

Xinbao Yu

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

658
citations

623734

14
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24
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49
all docs

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docs citations

49
times ranked

503
citing authors

#	ARTICLE	IF	CITATIONS
1	Expansive soil modified by waste steel slag and its application in subbase layer of highways. <i>Soils and Foundations</i> , 2019, 59, 955-965.	3.1	73
2	Thermal Conductivity of Quartz Sands by Thermo-Time Domain Reflectometry Probe and Model Prediction. <i>Journal of Materials in Civil Engineering</i> , 2015, 27, .	2.9	72
3	A new generalized soil thermal conductivity model for sand-kaolin clay mixtures using thermo-time domain reflectometry probe test. <i>Acta Geotechnica</i> , 2017, 12, 739-752.	5.7	62
4	Time Domain Reflectometry Automatic Bridge Scour Measurement System: Principles and Potentials. <i>Structural Health Monitoring</i> , 2009, 8, 463-476.	7.5	49
5	Expansive Soil Treatment with Liquid Ionic Soil Stabilizer. <i>Transportation Research Record</i> , 2018, 2672, 185-194.	1.9	37
6	Life-Cycle cost-benefit analysis of Bridge deck de-icing using geothermal heat pump system: A case study of North Texas. <i>Sustainable Cities and Society</i> , 2019, 47, 101492.	10.4	35
7	Experimental feasibility study of a new attached hydronic loop design for geothermal heating of bridge decks. <i>Applied Thermal Engineering</i> , 2020, 164, 114507.	6.0	28
8	Thermal conductivity of sand-kaolin clay mixtures. <i>Environmental Geotechnics</i> , 2016, 3, 190-202.	2.3	25
9	A new time-domain reflectometry bridge scour sensor. <i>Structural Health Monitoring</i> , 2013, 12, 99-113.	7.5	22
10	A novel full-scale external geothermal heating system for bridge deck de-icing. <i>Applied Thermal Engineering</i> , 2021, 185, 116365.	6.0	20
11	Study on Properties of Expansive Soil Improved by Steel Slag Powder and Cement under Freeze-Thaw Cycles. <i>KSCE Journal of Civil Engineering</i> , 2021, 25, 417-428.	1.9	20
12	Feasibility study of a new attached multi-loop CO2 heat pipe for bridge deck de-icing using geothermal energy. <i>Journal of Cleaner Production</i> , 2020, 275, 123160.	9.3	19
13	Chemical Treatment of a Highly Expansive Clay Using a Liquid Ionic Soil Stabilizer. <i>Geotechnical and Geological Engineering</i> , 2020, 38, 4981-4993.	1.7	17
14	Field Testing and Analyses of a Batter Pile Group Foundation under Lateral Loading. <i>Transportation Research Record</i> , 2011, 2212, 42-55.	1.9	15
15	Implementation of LRFD of Drilled Shafts in Louisiana. <i>Journal of Infrastructure Systems</i> , 2012, 18, 103-112.	1.8	15
16	Use of a thermo-TDR probe to measure sand thermal conductivity dryout curves (TCDCs) and model prediction. <i>International Journal of Heat and Mass Transfer</i> , 2017, 115, 1054-1064.	4.8	15
17	Numerical analyses of a laboratory test of a geothermal bridge deck externally heated under controlled temperature. <i>Applied Thermal Engineering</i> , 2020, 174, 115255.	6.0	13
18	D-Load Strength of Concrete Pipes with Epoxy Linings. <i>Journal of Pipeline Systems Engineering and Practice</i> , 2019, 10, 04019030.	1.6	12

#	ARTICLE	IF	CITATIONS
19	Thermo-TDR Probe for Measurement of Soil Moisture, Density, and Thermal Properties. , 2014, , .		11
20	Structural evaluation of invert-cut circular and arch shape corrugated steel pipes through laboratory testing. Canadian Journal of Civil Engineering, 2021, 48, 187-201.	1.3	10
21	Interpretation Criteria to Evaluate Resistance Factors for Axial Load Capacity of Drilled Shafts. Transportation Research Record, 2010, 2202, 20-31.	1.9	8
22	Assessment of an Automation Algorithm for TDR Bridge Scour Monitoring System. Advances in Structural Engineering, 2011, 14, 13-24.	2.4	8
23	Development and Evaluation of a Thermo-TDR Probe. , 2014, , .		8
24	Application of a thermo-time domain reflectometry probe in sand-kaolin clay mixtures. Engineering Geology, 2017, 216, 98-107.	6.3	7
25	A new TDR sensor for accurate freeze/thaw measurement. International Journal of Pavement Engineering, 2012, 13, 523-534.	4.4	6
26	Calibration of Side, Tip, and Total Resistance Factors for Load and Resistance Factor Design of Drilled Shafts. Transportation Research Record, 2012, 2310, 38-48.	1.9	6
27	Time domain reflectometry sensor-assisted freeze/thaw analysis in geomaterials. Cold Regions Science and Technology, 2012, 71, 84-89.	3.5	5
28	Numerical Simulation of Geothermal Heated Bridge Deck. DEStech Transactions on Materials Science and Engineering, 2017, , .	0.0	4
29	Design and evaluation of a distributed TDR moisture sensor. Smart Structures and Systems, 2010, 6, 1007-1023.	1.9	4
30	Insulated PEX-pipe loops for deicing on existing bridge deck using geothermal energy: Laboratory tests, modeling, and performance analyses. Applied Thermal Engineering, 2022, 205, 118028.	6.0	4
31	Numerical Feasibility Study of an Externally Heated Geothermal Bridge Deck. , 2018, , .		3
32	Farming Influence on Physical-Mechanical Properties and Microstructural Characteristics of Backfilled Loess Farmland in Yan'an, China. Sustainability, 2020, 12, 5516.	3.2	3
33	Experimental study on the correlation between the partial and total salt content in saline gravel using ion chromatography. Transportation Geotechnics, 2021, 26, 100424.	4.5	3
34	Validation of a Thermo-Time Domain Reflectometry Probe for Sand Thermal Conductivity Measurement in Drainage and Drying Processes. Geotechnical Testing Journal, 2018, 41, 403-412.	1.0	3
35	Geothermal Energy for Bridge Deck and Pavement Deicing—A Brief Review. , 2016, , .		2
36	Heating performance of a novel externally-heated geothermal bridge de-icing system: field tests and numerical simulations. Sustainable Energy Technologies and Assessments, 2021, 46, 101280.	2.7	2

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37	Design and Evaluation of a Moisture/Suction TDR Probe. <i>Geotechnical Testing Journal</i> , 2017, 40, 762-775.	1.0	2
38	Study on the Erosion Mechanism of the Solidified Silt Under Sulphate"Chloride Erosion. <i>Geotechnical and Geological Engineering</i> , 2022, 40, 3749-3762.	1.7	2
39	Laboratory study of a hydronic concrete deck heated externally in a controlled sub-freezing environment. <i>Energy and Built Environment</i> , 2024, 5, 9-23.	5.9	2
40	Sensor Technology for Decision Support of Spring Load Restrictions. <i>Transportation Research Record</i> , 2008, 2053, 17-22.	1.9	1
41	Estimating Embankment Settlement from Piezocone Penetration Test Data. <i>Transportation Research Record</i> , 2011, 2212, 120-130.	1.9	1
42	Performance of Sand-Treated Clay Subgrade Supporting a Low-Volume Flexible Pavement. <i>Transportation Research Record</i> , 2015, 2473, 91-97.	1.9	1
43	Laboratory Evaluation of a Liquid Ionic Stabilizer for an Expansive Soil in North Texas. , 2018, , .		1
44	Extrapolation of O-cell drilled shaft tests for load and resistance factor design (LRFD) calibration. <i>Acta Geotechnica</i> , 2021, 16, 491-506.	5.7	1
45	Rigid pavement icing: misting tests on a model pavement column under simulated cold fronts inside a freezer. <i>International Journal of Pavement Engineering</i> , 2023, 24, .	4.4	1
46	Geomaterials in Geotechnical Engineering. <i>Advances in Civil Engineering</i> , 2019, 2019, 1-2.	0.7	0
47	Externally heated geothermal bridge deck: Performance analysis of the U-tube ground heat exchanger. <i>E3S Web of Conferences</i> , 2020, 205, 07006.	0.5	0
48	Numerical Study and Experimental Validation of the Thermal Performance of a U-Tube Borehole Heat Exchanger for a Geothermal De-Icing System. , 2021, , .		0