

Xiong Bill Yu

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

177
papers

2,191
citations

25
h-index

40
g-index

234
ext. papers

2,863
ext. citations

4.2
avg, IF

6.02
L-index

#	Paper	IF	Citations
177	Naturally grown mycelium-composite as sustainable building insulation materials. <i>Journal of Cleaner Production</i> , 2022 , 130784	10.3	4
176	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	4	1
175	Detection of Concrete Structural Defects Using Impact Echo Based on Deep Networks. <i>Journal of Testing and Evaluation</i> , 2021 , 49, 20190801	1	2
174	Assessment of Sulfate-Induced Heave in Chemically Treated Soils Using a Novel Hybrid Sensor. <i>Geotechnical Testing Journal</i> , 2021 , 44, 20190196	1.3	2
173	Energy, environmental and economic performance evaluation of energy pile system under different climate conditions. <i>Energy Conversion and Management</i> , 2021 , 252, 115041	10.6	1
172	Machine learning model and strategy for fast and accurate detection of leaks in water supply network. <i>Journal of Infrastructure Preservation and Resilience</i> , 2021 , 2,	2.1	6
171	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	10.3	6
170	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	4	4
169	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, 04021022	2.8	4
168	Seismic response of a novel hybrid foundation for offshore wind turbine by geotechnical centrifuge modeling. <i>Renewable Energy</i> , 2021 , 172, 1404-1416	8.1	10
167	PSO-SVM-based deep displacement prediction of Majiagou landslide considering the deformation hysteresis effect. <i>Landslides</i> , 2021 , 18, 179-193	6.6	20
166	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	14.7	16
165	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	6.6	0
164	Machine Learning: New Ideas and Tools in Environmental Science and Engineering. <i>Environmental Science & Technology</i> , 2021 , 55, 12741-12754	10.3	26
163	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	4	1
162	Novel strategies to grow natural fibers with improved thermal stability and fire resistance. <i>Journal of Cleaner Production</i> , 2021 , 320, 128729	10.3	2
161	Localized health monitoring for seismic resilience quantification and safety evaluation of smart structures. <i>Structural Safety</i> , 2021 , 93, 102127	4.9	5

160	Investigation on scour process around bridge foundations considering soil particles and layer distributions. <i>European Journal of Environmental and Civil Engineering</i> , 2020 , 1-18	1.5	1
159	A generalized predictive model for TiO-Catalyzed photo-degradation rate constants of water contaminants through artificial neural network. <i>Environmental Research</i> , 2020 , 187, 109697	7.9	11
158	Adaptive Greenhouse with Thermochromic Material: Performance Evaluation in Cold Regions. <i>Journal of Energy Engineering - ASCE</i> , 2020 , 146, 04020032	1.7	0
157	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	8.1	9
156	Contributions of chemical potential to the diffusive Seebeck coefficient for bulk semiconductor materials. <i>European Physical Journal Plus</i> , 2020 , 135, 1	3.1	2
155	Numerical and Experimental Study on Soil Plug Resistance of Open-Ended Pipe Pile with a Restriction Plate. <i>Advances in Civil Engineering</i> , 2020 , 2020, 1-14	1.3	
154	Performance evaluation of solar-responsive asphalt mixture with thermochromic materials and nano-TiO ₂ scatterers. <i>Construction and Building Materials</i> , 2020 , 247, 118605	6.7	10
153	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	4	12
152	Improving Soil Surface Erosion Resistance by Fungal Mycelium 2020 ,		1
151	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	6.7	6
150	Molecular dynamics investigation on n-alkane-air/water interfaces. <i>Fuel</i> , 2020 , 267, 117252	7.1	4
149	Simulation of optical properties of thermochromic film: Influences of particle configuration and geometry. <i>Optik</i> , 2020 , 202, 163635	2.5	
148	The loading behavior of innovative monopile foundations for offshore wind turbine based on centrifuge experiments. <i>Renewable Energy</i> , 2020 , 152, 1109-1120	8.1	6
147	Impact of Visible-Solar-Light-Driven photocatalytic pavement on air quality improvement. <i>Transportation Research, Part D: Transport and Environment</i> , 2020 , 84, 102341	6.4	2
146	Deep Multi-Graph Clustering via Attentive Cross-Graph Association 2020 ,		4
145	Seismic Functionality and Resilience Analysis of Water Distribution Systems. <i>Journal of Pipeline Systems Engineering and Practice</i> , 2020 , 11, 04019045	1.5	7
144	Long-Term Stability and Deformation Behaviour of Anhydrite Mine-Out for Crude Oil Storage. <i>Rock Mechanics and Rock Engineering</i> , 2020 , 53, 1719-1735	5.7	5
143	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	6	5

142	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	6.7	14
141	Microstructure-Based Random Finite Element Method Model for Freezing Effects in Soils and Cold Region Retaining Walls. <i>Transportation Research Record</i> , 2020 , 2674, 708-719	1.7	
140	Framework for Seismic Damage and Renewal Cost Analysis of Buried Water Pipelines. <i>Journal of Pipeline Systems Engineering and Practice</i> , 2020 , 11, 04020038	1.5	6
139	Efficient mapping of crash risk at intersections with connected vehicle data and deep learning models. <i>Accident Analysis and Prevention</i> , 2020 , 144, 105665	6.1	8
138	Electromagnetic simulation on optical performance of thermochromic film: Influences of particle size, shape, concentration, and film substrate. <i>Optik</i> , 2020 , 206, 164307	2.5	1
137	Performance of Visible-Light-Driven Photocatalytic Pavement in Reduction of Motor Vehicles Exhaust Gas. <i>Transportation Research Record</i> , 2020 , 2674, 512-519	1.7	
136	A Deep Neural Network for Accurate and Robust Prediction of the Glass Transition Temperature of Polyhydroxyalkanoate Homo- and Copolymers. <i>Materials</i> , 2020 , 13,	3.5	4
135	Modeling and Experimental Studies on Adsorption and Photocatalytic Performance of Nitrogen-Doped TiO ₂ Prepared via the Sol-Gel Method. <i>Catalysts</i> , 2020 , 10, 1449	4	1
134	Procedures for quick estimation of hydraulic conductivity of unsaturated soils. <i>Environmental Geotechnics</i> , 2020 , 7, 350-360	1.2	0
133	Kinetic studies on using photocatalytic coatings for removal of indoor volatile organic compounds. <i>Indoor and Built Environment</i> , 2020 , 29, 689-700	1.8	1
132	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	12.8	32
131	Design and characterization of energy efficient roofing system with innovative TiO ₂ enhanced thermochromic films. <i>Construction and Building Materials</i> , 2019 , 223, 1053-1062	6.7	15
130	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	6	15
129	Assessment of fresh water wind resources on Lake Erie. <i>Wind Engineering</i> , 2019 , 43, 83-91	1.2	
128	A holistic computational model for prediction of clay suspension structure. <i>International Journal of Sediment Research</i> , 2019 , 34, 345-354	3	2
127	Analysis of the Stability of Thawing Slopes by Random Finite Element Method. <i>Transportation Research Record</i> , 2019 , 2673, 465-476	1.7	1
126	Vertical bearing capacity of the pile foundation with restriction plate via centrifuge modelling. <i>Ocean Engineering</i> , 2019 , 181, 109-120	3.9	15
125	Adaptive thermochromic roof system: Assessment of performance under different climates. <i>Energy and Buildings</i> , 2019 , 192, 1-14	7	37

124	Behaviors of Expansive Soils Mixed with Polymeric Stabilizing Foams 2019 ,		1
123	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	2.2	16
122	Analysis of surface erosion of cohesionless soils using a three-dimensional coupled computational fluid dynamics discrete element method (CFDDDEM) model. <i>Canadian Geotechnical Journal</i> , 2019 , 56, 687-698	3.2	3
121	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, 04019060	2	8
120	Thermo and light-responsive building envelope: Energy analysis under different climate conditions. <i>Solar Energy</i> , 2019 , 193, 866-877	6.8	17
119	Reliability Analysis of Water Distribution Systems Using Physical Probabilistic Pipe Failure Method. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2019 , 145, 04018097	2.8	24
118	Onshore and offshore wind energy potential assessment near Lake Erie shoreline: A spatial and temporal analysis. <i>Energy</i> , 2018 , 147, 1092-1107	7.9	27
117	An innovative energy pile technology to expand the viability of geothermal bridge deck snow melting for different United States regions: Computational assisted feasibility analyses. <i>Renewable Energy</i> , 2018 , 123, 417-427	8.1	26
116	Use of spatio-temporal calibrated wind shear model to improve accuracy of wind resource assessment. <i>Applied Energy</i> , 2018 , 213, 469-485	10.7	25
115	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	6.7	10
114	Influence of particle shape on the erodibility of non-cohesive soil: Insights from coupled CFDDDEM simulations. <i>Particuology</i> , 2018 , 39, 12-24	2.8	16
113	Measurement of Wavelength and Temperature-Dependent Optical Properties of Thermochromic Pigments. <i>Applied Spectroscopy</i> , 2018 , 72, 297-304	3.1	7
112	Effective and Safe Berming for Pavement Shoulder Maintenance in Cold Regions. <i>Journal of Cold Regions Engineering - ASCE</i> , 2018 , 32, 04017020	1.1	
111	Laboratory characterization and discrete element modeling of shrinkage and cracking in clay layer. <i>Canadian Geotechnical Journal</i> , 2018 , 55, 680-688	3.2	14
110	Performance Evaluation of Water Distribution Systems and Asset Management. <i>Journal of Infrastructure Systems</i> , 2018 , 24, 03118001	2.9	24
109	A Microstructure-Based Finite Element Model to Estimate Hydraulic Properties in Fine-Grained Soils 2018 ,		1
108	Multimodal Characterization of the Anisotropic Behaviors of Shale Rocks 2018 ,		1
107	Effects of Microbial Induced Calcite Precipitation on Bentonite Cracking Remediation 2018 ,		2

106	Local Graph Clustering by Multi-network Random Walk with Restart. <i>Lecture Notes in Computer Science</i> , 2018 , 490-501	0.9	2
105	Optical properties of smart thermochromic film by computational optical model. <i>Optik</i> , 2018 , 157, 1-10	2.5	3
104	Method for Quick Prediction of Hydraulic Conductivity and Soil-Water Retention of Unsaturated Soils. <i>Transportation Research Record</i> , 2018 , 2672, 108-117	1.7	2
103	Microstructure-Based Random Finite Element Method Simulation of Frost Heave: Theory and Implementation. <i>Transportation Research Record</i> , 2018 , 2672, 347-357	1.7	2
102	Erosion mechanism of local scour around cushioned caisson on reinforced ground. <i>Marine Georesources and Geotechnology</i> , 2017 , 35, 1028-1036	2.2	4
101	Comparison of the implementation of three common types of coupled CFD-DEM model for simulating soil surface erosion. <i>International Journal of Multiphase Flow</i> , 2017 , 91, 89-100	3.6	25
100	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	10.6	43
99	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	8.1	24
98	A review of bridge scour: mechanism, estimation, monitoring and countermeasures. <i>Natural Hazards</i> , 2017 , 87, 1881-1906	3	69
97	Microstructure-Based Random Finite Element Simulation of Thermal and Hydraulic Conduction Processes in Unsaturated Frozen Soils 2017 ,		1
96	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	3	11
95	Feasibility of geothermal heat exchanger pile-based bridge deck snow melting system: A simulation based analysis. <i>Renewable Energy</i> , 2017 , 101, 214-224	8.1	27
94	Analyses of the Extensible Blade in Improving Wind Energy Production at Sites with Low-Class Wind Resource. <i>Energies</i> , 2017 , 10, 1295	3.1	10
93	Borehole Geophysics: Tools to Characterize Rock Properties. <i>Geo-strata</i> , 2017 , 21, 62-69	0	
92	Characterizing the surface charge of clay minerals with Atomic Force Microscope (AFM). <i>AIMS Materials Science</i> , 2017 , 4, 582-593	1.9	18
91	Comparison and Estimation of the Local Scour Depth around Pile Groups and Wide Piers 2017 ,		6
90	Reflectance Spectra of Thermochromic Asphalt Binder: Characterization and Optical Mixing Model. <i>Journal of Materials in Civil Engineering</i> , 2016 , 28, 04015121	3	18
89	Capillary rise method for the measurement of the contact angle of soils. <i>Acta Geotechnica</i> , 2016 , 11, 21-35	4.9	20

88	Innovative thermochromic asphalt coating: characterisation and thermal performance. <i>Road Materials and Pavement Design</i> , 2016 , 17, 187-202	2.6	23
87	Design and analyses of open-ended pipe piles in cohesionless soils. <i>Frontiers of Structural and Civil Engineering</i> , 2016 , 10, 22-29	2.5	7
86	Image analyses for video-based remote structure vibration monitoring system. <i>Frontiers of Structural and Civil Engineering</i> , 2016 , 10, 12-21	2.5	7
85	. <i>IEEE Sensors Journal</i> , 2016 , 16, 2832-2853	4	79
84	Performance of a residential ground source heat pump system in sedimentary rock formation. <i>Applied Energy</i> , 2016 , 164, 89-98	10.7	38
83	Sensitivity analysis of a vertical geothermal heat pump system. <i>Applied Energy</i> , 2016 , 170, 148-160	10.7	76
82	A New Non-Destructive TDR System Combined with a Piezoelectric Stack for Measuring Properties of Geomaterials. <i>Materials</i> , 2016 , 9,	3.5	5
81	Fatigue Analysis of an Innovative Extensible Wind Turbine Blade 2016 ,		1
80	Bio-inspired directional sensor with piezoelectric microfiber and helical electrodes. <i>Journal of Intelligent Material Systems and Structures</i> , 2016 , 27, 1755-1766	2.3	3
79	Experimental Characterization and Microstructure Based Random FEM Simulation of Freezing and Thawing Effects on Soils 2016 ,		1
78	Advancement in Numerical Simulations of Gas Hydrate Dissociation in Porous Media 2016 , 49-111		
77	The Feasibility of a Current-Source Thermoelectric Power Generator and Its Corresponding Structure Design. <i>Journal of Electronic Materials</i> , 2015 , 44, 1943-1947	1.9	
76	Characterization of the Optical and Mechanical Properties of Innovative Multifunctional Thermochromic Asphalt Binders. <i>Journal of Materials in Civil Engineering</i> , 2015 , 27, 04014171	3	36
75	A Comprehensive 3D Finite Element Model of a Thermoelectric Module Used in a Power Generator: A Transient Performance Perspective. <i>Journal of Electronic Materials</i> , 2015 , 44, 2080-2088	1.9	2
74	Laboratory study on the mechanical behaviors of an anisotropic shale rock. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2015 , 7, 213-219	5.3	68
73	Design and evaluation of a high sensitivity spiral TDR scour sensor. <i>Smart Materials and Structures</i> , 2015 , 24, 085005	3.4	9
72	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	5.3	12
71	Soil Plugging Mechanism on Large Diameter Pipe Piles: Insight from Discrete Element Simulations 2015 ,		3

70	Understanding the microscopic moisture migration in pore space using DEM simulation. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2015 , 7, 171-177	5.3	4
69	Modeling of Asphalt Pavement Temperature under Various Seasons: Impact of Thermochromic Materials 2015 ,		2
68	Model and Procedures for Reliable near Term Wind Energy Production Forecast. <i>Wind Engineering</i> , 2015 , 39, 595-607	1.2	19
67	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. <i>Construction and Building Materials</i> , 2015 , 76, 366-379	6.7	31
66	Design, analyses, and evaluation of a spiral TDR sensor with high spatial resolution. <i>Smart Structures and Systems</i> , 2015 , 16, 683-699		1
65	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	8.9	56
64	An innovative nonintrusive driver assistance system for vital signal monitoring. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2014 , 18, 1932-9	7.2	78
63	Flow and Scour Patterns around Bridge Piers with Different Configurations: Insights from CFD Simulations 2014 ,		2
62	Coupled thermo-hydraulic modelling of pavement under frost. <i>International Journal of Pavement Engineering</i> , 2014 , 15, 427-437	2.6	5
61	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	3.8	11
60	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	6.7	16
59	A holistic 3D finite element simulation model for thermoelectric power generator element. <i>Energy Conversion and Management</i> , 2014 , 86, 99-110	10.6	23
58	Thermal Properties of Thermochromic Asphalt Binders by Modulated Differential Scanning Calorimetry. <i>Transportation Research Record</i> , 2014 , 2444, 142-150	1.7	17
57	Experimental Characterization of the Anisotropic Behaviors of Shale Rock 2014 ,		1
56	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	11.8	104
55	Multiscale Chemico-Thermo-Hydro-Mechanical Modeling of Early-Stage Hydration and Shrinkage of Cement Compounds. <i>Journal of Materials in Civil Engineering</i> , 2013 , 25, 1239-1247	3	6
54	Thermo-Hydro-Mechanical-Chemical Simulation of Methane Hydrate Dissociation in Porous Media. <i>Geotechnical and Geological Engineering</i> , 2013 , 31, 1681-1691	1.5	7
53	An Innovative Non-invasive ECG Sensor and Comparison Study with Clinic System 2013 ,		5

52	Remote control system for energy efficient home 2013 ,		3
51	System Design on Thermoelectric Energy Harvesting from Body Heat 2013 ,		4
50	A non-contact wearable wireless body sensor network for multiple vital signal detection 2013 ,		1
49	Thermally Induced Water Flux in Soils. <i>Transportation Research Record</i> , 2013 , 2349, 63-71	1.7	4
48	A new time-domain reflectometry bridge scour sensor. <i>Structural Health Monitoring</i> , 2013 , 12, 99-113	4.4	21
47	Formulation and Characterization of Freezing Saturated Soils. <i>Journal of Cold Regions Engineering - ASCE</i> , 2013 , 27, 94-107	1.1	8
46	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	3	13
45	Influence of Contact Angle on Soil-Water Characteristic Curve with Modified Capillary Rise Method. <i>Transportation Research Record</i> , 2013 , 2349, 32-40	1.7	11
44	Emulating the directional sensitivity of fish hair cell sensor. <i>Journal of Intelligent Material Systems and Structures</i> , 2013 , 24, 1484-1493	2.3	10
43	Real-time TDR Field Bridge Scour Monitoring System 2013 ,		4
42	Experimental Study of Sustainable Asphalt Binder: Influence of Thermochromic Materials. <i>Transportation Research Record</i> , 2013 , 2372, 108-115	1.7	43
41	Physically Based Equation for Phase Composition Curve of Frozen Soils. <i>Transportation Research Record</i> , 2013 , 2349, 93-99	1.7	27
40	Computer Simulations on the Effects of Desaturation on Soil Liquefaction Resistance 2013 ,		4
39	Experimental Evaluation of Lime Sludge Performance in Subgrade Stabilization 2012 ,		1
38	System design to harvest thermal energy across pavement structure 2012 ,		12
37	A new TDR sensor for accurate freeze/thaw measurement. <i>International Journal of Pavement Engineering</i> , 2012 , 13, 523-534	2.6	5
36	2012 ,		2
35	Time domain reflectometry sensor-assisted freeze/thaw analysis in geomaterials. <i>Cold Regions Science and Technology</i> , 2012 , 71, 84-89	3.8	3

34	Multiphysics extension to physically based analyses of pipes with emphasis on frost actions. <i>Journal of Zhejiang University: Science A</i> , 2012 , 13, 877-887	2.1	3
33	Theoretical Basis for Modeling Porous Geomaterials under Frost Actions: A Review. <i>Soil Science Society of America Journal</i> , 2012 , 76, 313-330	2.5	16
32	Hair flow sensors: from bio-inspiration to bio-mimicking—review. <i>Smart Materials and Structures</i> , 2012 , 21, 113001	3.4	92
31	A New Method for Soil Water Characteristic Curve Measurement Based on Similarities Between Soil Freezing and Drying. <i>Geotechnical Testing Journal</i> , 2012 , 35, 103653	1.3	1
30	Development of Micromechanics Models and Innovative Sensor Technologies to Evaluate Internal Frost Damage of Concrete. <i>Transportation Research Record</i> , 2011 , 2240, 50-58	1.7	6
29	Micromechanics models and innovative sensor technologies to evaluate internal-frost damage of concrete 2011 ,		2
28	Assessment of an Automation Algorithm for TDR Bridge Scour Monitoring System. <i>Advances in Structural Engineering</i> , 2011 , 14, 13-24	1.9	5
27	Bio-inspired flow and acoustic sensor 2011 ,		8
26	Coupled thermo-hydro-mechanical model for porous materials under frost action: theory and implementation. <i>Acta Geotechnica</i> , 2011 , 6, 51-65	4.9	72
25	Sustainable Flood Risk Management: Lesson from Recent Cases 2011 ,		1
24	Multiphysics for Early Stage Cement Hydration: Theoretical Framework. <i>Advanced Materials Research</i> , 2011 , 255-260, 4247-4250	0.5	
23	Innovative Sensor and Analyses for Investigating the Effects of Freeze-Thaw on Soil. <i>Advanced Materials Research</i> , 2011 , 255-260, 4251-4255	0.5	
22	MULTIPHYSICAL SIMULATIONS OF THE FREEZING EFFECTS ON SOILS. <i>Springer Series in Geomechanics and Geoengineering</i> , 2011 , 177-180	0.1	
21	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	1.3	8
20	Comparison Study of Three Common Technologies for Freezing-Thawing Measurement. <i>Advances in Civil Engineering</i> , 2010 , 2010, 1-10	1.3	4
19	A bio-inspired flow sensor 2010 ,		5
18	Seismic CPT _u to Assist the Design on Existing Foundations 2010 ,		3
17	Design and evaluation of a distributed TDR moisture sensor. <i>Smart Structures and Systems</i> , 2010 , 6, 1007-1023		4

16	Time Domain Reflectometry Automatic Bridge Scour Measurement System: Principles and Potentials. <i>Structural Health Monitoring</i> , 2009 , 8, 463-476	4.4	34
15	An Innovative Sensor for Assisting Spring Load Restrictions: Results of Field Demonstration Study 2009 ,		1
14	Sustainability through Beneficial Use of Lime Sludge for Construction 2009 ,		2
13	Sensor Technology for Decision Support of Spring Load Restrictions. <i>Transportation Research Record</i> , 2008 , 2053, 17-22	1.7	0
12	Risk Based Design of Levee System 2008 ,		1
11	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	3.4	12
10	Algorithm for Time Domain Reflectometry Bridge Scour Measurement System 2007 ,		7
9	Unknown Foundation Testing: A Case Comparison of Different Geophysical Methods 2007 ,		3
8	No-Fines Concrete as Ecologic Stream Bank Erosion Control 2007 ,		1
7	Mobile Computer for Portable Field Instrumentation System 2006 , 1		
6	Time Domain Reflectometry for Automatic Bridge Scour Monitoring 2006 , 152		4
5	Time Domain Reflectometry for Compaction Control of Stabilized Soils. <i>Transportation Research Record</i> , 2004 , 1868, 14-22	1.7	7
4	Soil Water Content and Dry Density by Time Domain Reflectometry. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2004 , 130, 922-934	3.4	89
3	Three-Dimensional Graphene Bimetallic Nanocatalysts Foam for Energy Storage and Biosensing 277-324		
2	An innovative machine learning based framework for water distribution network leakage detection and localization. <i>Structural Health Monitoring</i> , 147592172110402	4.4	3
1	A probabilistic strategy to evaluate scour around bridge deepwater foundations considering a reliability assessment. <i>Marine Georesources and Geotechnology</i> , 1-13	2.2	1