, 32, .	1.3	30
32	Model-independent strength-reduction factor for effect of spatial variability on tunnel with improved soil surrounds. <i>Geotechnique</i> , 2021, 71, 406-422.	2.2	29
33	Influence of ground motion duration on the seismic performance of earth slopes based on numerical analysis. <i>Soil Dynamics and Earthquake Engineering</i> , 2021, 143, 106595.	1.9	29
34	Effect of spatial variability on performance of cement-treated soil slab during deep excavation. <i>Construction and Building Materials</i> , 2018, 188, 505-519.	3.2	28
35	Finite-Element Analysis of Heat Transfer of Horizontal Ground-Freezing Method in Shield-Driven Tunneling. <i>International Journal of Geomechanics</i> , 2017, 17, .	1.3	27
36	Probabilistic investigations on the watertightness of jet-grouted ground considering geometric imperfections in diameter and position. <i>Canadian Geotechnical Journal</i> , 2017, 54, 1447-1459.	1.4	26

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37	Model for large strain consolidation under constant rate of strain. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2013, 37, 1574-1590.	1.7	25
38	Random finite element analysis on uplift bearing capacity and failure mechanisms of square plate anchors in spatially variable clay. <i>Engineering Geology</i> , 2022, 304, 106677.	2.9	25
39	Statistical evaluation of the overall strength of a soil-cement column under axial compression. <i>Construction and Building Materials</i> , 2017, 132, 51-60.	3.2	23
40	Holding capacity of dynamically installed anchors in normally consolidated clay under inclined loading. <i>Canadian Geotechnical Journal</i> , 2017, 54, 1257-1271.	1.4	22
41	A direct simulation algorithm for a class of beta random fields in modelling material properties. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 326, 642-655.	3.4	22
42	Meso-mechanical investigations on the overall elastic properties of multi-phase construction materials using finite element method. <i>Construction and Building Materials</i> , 2019, 228, 116727.	3.2	21
43	Numerical investigations on the seismic response of a subway tunnel embedded in spatially random clays. <i>Underground Space (China)</i> , 2020, 5, 43-52.	3.4	21
44	A novel random discrete element analysis of rock fragmentation. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2020, 44, 1386-1395.	1.7	21
45	A generalized model for effective thermal conductivity of soils considering porosity and mineral composition. <i>Acta Geotechnica</i> , 2021, 16, 3455-3466.	2.9	21
46	Effect of mesoscale internal structure on effective thermal conductivity of anisotropic geomaterials. <i>Acta Geotechnica</i> , 2022, 17, 3553-3566.	2.9	21
47	Experimental Investigations on the Pull-Out Behavior of Tire Strips Reinforced Sands. <i>Materials</i> , 2017, 10, 707.	1.3	20
48	Stress-dependent behavior of marine clay admixed with fly-ash-blended cement. <i>International Journal of Pavement Research and Technology</i> , 2018, 11, 611-616.	1.3	20
49	Seismic response of pile-raft system embedded in spatially random clay. <i>Geotechnique</i> , 2019, 69, 638-645.	2.2	19
50	Primary yielding locus of cement-stabilized marine clay and its applications. <i>Marine Georesources and Geotechnology</i> , 2019, 37, 488-505.	1.2	19
51	A direct simulation method and lower-bound estimation for a class of gamma random fields with applications in modelling material properties. <i>Probabilistic Engineering Mechanics</i> , 2017, 47, 16-25.	1.3	18
52	Lateral compression response of overlapping jet-grout columns with geometric imperfections in radius and position. <i>Canadian Geotechnical Journal</i> , 2018, 55, 1282-1294.	1.4	18
53	Investigation on the Triaxial Mechanical Characteristics of Cement-Treated Subgrade Soil Admixed with Polypropylene Fiber. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 4557.	1.3	18
54	Estimation of failure probability in braced excavation using Bayesian networks with integrated model updating. <i>Underground Space (China)</i> , 2020, 5, 315-323.	3.4	18

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55	Modeling response spectrum compatible pulse-like ground motion. <i>Mechanical Systems and Signal Processing</i> , 2022, 177, 109177.	4.4	18
56	Statistical Evaluation of the Load-Settlement Response of a Multicolumn Composite Foundation. <i>International Journal of Geomechanics</i> , 2018, 18, .	1.3	17
57	Analysis of cement-treated soil slab for deep excavation support – a rational approach. <i>Geotechnique</i> , 2019, 69, 888-905.	2.2	16
58	On spectral representation method and Karhunen-Loève expansion in modelling construction material properties. <i>Archives of Civil and Mechanical Engineering</i> , 2018, 18, 768-783.	1.9	15
59	Stability of Tunnels in Cement-Admixed Soft Soils with Spatial Variability. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2018, 144, .	1.5	15
60	A prediction model for the tensile strength of cement-admixed clay with randomly orientated fibres. <i>European Journal of Environmental and Civil Engineering</i> , 2018, 22, 1131-1145.	1.0	14
61	A three-dimensional algorithm for estimating water-tightness of cement-treated ground with geometric imperfections. <i>Computers and Geotechnics</i> , 2019, 115, 103176.	2.3	14
62	Experimental Investigations on the Mechanical and Microscopic Behavior of Cement-Treated Clay Modified by Nano-MgO and Fibers. <i>International Journal of Geomechanics</i> , 2022, 22, .	1.3	14
63	Effect of sleeves and skirts on mitigating spudcan punch-through in sand overlying normally consolidated clay. <i>Geotechnique</i> , 2019, 69, 283-296.	2.2	12
64	Probabilistic risk assessment of landslide-induced surges considering the spatial variability of soils. <i>Engineering Geology</i> , 2021, 283, 105976.	2.9	12
65	Dyadic wavelet analysis of bender element signals in determining shear wave velocity. <i>Canadian Geotechnical Journal</i> , 2020, 57, 2027-2030.	1.4	11
66	A patching algorithm for conditional random fields in modeling material properties. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 377, 113719.	3.4	11
67	Bender Element Measurement for Small-Strain Shear Modulus of Compacted Loess. <i>International Journal of Geomechanics</i> , 2021, 21, .	1.3	11
68	Deterministic and Probabilistic Investigations of Piping Occurrence during Tunneling through Spatially Variable Soils. <i>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering</i> , 2021, 7, 04021009.	1.1	11
69	Equivalent Strength for Tunnels in Cement-Admixed Soil Columns with Spatial Variability and Positioning Error. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2020, 146, .	1.5	10
70	Modeling Seepage Flow and Spatial Variability of Soil Thermal Conductivity during Artificial Ground Freezing for Tunnel Excavation. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6275.	1.3	10
71	Statistical Evaluation for Strength of Pile by Deep Mixing Method. , 2008, , 195-200.		10
72	Determination of limiting cavity depths for offshore spudcan foundations in a spatially varying seabed. <i>Marine Structures</i> , 2020, 71, 102723.	1.6	9

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73	Seismic performance of earth dams founded on liquefiable soil layer subjected to near-fault pulse-like ground motions. <i>Soil Dynamics and Earthquake Engineering</i> , 2021, 143, 106623.	1.9	9
74	Applicability of Continuous, Stationary, and Discrete Wavelet Transforms in Engineering Signal Processing. <i>Journal of Performance of Constructed Facilities</i> , 2021, 35, .	1.0	9
75	Experimental and Numerical Studies of the Excess Pore Pressure Field Surrounding an Advancing Spudcan Footing. <i>Journal of Offshore Mechanics and Arctic Engineering</i> , 2018, 140, .	0.6	8
76	Probabilistically quantifying the effect of geotechnical anisotropy on landslide susceptibility. <i>Bulletin of Engineering Geology and the Environment</i> , 2021, 80, 6615-6627.	1.6	8
77	A modified method to calculate reliability index using maximum entropy principle. <i>Journal of Central South University</i> , 2013, 20, 1058-1063.	1.2	7
78	Statistical Analysis of Earthquake-Induced Bending Moment in Fixed-Head Piles Embedded in Soft Clay. <i>Journal of Engineering Mechanics - ASCE</i> , 2017, 143, .	1.6	7
79	Seismic responses of rectangular subway tunnels in a clayey ground. <i>PLoS ONE</i> , 2018, 13, e0204672.	1.1	7
80	Enhanced Singular Value Truncation Method for Non-Destructive Evaluation of Structural Damage Using Natural Frequencies. <i>Materials</i> , 2019, 12, 1021.	1.3	7
81	An effective stress theoretical model for shear resistance and adhesion factor of dynamically installed anchors. <i>Geotechnique</i> , 2019, 69, 1004-1018.	2.2	7
82	Characteristic strength of soils underlying foundations considering effect of spatial variability. <i>Canadian Geotechnical Journal</i> , 2020, 57, 518-536.	1.4	7
83	Model updating for slope stability assessment in spatially varying soil parameters using multi-type observations. <i>Mechanical Systems and Signal Processing</i> , 2022, 171, 108906.	4.4	7
84	Miniature LVDT setup for local strain measurement on cement-treated clay specimens. <i>Marine Georesources and Geotechnology</i> , 2019, 37, 568-577.	1.2	6
85	Effect of uncertain hydrothermal properties and freezing temperature on the thermal process of frozen soil around a single freezing pipe. <i>International Communications in Heat and Mass Transfer</i> , 2021, 124, 105267.	2.9	6
86	Model Updating of Slope Stability Analysis Using 3D Conditional Random Fields. <i>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering</i> , 2021, 7, .	1.1	6
87	Experimental and theoretical investigations on fin configuration effects of dynamically installed anchors in clay. <i>Canadian Geotechnical Journal</i> , 2021, 58, 1527-1542.	1.4	6
88	Reliability-Based Design Applied to Multi-Column Composite Foundations. , 2009, , .		5
89	Parallel finite element analysis of seismic soil structure interaction using a PC cluster. <i>Computers and Geotechnics</i> , 2016, 80, 167-177.	2.3	5
90	Effects of reconsolidation time on holding capacity of deepwater dynamically installed anchors. <i>Canadian Geotechnical Journal</i> , 2019, 56, 1876-1888.	1.4	5

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91	Insight into centrifuge modelling errors in predicting embedment depths of dynamically installed anchors. <i>Canadian Geotechnical Journal</i> , 2020, 57, 1796-1804.	1.4	5
92	Three-Dimensional Seepage Investigation of Riverside Tunnel Construction Considering Heterogeneous Permeability. <i>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering</i> , 2021, 7, 04021041.	1.1	5
93	Probabilistic decoupled approach to estimate seismic rotational displacements of flexible slopes considering depth-dependent soil variability. <i>Acta Geotechnica</i> , 2022, 17, 1551-1567.	2.9	5
94	Measure for Reducing the Tensile Stress in Cement-Treated Soil Layer in Deep Excavation in Soft Clay. <i>KSCE Journal of Civil Engineering</i> , 2019, 23, 3924-3934.	0.9	4
95	Experimental Investigations on Effect of Geocell, Waste Tire Chips, and Geocellâ€“Tire Chips on Foundation Reinforcement. <i>Journal of Performance of Constructed Facilities</i> , 2019, 33, .	1.0	4
96	Laboratory Investigations on Geotechnical Characteristics of Albumen Treated Loess Soil. <i>KSCE Journal of Civil Engineering</i> , 2022, 26, 539-549.	0.9	4
97	Experimental Investigations on the Spillway Section Shape of the Breaching Process of Landslide Dams. <i>International Journal of Geomechanics</i> , 2022, 22, .	1.3	4
98	Maximum Shear Modulus of Cement-Treated Singapore Marine Clay. <i>DEStech Transactions on Materials Science and Engineering</i> , 2017, , .	0.0	3
99	Artificial Ground Freezing Technique in Tunnel Construction Considering Uncertain Drilling Inaccuracy of Freeze Pipes. , 2019, , .		3
100	Application of an immune algorithm to settlement prediction. <i>Journal of Zhejiang University: Science A</i> , 2009, 10, 93-100.	1.3	2
101	Effect of spatial variability on undrained triaxial test of cement-admixed soil. <i>Japanese Geotechnical Society Special Publication</i> , 2016, 2, 2101-2106.	0.2	2
102	Direct Simulation Methods for a Class of Normal and Lognormal Random Fields with Applications in Modeling Material Properties. <i>Journal of Engineering Mechanics - ASCE</i> , 2022, 148, .	1.6	2
103	Modeling Irregularly Inclined Fissure Surfaces within Nonuniform Expansive Soil Slopes. <i>International Journal of Geomechanics</i> , 2022, 22, .	1.3	2
104	Modeling Gaussian and Gamma random fields for layered material properties with transitional zones. <i>Probabilistic Engineering Mechanics</i> , 2022, 69, 103306.	1.3	2
105	An RVE recognition method for non-homogeneous materials based on two-point correlation function. <i>Arabian Journal of Geosciences</i> , 2022, 15, .	0.6	2
106	Notice of Retraction: PSO algorithm-based reliability analysis of bearing capacity of multi-pile composite foundation. , 2010, , .		1
107	Some issues in core strength measurement in cement-soil treatment for deep excavation - Field data study. <i>Japanese Geotechnical Society Special Publication</i> , 2016, 2, 1563-1566.	0.2	1
108	Seepage Evaluation in Tunnel Construction Considering the Spatial Variability of Surrounding Soils. , 2019, , .		1

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109	Load-settlement Response of a Composite Foundation: A Reliability-Based Design Approach. DEStech Transactions on Engineering and Technology Research, 2017, , .	0.0	1
110	A novel method for modelling the existence of fault fracture zones within 3D weathered rock slopes. IOP Conference Series: Earth and Environmental Science, 2021, 861, 032036.	0.2	1
111	Hydrothermal Performance of In-Tunnel Ground Freezing Subjected to Drilling Inaccuracy and Seepage Flow. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2022, 8, .	1.1	1
112	Numerical Analysis of a Temperature Field within a Vertical Frozen Soil Wall. , 2016, , .		0
113	A Wavelet-Based Fiber Optic Sensors Data Processing Method and Its Application on Embankment Sliding Surface Detection. Springer Series in Geomechanics and Geoengineering, 2020, , 333-339.	0.0	0
114	Preliminary Investigation on Overall Permeability of Granular Mixed Materials. Sustainable Civil Infrastructures, 2021, , 97-109.	0.1	0
115	Large-Scale 3D Random Finite Element Analysis of Embankment Seepage Stability. Sustainable Civil Infrastructures, 2021, , 1-13.	0.1	0
116	Numerical Analysis of Temperature Field of Horizontal Ground Freezing for Large-Diameter Tunnelling. DEStech Transactions on Engineering and Technology Research, 2017, , .	0.0	0
117	Observation of Reinforcement Methods in Organic Disseminated Sand. DEStech Transactions on Materials Science and Engineering, 2017, , .	0.0	0
118	A Design Framework for Spatial Variability in Cement-Treated Soft Clay in Deep Excavations and Underground Constructions. Developments in Geotechnical Engineering, 2019, , 59-69.	0.6	0