Jie Zhang

List of Publications by Year
in descending order

88 papers	3,859 citations	117453 34 h-index	128067 60 g-index
92 all docs	92 docs citations	92 times ranked	1937 citing authors

#	Article	IF	Citations
1	Quality Utilityâ€"A Compromise Programming Approach to Robust Design. Journal of Mechanical Design, Transactions of the ASME, 1999, 121, 179-187.	1.7	278
2	Stability analysis of rainfall-induced slope failure: a review. Proceedings of the Institution of Civil Engineers: Geotechnical Engineering, 2011, 164, 299-316.	0.9	206
3	Efficient system reliability analysis illustrated for a retaining wall and a soil slope. Computers and Geotechnics, 2011, 38, 196-204.	2.3	151
4	Bayesian Framework for Characterizing Geotechnical Model Uncertainty. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 932-940.	1.5	149
5	Back analysis of slope failure with Markov chain Monte Carlo simulation. Computers and Geotechnics, 2010, 37, 905-912.	2.3	149
6	New methods for system reliability analysis of soil slopes. Canadian Geotechnical Journal, 2011, 48, 1138-1148.	1.4	134
7	Probabilistic methods for unified treatment of geotechnical and geological uncertainties in a geotechnical analysis. Engineering Geology, 2019, 249, 148-161.	2.9	118
8	Efficient Probabilistic Back-Analysis of Slope Stability Model Parameters. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 99-109.	1.5	114
9	Investigation of the evolutionary process of a reinforced model slope using a fiber-optic monitoring network. Engineering Geology, 2015, 186, 34-43.	2.9	114
10	Application of the Kriging-Based Response Surface Method to the System Reliability of Soil Slopes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 651-655.	1.5	113
11	Optimization of site exploration program for improved prediction of tunneling-induced ground settlement in clays. Computers and Geotechnics, 2014, 56, 69-79.	2.3	106
12	Probabilistic prediction of rainfall-induced slope failure using a mechanics-based model. Engineering Geology, 2014, 168, 129-140.	2.9	101
13	Influence of spatial variability of soil Young's modulus on tunnel convergence in soft soils. Engineering Geology, 2017, 228, 357-370.	2.9	95
14	Ground and tunnel responses induced by partial leakage in saturated clay with anisotropic permeability. Engineering Geology, 2015, 189, 104-115.	2.9	92
15	Extension of Hassan and Wolff method for system reliability analysis of soil slopes. Engineering Geology, 2013, 160, 81-88.	2.9	88
16	Characterising geotechnical model uncertainty by hybrid Markov Chain Monte Carlo simulation. Computers and Geotechnics, 2012, 43, 26-36.	2.3	83
17	Distributed fiber optic monitoring and stability analysis of a model slope under surcharge loading. Journal of Mountain Science, 2014, 11, 979-989.	0.8	80
18	Flattening of jointed shield-driven tunnel induced by longitudinal differential settlements. Tunnelling and Underground Space Technology, 2012, 31, 20-32.	3.0	72

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19	System reliability analysis of soil slopes stabilized with piles. Engineering Geology, 2017, 229, 45-52.	2.9	69
20	Grouting-based treatment of tunnel settlement: Practice in Shanghai. Tunnelling and Underground Space Technology, 2018, 80, 181-196.	3.0	66
21	Robust Geotechnical Design of Drilled Shafts in Sand: New Design Perspective. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 2007-2019.	1.5	65
22	Geotechnical reliability analysis with limited data: Consideration of model selection uncertainty. Engineering Geology, 2014, 181, 27-37.	2.9	61
23	Probabilistic slope stability analysis considering the variability of hydraulic conductivity under rainfall infiltrationâ€“redistribution conditions. Engineering Geology, 2014, 183, 1-13.	2.9	60
24	In situ rainfall infiltration studies at a hillside in Hubei Province, China. Engineering Geology, 2000, 57, 31-38.	2.9	58
25	Fiber Bragg grating-based performance monitoring of a slope model subjected to seepage. Smart Materials and Structures, 2014, 23, 095027.	1.8	58
26	Robust Geotechnical Design of Earth Slopes Using Fuzzy Sets. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2015, 141, .	1.5	57
27	Robust geotechnical design of shield-driven tunnels. Computers and Geotechnics, 2014, 56, 191-201.	2.3	55
28	Kriging Numerical Models for Geotechnical Reliability Analysis. Soils and Foundations, 2011, 51, 1169-1177.	1.3	52
29	Unsaturated soil slope characterization with Karhunenâ€“LoÃ¨ve and polynomial chaos via Bayesian approach. Engineering With Computers, 2019, 35, 337-350.	3.5	51
30	Reliability-Based Optimization of Geotechnical Systems. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 1211-1221.	1.5	50
31	Slope Reliability Analysis Considering Site-Specific Performance Information. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 227-238.	1.5	45
32	Identification of representative slip surfaces for reliability analysis of soil slopes based on shear strength reduction. Computers and Geotechnics, 2017, 85, 199-206.	2.3	44
33	Efficient response surface method for practical geotechnical reliability analysis. Computers and Geotechnics, 2015, 69, 496-505.	2.3	42
34	Risk assessment of slope failure considering multiple slip surfaces. Computers and Geotechnics, 2016, 74, 188-195.	2.3	41
35	Evaluating Model Uncertainty of an SPT-based Simplified Method for Reliability Analysis for Probability of Liquefaction. Soils and Foundations, 2009, 49, 135-152.	1.3	36
36	Calibration of empirical models considering model fidelity and model robustness â€” Focusing on predictions of liquefaction-induced settlements. Engineering Geology, 2016, 203, 168-177.	2.9	35

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37	Improved analytical model for circumferential behavior of jointed shield tunnels considering the longitudinal differential settlement. Tunnelling and Underground Space Technology, 2015, 45, 153-165.	3.0	33
38	Probabilistic calibration of a coupled hydro-mechanical slope stability model with integration of multiple observations. Georisk, 2018, 12, 169-182.	2.6	33
39	Predicting liquefaction probability based on shear wave velocity: an update. Bulletin of Engineering Geology and the Environment, 2016, 75, 1199-1214.	1.6	32
40	Simplified analysis method for predicting the influence of deep excavation on existing tunnels. Computers and Geotechnics, 2020, 121, 103477.	2.3	32
41	Inter-region variability of Robertson and Wride method for liquefaction hazard analysis. Engineering Geology, 2016, 203, 191-203.	2.9	28
42	Bayesian network for characterizing model uncertainty of liquefaction potential evaluation models. KSCE Journal of Civil Engineering, 2012, 16, 714-722.	0.9	27
43	Calibrating cross-site variability for reliability-based design of pile foundations. Computers and Geotechnics, 2014, 62, 154-163.	2.3	27
44	Evaluation of generalized linear models for soil liquefaction probability prediction. Environmental Earth Sciences, 2013, 68, 1925-1933.	1.3	25
45	Reliability analysis of slope stability under seismic condition during a given exposure time. Landslides, 2018, 15, 2303-2313.	2.7	25
46	Model Tests by Centrifuge of Soil Nail Reinforcements. Journal of Testing and Evaluation, 2001, 29, 315-328.	0.4	24
47	Establishing region-specific N â€“ V relationships through hierarchical Bayesian modeling. Engineering Geology, 2021, 287, 106105.	2.9	23
48	Back-Analysis and Parameter Identification for Deep Excavation Based on Pareto Multiobjective Optimization. Journal of Aerospace Engineering, 2015, 28, .	0.8	22
49	Influences of internal erosion on infiltration and slope stability. Bulletin of Engineering Geology and the Environment, 2019, 78, 1815-1827.	1.6	21
50	Bayesian network based machine learning for design of pile foundations. Automation in Construction, 2020, 118, 103295.	4.8	21
51	Conditions of Hydraulic Heterogeneity under Which Bayesian Estimation is More Reliable. Water (Switzerland), 2020, 12, 160.	1.2	20
52	Bayesian Methods for Geotechnical Applicationsâ€”A Practical Guide. , 2017, , .		19
53	Value of information analysis of site investigation program for slope design. Computers and Geotechnics, 2021, 131, 103938.	2.3	18
54	Binary classification method for efficient and accurate system reliability analyses of layered soil slopes. Georisk, 0, , 1-17.	2.6	17

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55	Assessing the annual risk of vehicles being hit by a rainfall-induced landslide: a case study on Kennedy Road in Wan Chai, Hong Kong. Natural Hazards and Earth System Sciences, 2020, 20, 1833-1846.	1.5	16
56	Assessing annual probability of rainfall-induced slope failure through a mechanics-based model. Acta Geotechnica, 2022, 17, 949-964.	2.9	16
57	Reliability-based code revision for design of pile foundations: Practice in Shanghai, China. Soils and Foundations, 2015, 55, 637-649.	1.3	14
58	Probabilistic prediction of slope failure time. Engineering Geology, 2020, 271, 105586.	2.9	14
59	Bayesian machine learning-based method for prediction of slope failure time. Journal of Rock Mechanics and Geotechnical Engineering, 2022, 14, 1188-1199.	3.7	14
60	Quantitative risk assessment of landslides with direct simulation of pre-failure to post-failure behaviors. Acta Geotechnica, 2022, 17, 4497-4514.	2.9	13
61	Probabilistic performance assessment of shield tunnels subjected to accidental surcharges. Structure and Infrastructure Engineering, 2019, 15, 1500-1509.	2.0	12
62	Calibrating a standard penetration test based method for region-specific liquefaction potential assessment. Bulletin of Engineering Geology and the Environment, 2020, 79, 5185-5204.	1.6	10
63	System reliability analysis of soil slopes through constrained optimization. Landslides, 2021, 18, 655-666.	2.7	10
64	Characterization of spatial variability with observed responses: application of displacement back estimation. Journal of Zhejiang University: Science A, 2020, 21, 478-495.	1.3	8
65	Study of time-dependent reliability of old man-made slopes considering model uncertainty. Georisk, 2009, 3, 106-113.	2.6	7
66	Effect of Soil Spatial Variability on Ground Settlement Induced by Shield Tunnelling. , 2017, , .		7
67	Developing joint distribution of a max and M w of seismic loading for performance-based assessment of liquefaction induced structural damage. Engineering Geology, 2018, 232, 1-11.	2.9	7
68	Assessing indirect economic losses of landslides along highways. Natural Hazards, 2021, 106, 2775-2796.	1.6	6
69	Chinese code methods for liquefaction potential assessment based on standard penetration test: An extension. Soil Dynamics and Earthquake Engineering, 2021, 144, 106697.	1.9	6
70	Performance-based assessment of permanent displacement of soil slopes using two-dimensional dynamic analysis. Georisk, 2022, 16, 178-195.	2.6	6
71	Reliability-based Assessment of Stability of Slopes. IOP Conference Series: Earth and Environmental Science, 2015, 26, 012006.	0.2	5
72	Probabilistic Methods for Assessing Soil Liquefaction Potential and Effect. , 2017, , .		5

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73	Importance sampling for system reliability analysis of soil slopes based on shear strength reduction. Georisk, 2020, , 1-12.	2.6	5
74	Depth-consistent models for probabilistic liquefaction potential assessment based on shear wave velocity. Bulletin of Engineering Geology and the Environment, 2022, 81, .	1.6	5
75	Bayesian estimation of soil-water characteristic curves. Canadian Geotechnical Journal, 2022, 59, 569-582.	1.4	4
76	Performance Assessment of Deteriorating Reinforced Concrete Drainage Culverts: A case study. Engineering Failure Analysis, 2021, 131, 105845.	1.8	4
77	Assessing expected benefit of site investigation program for reliability-based design of slope. Engineering Geology, 2022, 306, 106749.	2.9	4
78	Assessment of Error Assumption in Probabilistic Model Calibration of Rainfall Infiltration in Soil Slope. , 2017, , .		3
79	A FORMâ€based approach for probabilistic analysis in geotechnics: Application to a reinforced concrete drainage culvert. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 2090-2105.	1.7	3
80	Prediction of Vibration Induced by High-Speed Train: Consideration of Soil Spatial Variability. , 2017, , .		2
81	Case Histories of Liquefaction-Induced Building Damageâ€“Focusing on the 22 February 2011 Christchurch Earthquake. , 2018, , .		1
82	Developing Region-Specific Liquefaction Assessment Criterion for Bachu Region, China. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2020, 6, .	1.1	1
83	Performance of Subset Simulation Apllied to A Simple System Reliability Problem. , 2012, , .		1
84	R-LRFD:RobustLoad and Resistance Factor Design. , 2015, , .		0
85	Discussion on â€œAssessment of the application of point estimate methods in the probabilistic stability analysis of slopesâ€•by A. Morteza and P. Rainer [Comput. Geotech. 69 (2015) 540â€“550]. Computers and Geotechnics, 2016, 75, 257-259.	2.3	0
86	Assessment of Site Exploration Program Considering Spatial Variability of Soils. , 2018, , 265-272.		0
87	Kriging based Response Surface Method for Geotechnical Reliability Analysis. , 2011, , .		0
88	Reliability analysis of karst roof stability based on strength reduction method. IOP Conference Series: Earth and Environmental Science, 2021, 861, 072118.	0.2	0