

# Xiong Bill Yu

## List of Publications by Year in descending order

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229  
papers

3,673  
citations

126708

33  
h-index

174990

52  
g-index

234  
all docs

234  
docs citations

234  
times ranked

3320  
citing authors

#	ARTICLE	IF	CITATIONS
1	Machine Learning: New Ideas and Tools in Environmental Science and Engineering. <i>Environmental Science &amp; Technology</i> , 2021, 55, 12741-12754.	4.6	140
2	Capacitive Biopotential Measurement for Electrophysiological Signal Acquisition: A Review. <i>IEEE Sensors Journal</i> , 2016, 16, 2832-2853.	2.4	128
3	Soil Water Content and Dry Density by Time Domain Reflectometry. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2004, 130, 922-934.	1.5	127
4	A review of bridge scour: mechanism, estimation, monitoring and countermeasures. <i>Natural Hazards</i> , 2017, 87, 1881-1906.	1.6	127
5	Hair flow sensors: from bio-inspiration to bio-mimicking—a review. <i>Smart Materials and Structures</i> , 2012, 21, 113001.	1.8	121
6	Preparation and characterization of three dimensional graphene foam supported platinum–ruthenium bimetallic nanocatalysts for hydrogen peroxide based electrochemical biosensors. <i>Biosensors and Bioelectronics</i> , 2014, 52, 1-7.	5.3	112
7	Coupled thermo-hydro-mechanical model for porous materials under frost action: theory and implementation. <i>Acta Geotechnica</i> , 2011, 6, 51-65.	2.9	110
8	Sensitivity analysis of a vertical geothermal heat pump system. <i>Applied Energy</i> , 2016, 170, 148-160.	5.1	110
9	An innovative nonintrusive driver assistance system for vital signal monitoring. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2014, 18, 1932-1939.	3.9	108
10	Laboratory study on the mechanical behaviors of an anisotropic shale rock. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2015, 7, 213-219.	3.7	89
11	A deep neural network combined with molecular fingerprints (DNN-MF) to develop predictive models for hydroxyl radical rate constants of water contaminants. <i>Journal of Hazardous Materials</i> , 2020, 383, 121141.	6.5	70
12	Three dimensional graphene foam supported platinum–ruthenium bimetallic nanocatalysts for direct methanol and direct ethanol fuel cell applications. <i>Journal of Power Sources</i> , 2014, 256, 329-335.	4.0	66
13	Adaptive thermochromic roof system: Assessment of performance under different climates. <i>Energy and Buildings</i> , 2019, 192, 1-14.	3.1	63
14	PSO-SVM-based deep displacement prediction of Majiagou landslide considering the deformation hysteresis effect. <i>Landslides</i> , 2021, 18, 179-193.	2.7	63
15	LiDAR technology for wind energy potential assessment: Demonstration and validation at a site around Lake Erie. <i>Energy Conversion and Management</i> , 2017, 144, 252-261.	4.4	55
16	Adaptive building roof by coupling thermochromic material and phase change material: Energy performance under different climate conditions. <i>Construction and Building Materials</i> , 2020, 262, 120481.	3.2	52
17	Molecular image-convolutional neural network (CNN) assisted QSAR models for predicting contaminant reactivity toward OH radicals: Transfer learning, data augmentation and model interpretation. <i>Chemical Engineering Journal</i> , 2021, 408, 127998.	6.6	52
18	Performance of a residential ground source heat pump system in sedimentary rock formation. <i>Applied Energy</i> , 2016, 164, 89-98.	5.1	51

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19	Experimental Study of Sustainable Asphalt Binder. Transportation Research Record, 2013, 2372, 108-115.	1.0	50
20	Time Domain Reflectometry Automatic Bridge Scour Measurement System: Principles and Potentials. Structural Health Monitoring, 2009, 8, 463-476.	4.3	49
21	Performance Evaluation of Water Distribution Systems and Asset Management. Journal of Infrastructure Systems, 2018, 24, .	1.0	49
22	An innovative energy pile technology to expand the viability of geothermal bridge deck snow melting for different United States regions: Computational assisted feasibility analyses. Renewable Energy, 2018, 123, 417-427.	4.3	48
23	Investigation of internal curing effects on microstructure and permeability of interface transition zones in cement mortar with SEM imaging, transport simulation and hydration modeling techniques. Construction and Building Materials, 2015, 76, 366-379.	3.2	47
24	Physically Based Equation for Phase Composition Curve of Frozen Soils. Transportation Research Record, 2013, 2349, 93-99.	1.0	46
25	Feasibility of geothermal heat exchanger pile-based bridge deck snow melting system: A simulation based analysis. Renewable Energy, 2017, 101, 214-224.	4.3	46
26	Characterization of the Optical and Mechanical Properties of Innovative Multifunctional Thermochromic Asphalt Binders. Journal of Materials in Civil Engineering, 2015, 27, .	1.3	43
27	Comparison of the implementation of three common types of coupled CFD-DEM model for simulating soil surface erosion. International Journal of Multiphase Flow, 2017, 91, 89-100.	1.6	43
28	Thermo and light-responsive building envelope: Energy analysis under different climate conditions. Solar Energy, 2019, 193, 866-877.	2.9	43
29	Use of spatio-temporal calibrated wind shear model to improve accuracy of wind resource assessment. Applied Energy, 2018, 213, 469-485.	5.1	39
30	Reliability Analysis of Water Distribution Systems Using Physical Probabilistic Pipe Failure Method. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	1.3	37
31	Innovative thermochromic asphalt coating: characterisation and thermal performance. Road Materials and Pavement Design, 2016, 17, 187-202.	2.0	35
32	Onshore and offshore wind energy potential assessment near Lake Erie shoreline: A spatial and temporal analysis. Energy, 2018, 147, 1092-1107.	4.5	35
33	Influence of particle shape on the erodibility of non-cohesive soil: Insights from coupled CFD-DEM simulations. Particuology, 2018, 39, 12-24.	2.0	35
34	Naturally grown mycelium-composite as sustainable building insulation materials. Journal of Cleaner Production, 2022, 342, 130784.	4.6	34
35	Machine learning model and strategy for fast and accurate detection of leaks in water supply network. Journal of Infrastructure Preservation and Resilience, 2021, 2, .	1.5	32
36	Characterizing the surface charge of clay minerals with Atomic Force Microscope (AFM). AIMS Materials Science, 2017, 4, 582-593.	0.7	32

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37	Study on the behaviors of fungi-concrete surface interactions and theoretical assessment of its potentials for durable concrete with fungal-mediated self-healing. <i>Journal of Cleaner Production</i> , 2021, 292, 125870.	4.6	31
38	Capillary rise method for the measurement of the contact angle of soils. <i>Acta Geotechnica</i> , 2016, 11, 21-35.	2.9	29
39	Influence of local geological data on the performance of horizontal ground-coupled heat pump system integrated with building thermal loads. <i>Renewable Energy</i> , 2017, 113, 1046-1055.	4.3	28
40	Vertical bearing capacity of the pile foundation with restriction plate via centrifuge modelling. <i>Ocean Engineering</i> , 2019, 181, 109-120.	1.9	28
41	A holistic 3D finite element simulation model for thermoelectric power generator element. <i>Energy Conversion and Management</i> , 2014, 86, 99-110.	4.4	27
42	Assessing the water-sealed safety of an operating underground crude oil storage adjacent to a new similar cavern – A case study in China. <i>Engineering Geology</i> , 2019, 249, 257-272.	2.9	27
43	A generalized predictive model for TiO <sub>2</sub> -Catalyzed photo-degradation rate constants of water contaminants through artificial neural network. <i>Environmental Research</i> , 2020, 187, 109697.	3.7	27
44	Laboratory characterization and discrete element modeling of shrinkage and cracking in clay layer. <i>Canadian Geotechnical Journal</i> , 2018, 55, 680-688.	1.4	26
45	A machine learning method for inclinometer lateral deflection calculation based on distributed strain sensing technology. <i>Bulletin of Engineering Geology and the Environment</i> , 2020, 79, 3383-3401.	1.6	24
46	Investigation of internal frost damage in cementitious materials with micromechanics analysis, SEM imaging and ultrasonic wave scattering techniques. <i>Construction and Building Materials</i> , 2014, 50, 478-485.	3.2	23
47	Reflectance Spectra of Thermochromic Asphalt Binder: Characterization and Optical Mixing Model. <i>Journal of Materials in Civil Engineering</i> , 2016, 28, .	1.3	23
48	Experimental and numerical investigations on the performance of sacrificial piles in reducing local scour around pile groups. <i>Natural Hazards</i> , 2017, 85, 1417-1435.	1.6	23
49	Efficient mapping of crash risk at intersections with connected vehicle data and deep learning models. <i>Accident Analysis and Prevention</i> , 2020, 144, 105665.	3.0	23
50	Performance evaluation of solar-responsive asphalt mixture with thermochromic materials and nano-TiO <sub>2</sub> scatterers. <i>Construction and Building Materials</i> , 2020, 247, 118605.	3.2	23
51	A new time-domain reflectometry bridge scour sensor. <i>Structural Health Monitoring</i> , 2013, 12, 99-113.	4.3	22
52	Thermal Properties of Thermochromic Asphalt Binders by Modulated Differential Scanning Calorimetry. <i>Transportation Research Record</i> , 2014, 2444, 142-150.	1.0	22
53	Model and Procedures for Reliable near Term Wind Energy Production Forecast. <i>Wind Engineering</i> , 2015, 39, 595-607.	1.1	22
54	Monitoring the structural capacity of airfield pavement with built-in sensors and modulus back-calculation algorithm. <i>Construction and Building Materials</i> , 2018, 175, 552-561.	3.2	22

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55	Widths, types, and configurations: Influences on scour behaviors of bridge foundations in non-cohesive soils. <i>Marine Georesources and Geotechnology</i> , 2019, 37, 578-588.	1.2	22
56	Design and characterization of energy efficient roofing system with innovative TiO <sub>2</sub> enhanced thermochromic films. <i>Construction and Building Materials</i> , 2019, 223, 1053-1062.	3.2	21
57	Analyses of the thermo-hydro-mechanical responses of energy pile subjected to non-isothermal heat exchange condition. <i>Renewable Energy</i> , 2020, 157, 150-163.	4.3	20
58	Seismic response of a novel hybrid foundation for offshore wind turbine by geotechnical centrifuge modeling. <i>Renewable Energy</i> , 2021, 172, 1404-1416.	4.3	20
59	Theoretical Basis for Modeling Porous Geomaterials under Frost Actions: A Review. <i>Soil Science Society of America Journal</i> , 2012, 76, 313-330.	1.2	19
60	System design to harvest thermal energy across pavement structure. , 2012, , .		18
61	Investigation of Internal Frost Damage in Concrete with Thermodynamic Analysis, Microdamage Modeling, and Time-Domain Reflectometry Sensor Measurements. <i>Journal of Materials in Civil Engineering</i> , 2013, 25, 1248-1259.	1.3	18
62	Energy, environmental and economic performance evaluation of energy pile system under different climate conditions. <i>Energy Conversion and Management</i> , 2022, 252, 115041.	4.4	18
63	An innovative machine learning based framework for water distribution network leakage detection and localization. <i>Structural Health Monitoring</i> , 2022, 21, 1626-1644.	4.3	17
64	Predicting the phase composition curve in frozen soils using index properties: A physico-empirical approach. <i>Cold Regions Science and Technology</i> , 2014, 108, 10-17.	1.6	16
65	A non-destructive method to measure the thermal properties of frozen soils during phase transition. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2015, 7, 155-162.	3.7	16
66	Seismic Functionality and Resilience Analysis of Water Distribution Systems. <i>Journal of Pipeline Systems Engineering and Practice</i> , 2020, 11, .	0.9	16
67	Comparative evaluation of moisture susceptibility of modified/foamed asphalt binders combined with different types of aggregates using surface free energy approach. <i>Construction and Building Materials</i> , 2020, 256, 119429.	3.2	16
68	A Novel Machine Learning Model to Predict the Photo-Degradation Performance of Different Photocatalysts on a Variety of Water Contaminants. <i>Catalysts</i> , 2021, 11, 1107.	1.6	16
69	Time Domain Reflectometry Surface Reflections for Dielectric Constant in Highly Conductive Soils. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2007, 133, 1597-1608.	1.5	15
70	Deep Multi-Graph Clustering via Attentive Cross-Graph Association. , 2020, , .		15
71	Design and analyses of open-ended pipe piles in cohesionless soils. <i>Frontiers of Structural and Civil Engineering</i> , 2016, 10, 22-29.	1.2	14
72	Influence of Contact Angle on Soil's Water Characteristic Curve with Modified Capillary Rise Method. <i>Transportation Research Record</i> , 2013, 2349, 32-40.	1.0	13

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73	Performance of Existing Methods for Estimation and Mitigation of Local Scour around Bridges: Case Studies. <i>Journal of Performance of Constructed Facilities</i> , 2019, 33, .	1.0	13
74	Experimental investigation on the long-term interactions of anhydrite rock, crude oil, and water in a mine-out space for crude-oil storage. <i>Engineering Geology</i> , 2020, 265, 105414.	2.9	13
75	Framework for Seismic Damage and Renewal Cost Analysis of Buried Water Pipelines. <i>Journal of Pipeline Systems Engineering and Practice</i> , 2020, 11, .	0.9	13
76	Molecular dynamics investigation on n-alkane-air/water interfaces. <i>Fuel</i> , 2020, 267, 117252.	3.4	13
77	Laboratory Evaluation of Time-Domain Reflectometry for Bridge Scour Measurement: Comparison with the Ultrasonic Method. <i>Advances in Civil Engineering</i> , 2010, 2010, 1-12.	0.4	12
78	Design and evaluation of a high sensitivity spiral TDR scour sensor. <i>Smart Materials and Structures</i> , 2015, 24, 085005.	1.8	12
79	A Deep Neural Network for Accurate and Robust Prediction of the Glass Transition Temperature of Polyhydroxyalkanoate Homo- and Copolymers. <i>Materials</i> , 2020, 13, 5701.	1.3	12
80	Asset Management Decision Support Model for Water Distribution Systems: Impact of Water Pipe Failure on Road and Water Networks. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2021, 147, .	1.3	12
81	Time Domain Reflectometry for Compaction Control of Stabilized Soils. <i>Transportation Research Record</i> , 2004, 1868, 14-22.	1.0	11
82	Emulating the directional sensitivity of fish hair cell sensor. <i>Journal of Intelligent Material Systems and Structures</i> , 2013, 24, 1484-1493.	1.4	11
83	Analyses of the Extensible Blade in Improving Wind Energy Production at Sites with Low-Class Wind Resource. <i>Energies</i> , 2017, 10, 1295.	1.6	11
84	The loading behavior of innovative monopile foundations for offshore wind turbine based on centrifuge experiments. <i>Renewable Energy</i> , 2020, 152, 1109-1120.	4.3	11
85	Novel strategies to grow natural fibers with improved thermal stability and fire resistance. <i>Journal of Cleaner Production</i> , 2021, 320, 128729.	4.6	11
86	Formulation and Characterization of Freezing Saturated Soils. <i>Journal of Cold Regions Engineering - ASCE</i> , 2013, 27, 94-107.	0.5	10
87	Analyses of the Impacts of Climate Change and Forest Fire on Cold Region Slopes Stability by Random Finite Element Method. <i>Landslides</i> , 2021, 18, 2531-2545.	2.7	10
88	Localized health monitoring for seismic resilience quantification and safety evaluation of smart structures. <i>Structural Safety</i> , 2021, 93, 102127.	2.8	10
89	Analysis of surface erosion of cohesionless soils using a three-dimensional coupled computational fluid dynamics “ discrete element method (CFD“DEM) model. <i>Canadian Geotechnical Journal</i> , 2019, 56, 687-698.	1.4	9
90	Investigating the effect of grain composition on the erosion around deepwater foundations with a new simplified scour resistance test. <i>Transportation Geotechnics</i> , 2021, 28, 100527.	2.0	9

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91	Algorithm for Time Domain Reflectometry Bridge Scour Measurement System. , 2007, , .		8
92	Assessment of an Automation Algorithm for TDR Bridge Scour Monitoring System. Advances in Structural Engineering, 2011, 14, 13-24.	1.2	8
93	Bio-inspired flow and acoustic sensor. Proceedings of SPIE, 2011, , .	0.8	8
94	Thermo-Hydro-Mechanical-Chemical Simulation of Methane Hydrate Dissociation in Porous Media. Geotechnical and Geological Engineering, 2013, 31, 1681-1691.	0.8	8
95	Image analyses for video-based remote structure vibration monitoring system. Frontiers of Structural and Civil Engineering, 2016, 10, 12-21.	1.2	8
96	Measurement of Wavelength and Temperature-Dependent Optical Properties of Thermochromic Pigments. Applied Spectroscopy, 2018, 72, 297-304.	1.2	8
97	A holistic computational model for prediction of clay suspension structure. International Journal of Sediment Research, 2019, 34, 345-354.	1.8	8
98	Contributions of chemical potential to the diffusive Seebeck coefficient for bulk semiconductor materials. European Physical Journal Plus, 2020, 135, 1.	1.2	8
99	Comparison and Estimation of the Local Scour Depth around Pile Groups and Wide Piers. , 2017, , .		8
100	Multiscale Chemico-Thermo-Hydro-Mechanical Modeling of Early-Stage Hydration and Shrinkage of Cement Compounds. Journal of Materials in Civil Engineering, 2013, 25, 1239-1247.	1.3	7
101	Long-Term Stability and Deformation Behaviour of Anhydrite Mine-Out for Crude Oil Storage. Rock Mechanics and Rock Engineering, 2020, 53, 1719-1735.	2.6	7
102	Time Domain Reflectometry for Automatic Bridge Scour Monitoring. , 2006, , 152.		6
103	Development of Micromechanics Models and Innovative Sensor Technologies to Evaluate Internal Frost Damage of Concrete. Transportation Research Record, 2011, 2240, 50-58.	1.0	6
104	A new TDR sensor for accurate freeze-thaw measurement. International Journal of Pavement Engineering, 2012, 13, 523-534.	2.2	6
105	Multiphysics extension to physically based analyses of pipes with emphasis on frost actions. Journal of Zhejiang University: Science A, 2012, 13, 877-887.	1.3	6
106	An Innovative Non-invasive ECG Sensor and Comparison Study with Clinic System. , 2013, , .		6
107	Coupled thermo-hydraulic modelling of pavement under frost. International Journal of Pavement Engineering, 2014, 15, 427-437.	2.2	6
108	Analysis of the Stability of Thawing Slopes by Random Finite Element Method. Transportation Research Record, 2019, 2673, 465-476.	1.0	6

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109	Stability analysis of anhydrite mine-out as an underground gas storage based on DEM and similarity theory: a case study. <i>Bulletin of Engineering Geology and the Environment</i> , 2022, 81, 1.	1.6	6
110	A bio-inspired flow sensor. <i>Proceedings of SPIE</i> , 2010, , .	0.8	5
111	Time domain reflectometry sensor-assisted freeze/thaw analysis in geomaterials. <i>Cold Regions Science and Technology</i> , 2012, 71, 84-89.	1.6	5
112	Real-time TDR Field Bridge Scour Monitoring System. , 2013, , .		5
113	Soil Plugging Mechanism on Large Diameter Pipe Piles: Insight from Discrete Element Simulations. , 2015, , .		5
114	Understanding the microscopic moisture migration in pore space using DEM simulation. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2015, 7, 171-177.	3.7	5
115	A New Non-Destructive TDR System Combined with a Piezoelectric Stack for Measuring Properties of Geomaterials. <i>Materials</i> , 2016, 9, 439.	1.3	5
116	Erosion mechanism of local scour around cushioned caisson on reinforced ground. <i>Marine Georesources and Geotechnology</i> , 2017, 35, 1028-1036.	1.2	5
117	Impact of Visible-Solar-Light-Driven photocatalytic pavement on air quality improvement. <i>Transportation Research, Part D: Transport and Environment</i> , 2020, 84, 102341.	3.2	5
118	Unknown Foundation Testing: A Case Comparison of Different Geophysical Methods. , 2007, , .		4
119	Comparison Study of Three Common Technologies for Freezing-Thawing Measurement. <i>Advances in Civil Engineering</i> , 2010, 2010, 1-10.	0.4	4
120	System Design on Thermoelectric Energy Harvesting from Body Heat. , 2013, , .		4
121	Thermally Induced Water Flux in Soils. <i>Transportation Research Record</i> , 2013, 2349, 63-71.	1.0	4
122	Computer Simulations on the Effects of Desaturation on Soil Liquefaction Resistance. , 2013, , .		4
123	Flow and Scour Patterns around Bridge Piers with Different Configurations: Insights from CFD Simulations. , 2014, , .		4
124	Optical properties of smart thermochromic film by computational optical model. <i>Optik</i> , 2018, 157, 1-10.	1.4	4
125	Effects of Microbial Induced Calcite Precipitation on Bentonite Cracking Remediation. , 2018, , .		4
126	Improving Soil Surface Erosion Resistance by Fungal Mycelium. , 2020, , .		4



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127	Local Graph Clustering by Multi-network Random Walk with Restart. Lecture Notes in Computer Science, 2018, , 490-501.	1.0	4
128	Design and evaluation of a distributed TDR moisture sensor. Smart Structures and Systems, 2010, 6, 1007-1023.	1.9	4
129	A New Method for Soil Water Characteristic Curve Measurement Based on Similarities Between Soil Freezing and Drying. Geotechnical Testing Journal, 2012, 35, 2-10.	0.5	4
130	Detection of Concrete Structural Defects Using Impact Echo Based on Deep Networks. Journal of Testing and Evaluation, 2021, 49, 20190801.	0.4	4
131	Refined One-Step TDR Method for Water Content and Density. , 2006, , 1.		3
132	No-Fines Concrete as Ecologic Stream Bank Erosion Control. , 2007, , .		3
133	Sustainability through Beneficial Use of Lime Sludge for Construction. , 2009, , .		3
134	Seismic CPTu to Assist the Design on Existing Foundations. , 2010, , .		3
135	Experimental Evaluation of Lime Sludge Performance in Subgrade Stabilization. , 2012, , .		3
136	Innovative Microbial Fuel cell for energy harvesting. , 2012, , .		3
137	Remote control system for energy efficient home. , 2013, , .		3
138	Modeling of Asphalt Pavement Temperature under Various Seasons: Impact of Thermochromic Materials. , 2015, , .		3
139	Bio-inspired directional sensor with piezoelectric microfiber and helical electrodes. Journal of Intelligent Material Systems and Structures, 2016, 27, 1755-1766.	1.4	3
140	Microstructure-Based Random Finite Element Method Simulation of Frost Heave: Theory and Implementation. Transportation Research Record, 2018, 2672, 347-357.	1.0	3
141	Kinetic studies on using photocatalytic coatings for removal of indoor volatile organic compounds. Indoor and Built Environment, 2020, 29, 689-700.	1.5	3
142	Adaptive Greenhouse with Thermochromic Material: Performance Evaluation in Cold Regions. Journal of Energy Engineering - ASCE, 2020, 146, 04020032.	1.0	3
143	Predicting Active Sites in Photocatalytic Degradation Process Using an Interpretable Molecular-Image Combined Convolutional Neural Network. Catalysts, 2022, 12, 746.	1.6	3
144	Mobile Computer for Portable Field Instrumentation System. , 2006, , 1.		2

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145	Soil Property Variation by Time Domain Reflectometry. , 2006, , 553.		2
146	Measurement of Soil Air Suction Change during Freezing-Thawing Process. , 2009, , .		2
147	Micromechanics models and innovative sensor technologies to evaluate internal-frost damage of concrete. Proceedings of SPIE, 2011, , .	0.8	2
148	A non-contact wearable wireless body sensor network for multiple vital signal detection. , 2013, , .		2
149	Streamlining of Bridge Pier as a Scour Countermeasure: A Feasibility Study. , 2015, , .		2
150	A Comprehensive 3D Finite Element Model of a Thermoelectric Module Used in a Power Generator: A Transient Performance Perspective. Journal of Electronic Materials, 2015, 44, 2080-2088.	1.0	2
151	Method for Quick Prediction of Hydraulic Conductivity and Soil-Water Retention of Unsaturated Soils. Transportation Research Record, 2018, 2672, 108-117.	1.0	2
152	Behaviors of Expansive Soils Mixed with Polymeric Stabilizing Foams. , 2019, , .		2
153	Electromagnetic simulation on optical performance of thermochromic film: Influences of particle size, shape, concentration, and film substrate. Optik, 2020, 206, 164307.	1.4	2
154	Performance of Visible-Light-Driven Photocatalytic Pavement in Reduction of Motor Vehiclesâ€™ Exhaust Gas. Transportation Research Record, 2020, 2674, 512-519.	1.0	2
155	Modeling and Experimental Studies on Adsorption and Photocatalytic Performance of Nitrogen-Doped TiO <sub>2</sub> Prepared via the Solâ€“Gel Method. Catalysts, 2020, 10, 1449.	1.6	2
156	Design, analyses, and evaluation of a spiral TDR sensor with high spatial resolution. Smart Structures and Systems, 2015, 16, 683-699.	1.9	2
157	Assessment of Sulfate-Induced Heave in Chemically Treated Soils Using a Novel Hybrid Sensor. Geotechnical Testing Journal, 2021, 44, 20190196.	0.5	2
158	A probabilistic strategy to evaluate scour around bridge deepwater foundations considering a reliability assessment. Marine Georesources and Geotechnology, 2023, 41, 54-66.	1.2	2
159	Frequency versus time domain simulation of nonuniform TDR system. , 2005, , .		1
160	Impact Test System for Pavement Subgrade Evaluation. , 2006, , 1.		1
161	Sensor Technology for Decision Support of Spring Load Restrictions. Transportation Research Record, 2008, 2053, 17-22.	1.0	1
162	Risk Based Design of Levee System. , 2008, , .		1

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163	An Innovative Sensor for Assisting Spring Load Restrictions: Results of Field Demonstration Study. , 2009, , .		1
164	Smart pavement sensor based on thermoelectricity power. , 2010, , .		1
165	Sustainable Flood Risk Management: Lesson from Recent Cases. , 2011, , .		1
166	Comparison Study on Computer Simulations for Bridge Scour Estimation. , 2011, , .		1
167	An innovative non-contact ECG sensor for monitoring heart disease. , 2011, , .		1
168	Towards safe and comfortable high-speed transportation infrastructure. Journal of Zhejiang University: Science A, 2012, 13, 799-801.	1.3	1
169	The Electroencephalographic Response during a Driving Process: Normal Driving, Turning and Collision. , 2013, , .		1
170	Experimental Characterization of the Anisotropic Behaviors of Shale Rock. , 2014, , .		1
171	Experimental Study of Compaction Behaviors and Assessment of Berm Materials. , 2015, , .		1
172	Fatigue Analysis of an Innovative Extensible Wind Turbine Blade. , 2016, , .		1
173	Real time measurement of the dynamic displacement field of a large-scale arch-truss bridge by remote sensing technology. , 2016, , .		1
174	Experimental Characterization and Microstructure Based Random FEM Simulation of Freezing and Thawing Effects on Soils. , 2016, , .		1
175	Microstructure-Based Random Finite Element Simulation of Thermal and Hydraulic Conduction Processes in Unsaturated Frozen Soils. , 2017, , .		1
176	Framework to Holistically Predict the Behaviors of Cohesive Granular Materials. , 2018, , .		1
177	A Microstructure-Based Finite Element Model to Estimate Hydraulic Properties in Fine-Grained Soils. , 2018, , .		1
178	Multimodal Characterization of the Anisotropic Behaviors of Shale Rocks. , 2018, , .		1
179	Reliability Assessment of Corroded Water Distribution Networks. , 2019, , .		1
180	Procedures for quick estimation of hydraulic conductivity of unsaturated soils. Environmental Geotechnics, 2020, 7, 350-360.	1.3	1

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181	Investigation on scour process around bridge foundations considering soil particles and layer distributions. European Journal of Environmental and Civil Engineering, 2020, , 1-18.	1.0	1
182	Numerical and Experimental Study on Soil Plug Resistance of Open-Ended Pipe Pile with a Restriction Plate. Advances in Civil Engineering, 2020, 2020, 1-14.	0.4	1
183	Soil Texture from TDR Waveform Analysis. , 2007, , .		1
184	Computer Vision System for Real-Time Monitoring of Civil Infrastructures. , 0, , .		1
185	Soil Type Identification by Time Domain Dielectric Spectroscopy-Theoretical Basis and Preliminary Results. , 2006, , 144.		0
186	Engineering Aspects of the South China Levee System with Implications for the Reconstruction of the New Orleans Levee System. , 2007, , .		0
187	Hyperspectral Remote Sensing for Municipal Land Cover Classification. , 2008, , .		0
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