Guojun Cai

List of Publications by Year
in descending order

114 papers	2,249 citations	236912 25 h-index	276858 41 g-index
118 all docs	118 docs citations	118 times ranked	1330 citing authors

#	Article	IF	Citations
1	Evaluation of engineering properties and environmental effect of recycled waste tire-sand/soil in geotechnical engineering: A compressive review. Renewable and Sustainable Energy Reviews, 2020, 126, 109831.	16.4	129
2	Review of ground improvement using microbial induced carbonate precipitation (MICP). Marine Georesources and Geotechnology, 2017, 35, 1135-1146.	2.1	100
3	Assessment of direct CPT and CPTU methods for predicting the ultimate bearing capacity of single piles. Engineering Geology, 2009, 104, 211-222.	6.3	78
4	Application of lignin-based by-product stabilized silty soil in highway subgrade: A field investigation. Journal of Cleaner Production, 2017, 142, 4243-4257.	9.3	78
5	Experimental investigation of thermal and mechanical properties of lignin treated silt. Engineering Geology, 2015, 196, 1-11.	6.3	77
6	Investigation on thermal characteristics and prediction models of soils. International Journal of Heat and Mass Transfer, 2017, 106, 1074-1086.	4.8	72
7	Mechanical properties and micro-mechanism of loess roadbed filling using by-product red mud as a partial alternative. Construction and Building Materials, 2019, 216, 188-201.	7.2	65
8	Comparison of CPT charts for soil classification using PCPT data: Example from clay deposits in Jiangsu Province, China. Engineering Geology, 2011, 121, 89-96.	6.3	55
9	Evaluation of thermal-mechanical properties of quartz sandâ€“bentoniteâ€“carbon fiber mixtures as the borehole backfilling material in ground source heat pump. Energy and Buildings, 2019, 202, 109407.	6.7	52
10	Characterization on the correlation between shear wave velocity and piezocone tip resistance of Jiangsu clays. Engineering Geology, 2014, 171, 96-103.	6.3	51
11	Engineering properties and microstructural characteristics of foundation silt stabilized by lignin-based industrial by-product. KSCE Journal of Civil Engineering, 2016, 20, 2725-2736.	1.9	50
12	Compression properties and micro-mechanisms of rubber-sand particle mixtures considering grain breakage. Construction and Building Materials, 2018, 187, 1061-1072.	7.2	49
13	Application of Lignin-Stabilized Silty Soil in Highway Subgrade: A Macroscale Laboratory Study. Journal of Materials in Civil Engineering, 2018, 30, .	2.9	48
14	A hybrid GMDH neural network and logistic regression framework for state parameterâ€“based liquefaction evaluation. Canadian Geotechnical Journal, 2021, 58, 1801-1811.	2.8	48
15	Stabilization Mechanism and Effect Evaluation of Stabilized Silt with Lignin Based on Laboratory Data. Marine Georesources and Geotechnology, 2016, 34, 331-340.	2.1	47
16	Thermo-hydro-mechanical properties of bentonite-sand-graphite-polypropylene fiber mixtures as buffer materials for a high-level radioactive waste repository. International Journal of Heat and Mass Transfer, 2019, 141, 981-994.	4.8	45
17	Reliability assessment of CPTU-based pile capacity predictions in soft clay deposits. Engineering Geology, 2012, 141-142, 84-91.	6.3	41
18	Thermal characterization and prediction model of typical soils in Nanjing area of China. Engineering Geology, 2015, 191, 23-30.	6.3	41

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19	Durability of silty soil stabilized with recycled lignin for sustainable engineering materials. Journal of Cleaner Production, 2020, 248, 119293.	9.3	41
20	A unified soil thermal conductivity model based on artificial neural network. International Journal of Thermal Sciences, 2020, 155, 106414.	4.9	41
21	Multivariate correlation among resilient modulus and cone penetration test parameters of cohesive subgrade soils. Engineering Geology, 2016, 209, 128-142.	6.3	40
22	Field evaluation of deformation characteristics of a lacustrine clay deposit using seismic piezocone tests. Engineering Geology, 2010, 116, 251-260.	6.3	35
23	Reclaimed Lignin-Stabilized Silty Soil: Undrained Shear Strength, Atterberg Limits, and Microstructure Characteristics. Journal of Materials in Civil Engineering, 2018, 30, 04018277.	2.9	33
24	Estimation of heavy metal-contaminated soilsâ€™ mechanical characteristics using electrical resistivity. Environmental Science and Pollution Research, 2017, 24, 13561-13575.	5.3	31
25	Assessment of mechanical properties in recycled lignin-stabilized silty soil as base fill material. Journal of Cleaner Production, 2018, 172, 1788-1799.	9.3	31
26	Design optimization of the soil nail wall-retaining pile-anchor cable supporting system in a large-scale deep foundation pit. Acta Geotechnica, 2021, 16, 2251-2274.	5.7	31
27	Watt-level road-compatible piezoelectric energy harvester for LED-induced lamp system. Energy, 2021, 229, 120685.	8.8	28
28	Predictions of coefficient of consolidation from CPTU dissipation tests in Quaternary clays. Bulletin of Engineering Geology and the Environment, 2012, 71, 337-350.	3.5	27
29	Strength and microstructure characteristics of the recycled rubber tire-sand mixtures as lightweight backfill. Environmental Science and Pollution Research, 2018, 25, 3872-3883.	5.3	27
30	A novel PSO-KELM based soil liquefaction potential evaluation system using CPT and Vs measurements. Soil Dynamics and Earthquake Engineering, 2021, 150, 106930.	3.8	27
31	Multivariate correlation analysis of seismic piezocone penetration (SCPTU) parameters and design properties of Jiangsu quaternary cohesive soils. Engineering Geology, 2017, 228, 11-38.	6.3	26
32	CPT-based fully probabilistic seismic liquefaction potential assessment to reduce uncertainty: Integrating XGBoost algorithm with Bayesian theorem. Computers and Geotechnics, 2022, 149, 104868.	4.7	25
33	Correlations Between Electrical Resistivity and Geotechnical Parameters for Jiangsu Marine Clay Using Spearmanâ€™s Coefficient Test. International Journal of Civil Engineering, 2017, 15, 419-429.	2.0	24
34	Liquefaction assessments using seismic piezocone penetration (SCPTU) test investigations in Tangshan region in China. Soil Dynamics and Earthquake Engineering, 2012, 41, 141-150.	3.8	23
35	In-situ evaluation of undrained shear strength from seismic piezocone penetration tests for soft marine clay in Jiangsu, China. Transportation Geotechnics, 2019, 20, 100253.	4.5	23
36	Investigation of internal force of anti-slide pile on landslides considering the actual distribution of soil resistance acting on anti-slide piles. Natural Hazards, 2020, 102, 1369-1392.	3.4	23

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37	Correlations between Shear Wave Velocity and Geotechnical Parameters for Jiangsu Clays of China. Pure and Applied Geophysics, 2019, 176, 669-684.	1.9	22
38	Laboratory observation of engineering properties and deformation mechanisms of cemented rubber-sand mixtures. Construction and Building Materials, 2016, 120, 514-523.	7.2	21
39	Assessment of Ground Improvement by Vibro-compaction Method for Liquefiable Deposits from In-Situ Testing Data. International Journal of Civil Engineering, 2019, 17, 723-735.	2.0	21
40	Experimental study on fatigue degradation of piezoelectric energy harvesters under equivalent traffic load conditions. International Journal of Fatigue, 2021, 150, 106320.	5.7	21
41	Improved p-y curve models for large diameter and super-long cast-in-place piles using piezocone penetration test data. Computers and Geotechnics, 2021, 130, 103911.	4.7	20
42	Bayesian probabilistic characterization of consolidation behavior of clays using CPTU data. Acta Geotechnica, 2022, 17, 931-948.	5.7	20
43	Correlations between electrical resistivity and basic engineering property parameters for marine clays in Jiangsu, China. Journal of Applied Geophysics, 2018, 159, 640-648.	2.1	19
44	Dynamic properties and environmental impact of waste red mud-treated loess under adverse conditions. Bulletin of Engineering Geology and the Environment, 2021, 80, 93-113.	3.5	19
45	Mapping probability of liquefaction using geostatistics and first order reliability method based on CPTU measurements. Engineering Geology, 2017, 218, 197-212.	6.3	18
46	Identification of Soil Strata Based on General Regression Neural Network Model From CPTU Data. Marine Georesources and Geotechnology, 2015, 33, 229-238.	2.1	17
47	Undrained Shear Strength and Pore Pressure Changes Due to Prestress Concrete Pile Installation in Soft Clay. International Journal of Civil Engineering, 2019, 17, 193-203.	2.0	16
48	Humidity field characteristics in road embankment constructed with recycled construction wastes. Journal of Cleaner Production, 2020, 259, 120977.	9.3	16
49	Prediction of embankment settlements over marine clay using piezocone penetration tests. Bulletin of Engineering Geology and the Environment, 2011, 70, 401-409.	3.5	15
50	Evaluation of Pile Bearing Capacity from Piezocone Penetration Test Data in Soft Jiangsu Quaternary Clay Deposits. Marine Georesources and Geotechnology, 2011, 29, 177-201.	2.1	15
51	Compression behavior of reconstituted soils mixed with bentonite for a cutoff wall in a landfill site. Environmental Earth Sciences, 2018, 77, 1.	2.7	15
52	Fabrication and performance of Tile transducers for piezoelectric energy harvesting. AIP Advances, 2020, 10, .	1.3	15
53	Deformation characteristics and control for foundation pits in floodplain areas of Nanjing, China. Bulletin of Engineering Geology and the Environment, 2021, 80, 5527-5538.	3.5	15
54	Empirical correlations of soil parameters based on piezocone penetration tests (CPTU) for Hong Kong-Zhuhai-Macau Bridge (HZMB) project. Transportation Geotechnics, 2021, 30, 100605.	4.5	15

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55	Investigation of thermal conductivity and prediction model of recycled tire rubber-sand mixtures as lightweight backfill. Construction and Building Materials, 2020, 248, 118657.	7.2	15
56	Characterization of spatial variability of CPTU data in a liquefaction site improved by vibro-compaction method. KSCE Journal of Civil Engineering, 2017, 21, 209-219.	1.9	14
57	Preparation and performance study of a new type of Tile transducer for roadway applications. Journal of Intelligent Material Systems and Structures, 2020, 31, 2020-2028.	2.5	14
58	Probabilistic identification of contaminated soils using resistivity piezocone penetration tests. Acta Geotechnica, 2020, 15, 761-779.	5.7	13
59	Evaluation of subsurface spatial variability in site characterization based on RCPTU data. Bulletin of Engineering Geology and the Environment, 2016, 75, 401-412.	3.5	12
60	Performance and prediction of long-term settlement in road embankments constructed with recycled construction and demolition waste. Acta Geotechnica, 2022, 17, 4069-4093.	5.7	12
61	Investigation of Thermal Conductivity and Prediction Model of Mucky Silty Clay. Journal of Materials in Civil Engineering, 2020, 32, .	2.9	11
62	Safety Assessment of Buried Pipeline during Pile Driving Vibration in Offshore Engineering. Marine Georesources and Geotechnology, 2016, 34, 689-702.	2.1	10
63	Random field characterization of CPTU soil behavior type index of Jiangsu quaternary soil deposits. Bulletin of Engineering Geology and the Environment, 2017, 76, 353-369.	3.5	10
64	Development and validation of a method to predict the soil thermal conductivity using thermal piezocone penetration testing (T-CPTU). Canadian Geotechnical Journal, 2022, 59, 510-525.	2.8	10
65	Consolidation Parameters Interpretation of CPTU Dissipation Data Based on Strain Path Theory for Soft Jiangsu Quaternary Clays. Marine Georesources and Geotechnology, 2015, 33, 310-319.	2.1	9
66	SPTâ€“CPTU Correlations and Liquefaction Evaluation for the Island and Tunnel Project of the Hong Kongâ€“Zhuhaiâ€“Macao Bridge. International Journal of Civil Engineering, 2018, 16, 1423-1434.	2.0	9
67	Prediction of soil thermal conductivity based on Intelligent computing model. Heat and Mass Transfer, 2022, 58, 1695-1708.	2.1	9
68	SPT-CPT Correlation and Its Application for Liquefaction Evaluation in China. Marine Georesources and Geotechnology, 2015, 33, 272-281.	2.1	7
69	Evaluation of geotechnical parameters of a lagoonal clay deposit in Jiangsu Lixia River area of China by seismic piezocone tests. KSCE Journal of Civil Engineering, 2016, 20, 1769-1782.	1.9	7
70	Evaluation of Engineering Characteristics of Lian-Yan Railway Soft Soil Based on CPTU Data-A Case Study. Procedia Engineering, 2017, 189, 33-39.	1.2	7
71	Artificial neural network prediction models of heavy metal polluted soil resistivity. European Journal of Environmental and Civil Engineering, 2021, 25, 1570-1590.	2.1	7
72	Prediction of in situ state parameter of sandy deposits from CPT measurements using optimized GMDH-type neural networks. Acta Geotechnica, 2022, 17, 4515-4535.	5.7	7

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73	Subsurface characterization of a construction site in Nanjing, China using ERT and CPTU methods. Engineering Geology, 2022, 299, 106563.	6.3	6
74	Study on Strength Characteristics and Microcosmic Mechanism of Silt Improved by Lignin-Based Bio-Energy Coproducts. , 2014, , .		5
75	Comparative performance of the international piezocone and China CPT in Jiangsu Quaternary clays of China. Transportation Geotechnics, 2015, 3, 1-14.	4.5	5
76	Physical and Microscopic Characteristics Experiments with Heavy Metal Polluted Cohesive Soil. , 2016, , .		5
77	Performance evaluation of soil mixtures treated with graphite and used as barrier fill material for high-level radioactive waste repository. Acta Geotechnica, 2021, 16, 1487-1507.	5.7	5
78	Experimental Analysis on the Mechanical Properties of Saturated Silty Mudstone under Frozen Conditions. Journal of Testing and Evaluation, 2019, 47, 188-202.	0.7	5
79	Stress History Estimation Method of Underconsolidated Soil by Partial Piezocone Dissipation Tests. Marine Georesources and Geotechnology, 2014, 32, 368-378.	2.1	4
80	Piezocone penetration test-based site characterisation of Chongâ€“Qi Bridge project, China. Proceedings of the Institution of Civil Engineers: Forensic Engineering, 2020, 173, 25-34.	0.5	4
81	Spatial Variability Analysis of Soil Properties using Geostatistics. Advances in Computer and Electrical Engineering Book Series, 2016, , 195-226.	0.3	4
82	Artificial neural network model for predicting soil electrical resistivity. Journal of Intelligent and Fuzzy Systems, 2015, 29, 1751-1759.	1.4	3
83	Assessment of CPTU and static load test methods for predicting ultimate bearing capacity of pile. Marine Georesources and Geotechnology, 2017, 35, 738-745.	2.1	3
84	Prediction of limit pressure and pressuremeter modulus using artificial neural network analysis based on CPTU data. Arabian Journal of Geosciences, 2021, 14, 1.	1.3	3
85	In situ evaluation of soil contaminated by total petroleum hydrocarbons using membrane interface probe: a case study from Nanjing, China. Bulletin of Engineering Geology and the Environment, 2022, 81, 1.	3.5	3
86	Uncertainty Analysis of Axial Pile Capacity in Layered Soils by the Piezocone Penetration Test. Frontiers in Earth Science, 2022, 10, .	1.8	3
87	Seismic Cone Penetration Test Assessment of Vibratory Probe Compaction for Liquefaction Mitigation. , 2012, , .		2
88	Assessment of soft clay ground improvement from SCPTU results. Proceedings of the Institution of Civil Engineers: Geotechnical Engineering, 2012, 165, 83-95.	1.6	2
89	Assessing Spatial Variability of Piezocone Penetration Resistance of Layered Soft Clays Using Geostatistics. , 2017, , .		2
90	Estimation of Undrained Shear Strength of Overconsolidated Clay Using a Maximum Excess Pore Pressure Method Based on Piezocone Penetration Test (CPTU). Geotechnical Testing Journal, 2021, 44, 1153-1162.	1.0	2

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91	Mapping constrained modulus differences in a highway widening project based on CPTU data and two-dimensional anisotropic geostatistics. Transportation Geotechnics, 2022, 32, 100686.	4.5	2
92	Quantitative identification of cutoff wall construction defects using Bayesian approach based on excess pore water pressure. Acta Geotechnica, 2022, 17, 2553-2571.	5.7	2
93	Effect of Excavation Disturbance on Clayey Soil Mechanical Properties and Pile Capacity. International Journal of Geomechanics, 2022, 22, .	2.7	2
94	Application of the Piezocone Penetration Testing to Assess Flow Characteristics of Marine Clay. , 2014, , .		1
95	Assessment of Stress History of Jiangsu Clay Deposits from Seismic Piezocone Penetration Testing (SCPTU) Data. Marine Georesources and Geotechnology, 2015, 33, 299-309.	2.1	1
96	Geostatistical Modeling Resistivity of Cohesionless Soil Using RCPTU Data. , 2016, , .		1
97	Field Investigation of Maximum Dynamic Shear Modulus of Clay Deposit Using Seismic Piezocone. International Journal of Civil Engineering, 2019, 17, 699-708.	2.0	1
98	Closure to â€œReclaimed Lignin-Stabilized Silty Soil: Undrained Shear Strength, Atterberg Limits, and Microstructure Characteristicsâ€•by Tao Zhang, Guojun Cai, and Songyu Liu. Journal of Materials in Civil Engineering, 2020, 32, 07020002.	2.9	1
99	Prediction of the Coefficient of Consolidation of Soil via the Hyperbolic Fitting Method during Piezocone Dissipation Test. International Journal of Geomechanics, 2020, 20, 06020026.	2.7	1
100	Thermomechanical Analysis of Fiberâ€“Bentonite-Based Mixtures as Buffer Material in an Engineered Nuclear Barrier. Journal of Materials in Civil Engineering, 2021, 33, .	2.9	1
101	Effect of Particle Size and Constraint Conditions on Single Particle Strength of Carbonate Sand. Sensors, 2022, 22, 765.	3.8	1
102	Shallow Sliding Failure Analysis of Weakly Expansive Soil Slope during Wet-Dry Cycles. Soil Mechanics and Foundation Engineering, 2022, 58, 445.	0.7	1
103	Multivariate distribution models of soil electrical resistivity. Cold Regions Science and Technology, 2022, 201, 103584.	3.5	1
104	Assessment of Engineering Characteristics of Pesticides-Contaminated Soil Based on RCPTU Data. , 2014, , .		0
105	Postsurcharge Secondary Compression Characteristics of Marine Clay from Piezocone Penetration Tests on a Low-Volume Road. Transportation Research Record, 2015, 2473, 172-180.	1.9	0
106	Evaluation of Undrained Shear Strength of Clay Using the CPTU Pore Pressure Method. Soil Mechanics and Foundation Engineering, 2018, 55, 162-167.	0.7	0
107	Evaluating the Influence of Dynamic Compaction on Soft Soil Foundations Based on CPTu Testing. , 2021, , .		0
108	Evaluation of Liquefaction Potential of Saturated Sands Based on Resistivity Piezocone Penetration Testingâ€”A Case Study. , 2018, , 509-514.		0

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109	Evaluation of Liquefaction Potential of Saturated Sands Based on Resistivity Piezocone Penetration Testing. , 2018, , 355-363.		0
110	Multivariate Correlations Among SCPTU Parameters of Jiangsu Cohesionless Soils. , 2018, , 364-372.		0
111	A Penetration Processing Study of Piezocone Penetration Test in Cutoff Wall. , 2018, , 486-492.		0
112	Analysis of Consolidation Processing of Piezocone Penetration Test in Cutoff Wall. Environmental Science and Engineering, 2019, , 391-396.	0.2	0
113	Laboratory Study of the Detection of Metal Contaminated Clay Layer Using Four-Electrode Resistivity Cone. Environmental Science and Engineering, 2019, , 359-366.	0.2	0
114	A Stochastic Approach to Soil-Rock Slope Stability Analysis Considering Soil Softening of Contact Zone. Soil Mechanics and Foundation Engineering, 2021, 58, 383-390.	0.7	0