Huabei Liu

List of Publications by Year
in descending order

110 papers	3,531 citations	101543 36 h-index	161849 54 g-index
112 all docs	112 docs citations	112 times ranked	1519 citing authors

#	Article	IF	Citations
1	Large-Scale Shaking Table Tests on Modular-Block Reinforced Soil Retaining Walls. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2005, 131, 465-476.	3.0	155
2	Seismic response of large underground structures in liquefiable soils subjected to horizontal and vertical earthquake excitations. Computers and Geotechnics, 2005, 32, 223-244.	4.7	125
3	Three-dimensional simulation of the construction process of the Zipingpu concrete face rockfill dam based on a generalized plasticity model. Computers and Geotechnics, 2012, 43, 143-154.	4.7	119
4	Constitutive modeling of soil-structure interface through the concept of critical state soil mechanics. Mechanics Research Communications, 2006, 33, 515-531.	1.8	116
5	Associated Generalized Plasticity Framework for Modeling Gravelly Soils Considering Particle Breakage. Journal of Engineering Mechanics - ASCE, 2013, 139, 606-615.	2.9	115
6	Pressure-Level Dependency and Densification Behavior of Sand Through Generalized Plasticity Model. Journal of Engineering Mechanics - ASCE, 2003, 129, 851-860.	2.9	110
7	Numerical simulation of the seismic response of the Zipingpu concrete face rockfill dam during the Wenchuan earthquake based on a generalized plasticity model. Computers and Geotechnics, 2013, 49, 111-122.	4.7	107
8	Centrifugal Modeling of Seismic Behavior of Large-Diameter Pipe in Liquefiable Soil. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2003, 129, 1092-1101.	3.0	91
9	Dynamic Analysis of Subway Structures Under Blast Loading. Geotechnical and Geological Engineering, 2009, 27, 699-711.	1.7	88
10	Parametric Studies on the Behavior of Reinforced Soil Retaining Walls under Earthquake Loading. Journal of Engineering Mechanics - ASCE, 2005, 131, 1056-1065.	2.9	80
11	Constitutive description of interface behavior including cyclic loading and particle breakage within the framework of critical state soil mechanics. International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 1495-1514.	3.3	80
12	Constitutive modeling of dense gravelly soils subjected to cyclic loading. International Journal for Numerical and Analytical Methods in Geomechanics, 2014, 38, 1503-1518.	3.3	80
13	Long-term lateral displacement of geosynthetic-reinforced soil segmental retaining walls. Geotextiles and Geomembranes, 2012, 32, 18-27.	4.6	69
14	Analyzing Dynamic Behavior of Geosynthetic-Reinforced Soil Retaining Walls. Journal of Engineering Mechanics - ASCE, 2004, 130, 911-920.	2.9	68
15	Application of near-surface seismic refraction tomography and multichannel analysis of surface waves for geotechnical site characterizations: A case study. Engineering Geology, 2016, 208, 100-113.	6.3	60
16	Stress-Dilatancy Relationship of Zipingpu Gravel under Cyclic Loading in Triaxial Stress States. International Journal of Geomechanics, 2016, 16, .	2.7	58
17	Finite-Element Simulations of Full-Scale Modular-Block Reinforced Soil Retaining Walls under Earthquake Loading. Journal of Engineering Mechanics - ASCE, 2010, 136, 653-661.	2.9	57
18	Macro and micro investigation of gravel content on simple shear behavior of sand-gravel mixture. Construction and Building Materials, 2019, 221, 730-744.	7.2	56

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19	Reinforcement load and deformation mode of geosynthetic-reinforced soil walls subject to seismic loading during service life. Geotextiles and Geomembranes, 2011, 29, 1-16.	4.6	55
20	Particle Breakage of Calcareous Sand and Its Correlation with Input Energy. International Journal of Geomechanics, 2020, 20, .	2.7	55
21	Geogrid-reinforced lime-treated cohesive soil retaining wall: Case study andÂimplications. Geotextiles and Geomembranes, 2012, 35, 112-118.	4.6	53
22	DEM investigation of the effect of intermediate principle stress on particle breakage of granular materials. Computers and Geotechnics, 2017, 84, 58-67.	4.7	52
23	Long-Term Reinforcement Load of Geosynthetic-Reinforced Soil Retaining Walls. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 875-889.	3.0	49
24	Bayesian network models for probabilistic evaluation of earthquake-induced liquefaction based on CPT and Vs databases. Engineering Geology, 2019, 254, 76-88.	6.3	49
25	Working mechanism of cutoff walls in reducing uplift of large underground structures induced by soil liquefaction. Computers and Geotechnics, 2006, 33, 209-221.	4.7	48
26	Post-construction performance of a two-tiered geogrid reinforced soil wall backfilled with soil-rock mixture. Geotextiles and Geomembranes, 2014, 42, 91-97.	4.6	48
27	A new measurement approach for deflection monitoring of large-scale bored piles using distributed fiber sensing technology. Measurement: Journal of the International Measurement Confederation, 2018, 117, 444-454.	5.0	48
28	Large-scale tests of pile-supported earth platform with and without geogrid. Geotextiles and Geomembranes, 2014, 42, 586-598.	4.6	47
29	Seismic response of multi-tiered reinforced soil retaining walls. Soil Dynamics and Earthquake Engineering, 2014, 61-62, 1-12.	3.8	45
30	Cyclic and postcyclic simple shear behavior of binary sand-gravel mixtures with various gravel contents. Soil Dynamics and Earthquake Engineering, 2019, 123, 230-241.	3.8	45
31	Long-term behavior of GRS retaining walls with marginal backfill soils. Geotextiles and Geomembranes, 2009, 27, 295-307.	4.6	44
32	Seismic response of pile-raft-clay system subjected to a long-duration earthquake: centrifuge test and finite element analysis. Soil Dynamics and Earthquake Engineering, 2017, 92, 488-502.	3.8	44
33	Numerical analysis of geocell-reinforced retaining wall failure modes. Geotextiles and Geomembranes, 2018, 46, 284-296.	4.6	42
34	Soil-Structure Interaction and Failure of Cast-Iron Subway Tunnels Subjected to Medium Internal Blast Loading. Journal of Performance of Constructed Facilities, 2012, 26, 691-701.	2.0	41
35	Evaluation of interface shear behavior of GFRP soil nails with a strain-transfer model and distributed fiber-optic sensors. Computers and Geotechnics, 2018, 95, 180-190.	4.7	41
36	Finite Element Studies of Asphalt Concrete Pavement Reinforced with Geogrid. Journal of Engineering Mechanics - ASCE, 2003, 129, 801-811.	2.9	38

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37	A pseudo-static method for seismic responses of underground frame structures subjected to increasing excitations. Tunnelling and Underground Space Technology, 2017, 65, 106-120.	6.2	38
38	Unified Elastoplasticâ€“Viscoplastic Bounding Surface Model of Geosynthetics and Its Applications to Geosynthetic Reinforced Soil-Retaining Wall Analysis. Journal of Engineering Mechanics - ASCE, 2007, 133, 801-815.	2.9	37
39	Seismic Responses of Reinforced Soil Retaining Walls and the Strain Softening of Backfill Soils. International Journal of Geomechanics, 2012, 12, 351-356.	2.7	33
40	Responses of reinforced soil retaining walls subjected to horizontal and vertical seismic loadings. Soil Dynamics and Earthquake Engineering, 2020, 129, 105969.	3.8	32
41	Reproducing ground response using inâ€situ soil dynamic parameters. Earthquake Engineering and Structural Dynamics, 2022, 51, 2449-2465.	4.4	32
42	Stress Dilatancy and Reinforcement Load of Vertical-Reinforced Soil Composite: Analytical Method. Journal of Engineering Mechanics - ASCE, 2014, 140, 630-639.	2.9	31
43	The influence of rolling resistance on the stress-dilatancy and fabric anisotropy of granular materials. Granular Matter, 2018, 20, 1.	2.2	31
44	Centrifuge Tests of Geocell-Reinforced Retaining Walls at Limit Equilibrium. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	3.0	30
45	Deformation analysis of reinforced soil retaining wallsâ€”simplistic versus sophisticated finite element analyses. Acta Geotechnica, 2009, 4, 203-213.	5.7	29
46	Stress-dilatancy of Zipingpu gravel in triaxial compression tests. Science China Technological Sciences, 2016, 59, 214-224.	4.0	29
47	Stability analysis of geocell-reinforced retaining walls. Geosynthetics International, 2017, 24, 442-450.	2.9	27
48	Creep behaviour of sandâ€“geomembrane interfaces. Geosynthetics International, 2014, 21, 83-88.	2.9	26
49	Seismic response of clay-pile-raft-superstructure systems subjected to far-field ground motions. Soil Dynamics and Earthquake Engineering, 2017, 101, 209-224.	3.8	26
50	Early-Warning System With Quasi-Distributed Fiber Optic Sensor Networks and Cloud Computing for Soil Slopes. IEEE Access, 2017, 5, 25437-25444.	4.2	26
51	Reinforcement Load and Compression of Reinforced Soil Mass under Surcharge Loading. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2015, 141, .	3.0	25
52	FINITE ELEMENT ANALYSIS OF PIPE BURIED IN SATURATED SOIL DEPOSIT SUBJECT TO EARTHQUAKE LOADING. Journal of Earthquake and Tsunami, 2008, 02, 1-17.	1.3	24
53	Unified sand modeling using associated or non-associated flow rule. Mechanics Research Communications, 2013, 50, 63-70.	1.8	24
54	Development of a Novel Settlement Monitoring System Using Fiber-Optic Liquid-Level Transducers With Automatic Temperature Compensation. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 2214-2222.	4.7	23

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55	Large-scale triaxial compression tests of geocell-reinforced sand. Geosynthetics International, 2019, 26, 388-395.	2.9	23
56	Performance-based seismic assessment of shield tunnels by incorporating a nonlinear pseudostatic analysis approach for the soil-tunnel interaction. Tunnelling and Underground Space Technology, 2021, 114, 103981.	6.2	22
57	Mechanism and Countermeasure of Segmental Lining Damage Induced by Large Water Inflow from Excavation Face in Shield Tunneling. International Journal of Geomechanics, 2018, 18, .	2.7	21
58	Identification of ground motion intensity measure and its application for predicting soil liquefaction potential based on the Bayesian network method. Engineering Geology, 2019, 248, 34-49.	6.3	21
59	Bounding Surface Model for Geosynthetic Reinforcements. Journal of Engineering Mechanics - ASCE, 2001, 127, 963-967.	2.9	20
60	Earth pressure coefficients for reinforcement loads of vertical geosynthetic-reinforced soil retaining walls under working stress conditions. Geotextiles and Geomembranes, 2018, 46, 486-496.	4.6	19
61	Centrifuge model study on the seismic responses of shield tunnel. Tunnelling and Underground Space Technology, 2019, 92, 103036.	6.2	19
62	Deformation Monitoring of Metro Tunnel with a New Ultrasonic-Based System. Sensors, 2017, 17, 1758.	3.8	18
63	Analyzing Reinforcement Loads of Vertical Geosynthetic-Reinforced Soil Walls Considering Toe Restraint. International Journal of Geomechanics, 2017, 17, .	2.7	17
64	Case history on failure of geosynthetics-reinforced soil bridge approach retaining walls. Geotextiles and Geomembranes, 2021, 49, 1585-1599.	4.6	17
65	Modeling cyclic behavior of geosynthetics using mathematical functions combined with Masing rule and bounding surface plasticity. Geosynthetics International, 2006, 13, 234-245.	2.9	16
66	Simplified Blast-Load Effects on the Column and Bent Beam of Highway Bridges. Journal of Bridge Engineering, 2015, 20, .	2.9	16
67	Relationship between earthquake-induced uplift of rectangular underground structures and the excess pore water pressure ratio in saturated sandy soils. Tunnelling and Underground Space Technology, 2018, 79, 35-51.	6.2	16
68	Analyzing the Reinforcement Loads of Geosynthetic-Reinforced Soil Walls Subject to Seismic Loading during the Service Life. Journal of Performance of Constructed Facilities, 2009, 23, 292-302.	2.0	15
69	Finite Element Simulation of Medium-Range Blast Loading Using LS-DYNA. Shock and Vibration, 2015, 2015, 1-9.	0.6	15
70	Required reinforcement stiffness for vertical geosynthetic-reinforced-soil walls at strength limit state. Geotechnique, 2016, 66, 424-434.	4.0	15
71	Centrifuge Modeling of Underground Tunnel in Saturated Soil Subjected to Internal Blast Loading. Journal of Performance of Constructed Facilities, 2016, 30, .	2.0	15
72	Relationship between Arias intensity and the responses of reinforced soil retaining walls subjected to near-field ground motions. Soil Dynamics and Earthquake Engineering, 2018, 111, 160-168.	3.8	15

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73	Evaluation of the lateral earth pressure coefficients at-rest in granular soil deposits using the anisotropic components of S-wave velocity. Engineering Geology, 2017, 230, 55-63.	6.3	14
74	Improved Hardin-Drnevich model for the dynamic modulus and damping ratio of frozen soil. Cold Regions Science and Technology, 2018, 153, 64-77.	3.5	14
75	Nonlinear Elastic Analysis of Reinforcement Loads for Vertical Reinforced Soil Composites without Facing Restriction. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, .	3.0	13
76	A large-scale test of reinforced soil railway embankment with soilbag facing under dynamic loading. Geomechanics and Engineering, 2017, 12, 579-593.	0.9	12
77	Comparing the Seismic Responses of Single- and Multi-Tiered Geosynthetic Reinforced Soil Walls. , 2011, , .		11
78	Analyzing the deformation and failure of geosynthetic-encased granular soil in the triaxial stress condition. Geotextiles and Geomembranes, 2020, 48, 886-896.	4.6	11
79	Damage of Cast-Iron Subway Tunnels under Internal Explosions. , 2011, , .		10
80	Coupling effects of surface building and earthquake loading on in-service shield tunnels. Transportation Geotechnics, 2021, 26, 100453.	4.5	10
81	Investigating the relationship between erosion-induced structural damage and lining displacement parameters in shield tunnelling. Computers and Geotechnics, 2021, 133, 104041.	4.7	10
82	Particle breakage and the critical state of sand: By Ghafghazi, M., Shuttle, D.A., DeJong, J.T., 2014. Soils and Foundations 54 (3), 451â€“461. Soils and Foundations, 2015, 55, 220-222.	3.1	9
83	The Uplift Behavior of a Subway Station During Different Degree of Soil Liquefaction. Procedia Engineering, 2017, 189, 18-24.	1.2	9
84	Modeling the Effects of Internal Erosion on the Structural Damage of a Shield Tunnel. International Journal of Geomechanics, 2020, 20, 04020053.	2.7	9
85	Measuring joint opening displacement between model shield-tunnel segments for reduced-scale model tests. Structures, 2018, 16, 112-118.	3.6	8
86	Evaluation of hyperbolic stress-strain and bulk-modulus model parameters in granular soil mass using seismic surveying. Engineering Geology, 2020, 266, 105456.	6.3	8
87	Response of circular tunnel with imperfect interface bonding in layered ground subjected to obliquely incident plane P or SV wave. International Journal for Numerical and Analytical Methods in Geomechanics, 2018, 42, 2001-2017.	3.3	6
88	Behavior of rockfill dam under complex terrain condition. Arabian Journal of Geosciences, 2020, 13, 1.	1.3	6
89	Evaluating the overconsolidation ratios and peak friction angles of granular soil deposits using noninvasive seismic surveying. Acta Geotechnica, 2020, 15, 3193-3209.	5.7	6
90	Analytical method for the lateral displacements of steel-reinforced soil walls on stiff foundations with incremental panel facings. Geotechnique, 2015, 65, 728-739.	4.0	5

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91	Failure of circular tunnel in saturated soil subjected to internal blast loading. Geomechanics and Engineering, 2016, 11, 421-438.	0.9	5
92	Centrifuge Testing of Segmental Geosynthetic-Reinforced Soil Retaining Walls Subject to Modest Seismic Loading. , 2010, , .		4
93	Three-Dimensional Analysis of Underground Tunnels in Liquefiable Soil Subject to Earthquake Loading. , 2012, , .		4
94	One-step analytical method for required reinforcement stiffness of vertical reinforced soil wall with given factor of safety on backfill soil. Geotextiles and Geomembranes, 2021, 49, 343-350.	4.6	4
95	Seismic response of a continuous foundation structure supported on partially improved foundation soil. Soil Dynamics and Earthquake Engineering, 2016, 90, 128-137.	3.8	3
96	Response of Long Tunnel in Layered Half-Space under Asynchronous Seismic Shear-Horizontal Wave Propagation. Journal of Engineering Mechanics - ASCE, 2018, 144, 04018050.	2.9	3
97	Estimating drained cross-anisotropic elastic parameters in saturated clays using the undrained properties. Engineering Geology, 2021, 293, 106340.	6.3	3
98	Comparison of Data-Driven Methods for Evaluating Earthquake-Induced Liquefaction Potential. Springer Series in Geomechanics and Geoengineering, 2020, , 353-364.	0.1	3
99	Poro-Elasto-Plastic Modeling of Saturated Granular Soils Subjected to Blast Loading. , 2013, , .		2
100	An Analytical Method for Reinforcement Load of Wrapped-Face Mse Walls before Full Mobilization of Soil Strength. , 2013, , .		2
101	Modeling Liquefaction-Induced Large Deformation of Sand Incorporating the Effects of Fabric Anisotropy Evolution. Journal of Engineering Mechanics - ASCE, 2021, 147, .	2.9	2
102	Effects of Relative Creep of Geosynthetic-Reinforcements on the Responses of Geosynthetic MSE Walls. , 2009, , .		1
103	Discussion of â€œNumerical Evaluation of the Behavior of GRS Walls with Segmental Block Facing under Working Stress Conditionsâ€•by S. H. Mirmoradi and M. Ehrlich. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, 07016001.	3.0	1
104	A Dynamic Explicit Algorithm for Saturated Porous Media. , 2017, , .		1
105	Analyzing operational reinforcement loads of geosynthetic-reinforced soil retaining walls based on plasticity theory. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2022, 52, 1083-1095.	0.5	1
106	Closure to â€œAssociated Generalized Plasticity Framework for Modeling Gravelly Soils Considering Particle Breakageâ€•by Huabei Liu and Degao Zou. Journal of Engineering Mechanics - ASCE, 2014, 140, 07014004.	2.9	0
107	Discussion of â€œCentrifuge evaluation of the time-dependent behavior of geotextile-reinforced soil wallsâ€•by C.M.L. Costa, J.G. Zornberg, B.S. Bueno, Y.D.J. Costa, Geotextiles and Geomembranes 44(2016) 188â€“200. Geotextiles and Geomembranes, 2016, 44, 884-887.	4.6	0
108	Time-Dependent Load Redistribution in Geosynthetic-Reinforced Soil Walls Considering the Strain Softening of Backfill Soils. , 2017, , .		0

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109	Influence of Long-Term Stiffness of Geogrids on the Reinforcement Load of Reinforced Soil Retaining Walls. , 2019, , .		0
110	A semi-analytical approach for efficient calculation of drained cross-anisotropic elastic moduli in saturated granular soils from undrained attributes. Computers and Geotechnics, 2022, 148, 104794.	4.7	0