

Jun-Xing Zheng

List of Publications by Year in descending order

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Version: 2024-02-01

73
papers

1,513
citations

318942

23
h-index

406436

35
g-index

75
all docs

75
docs citations

75
times ranked

956
citing authors

#	ARTICLE	IF	CITATIONS
1	Bio-inspired geotechnical engineering: principles, current work, opportunities and challenges. <i>Geotechnique</i> , 2022, 72, 687-705.	2.2	74
2	Laboratory-on-a-smartphone for estimating angularity of granular soils. <i>Acta Geotechnica</i> , 2022, 17, 2651-2674.	2.9	3
3	On compression behavior and particle breakage of carbonate silty sands. <i>Engineering Geology</i> , 2022, 297, 106492.	2.9	7
4	Particle shape characterizations for energetic materials by computational geometry and stereology method. <i>SN Applied Sciences</i> , 2022, 4, 1.	1.5	3
5	Microstructure Characterization of High Explosives by Wavelet Transform. <i>Mathematical Problems in Engineering</i> , 2022, 2022, 1-16.	0.6	0
6	Realistic soil particle generation based on limited morphological information by probability-based spherical harmonics. <i>Computational Particle Mechanics</i> , 2021, 8, 215-235.	1.5	20
7	Three-dimensional Wadell roundness for particle angularity characterization of granular soils. <i>Acta Geotechnica</i> , 2021, 16, 133-149.	2.9	51
8	Accelerated simulations of direct shear tests by physics engine. <i>Computational Particle Mechanics</i> , 2021, 8, 471-492.	1.5	4
9	Performance evaluation of geosynthetic reinforced flexible pavement: a review of full-scale field studies. <i>International Journal of Pavement Research and Technology</i> , 2021, 14, 30-42.	1.3	20
10	Evaluation of geogrid reinforcement of flexible pavement performance: A review of large-scale laboratory studies. <i>Transportation Geotechnics</i> , 2021, 27, 100471.	2.0	26
11	Finite element viscoelastic simulations of rutting behavior of hot mix and warm mix asphalt overlay on flexible pavements. <i>International Journal of Pavement Research and Technology</i> , 2021, 14, 708-719.	1.3	9
12	Modeling excess shear stress around tandem piers of the longitudinal bridge by computational fluid dynamics. <i>Journal of Applied Water Engineering and Research</i> , 2021, 9, 216-229.	1.0	2
13	Simulating shearing behavior of realistic granular soils using physics engine. <i>Granular Matter</i> , 2021, 23, 1.	1.1	4
14	Effectiveness of Geosynthetics in the Construction of Roadways: A Full-Scale Field Studies Review. , 2021, , .		5
15	In-plane asymmetric buckling of an FGM circular arch subjected to thermal and pressure fields. <i>Engineering Structures</i> , 2021, 239, 112268.	2.6	9
16	The critical state parameters of sands from their image-based intrinsic properties. <i>Acta Geotechnica</i> , 2021, 16, 4081-4092.	2.9	1
17	Physics engine based simulation of shear behavior of granular soils using hard and soft contact models. <i>Journal of Computational Science</i> , 2021, 56, 101504.	1.5	2
18	Computer Vision Technology for Characterizing Particle Size and Shape of Aggregate Materials: A Review. , 2021, , .		0

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19	Structural failure performance of the encased functionally graded porous cylinder consolidated by graphene platelet under uniform radial loading. <i>Thin-Walled Structures</i> , 2020, 146, 106454.	2.7	37
20	Morphology-based indices and recommended sampling sizes for using image-based methods to quantify degradations of compacted aggregate materials. <i>Construction and Building Materials</i> , 2020, 230, 116970.	3.2	25
21	Nonlinear stability of the encased functionally graded porous cylinders reinforced by graphene nanofillers subjected to pressure loading under thermal effect. <i>Composite Structures</i> , 2020, 233, 111584.	3.1	25
22	Thermal-elastic buckling of the arch-shaped structures with FGP aluminum reinforced by composite graphene platelets. <i>Thin-Walled Structures</i> , 2020, 157, 107142.	2.7	25
23	Long-Term Settlement of High Concrete-Face Rockfill Dam by Field Monitoring and Numerical Simulation. <i>Advances in Civil Engineering</i> , 2020, 2020, 1-17.	0.4	3
24	Field and simulated rutting behavior of hot mix and warm mix asphalt overlays. <i>Construction and Building Materials</i> , 2020, 265, 120366.	3.2	18
25	Rutting Performance Evaluation of Hot Mix Asphalt and Warm Mix Asphalt Mixtures by Using Dynamic Modulus, Hamburg Wheel Tracking Tests, and Viscoelastic Finite Element Simulations. , 2020, , .		4
26	Explanations of anisotropic strength and fabric evolution in granular soils by DEM simulations and buckling failure theory. <i>Geomechanics and Geoengineering</i> , 2020, , 1-15.	0.9	1
27	Thermal nonlinear performance of the porous metal cylinders with composite graphene nanofiller reinforcement encased in elastic mediums. <i>International Journal of Mechanical Sciences</i> , 2020, 181, 105698.	3.6	22
28	Particle Size Characteristics of Unconventionally Large Aggregate Particles by Stereophotography. , 2020, , .		1
29	Numerical Simulation of Velocity Field around Two Columns of Tandem Piers of the Longitudinal Bridge. <i>Fluids</i> , 2020, 5, 32.	0.8	0
30	Three-dimensional particle shape characterizations from half particle geometries. <i>Powder Technology</i> , 2020, 367, 122-132.	2.1	21
31	Comparing Realistic Particle Simulation Using Discrete Element Method and Physics Engine. , 2020, , .		3
32	Comparisons between Two-Dimensional and Three-Dimensional Fabric Characterizations Based on Scalar Parameters for Sands. , 2020, , .		0
33	Simplified approach to characterize anisotropic strength of granular soils. <i>International Journal of Geo-Engineering</i> , 2020, 11, 1.	0.9	1
34	Clone granular soils with mixed particle morphological characteristics by integrating spherical harmonics with Gaussian mixture model, expectationâ€™maximization, and Dirichlet process. <i>Acta Geotechnica</i> , 2020, 15, 2779-2796.	2.9	12
35	Simulations of realistic granular soils in oedometer tests using physics engine. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2020, 44, 983-1002.	1.7	16
36	Two-dimensional and three-dimensional inherent fabric in cross-anisotropic granular soils. <i>Computers and Geotechnics</i> , 2019, 116, 103197.	2.3	25

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37	Nonlinear stability analysis of thin-walled steel pipe confined in soft bilayer medium. <i>Engineering Structures</i> , 2019, 196, 109318.	2.6	23
38	Improved watershed analysis for segmenting contacting particles of coarse granular soils in volumetric images. <i>Powder Technology</i> , 2019, 356, 295-303.	2.1	42
39	Mechanics of the confined functionally graded porous arch reinforced by graphene platelets. <i>Engineering Structures</i> , 2019, 201, 109817.	2.6	31
40	Collapse mechanism of the thin-walled functionally graded cylinders encased in the saturated permeable mediums. <i>Engineering Structures</i> , 2019, 198, 109472.	2.6	19
41	Analytical consideration and numerical verification of the confined functionally graded porous ring with graphene platelet reinforcement. <i>International Journal of Mechanical Sciences</i> , 2019, 161-162, 105079.	3.6	20
42	Simulation of Realistic Particles with Bullet Physics Engine. <i>E3S Web of Conferences</i> , 2019, 92, 14004.	0.2	7
43	Effect of temperature variations on the stability mechanism of the confined functionally graded porous arch with nanocomposites reinforcement under mechanical loading. <i>Composites Part B: Engineering</i> , 2019, 176, 107330.	5.9	37
44	Nonlinear stability and buckling analysis of composite functionally graded arches subjected to external pressure and temperature loading. <i>Engineering Structures</i> , 2019, 199, 109606.	2.6	28
45	Nonlinear Buckling Mechanism of an Arch Subjected to a Symmetrically-placed Point Load. <i>KSCE Journal of Civil Engineering</i> , 2019, 23, 4781-4789.	0.9	14
46	Minimum image quality for reliable optical characterizations of soil particle shapes. <i>Computers and Geotechnics</i> , 2019, 114, 103110.	2.3	26
47	Effects of grouting voids on the elastic buckling of confined pipe liners subjected to uniform pressure. <i>Thin-Walled Structures</i> , 2019, 137, 502-514.	2.7	31
48	Three-dimensional particle size and shape characterisation using structural light. <i>Geotechnique Letters</i> , 2019, 9, 72-78.	0.6	20
49	Nonlinear structural stability performance of pressurized thin-walled FGM arches under temperature variation field. <i>International Journal of Non-Linear Mechanics</i> , 2019, 113, 86-102.	1.4	38
50	Effect of morphological parameters of natural sand on mechanical properties of engineered cementitious composites. <i>Cement and Concrete Composites</i> , 2019, 100, 108-119.	4.6	80
51	Nonlinear buckling of thin-walled FGM arch encased in rigid confinement subjected to external pressure. <i>Engineering Structures</i> , 2019, 186, 86-95.	2.6	47
52	Material distribution optimization of functionally graded arch subjected to external pressure under temperature rise field. <i>Thin-Walled Structures</i> , 2019, 138, 64-78.	2.7	36
53	Buckling of Thin-Walled High Density Polyethylene Liners Encased in Rigid Pipes under External Pressure and Thermal Effects. , 2019, , .		0
54	Particulate material fabric characterization from volumetric images by computational geometry. <i>Powder Technology</i> , 2019, 344, 804-813.	2.1	24

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55	Leaching and microstructural properties of lead contaminated kaolin stabilized by GGBS-MgO in semi-dynamic leaching tests. <i>Construction and Building Materials</i> , 2018, 172, 626-634.	3.2	78
56	Rammed aggregate pier installation effect on soil properties. <i>Proceedings of the Institution of Civil Engineers: Ground Improvement</i> , 2018, 171, 63-73.	0.7	5
57	Identification and Characterization of Particle Shapes from Images of Sand Assemblies Using Pattern Recognition. <i>Journal of Computing in Civil Engineering</i> , 2018, 32, .	2.5	21
58	Cross-anisotropic fabric of sands by wavelet-based simulation of human cognition. <i>Soils and Foundations</i> , 2018, 58, 1028-1041.	1.3	19
59	Visualizing Failure Surfaces in Soft Clay Due to Suction Caisson Loading. , 2018, , .		1
60	Compressibility of Sands of Various Geologic Origins at Pre-crushing Stress Levels. <i>Geotechnical and Geological Engineering</i> , 2017, 35, 2037-2051.	0.8	19
61	An image based clump library for DEM simulations. <i>Granular Matter</i> , 2017, 19, 1.	1.1	34
62	Particulate material fabric characterization by rotational haar wavelet transform. <i>Computers and Geotechnics</i> , 2017, 88, 46-60.	2.3	25
63	Closure to "Particle Roundness and Sphericity from Images of Assemblies by Chart Estimates and Computer Methods" by Roman D. Hryciw, Junxing Zheng, and Kristen Shetler. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2017, 143, 07017025.	1.5	1
64	Particle Roundness and Sphericity from Images of Assemblies by Chart Estimates and Computer Methods. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2016, 142, .	1.5	68
65	Index Void Ratios of Sands from Their Intrinsic Properties. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2016, 142, .	1.5	57
66	A corner preserving algorithm for realistic DEM soil particle generation. <i>Granular Matter</i> , 2016, 18, 1.	1.1	35
67	Roundness and Sphericity of Soil Particles in Assemblies by Computational Geometry. <i>Journal of Computing in Civil Engineering</i> , 2016, 30, .	2.5	70
68	Segmentation of contacting soil particles in images by modified watershed analysis. <i>Computers and Geotechnics</i> , 2016, 73, 142-152.	2.3	43
69	Optical Flow Analysis of Internal Erosion and Soil Piping in Images Captured by the VisCPT. , 2014, , .		2
70	Soil Particle Size Characterization by Stereophotography. , 2014, , .		14
71	Innovations in Optical Geocharacterization. , 2014, , .		7
72	Three-Dimensional Translucent Segregation Table (3D-TST) test for soil particle size and shape distribution. , 2014, , 1037-1042.		12

#	ARTICLE	IF	CITATIONS
73	Rigidity indices of sands from their image-based intrinsic properties. Acta Geotechnica, 0, , 1.	2.9	0