

# Yixian Wang

## List of Publications by Year in descending order

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Version: 2024-02-01

88  
papers

2,980  
citations

159585

30  
h-index

175258

52  
g-index

88  
all docs

88  
docs citations

88  
times ranked

1265  
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling of non-linear rheological behavior of hard rock using triaxial rheological experiment. International Journal of Rock Mechanics and Minings Sciences, 2017, 93, 66-75.	5.8	238
2	Modeling of rheological fracture behavior of rock cracks subjected to hydraulic pressure and far field stresses. Theoretical and Applied Fracture Mechanics, 2019, 101, 59-66.	4.7	227
3	Shear-related roughness classification and strength model of natural rock joint based on fuzzy comprehensive evaluation. International Journal of Rock Mechanics and Minings Sciences, 2021, 137, 104550.	5.8	139
4	Determination of the stress field and crack initiation angle of an open flaw tip under uniaxial compression. Theoretical and Applied Fracture Mechanics, 2019, 104, 102358.	4.7	123
5	Coupled seepage-damage effect in fractured rock masses: model development and a case study. International Journal of Rock Mechanics and Minings Sciences, 2021, 144, 104822.	5.8	122
6	Full 3D Displacement Measuring System for 3D Displacement Field of Soil around a Laterally Loaded Pile in Transparent Soil. International Journal of Geomechanics, 2019, 19, .	2.7	111
7	Creep Behavior of Intact and Cracked Limestone Under Multi-Level Loading and Unloading Cycles. Rock Mechanics and Rock Engineering, 2017, 50, 1409-1424.	5.4	105
8	Fracture behaviour of central-flawed rock plate under uniaxial compression. Theoretical and Applied Fracture Mechanics, 2020, 106, 102503.	4.7	104
9	Study on nonlinear damage creep constitutive model for high-stress soft rock. Environmental Earth Sciences, 2016, 75, 1.	2.7	103
10	Displacement and force analyses of braced structure of deep excavation considering unsymmetrical surcharge effect. Computers and Geotechnics, 2019, 113, 103102.	4.7	98
11	Study on Strength Influence Mechanism of Fiber-Reinforced Expansive Soil Using Jute. Geotechnical and Geological Engineering, 2016, 34, 1079-1088.	1.7	89
12	Behavior and Modeling of Fiber-Reinforced Clay under Triaxial Compression by Combining the Superposition Method with the Energy-Based Homogenization Technique. International Journal of Geomechanics, 2018, 18, .	2.7	87
13	Numerical Analysis of Karst Water Inrush and a Criterion for Establishing the Width of Water-resistant Rock Pillars. Mine Water and the Environment, 2017, 36, 508-519.	2.0	85
14	Behavior of Fiber-Reinforced and Lime-Stabilized Clayey Soil in Triaxial Tests. Applied Sciences (Switzerland), 2019, 9, 900.	2.5	77
15	A statistical damage constitutive model considering whole joint shear deformation. International Journal of Damage Mechanics, 2020, 29, 988-1008.	4.2	72
16	Mechanical behavior and failure analysis of fracture-filled gneissic granite. Theoretical and Applied Fracture Mechanics, 2020, 108, 102674.	4.7	56
17	An elasto-visco-plastic model based on stress functions for deformation and damage of water-saturated rocks during the freeze-thaw process. Construction and Building Materials, 2020, 250, 118862.	7.2	56
18	Investigation of Deflection of a Laterally Loaded Pile and Soil Deformation Using the PIV Technique. International Journal of Geomechanics, 2017, 17, .	2.7	55

#	ARTICLE	IF	CITATIONS
19	Seismic response of tunnel lining structure in a thick expansive soil stratum. <i>Tunnelling and Underground Space Technology</i> , 2019, 88, 250-259.	6.2	52
20	Analysis of fracturing characteristics of unconfined rock plate under edge-on impact loading. <i>European Journal of Environmental and Civil Engineering</i> , 2020, 24, 2453-2468.	2.1	51
21	Minimum cover depth estimation for underwater shield tunnels. <i>Tunnelling and Underground Space Technology</i> , 2021, 115, 104027.	6.2	51
22	The propagation mechanism of an oblique straight crack in a rock sample and the effect of osmotic pressure under in-plane biaxial compression. <i>Arabian Journal of Geosciences</i> , 2020, 13, 1.	1.3	47
23	Numerical Analysis of Fiber-Reinforced Soils Based on the Equivalent Additional Stress Concept. <i>International Journal of Geomechanics</i> , 2019, 19, .	2.7	44
24	Numerical simulation of a layered rock under triaxial compression. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2013, 60, 12-18.	5.8	43
25	Combined effects of cyclic load and temperature fluctuation on the mechanical behavior of porous sandstones. <i>Engineering Geology</i> , 2020, 266, 105466.	6.3	43
26	Damage evolution characteristics of saw-tooth joint under shear creep condition. <i>International Journal of Damage Mechanics</i> , 2021, 30, 453-480.	4.2	40
27	Nonlinear shear constitutive model for peak shear-type joints based on improved Harris damage function. <i>Archives of Civil and Mechanical Engineering</i> , 2020, 20, 1.	3.8	39
28	Influence of wing crack propagation on the failure process and strength of fractured specimens. <i>Bulletin of Engineering Geology and the Environment</i> , 2022, 81, 1.	3.5	38
29	Shear strength model of joints based on Gaussian smoothing method and macro-micro roughness. <i>Computers and Geotechnics</i> , 2022, 143, 104605.	4.7	34
30	Deterioration of non-persistent rock joints: A focus on impact of freeze-thaw cycles. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2020, 135, 104515.	5.8	33
31	The compressive-shear fracture strength of rock containing water based on Druker-Prager failure criterion. <i>Arabian Journal of Geosciences</i> , 2019, 12, 1.	1.3	32
32	Rock slope stability analysis considering the effect of locked section. <i>Bulletin of Engineering Geology and the Environment</i> , 2021, 80, 7241-7251.	3.5	31
33	Improved Nonlinear Nishihara Shear Creep Model with Variable Parameters for Rock-Like Materials. <i>Advances in Civil Engineering</i> , 2020, 2020, 1-15.	0.7	30
34	Statistical damage constitutive model based on the Hoek-Brown criterion. <i>Archives of Civil and Mechanical Engineering</i> , 2021, 21, 1.	3.8	29
35	Investigation of the correlation between crack propagation process and the peak strength for the specimen containing a single pre-existing flaw made of rock-like material. <i>Archives of Civil and Mechanical Engineering</i> , 2021, 21, 1.	3.8	25
36	Constitutive modeling of rock materials considering the void compaction characteristics. <i>Archives of Civil and Mechanical Engineering</i> , 2022, 22, 1.	3.8	23

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37	Damage characteristics of shear strength of joints under freeze-thaw cycles. <i>Archive of Applied Mechanics</i> , 2022, 92, 1615-1631.	2.2	23
38	Creep damage model of rock mass under multi-level creep load based on spatio-temporal evolution of deformation modulus. <i>Archives of Civil and Mechanical Engineering</i> , 2021, 21, 1.	3.8	22
39	The strain characteristics and corresponding model of rock materials under uniaxial cyclic load/unload compression and their deformation and fatigue damage analysis. <i>Archive of Applied Mechanics</i> , 2021, 91, 2481-2496.	2.2	21
40	An experimental study on characteristics of impact compression of freeze-thawed granite samples under four different states considering moisture content and temperature difference. <i>Environmental Earth Sciences</i> , 2021, 80, 1.	2.7	16
41	Analysis of Acoustic Wave Frequency Spectrum Characters of Rock Mass under Blasting Damage Based on the HHT Method. <i>Advances in Civil Engineering</i> , 2018, 2018, 1-8.	0.7	13
42	Resilient Modulus-Physical Parameters Relationship of Improved Red Clay by Dynamic Tri-Axial Test. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1155.	2.5	13
43	Damage Statistical Empirical Model for Fractured Rock under Freezing-Thawing Cycle and Loading. <i>Geofluids</i> , 2020, 2020, 1-12.	0.7	13
44	Statistical Damage Shear Constitutive Model of Rock Joints Under Seepage Pressure. <i>Frontiers in Earth Science</i> , 2020, 8, .	1.8	13
45	Lateral Displacement and Internal Force in Diaphragm Walls Based on Principle of Minimum Potential Energy. <i>International Journal of Geomechanics</i> , 2019, 19, .	2.7	12
46	Theoretical and numerical models of rock wing crack subjected to hydraulic pressure and far-field stresses. <i>Arabian Journal of Geosciences</i> , 2020, 13, 1.	1.3	12
47	Predicting Response of Constructed Tunnel to Adjacent Excavation with Dewatering. <i>Geofluids</i> , 2021, 2021, 1-17.	0.7	12
48	Joint Investigation and 3D Visual Evaluation of Rock Mass Quality. <i>Advances in Civil Engineering</i> , 2020, 2020, 1-16.	0.7	12
49	Simplified Analytical Solutions for Tunnel Settlement Induced by Axially Loading Single Pile and Pile Group. <i>Journal of Engineering Mechanics - ASCE</i> , 2021, 147, .	2.9	11
50	Advances in Laboratory-Scale Hydraulic Fracturing Experiments. <i>Advances in Civil Engineering</i> , 2020, 2020, 1-18.	0.7	10
51	Shear expression derivation and parameter evaluation of Hoek-Brown criterion. <i>Archives of Civil and Mechanical Engineering</i> , 2022, 22, 1.	3.8	10
52	A hydraulic gradient similitude testing system for studying the responses of a laterally loaded pile and soil deformation. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	2.7	9
53	Crack coalescence patterns and local strain behaviors near flaw tip for rock-like material containing two flaws subjected to biaxial compression. <i>Arabian Journal of Geosciences</i> , 2020, 13, 1.	1.3	9
54	Mechanism of Deformation Compatibility and Pile Foundation Optimum for Long-Span Tower Foundation in Flood-Plain Deposit Zone. <i>International Journal of Civil Engineering</i> , 2017, 15, 887-894.	2.0	8

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55	Dynamic Compaction Model Tests for the Characteristics of Red Clay Under equal Energy Level. <i>Geotechnical and Geological Engineering</i> , 2018, 36, 1873-1883.	1.7	8
56	Modified Double-Reduction Method considering Strain Softening and Equivalent Influence Angle. <i>KSCE Journal of Civil Engineering</i> , 2020, 24, 3257-3266.	1.9	8
57	Blast Induced Crack Propagation and Damage Accumulation in Rock Mass Containing Initial Damage. <i>Shock and Vibration</i> , 2018, 2018, 1-10.	0.6	7
58	Analytical solutions for consolidation of composite ground improved by composite columns with circular and non-circular cross sections. <i>European Journal of Environmental and Civil Engineering</i> , 2020, , 1-17.	2.1	7
59	Dynamic response of cylindrical thick-walled granite specimen with clay infilling subjected to dynamic loading. <i>Archive of Applied Mechanics</i> , 2022, 92, 643-648.	2.2	7
60	Extended Smooth Orthogonal Decomposition for Modal Analysis. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2018, 140, .	1.6	6
61	Deformation of the Geocell Flexible Reinforced Retaining Wall under Earthquake. <i>Advances in Civil Engineering</i> , 2021, 2021, 1-11.	0.7	6
62	Time-dependent behavior of subcritical crack growth for rock plate: Experimental and numerical study. <i>International Journal of Distributed Sensor Networks</i> , 2018, 14, 155014771881201.	2.2	5
63	Fracture Behavior of Rock with Initial Damage: Theoretical, Experimental, and Numerical Investigations. <i>Geofluids</i> , 2020, 2020, 1-9.	0.7	5
64	Precise evaluation method for the stability analysis of multi-scale slopes. <i>Simulation</i> , 2020, 96, 841-848.	1.8	5
65	Soil Creep Effect on Time-Dependent Deformation of Deep Braced Excavation. <i>Advances in Materials Science and Engineering</i> , 2022, 2022, 1-14.	1.8	5
66	Effect of Sand Relative Density on Response of a Laterally Loaded Pile and Sand Deformation. <i>Journal of Chemistry</i> , 2015, 2015, 1-6.	1.9	4
67	Shear Behavior of Bolt-Reinforced Joint Rock Under Varying Stress Environment. <i>Geotechnical and Geological Engineering</i> , 2020, 38, 5755-5770.	1.7	4
68	Testing Study on Crack Propagation Due to Rheological Fracture in Quasi-Brittle Material Under Compression-Shear or Double Torsional Loading. <i>Geotechnical and Geological Engineering</i> , 2016, 34, 1655-1667.	1.7	3
69	Numerical Simulation of Fluid-Solid Coupling in Surrounding Rock for River Stope Mining. <i>Shock and Vibration</i> , 2020, 2020, 1-11.	0.6	3
70	Shear Resistance of Rock Joint under Nonuniform Normal Stress. <i>Advances in Materials Science and Engineering</i> , 2020, 2020, 1-8.	1.8	3
71	Editorial: Hydro-Mechanical Coupling and Creep Behaviors of Geomaterials. <i>Frontiers in Earth Science</i> , 2021, 8, .	1.8	3
72	The controlling factors of the karst water hydrochemistry in a karst basin of southwestern China. <i>Environmental Earth Sciences</i> , 2021, 80, 1.	2.7	3

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73	Analysis on the evolution of frost heaving pressure of penetrating crack considering water content and migration. Simulation, 2023, 99, 41-54.	1.8	3
74	Modelling the Triaxial Compression Behavior of Loess Using the Disturbed State Concept. Advances in Civil Engineering, 2021, 2021, 1-17.	0.7	2
75	Temporal-Spatial Characteristics of Ground and Pile Responses to Twin Shield Tunneling in Clays. Geofluids, 2021, 2021, 1-15.	0.7	2
76	Shear behaviors of clay-infilled joint with different water contents: experiment and model. Arabian Journal of Geosciences, 2021, 14, 1.	1.3	2
77	Determination of Joint Surface Roughness Based on 3D Statistical Morphology Characteristic. Advances in Civil Engineering, 2021, 2021, 1-12.	0.7	2
78	Damage and Fracture Behavior of Rock. Advances in Civil Engineering, 2019, 2019, 1-3.	0.7	1
79	Response Analysis of Deep Foundation Excavation and Dewatering on Surface Settlements. Advances in Civil Engineering, 2020, 2020, 1-10.	0.7	1
80	Influence of the Micro-deformation Characteristics of Binary Media on the Shear Behavior of Structural Plane. Geotechnical and Geological Engineering, 2021, 39, 347-358.	1.7	1
81	Dynamic Response and Mechanical Behaviours of Geogrid for High Earth-rockfill Dams. Geotechnical and Geological Engineering, 2021, 39, 5479-5492.	1.7	1
82	Stability Analysis of Slope Considering the Energy Evolution of Locked Segment. Geotechnical and Geological Engineering, 0, , 1.	1.7	1
83	Experimental study on mechanical properties and effective stress coefficient of water-saturated sandstone under hydraulic-mechanical coupling. Arabian Journal of Geosciences, 2022, 15, .	1.3	1
84	Motion Situation and Kinetic Energy Analysis for Ore Pass of Underground Mine. Applied Mechanics and Materials, 0, 90-93, 383-386.	0.2	0
85	An Improved Method for Calculating Bending Moment and Shearing Force of Beam in Numerical Modelling. Tehnicki Vjesnik, 2018, 25, .	0.2	0
86	Searching for Slip Surface of Disturbed Slope Based on Logistic Function. Shock and Vibration, 2020, 2020, 1-9.	0.6	0
87	Introduction to the Special Issue: Nonlinearity and numerical simulation applications in geotechnical engineering. Journal of Vibroengineering, 2019, 21, 816-818.	1.0	0
88	Direct Shear Test and Shear Strength Model of Clay-Filled Joints. Applied Rheology, 2021, 31, 50-62.	5.2	0