Hong-Hu Zhu

List of Publications by Citations

117 papers	1,927 citations	26 h-index	38 g-index
128 ext. papers	2,532 ext. citations	3.3 avg, IF	5.36 L-index

#	Paper	IF	Citations
117	Investigation of the evolutionary process of a reinforced model slope using a fiber-optic monitoring network. *Engineering Geology*, **2015**, 186, 34-43	6	90
116	An optical fibre monitoring system for evaluating the performance of a soil nailed slope. *Smart Structures and Systems*, **2012**, 9, 393-410		78
115	Field Pullout Testing and Performance Evaluation of GFRP Soil Nails. *Journal of Geotechnical and Geoenvironmental Engineering - ASCE*, **2011**, 137, 633-642	3.4	74
114	Large-scale geomechanical model testing of an underground cavern group in a true three-dimensional (3-D) stress state. *Canadian Geotechnical Journal*, **2010**, 47, 935-946	3.2	69
113	Probabilistic prediction of rainfall-induced slope failure using a mechanics-based model. *Engineering Geology*, **2014**, 168, 129-140	6	68
112	FBG-Based Monitoring of Geohazards: Current Status and Trends. *Sensors*, **2017**, 17,	3.8	68
111	Distributed fiber optic monitoring and stability analysis of a model slope under surcharge loading. *Journal of Mountain Science*, **2014**, 11, 979-989	2.1	63
110	Monitoring of lateral displacements of a slope using a series of special fibre Bragg grating-based in-place inclinometers. *Measurement Science and Technology*, **2012**, 23, 025007	2	57
109	Monitoring and warning of landslides and debris flows using an optical fiber sensor technology. *Journal of Mountain Science*, **2011**, 8, 728-738	2.1	54
108	Fiber Bragg grating-based performance monitoring of a slope model subjected to seepage. *Smart Materials and Structures*, **2014**, 23, 095027	3.4	50
107	Monitoring Internal Displacements of a Model Dam Using FBG Sensing Bars. *Advances in Structural Engineering*, **2010**, 13, 249-261	1.9	49
106	Mechanism of biochar soil pore□gas□water interaction: gas properties of biochar-amended sandy soil at different degrees of compaction using KNN modeling. *Acta Geophysica*, **2020**, 68, 207-217	2.2	48
105	Modeling the pullout behavior of short fiber in reinforced soil. *Geotextiles and Geomembranes*, **2014** , 42, 329-338	5.2	38
104	Monitoring the behavior of segment joints in a shield tunnel using distributed fiber optic sensors. *Structural Control and Health Monitoring*, **2018**, 25, e2056	4.5	37
103	A new flexible FBG sensing beam for measuring dynamic lateral displacements of soil in a shaking table test. *Measurement: Journal of the International Measurement Confederation*, **2013**, 46, 200-209	4.6	35
102	Settlement analysis of viscoelastic foundation under vertical line load using a fractional Kelvin-Voigt model. *Geomechanics and Engineering*, **2012**, 4, 67-78		34
101	Interfacial characterization of soil-embedded optical fiber for ground deformation measurement. *Smart Materials and Structures*, **2014**, 23, 095022	3.4	33

100	Mechanical properties and energy conversion of 3D close-packed lattice model for brittle rocks. *Computers and Geosciences*, **2017**, 103, 12-20	4.5	32
99	Feasibility study of strain based stability evaluation of locally loaded slopes: Insights from physical and numerical modeling. *Engineering Geology*, **2016**, 208, 39-50	6	32
98	A kinematic method for calculating shear displacements of landslides using distributed fiber optic strain measurements. *Engineering Geology*, **2018**, 234, 83-96	6	31
97	A distributed measurement method for in-situ soil moisture content by using carbon-fiber heated cable. *Journal of Rock Mechanics and Geotechnical Engineering*, **2015**, 7, 700-707	5.3	30
96	Introduction to an FBG-based inclinometer and its application to landslide monitoring. *Journal of Civil Structural Health Monitoring*, **2015**, 5, 645-653	2.9	29
95	Prediction of one-dimensional compression behavior of Nansha clay using fractional derivatives. *Marine Georesources and Geotechnology*, **2017**, 35, 688-697	2.2	29
94	Experimental investigation of pavement behavior after embankment widening using a fiber optic sensor network. *Structural Health Monitoring*, **2015**, 14, 46-56	4.4	27
93	A quantitative monitoring technology for seepage in slopes using DTS. *Engineering Geology*, **2015**, 186, 100-104	6	26
92	Investigation of the influence of soil moisture on thermal response tests using active distributed temperature sensing (ADTS) technology. *Energy and Buildings*, **2018**, 173, 239-251	7	26
91	An improved distributed sensing method for monitoring soil moisture profile using heated carbon fibers. *Measurement: Journal of the International Measurement Confederation*, **2018**, 123, 175-184	4.6	26
90	Forecasting slope deformation field using correlated grey model updated with time correction factor and background value optimization. *Engineering Geology*, **2019**, 260, 105215	6	26
89	Role of the interface between distributed fibre optic strain sensor and soil in ground deformation measurement. *Scientific Reports*, **2016**, 6, 36469	4.9	24
88	Time-dependent pullout behavior of glass fiber reinforced polymer (GFRP) soil nail in sand. *Canadian Geotechnical Journal*, **2015**, 52, 671-681	3.2	23
87	Performance Monitoring of a Glass Fiber-Reinforced Polymer Bar Soil Nail during Laboratory Pullout Test Using FBG Sensing Technology. *International Journal of Geomechanics*, **2013**, 13, 467-472	3.1	23
86	Feasibility study on corrosion monitoring of a concrete column with central rebar using BOTDR. *Smart Structures and Systems*, **2014**, 13, 41-53		22
85	A soil moisture estimation method using actively heated fiber Bragg grating sensors. *Engineering Geology*, **2018**, 242, 142-149	6	22
84	Strain integration-based soil shear displacement measurement using high-resolution strain sensing technology. *Measurement: Journal of the International Measurement Confederation*, **2020**, 166, 108210	4.6	21
83	PSO-SVM-based deep displacement prediction of Majiagou landslide considering the deformation hysteresis effect. *Landslides*, **2021**, 18, 179-193	6.6	20

82	A field study on distributed fiber optic deformation monitoring of overlying strata during coal mining. *Journal of Civil Structural Health Monitoring*, **2015**, 5, 553-562	2.9	18
81	A Fiber Bragg-Grating-Based Miniature Sensor for the Fast Detection of Soil Moisture Profiles in Highway Slopes and Subgrades. *Sensors*, **2018**, 18,	3.8	18
80	Toward Distributed Fiber-Optic Sensing of Subsurface Deformation: A Theoretical Quantification of Ground-Borehole-Cable Interaction. *Journal of Geophysical Research: Solid Earth*, **2020**, 125, e2019JB018878	3.6	16
79	Analysis on shear wave velocity structure of a gravel landslide based on dual-source surface wave method. *Landslides*, **2017**, 14, 1127-1137	6.6	16
78	Evaluations of load-deformation behavior of soil nail using hyperbolic pullout model. *Geomechanics and Engineering*, **2014**, 6, 277-292		16
77	Comparative Study on the Elongation Measurement of a Soil Nail Using Optical Lower Coherence Interferometry Method and FBG Method. *Advances in Structural Engineering*, **2010**, 13, 309-319	1.9	16
76	Stability analysis of an ancient landslide considering shear strength reduction behavior of slip zone soil. *Landslides*, **2016**, 13, 173-181	6.6	15
75	Physical modelling of sliding failure of concrete gravity dam under overloading condition. *Geomechanics and Engineering*, **2010**, 2, 89-106		15
74	Influence of biochar from animal and plant origin on the compressive strength characteristics of degraded landfill surface soils. *International Journal of Damage Mechanics*, **2021**, 30, 484-501	3	15
73	Monitoring of tunnel excavation based on the fiber Bragg grating sensing technology. *Measurement: Journal of the International Measurement Confederation*, **2021**, 169, 108334	4.6	15
72	Theoretical investigation of interaction between a rectangular plate and fractional viscoelastic foundation. *Journal of Rock Mechanics and Geotechnical Engineering*, **2014**, 6, 373-379	5.3	14
71	Resonance magnetoelectric effect in radially polarized long cylindrical composite structures. *Journal of Applied Physics*, **2013**, 113, 214105	2.5	14
70	Experimental Investigation of Consolidation Properties of Nano-Bentonite Mixed Clayey Soil. *Sustainability*, **2020**, 12, 459	3.6	13
69	Performance evaluation of two types of heated cables for distributed temperature sensing-based measurement of soil moisture content. *Journal of Rock Mechanics and Geotechnical Engineering*, **2016**, 8, 212-217	5.3	13
68	Deformation Monitoring of Metro Tunnel with a New Ultrasonic-Based System. *Sensors*, **2017**, 17,	3.8	13
67	Quantifying progressive failure of micro-anchored fiber optic cable–sand interface via high-resolution distributed strain sensing. *Canadian Geotechnical Journal*, **2020**, 57, 871-881	3.2	13
66	A machine learning method for inclinometer lateral deflection calculation based on distributed strain sensing technology. *Bulletin of Engineering Geology and the Environment*, **2020**, 79, 3383-3401	4	12
65	Gas permeability in soil amended with biochar at different compaction states. *IOP Conference Series: Earth and Environmental Science*, **2020**, 463, 012073	0.3	12

64	Exploring efficiency of biochar in enhancing water retention in soils with varying grain size distributions using ANN technique. *Acta Geotechnica*,1	4.9	12
63	Investigating temperature and moisture profiles of seasonally frozen soil under different land covers using actively heated fiber Bragg grating sensors. *Engineering Geology*, **2021**, 290, 106197	6	12
62	Quantitative Evaluation of Optical Fiber/Soil Interfacial Behavior and Its Implications for Sensing Fiber Selection. *IEEE Sensors Journal*, **2015**, 15, 3059-3067	4	11
61	Development and application of a fixed-point fiber-optic sensing cable for ground fissure monitoring. *Journal of Civil Structural Health Monitoring*, **2016**, 6, 715-724	2.9	11
60	Experimental Investigation of Pullout Behavior of Fiber-Reinforced Polymer Reinforcements in Sand. *Journal of Composites for Construction*, **2015**, 19, 04014062	3.3	10
59	Soil strain-field and stability analysis of cut slope based on optical fiber measurement. *Bulletin of Engineering Geology and the Environment*, **2017**, 76, 937-946	4	10
58	Analysis of the strain process of soil slope model during infiltration using BOTDA. *Bulletin of Engineering Geology and the Environment*, **2017**, 76, 947-959	4	10
57	Experimental and numerical investigation of uplift behavior of umbrella-shaped ground anchor. *Geomechanics and Engineering*, **2014**, 7, 165-181		10
56	A field study on the application of distributed temperature sensing technology in thermal response tests for borehole heat exchangers. *Bulletin of Engineering Geology and the Environment*, **2019**, 78, 3901-3915	4	10
55	Fast vibration characteristics analysis of an underwater shield tunnel using the accelerometer network enhanced by edge computing. *Measurement: Journal of the International Measurement Confederation*, **2019**, 141, 52-61	4.6	9
54	Experimental study on pullout performance of sensing optical fibers in compacted sand. *Measurement: Journal of the International Measurement Confederation*, **2015**, 73, 284-294	4.6	9
53	Fiber Bragg GratingBased Flume Test to Study the Initiation of Landslide-Debris Flows Induced by Concentrated Runoff. *Geotechnical Testing Journal*, **2021**, 44, 20190290	1.3	9
52	Feasibility study on ice content measurement of frozen soil using actively heated FBG sensors. *Cold Regions Science and Technology*, **2021**, 189, 103332	3.8	8
51	An Fiber Bragg Grating-Based Monitoring System for Slope Deformation Studies in Geotechnical Centrifuges. *Sensors*, **2019**, 19,	3.8	7
50	Slope Stability Analysis Based on Measured Strains along Soil Nails Using FBG Sensing Technology. *Mathematical Problems in Engineering*, **2013**, 2013, 1-5	1.1	7
49	Bending of a rectangular plate resting on a fractionalized Zener foundation. *Structural Engineering and Mechanics*, **2014**, 52, 1069-1084		7
48	DFOS Applications to Geo-Engineering Monitoring. *Photonic Sensors*, **2021**, 11, 158-186	2.3	7
47	A long term evaluation of circular mat foundations on clay deposits using fractional derivatives. *Computers and Geotechnics*, **2018**, 94, 72-82	4.4	6

46	Feasibility Investigation of Improving the Modified Green-Ampt Model for Treatment of Horizontal Infiltration in Soil. *Water (Switzerland)*, **2019**, 11, 645	3	5
45	Deformation Monitoring of Geomechanical Model Test and Its Application in Overall Stability Analysis of a High Arch Dam. *Journal of Sensors*, **2015**, 2015, 1-12	2	5
44	Feasibility Study of Anchored Fiber-Optic Strain-Sensing Arrays for Monitoring Soil Deformation beneath Model Foundation. *Geotechnical Testing Journal*, **2019**, 42, 20170321	1.3	5
43	Understanding Soil Surface Water Content Using Light Reflection Theory: A Novel Color Analysis Technique Considering Variability in Light Intensity. *Journal of Testing and Evaluation*, **2020**, 48, 20180320	1	5
42	Performance evaluation of buried pipe under loading using fiber Bragg grating and particle image velocimetry techniques. *Measurement: Journal of the International Measurement Confederation*, **2021**, 186, 110086	4.6	5
41	Performance evaluation of soil-embedded plastic optical fiber sensors for geotechnical monitoring. *Smart Structures and Systems*, **2016**, 17, 297-311		4
40	Modeling Dependence Among Suction, Moisture, and Cracking of a Novel Biochar Synthesized from Weed Species. *Advances in Civil Engineering Materials*, **2020**, 9, 20180092	0.7	4
39	Investigating the hydro-mechanical properties of calcareous sand foundations using distributed fiber optic sensing. *Engineering Geology*, **2021**, 295, 106440	6	4
38	Smart Sensing Technologies and Their Applications in Civil Infrastructures 2016. *Journal of Sensors*, **2016**, 2016, 1-2	2	4
37	Landslide displacement prediction based on a novel hybrid model and convolutional neural network considering time-varying factors. *Bulletin of Engineering Geology and the Environment*, **2021**, 80, 7403	4	4
36	Deformation prediction of reservoir landslides based on a Bayesian optimized random forest-combined Kalman filter. *Environmental Earth Sciences*, **2022**, 81, 1	2.9	4
35	Modeling dynamic responses of a cross-river road shield tunnel under stochastic vehicle loads. *Tunnelling and Underground Space Technology*, **2020**, 102, 103432	5.7	3
34	Smart Sensing Technologies and Their Applications in Civil Infrastructures. *Journal of Sensors*, **2015**, 2015, 1-1	2	3
33	Assessment of hydro-mechanical properties of biochar-amended soil sourced from two contrasting feedstock. *Biomass Conversion and Biorefinery*, **2020**, 1	2.3	3
32	Passive distributed temperature sensing (PDTS)-based moisture content estimation in agricultural soils under different vegetative canopies. *Paddy and Water Environment*, **2021**, 19, 383	1.6	3
31	Characterization of Soil Moisture Distribution and Movement Under the Influence of Watering-dewatering Using AHFO and BOTDA Technologies. *Environmental and Engineering Geoscience*, **2019**, 25, 189-202	0.7	2
30	Evaluation of feature- and pixel-based methods for deflection measurements in temporary structure monitoring. *Journal of Civil Structural Health Monitoring*, **2015**, 5, 615-628	2.9	2
29	Monitoring of soil nailed slopes and dams using innovative technologies **2008**, 1361-1366		2

28	Assessment of Flexural and Splitting Strength of Fiber-Reinforced Concrete Using Artificial Intelligence. *Advances in Civil Engineering Materials*, **2019**, 8, 20190030	0.7	2
27	Influence of soil density on gas permeability and water retention in soils amended with in-house produced biochar. *Journal of Rock Mechanics and Geotechnical Engineering*, **2021**,	5.3	2
26	Randomly generating three-dimensional realistic schistous sand particles using deep learning: Variational autoencoder implementation. *Engineering Geology*, **2021**, 291, 106235	6	2
25	Exploring Efficiency of Biochar in Enhancing Water Retention in Soils with Varying Grain Size Distributions using ANN Technique		2
24	Field monitoring of bearing capacity efficiency of permeable pipe pile in clayey soil: A comparative study. *Measurement: Journal of the International Measurement Confederation*, **2021**, 186, 110151	4.6	2
23	Influence of in-house produced biochar on geotechnical properties of expansive clay. *IOP Conference Series: Earth and Environmental Science*, **2020**, 463, 012072	0.3	1
22	Open image in new windowLaboratory Studies on Slope Stability Monitoring Using Distributed Fiber-Optic Sensing Technologies **2014**, 625-629		1
21	An Artificial Intelligence Model for Computing Optimum Fly Ash Content for Structural-Grade Concrete. *Advances in Civil Engineering Materials*, **2019**, 8, 20180079	0.7	1
20	Research review of large deformation monitoring of rock and soil. *IOP Conference Series: Earth and Environmental Science*, **2021**, 861, 042030	0.3	1
19	Fractional calculus-based compression modeling of soft clay. *Japanese Geotechnical Society Special Publication*, **2016**, 2, 417-420	0.2	1
18	Stochastic modelling of relative water permeability in vegetative soils with implications on stability of bioengineered slope. *Stochastic Environmental Research and Risk Assessment*, **2018**, 32, 3541-3559	3.5	1
17	Performance monitoring of a curved shield tunnel during adjacent excavations using a fiber optic nervous sensing system. *Tunnelling and Underground Space Technology*, **2022**, 124, 104483	5.7	1
16	Development and Evaluation of Arduino-Based Automatic Irrigation System for Regulation of Soil Moisture. *International Journal of Geosynthetics and Ground Engineering*, **2022**, 8, 1	2	0
15	Monitoring Water Infiltration of Capillary Barrier with Actively Heated Fiber Bragg Gratings. *Environmental Geotechnics*,1-16	1.2	0
14	Modeling uplift failure of pipes buried in sand using material point method. *Tunnelling and Underground Space Technology*, **2022**, 119, 104203	5.7	0
13	Correlations of SMR-Qslope Data in Stability Classification of Discontinuous Rock Slope: A Modified Relationship Considering the Iranian Data. *Geotechnical and Geological Engineering*,1	1.5	0
12	Distributed Fiber Optic Sensing in Pile Load Tests: Technological Development and Applications. *Lecture Notes in Civil Engineering*, **2022**, 1-11	0.3	0
11	Forecasting reservoir-induced landslide deformation using genetic algorithm enhanced multivariate Taylor series Kalman filter. *Bulletin of Engineering Geology and the Environment*, **2022**, 81, 1	4	0

10	Monitoring Flexure Behavior of Compacted Clay Beam Using High-Resolution Distributed Fiber Optic Strain Sensors. *Geotechnical Testing Journal*, **2022**, 45, 20200331	1.3	0
9	A field test to investigate spatiotemporal distribution of soil moisture under different cropland covers in the semiarid Loess Plateau of China. *Paddy and Water Environment*,1	1.6	0
8	Bearing performance of steel pipe pile in multilayered marine soil using fiber optic technique: A case study. *Marine Georesources and Geotechnology*,1-17	2.2	0
7	Subsurface Multi-Physical Monitoring of a Reservoir Landslide with the Fiber-Optic Nerve System. *Geophysical Research Letters*,	4.9	0
6	Closure to Experimental Investigation of Pullout Behavior of Fiber-Reinforced Polymer Reinforcements in Sand by Cheng-Cheng Zhang, Hong-Hu Zhu, Bin Shi, Fang-Dong Wu, and Jian-Hua Yin. *Journal of Composites for Construction*, **2015**, 19, 07015005	3.3	
5	Evaluating Suitability of Geomaterials-Amended Soil for Landfill Liner: A Comparative Study. *Journal of Hazardous, Toxic, and Radioactive Waste*, **2020**, 24, 04020052	2.3	
4	Fiber Optic Monitoring and Forecasting of Reservoir Landslides. *Lecture Notes in Civil Engineering*, **2021**, 1-13	0.3	
3	Experimental Study on Overlying Strata Deformation and Failure Using Distributed Intelligent Sensing. *Lecture Notes in Civil Engineering*, **2022**, 315-328	0.3	
2	Key-Block Theorem Application on Discontinuous Rock Slope Instabilities and Rock Mass Description. *Lecture Notes in Civil Engineering*, **2022**, 200-208	0.3	
1	Research Status and Prospect of Anti-slide Piles for Slope Stabilization. *Lecture Notes in Civil Engineering*, **2022**, 223-236	0.3	