

Ping Cao

List of Publications by Year in descending order

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papers

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279487

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Mechanical Behavior of Brittle Rock-Like Specimens with Pre-existing Fissures Under Uniaxial Loading: Experimental Studies and Particle Mechanics Approach. <i>Rock Mechanics and Rock Engineering</i> , 2016, 49, 763-783.	2.6	224
2	An Experimental and Numerical Study on Mechanical Behavior of Ubiquitous-Joint Brittle Rock-Like Specimens Under Uniaxial Compression. <i>Rock Mechanics and Rock Engineering</i> , 2016, 49, 4319-4338.	2.6	110
3	Study on nonlinear damage creep constitutive model for high-stress soft rock. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	1.3	103
4	Mechanical behavior around double circular openings in a jointed rock mass under uniaxial compression. <i>Archives of Civil and Mechanical Engineering</i> , 2020, 20, 1.	1.9	73
5	Directly searching method for slip plane and its influential factors based on critical state of slope. <i>Central South University</i> , 2009, 16, 131-135.	0.5	62
6	An elasto-visco-plastic model based on stress functions for deformation and damage of water-saturated rocks during the freeze-thaw process. <i>Construction and Building Materials</i> , 2020, 250, 118862.	3.2	56
7	Damage and fracture evolution of hydraulic fracturing in compression-shear rock cracks. <i>Theoretical and Applied Fracture Mechanics</i> , 2014, 74, 55-63.	2.1	53
8	Modeling the Progressive Failure of Jointed Rock Slope Using Fracture Mechanics and the Strength Reduction Method. <i>Rock Mechanics and Rock Engineering</i> , 2015, 48, 771-785.	2.6	50
9	Strength, fragmentation and fractal properties of mixed flaws. <i>Acta Geotechnica</i> , 2016, 11, 901-912.	2.9	50
10	Stability of soil nailed slope using strength reduction method. <i>European Journal of Environmental and Civil Engineering</i> , 2013, 17, 872-885.	1.0	46
11	Influence of confining stress on fracture characteristics and cutting efficiency of TBM cutters conducted on soft and hard rock. <i>Journal of Central South University</i> , 2015, 22, 1947-1955.	1.2	44
12	Correlation of UCS Rating with Schmidt Hammer Surface Hardness for Rock Mass Classification. <i>Rock Mechanics and Rock Engineering</i> , 2017, 50, 195-203.	2.6	44
13	Effect of water-rock interaction on the morphology of a rock surface. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2010, 47, 816-822.	2.6	39
14	Sequential Indentation Tests to Investigate the Influence of Confining Stress on Rock Breakage by Tunnel Boring Machine Cutter in a Biaxial State. <i>Rock Mechanics and Rock Engineering</i> , 2016, 49, 1479-1495.	2.6	37
15	Progressive failure analysis of slope with strain-softening behaviour based on strength reduction method. <i>Journal of Zhejiang University: Science A</i> , 2013, 14, 101-109.	1.3	33
16	A Study on Isotropic Rock Breaking with TBM Cutters Under Different Confining Stresses. <i>Geotechnical and Geological Engineering</i> , 2015, 33, 1379-1394.	0.8	31
17	Crack Initiation, Propagation, and Failure Characteristics of Jointed Rock or Rock-Like Specimens: A Review. <i>Advances in Civil Engineering</i> , 2019, 2019, 1-31.	0.4	31
18	Viscoelasto-plastic rheological experiment under circular increment step load and unload and nonlinear creep model of soft rocks. <i>Central South University</i> , 2009, 16, 488-494.	0.5	27

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19	Experimental and numerical study of the failure process and energy mechanisms of rock-like materials containing cross un-persistent joints under uniaxial compression. PLoS ONE, 2017, 12, e0188646.	1.1	27
20	Second-order cone programming formulation of discontinuous deformation analysis. International Journal for Numerical Methods in Engineering, 2019, 118, 243-257.	1.5	27
21	Crack propagation mechanism of compression-shear rock under static-dynamic loading and seepage water pressure. Journal of Central South University, 2014, 21, 1565-1570.	1.2	26
22	Morphological analysis of sheared rock with water-rock interaction effect. International Journal of Rock Mechanics and Minings Sciences, 2014, 70, 264-272.	2.6	24
23	Crack initiation stress and strain of jointed rock containing multi-cracks under uniaxial compressive loading: A particle flow code approach. Journal of Central South University, 2015, 22, 638-645.	1.2	24
24	Experimental study on acoustic emission characteristics of jointed rock mass by double disc cutter. Journal of Central South University, 2018, 25, 357-367.	1.2	24
25	Three-dimensional discrete element simulation of indirect tensile behaviour of a transversely isotropic rock. International Journal for Numerical and Analytical Methods in Geomechanics, 2020, 44, 1812-1832.	1.7	24
26	The influence of temperature and time on water-rock interactions based on the morphology of rock joint surfaces. Bulletin of Engineering Geology and the Environment, 2019, 78, 3385-3394.	1.6	23
27	Particle size distribution effects on deformation properties of graded aggregate base under cyclic loading. European Journal of Environmental and Civil Engineering, 2019, 23, 269-286.	1.0	21
28	Mechanism study on subcritical crack growth of flabby and intricate ore rock. Transactions of Nonferrous Metals Society of China, 2006, 16, 723-727.	1.7	20
29	Macro and meso characteristics evolution on shear behavior of rock joints. Journal of Central South University, 2015, 22, 3087-3096.	1.2	20
30	Test of subcritical crack growth and fracture toughness under water-rock interaction in three types of rocks. Journal of Central South University, 2015, 22, 662-668.	1.2	19
31	A new 3D JRC calculation method of rock joint based on laboratory-scale morphology testing and its application in shear strength analysis. Bulletin of Engineering Geology and the Environment, 2020, 79, 345-354.	1.6	19
32	Testing study of subcritical crack growth rate and fracture toughness in different rocks. Transactions of Nonferrous Metals Society of China, 2006, 16, 709-713.	1.7	18
33	Modeling of the progressive failure of an overhang slope subject to differential weathering in Three Gorges Reservoir, China. Landslides, 2016, 13, 1303-1313.	2.7	17
34	Anisotropy of Rock Profile JRC Values and Its Empirical Formula: A Case Study on Yellow Rust Granite. Geotechnical and Geological Engineering, 2017, 35, 1645-1655.	0.8	16
35	A kind of control technology for squeezing failure in deep roadways: a case study. Geomatics, Natural Hazards and Risk, 2017, 8, 1715-1729.	2.0	16

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37	Study on the Stability and Deformation of the Roadway Subjected to High In-Situ Stresses. <i>Geotechnical and Geological Engineering</i> , 2017, 35, 1615-1628.	0.8	16
38	Acoustic Emission Characteristics During Rock Fragmentation Processes Induced by Disc Cutter under Different Water Content Conditions. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 194.	1.3	16
39	A dimensionless parameter determining slip surfaces in homogeneous slopes. <i>KSCE Journal of Civil Engineering</i> , 2014, 18, 470-474.	0.9	13
40	Mechanical and Propagating Behaviors of Single-Flawed Rock Samples with Hydraulic Pressure and Uniaxial Compression Conditions. <i>International Journal of Geomechanics</i> , 2018, 18, .	1.3	13
41	Improved genetic algorithm freely searching for dangerous slip surface of slope. <i>Central South University</i> , 2005, 12, 749-752.	0.5	12
42	Crack growth analysis for rock-like materials with ordered multiple pre-cracks under biaxial compression. <i>Journal of Central South University</i> , 2017, 24, 866-874.	1.2	12
43	Wing crack model subjected to high hydraulic pressure and far field stresses and its numerical simulation. <i>Journal of Central South University</i> , 2012, 19, 578-585.	1.2	11
44	Numerical simulation on effects of embedded crack on rock fragmentation by a tunnel boring machine cutter. <i>Journal of Central South University</i> , 2014, 21, 3302-3308.	1.2	11
45	Three-dimensional rock slope stability analysis considering the surface load distribution. <i>European Journal of Environmental and Civil Engineering</i> , 2016, 20, 877-898.	1.0	11
46	Experimental Study of Crack Growth in Rock-Like Materials Containing Multiple Parallel Pre-existing Flaws Under Biaxial Compression. <i>Geotechnical and Geological Engineering</i> , 2017, 35, 1023-1034.	0.8	11
47	Experimental Study on the Validity and Rationality of Four Brazilian Disc Tests. <i>Geotechnical and Geological Engineering</i> , 2018, 36, 63-76.	0.8	11
48	Testing Study of Subcritical Crack Growth Mechanism During Water Rock Interaction. <i>Geotechnical and Geological Engineering</i> , 2016, 34, 923-929.	0.8	10
49	Calibrating the Micromechanical Parameters of the PFC2D(3D) Models Using the Improved Simulated Annealing Algorithm. <i>Mathematical Problems in Engineering</i> , 2017, 2017, 1-11.	0.6	10
50	Fracture analysis of central-flawed rock-like specimens under the influence of coplanar or non-coplanar edge flaws. <i>Bulletin of Engineering Geology and the Environment</i> , 2022, 81, 1.	1.6	10
51	Mechanical Behaviour of Anchored Rock Containing Weak Interlayer under Uniaxial Compression: Laboratory Test and Coupled DEM-FEM Simulation. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 492.	0.8	10
52	Variational safety factors and slip surfaces of slope using three-dimensional strength reduction analysis. <i>Journal of the Geological Society of India</i> , 2013, 82, 545-552.	0.5	9
53	Study on Rock Fracture with TBM Cutter Under Different Confining Stresses. <i>Indian Geotechnical Journal</i> , 2016, 46, 104-114.	0.7	9
54	A New Methodology for Open Pit Slope Design in Karst-Prone Ground Conditions Based on Integrated Stochastic-Limit Equilibrium Analysis. <i>Rock Mechanics and Rock Engineering</i> , 2016, 49, 2737-2752.	2.6	9

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55	Dynamic compression mechanical behavior and damage model of singly-jointed samples. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2020, 6, 1.	1.3	9
56	Effect of water absorption ratio on tensile strength of red sandstone and morphological analysis of fracture surfaces. <i>Journal of Central South University</i> , 2017, 24, 1647-1653.	1.2	9
57	Modified electromagnetism-like algorithm and its application to slope stability analysis. <i>Central South University</i> , 2011, 18, 2100-2107.	0.5	8
58	Integrated identification method of rheological model of sandstone in Sanmenxia bauxite. <i>Transactions of Nonferrous Metals Society of China</i> , 2014, 24, 1859-1865.	1.7	8
59	Nonlinear Damage and Failure Behavior of Brittle Rock Subjected to Impact Loading. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2012, 13, 61-68.	0.4	7
60	Numerical Analysis of Flattened Brazilian Disc Test Based on the Cusp Catastrophe Theory. <i>Mathematical Problems in Engineering</i> , 2016, 2016, 1-9.	0.6	7
61	Coupled Creep Characteristics of Anchor Structures and Soils Under Chemical Corrosion. <i>Indian Geotechnical Journal</i> , 2017, 47, 521-528.	0.7	7
62	Blast Induced Crack Propagation and Damage Accumulation in Rock Mass Containing Initial Damage. <i>Shock and Vibration</i> , 2018, 2018, 1-10.	0.3	7
63	An Experimental Study on Cracking Behavior of Precracked Sandstone Specimens under Seepage Pressure. <i>Advances in Civil Engineering</i> , 2018, 2018, 1-10.	0.4	7
64	Contour blasting parameters by using a tunnel blast design mode. <i>Journal of Central South University</i> , 2021, 28, 100-111.	1.2	7
65	Catastrophe analysis on pillar instability considered mining effect. <i>Central South University</i> , 2005, 12, 102-106.	0.5	6
66	Morphological parameters of both surfaces of coupled joint. <i>Journal of Central South University</i> , 2013, 20, 776-785.	1.2	6
67	Stability Analysis of Rock Slope Controlled by Major Geological Discontinuities Based on the Extended Kinematical Element Method. <i>Rock Mechanics and Rock Engineering</i> , 2016, 49, 2967-2975.	2.6	6
68	Study of Post-Peak Strain Softening Mechanical Behaviour of Rock Material Based on Hoek's Brown Criterion. <i>Advances in Civil Engineering</i> , 2018, 2018, 1-9.	0.4	6
69	Evolution Procedure of Multiple Rock Cracks under Seepage Pressure. <i>Mathematical Problems in Engineering</i> , 2013, 2013, 1-11.	0.6	5
70	Stability Assessment and Optimization Design of Lakeside Open-Pit Slope considering Fluid-Solid Coupling Effect. <i>Mathematical Problems in Engineering</i> , 2015, 2015, 1-11.	0.6	5
71	Effects of discontinuities on penetration of TBM cutters. <i>Journal of Central South University</i> , 2015, 22, 3624-3632.	1.2	5
72	Size Effect on Mechanical Properties of Rock-Like Materials with Three Joints. <i>Geotechnical and Geological Engineering</i> , 2020, 38, 4073-4089.	0.8	5

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73	Crack growth time dependence analysis of granite under compressive-shear stresses state. Science in China Series A: Mathematics, 2008, 14, 34-37.	0.2	4
74	Numerical Analysis of Ground Settlement Patterns Resulting from Tunnel Excavation in Composite Strata. Applied Sciences (Switzerland), 2022, 12, 5479.	1.3	4
75	Nonlinear Damage and Failure Behavior of Brittle Rock Subjected to Impact Loading. International Journal of Nonlinear Sciences and Numerical Simulation, 2012, 13, .	0.4	3
76	A Simple Generation Technique of Complex Geotechnical Computational Model. Mathematical Problems in Engineering, 2013, 2013, 1-8.	0.6	3
77	Experimental and Numerical Study on the Damage Evolution of Random Rock Joint Surface During Direct Shear Under CNL Condition. Geotechnical and Geological Engineering, 2019, 37, 975-983.	0.8	3
78	A new method for evaluating rock mass quality of slopes based on interval continuous mathematical models. Bulletin of Engineering Geology and the Environment, 2020, 79, 1357-1364.	1.6	3
79	Experimental Study on Permeability Coefficient in Layered Fine Tailings under Seepage Condition. Geofluids, 2021, 2021, 1-14.	0.3	3
80	Mode II fracture analysis of double edge cracked circular disk subjected to different diametral compression. Central South University, 2004, 11, 63-68.	0.5	2
81	Structural effect of soft rock rheology. Central South University, 2007, 14, 430-435.	0.5	2
82	Effect of Temperatureâ€“Water Coupled Actions on Joint Morphology. Geotechnical and Geological Engineering, 2017, 35, 3005-3013.	0.8	2
83	Failure Behaviour of Sandstone with a Preexisting Joint under Stepped Excavation. Advances in Civil Engineering, 2020, 2020, 1-11.	0.4	2
84	A 2-D differential-stress-based analysis on the tendency of mining-induced fault reactivation. Environmental Earth Sciences, 2020, 79, 1.	1.3	2
85	Mechanism analysis on pillar instability induced by micro-disturbance under critical condition. Central South University, 2005, 12, 346-348.	0.5	1
86	An Experimental Study on Mechanical Behavior of Parallel Joint Specimens under Compression Shear. Advances in Civil Engineering, 2018, 2018, 1-12.	0.4	0
87	Coupling Characteristics of Creep Fracture of Rock Foundation on Wind Turbine under Wind-Induced Vibration. Energies, 2022, 15, 3862.	1.6	0