Tao Zhao

List of Publications by Year
in descending order

64 papers	2,728 citations	147801 31 h-index	182427 51 g-index
66 all docs	66 docs citations	66 times ranked	1492 citing authors

#	Article	IF	Citations
1	Solutions for lined circular tunnels sequentially constructed in rheological rock subjected to non-hydrostatic initial stresses. European Journal of Environmental and Civil Engineering, 2022, 26, 1834-1866.	2.1	10
2	DEM modelling of cone penetration tests in lunar soil. Granular Matter, 2022, 24, 1.	2.2	1
3	AE energy evolution during CJB fracture affected by rock heterogeneity and column irregularity under lateral pressure. Geomatics, Natural Hazards and Risk, 2022, 13, 877-907.	4.3	20
4	Influence of Inter-Particle Friction and Damping on the Dynamics of Spherical Projectile Impacting Onto a Soil Bed. Frontiers in Earth Science, 2022, 10, .	1.8	4
5	Experimental Investigations on the Spillway Section Shape of the Breaching Process of Landslide Dams. International Journal of Geomechanics, 2022, 22, .	2.7	4
6	Numerical study on size effect and anisotropy of columnar jointed basalts under uniaxial compression. Bulletin of Engineering Geology and the Environment, 2022, 81, 1.	3.5	18
7	Slope erosion induced by surges of debris flow: insights from field experiments. Landslides, 2022, 19, 2367-2377.	5.4	2
8	Discrete element analysis of dry granular flow impact on slit dams. Landslides, 2021, 18, 1143-1152.	5.4	24
9	Influence of particle size on the buffering efficiency of soil cushion layer against rockfall impact. Natural Hazards, 2021, 108, 1469-1488.	3.4	15
10	Effect of particle breakage on the shear strength of calcareous sands. Marine Geophysical Researches, 2021, 42, 1.	1.2	11
11	Influence of Particle Breakage on Drained Shear Strength of Calcareous Sands. International Journal of Geomechanics, 2021, 21, .	2.7	40
12	Experimental and numerical study on the fragmentation mechanism of a single calcareous sand particle under normal compression. Bulletin of Engineering Geology and the Environment, 2021, 80, 2875-2888.	3.5	21
13	Influence of two unparallel fissures on the mechanical behaviours of rock-like specimens subjected to uniaxial compression. European Journal of Environmental and Civil Engineering, 2020, 24, 1643-1663.	2.1	10
14	Analysis of sand â€“ woven geotextile interface shear behavior using discrete element method (DEM). Canadian Geotechnical Journal, 2020, 57, 433-447.	2.8	37
15	Particle Size Segregation in Granular Mass Flows With Different Ambient Fluids. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019536.	3.4	26
16	A novel random discrete element analysis of rock fragmentation. International Journal for Numerical and Analytical Methods in Geomechanics, 2020, 44, 1386-1395.	3.3	21
17	Quantifying the Morphology of Calcareous Sands by Dynamic Image Analysis. International Journal of Geomechanics, 2020, 20, .	2.7	57
18	Discrete Element Analyses of a Realistic-shaped Rock Block Impacting Against a Soil Buffering Layer. Rock Mechanics and Rock Engineering, 2020, 53, 3807-3822.	5.4	22

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19	Dynamics of loose granular flow and its subsequent deposition in a narrow mountainous river. Journal of Mountain Science, 2019, 16, 1367-1380.	2.0	8
20	DEM analyses of rock block shape effect on the response of rockfall impact against a soil buffering layer. Engineering Geology, 2019, 249, 60-70.	6.3	60
21	Experimental study on the regulation function of slit dam against debris flows. Landslides, 2019, 16, 75-90.	5.4	37
22	Viscoelastic solutions for stresses and displacements around non-circular tunnels sequentially excavated at great depths. Acta Geotechnica, 2019, 14, 111-139.	5.7	24
23	Effects of strain rate on the mechanical and fracturing behaviors of rock-like specimens containing two unparallel fissures under uniaxial compression. Soil Dynamics and Earthquake Engineering, 2018, 110, 195-211.	3.8	60
24	Dynamic Fragmentation of Jointed Rock Blocks During Rockslideâ€Avalanches: Insights From Discrete Element Analyses. Journal of Geophysical Research: Solid Earth, 2018, 123, 3250-3269.	3.4	44
25	Experimental and numerical investigation of cracked chevron notched Brazilian disc specimen for fracture toughness testing of rock. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 197-211.	3.4	58
26	Micro-mechanical analysis of geomembrane-sand interactions using DEM. Computers and Geotechnics, 2018, 94, 58-71.	4.7	30
27	An experimental and theoretical comparison of CCNBD and CCNSCB specimens for determining mode I fracture toughness of rocks. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 1002-1018.	3.4	45
28	Evolution of Particle Breakage for Calcareous Sands during Ring Shear Tests. International Journal of Geomechanics, 2018, 18, .	2.7	80
29	Experimental and numerical investigation on the tensile fatigue properties of rocks using the cyclic flattened Brazilian disc method. Soil Dynamics and Earthquake Engineering, 2018, 105, 68-82.	3.8	59
30	A novel chevron notched short rod bend method for measuring the mode I fracture toughness of rocks. Engineering Fracture Mechanics, 2018, 190, 1-15.	4.3	72
31	Experimental Evaluation of the Shear Behavior of Fiber-Reinforced Calcareous Sands. International Journal of Geomechanics, 2018, 18, 04018175.	2.7	25
32	On the Dynamic Fragmentation and Lubrication of Coseismic Landslides. Journal of Geophysical Research: Solid Earth, 2018, 123, 9914-9932.	3.4	31
33	Effect of Particle Size Segregation in Debris Flow Deposition: A Preliminary Study. , 2018, , 73-80.		0
34	Reduction of Landslide Shear Resistance by Gravel Fragmentation: Insights from DEM Modelling. , 2018, , 34-41.		0
35	Generation of Complex Slope Geometries by DEM for Modeling Landslides: A Case Study of Tangjiashan Landslide. , 2018, , 11-19.		1
36	Quantifying the impact of dry debris flow against a rigid barrier by DEM analyses. Engineering Geology, 2018, 241, 86-96.	6.3	120

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37	Discrete Element Analyses of Earthquake-Induced Landslide. Springer Series in Geomechanics and Geoengineering, 2018, , 1574-1578.	0.1	0
38	Investigation of Dry Debris Flow Impact Against a Rigid Barrier via a Discrete Element Approach. , 2018, , 20-27.		0
39	Coupled DEM-CFD investigation on the formation of landslide dams in narrow rivers. Landslides, 2017, 14, 189-201.	5.4	79
40	Comprehensive evaluation of excavation-damaged zones in the deep underground caverns of the Houziyan hydropower station, Southwest China. Bulletin of Engineering Geology and the Environment, 2017, 76, 275-293.	3.5	42
41	Investigation of rock fragmentation during rockfalls and rock avalanches via 3â€Ð discrete element analyses. Journal of Geophysical Research F: Earth Surface, 2017, 122, 678-695.	2.8	81
42	Coupled DEM-CFD Analyses of Landslide-Induced Debris Flows. , 2017, , .		20
43	Fracture prediction of rocks under mode I and mode II loading using the generalized maximum tangential strain criterion. Engineering Fracture Mechanics, 2017, 186, 21-38.	4.3	104
44	An experimental and theoretical assessment of semi-circular bend specimens with chevron and straight-through notches for mode I fracture toughness testing of rocks. International Journal of Rock Mechanics and Minings Sciences, 2017, 99, 28-38.	5.8	127
45	Analysis of impact-induced rock fragmentation using a discrete element approach. International Journal of Rock Mechanics and Minings Sciences, 2017, 98, 33-38.	5.8	66
46	Cyclic flattened Brazilian disc tests for measuring the tensile fatigue properties of brittle rocks. Review of Scientific Instruments, 2017, 88, 083902.	1.3	19
47	Numerical Investigation of the Dynamic Properties of Intermittent Jointed Rock Models Subjected to Cyclic Uniaxial Compression. Rock Mechanics and Rock Engineering, 2017, 50, 89-112.	5.4	67
48	Testing DEM Approaches for Rockfall Impact Modeling. , 2017, , .		0
49	Fracture Toughness Determination of Cracked Chevron Notched Brazilian Disc Rock Specimen via Griffith Energy Criterion Incorporating Realistic Fracture Profiles. Rock Mechanics and Rock Engineering, 2016, 49, 3083-3093.	5.4	62
50	Microseismicity and its timeâ€“frequency characteristics of the left bank slope at the Jinping first-stage hydropower station during reservoir impoundment. Environmental Earth Sciences, 2016, 75, 1.	2.7	18
51	Loading-rate-dependent progressive fracturing of cracked chevron-notched Brazilian disc specimens in split Hopkinson pressure bar tests. International Journal of Rock Mechanics and Minings Sciences, 2016, 88, 49-60.	5.8	110
52	Discrete element simulation of dynamic semi-circular bend flexure tests of rocks using split Hopkinson pressure bar. Arabian Journal of Geosciences, 2016, 9, 1.	1.3	12
53	Research on a Calculation Method and Three-Dimensional Simulation of a High-Filled Embankment Rheological Settlement. , 2016, , .		0
54	Stress intensity factors and fracture process zones of ISRM-suggested chevron notched specimens for mode I fracture toughness testing of rocks. Engineering Fracture Mechanics, 2016, 168, 174-189.	4.3	98

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55	Experimental and numerical study on the fracture process zone and fracture toughness determination for ISRM-suggested semi-circular bend rock specimen. Engineering Fracture Mechanics, 2016, 154, 43-56.	4.3	137
56	Numerical Investigation of Dynamic Rock Fracture Toughness Determination Using a Semi-Circular Bend Specimen in Split Hopkinson Pressure Bar Testing. Rock Mechanics and Rock Engineering, 2016, 49, 731-745.	5.4	123
57	Numerical Observation of Three-Dimensional Wing Cracking of Cracked Chevron Notched Brazilian Disc Rock Specimen Subjected to Mixed Mode Loading. Rock Mechanics and Rock Engineering, 2016, 49, 79-96.	5.4	33
58	Rockslide and Impulse Wave Modelling in the Vajont Reservoir by DEM-CFD Analyses. Rock Mechanics and Rock Engineering, 2016, 49, 2437-2456.	5.4	81
59	Coupled DEM-CFD Investigation of Granular Transport in a Fluid Channel. IOP Conference Series: Earth and Environmental Science, 2015, 26, 012016.	0.3	0
60	A composite particle model for non-spherical particles in DEM simulations. Granular Matter, 2015, 17, 763-774.	2.2	56
61	Numerical investigation of the progressive fracture mechanisms of four ISRM-suggested specimens for determining the mode I fracture toughness of rocks. Computers and Geotechnics, 2015, 69, 424-441.	4.7	61
62	3D DEM investigation of granular column collapse: Evaluation of debris motion and its destructive power. Engineering Geology, 2015, 186, 3-16.	6.3	157
63	Investigation of granular batch sedimentation via DEMâ€“CFD coupling. Granular Matter, 2014, 16, 921-932.	2.2	74
64	Numerical Simulation of the Collapse of Granular Columns Using DEM. Special Publication - Royal Society of Chemistry, 2012, , 133-140.	0.0	3