Ping Cao

List of Publications by Year in descending order

87 papers	1,855 citations	279487 23 h-index	301761 39 g-index
87 all docs	87 docs citations	87 times ranked	1279 citing authors

#	Article	IF	Citations
1	Fracture analysis of central-flawed rock-like specimens under the influence of coplanar or non-coplanar edge flaws. Bulletin of Engineering Geology and the Environment, 2022, 81, 1.	1.6	10
2	Mechanical Behaviour of Anchored Rock Containing Weak Interlayer under Uniaxial Compression: Laboratory Test and Coupled DEMâ€“FEM Simulation. Minerals (Basel, Switzerland), 2022, 12, 492.	0.8	10
3	Numerical Analysis of Ground Settlement Patterns Resulting from Tunnel Excavation in Composite Strata. Applied Sciences (Switzerland), 2022, 12, 5479.	1.3	4
4	Coupling Characteristics of Creep Fracture of Rock Foundation on Wind Turbine under Wind-Induced Vibration. Energies, 2022, 15, 3862.	1.6	0
5	Contour blasting parameters by using a tunnel blast design mode. Journal of Central South University, 2021, 28, 100-111.	1.2	7
6	Experimental Study on Permeability Coefficient in Layered Fine Tailings under Seepage Condition. Geofluids, 2021, 2021, 1-14.	0.3	3
7	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
8	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
9	Dynamic compression mechanical behavior and damage model of singly-jointed samples. Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2020, 6, 1.	1.3	9
10	Failure Behaviour of Sandstone with a Preexisting Joint under Stepped Excavation. Advances in Civil Engineering, 2020, 2020, 1-11.	0.4	2
11	Threeâ€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
12	Size Effect on Mechanical Properties of Rock-Like Materials with Three Joints. Geotechnical and Geological Engineering, 2020, 38, 4073-4089.	0.8	5
13	Mechanical behavior around double circular openings in a jointed rock mass under uniaxial compression. Archives of Civil and Mechanical Engineering, 2020, 20, 1.	1.9	73
14	A 2-D differential-stress-based analysis on the tendency of mining-induced fault reactivation. Environmental Earth Sciences, 2020, 79, 1.	1.3	2
15	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.	3.2	56
16	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
17	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
18	Acoustic Emission Characteristics During Rock Fragmentation Processes Induced by Disc Cutter under Different Water Content Conditions. Applied Sciences (Switzerland), 2019, 9, 194.	1.3	16

#	Article	IF	Citations
19	Crack Initiation, Propagation, and Failure Characteristics of Jointed Rock or Rock-Like Specimens: A Review. Advances in Civil Engineering, 2019, 2019, 1-31.	0.4	31
20	Secondâ€order cone programming formulation of discontinuous deformation analysis. International Journal for Numerical Methods in Engineering, 2019, 118, 243-257.	1.5	27
21	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
22	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
23	å¾ªçŽ¯å‰ªåˆ‡ä¸‹èŠ‚ç†¡é¢å½¢è²ŒåŠèš‚ç†åŠ›å¦ç‰¹æ€§åŠ£åŒ–è§„å¾‹ç”©ç©¶. Journal of Central South University, 2018, 25, 653	1.2	17
24	Experimental Study on the Validity and Rationality of Four Brazilian Disc Tests. Geotechnical and Geological Engineering, 2018, 36, 63-76.	0.8	11
25	An Experimental Study on Mechanical Behavior of Parallel Joint Specimens under Compression Shear. Advances in Civil Engineering, 2018, 2018, 1-12.	0.4	0
26	Blast Induced Crack Propagation and Damage Accumulation in Rock Mass Containing Initial Damage. Shock and Vibration, 2018, 2018, 1-10.	0.3	7
27	An Experimental Study on Cracking Behavior of Precracked Sandstone Specimens under Seepage Pressure. Advances in Civil Engineering, 2018, 2018, 1-10.	0.4	7
28	Study of Post-Peak Strain Softening Mechanical Behaviour of Rock Material Based on Hoekâ€“Brown Criterion. Advances in Civil Engineering, 2018, 2018, 1-9.	0.4	6
29	Mechanical and Propagating Behaviors of Single-Flawed Rock Samples with Hydraulic Pressure and Uniaxial Compression Conditions. International Journal of Geomechanics, 2018, 18, .	1.3	13
30	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
31	Experimental Study of Crack Growth in Rock-Like Materials Containing Multiple Parallel Pre-existing Flaws Under Biaxial Compression. Geotechnical and Geological Engineering, 2017, 35, 1023-1034.	0.8	11
32	Crack growth analysis for rock-like materials with ordered multiple pre-cracks under biaxial compression. Journal of Central South University, 2017, 24, 866-874.	1.2	12
33	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
34	Coupled Creep Characteristics of Anchor Structures and Soils Under Chemical Corrosion. Indian Geotechnical Journal, 2017, 47, 521-528.	0.7	7
35	Effect of Temperatureâ€“Water Coupled Actions on Joint Morphology. Geotechnical and Geological Engineering, 2017, 35, 3005-3013.	0.8	2
36	Study on the Stability and Deformation of the Roadway Subjected to High In-Situ Stresses. Geotechnical and Geological Engineering, 2017, 35, 1615-1628.	0.8	16

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37	Correlation of UCS Rating with Schmidt Hammer Surface Hardness for Rock Mass Classification. Rock Mechanics and Rock Engineering, 2017, 50, 195-203.	2.6	44
38	Calibrating the Micromechanical Parameters of the PFC2D(3D) Models Using the Improved Simulated Annealing Algorithm. Mathematical Problems in Engineering, 2017, 2017, 1-11.	0.6	10
39	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
40	Effect of water absorption ratio on tensile strength of red sandstone and morphological analysis of fracture surfaces. Journal of Central South University, 2017, 24, 1647-1653.	1.2	9
41	Numerical Analysis of Flattened Brazilian Disc Test Based on the Cusp Catastrophe Theory. Mathematical Problems in Engineering, 2016, 2016, 1-9.	0.6	7
42	Study on nonlinear damage creep constitutive model for high-stress soft rock. Environmental Earth Sciences, 2016, 75, 1.	1.3	103
43	Mechanical Behavior of Brittle Rock-Like Specimens with Pre-existing Fissures Under Uniaxial Loading: Experimental Studies and Particle Mechanics Approach. Rock Mechanics and Rock Engineering, 2016, 49, 763-783.	2.6	224
44	Testing Study of Subcritical Crack Growth Mechanism During Water Rock Interaction. Geotechnical and Geological Engineering, 2016, 34, 923-929.	0.8	10
45	An Experimental and Numerical Study on Mechanical Behavior of Ubiquitous-Joint Brittle Rock-Like Specimens Under Uniaxial Compression. Rock Mechanics and Rock Engineering, 2016, 49, 4319-4338.	2.6	110
46	Study on Rock Fracture with TBM Cutter Under Different Confining Stresses. Indian Geotechnical Journal, 2016, 46, 104-114.	0.7	9
47	Sequential Indentation Tests to Investigate the Influence of Confining Stress on Rock Breakage by Tunnel Boring Machine Cutter in a Biaxial State. Rock Mechanics and Rock Engineering, 2016, 49, 1479-1495.	2.6	37
48	Strength, fragmentation and fractal properties of mixed flaws. Acta Geotechnica, 2016, 11, 901-912.	2.9	50
49	A New Methodology for Open Pit Slope Design in Karst-Prone Ground Conditions Based on Integrated Stochastic-Limit Equilibrium Analysis. Rock Mechanics and Rock Engineering, 2016, 49, 2737-2752.	2.6	9
50	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
51	Stability Analysis of Rock Slope Controlled by Major Geological Discontinuities Based on the Extended Kinematical Element Method. Rock Mechanics and Rock Engineering, 2016, 49, 2967-2975.	2.6	6
52	Three-dimensional rock slope stability analysis considering the surface load distribution. European Journal of Environmental and Civil Engineering, 2016, 20, 877-898.	1.0	11
53	A Study on Isotropic Rock Breaking with TBM Cutters Under Different Confining Stresses. Geotechnical and Geological Engineering, 2015, 33, 1379-1394.	0.8	31
54	Stability Assessment and Optimization Design of Lakeside Open-Pit Slope considering Fluid-Solid Coupling Effect. Mathematical Problems in Engineering, 2015, 2015, 1-11.	0.6	5

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55	Influence of confining stress on fracture characteristics and cutting efficiency of TBM cutters conducted on soft and hard rock. Journal of Central South University, 2015, 22, 1947-1955.	1.2	44
56	Effects of discontinuities on penetration of TBM cutters. Journal of Central South University, 2015, 22, 3624-3632.	1.2	5
57	Macro and meso characteristics evolution on shear behavior of rock joints. Journal of Central South University, 2015, 22, 3087-3096.	1.2	20
58	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
59	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
60	Modeling the Progressive Failure of Jointed Rock Slope Using Fracture Mechanics and the Strength Reduction Method. Rock Mechanics and Rock Engineering, 2015, 48, 771-785.	2.6	50
61	A dimensionless parameter determining slip surfaces in homogeneous slopes. KSCE Journal of Civil Engineering, 2014, 18, 470-474.	0.9	13
62	Integrated identification method of rheological model of sandstone in Sanmenxia bauxite. Transactions of Nonferrous Metals Society of China, 2014, 24, 1859-1865.	1.7	8
63	Numerical simulation on effects of embedded crack on rock fragmentation by a tunnel boring machine cutter. Journal of Central South University, 2014, 21, 3302-3308.	1.2	11
64	Damage and fracture evolution of hydraulic fracturing in compression-shear rock cracks. Theoretical and Applied Fracture Mechanics, 2014, 74, 55-63.	2.1	53
65	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
66	Morphological analysis of sheared rock with waterâ€“rock interaction effect. International Journal of Rock Mechanics and Minings Sciences, 2014, 70, 264-272.	2.6	24
67	Progressive failure analysis of slope with strain-softening behaviour based on strength reduction method. Journal of Zhejiang University: Science A, 2013, 14, 101-109.	1.3	33
68	Morphological parameters of both surfaces of coupled joint. Journal of Central South University, 2013, 20, 776-785.	1.2	6
69	Variational safety factors and slip surfaces of slope using three-dimensional strength reduction analysis. Journal of the Geological Society of India, 2013, 82, 545-552.	0.5	9
70	Stability of soil nailed slope using strength reduction method. European Journal of Environmental and Civil Engineering, 2013, 17, 872-885.	1.0	46
71	A Simple Generation Technique of Complex Geotechnical Computational Model. Mathematical Problems in Engineering, 2013, 2013, 1-8.	0.6	3
72	Evolution Procedure of Multiple Rock Cracks under Seepage Pressure. Mathematical Problems in Engineering, 2013, 2013, 1-11.	0.6	5

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73	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
74	Nonlinear Damage and Failure Behavior of Brittle Rock Subjected to Impact Loading. International Journal of Nonlinear Sciences and Numerical Simulation, 2012, 13, 61-68.	0.4	7
75	Wing crack model subjected to high hydraulic pressure and far field stresses and its numerical simulation. Journal of Central South University, 2012, 19, 578-585.	1.2	11
76	Modified electromagnetism-like algorithm and its application to slope stability analysis. Central South University, 2011, 18, 2100-2107.	0.5	8
77	Effect of waterâ€“rock interaction on the morphology of a rock surface. International Journal of Rock Mechanics and Minings Sciences, 2010, 47, 816-822.	2.6	39
78	Directly searching method for slip plane and its influential factors based on critical state of slope. Central South University, 2009, 16, 131-135.	0.5	62
79	Viscoelasto-plastic rheological experiment under circular increment step load and unload and nonlinear creep model of soft rocks. Central South University, 2009, 16, 488-494.	0.5	27
80	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
81	Structural effect of soft rock rheology. Central South University, 2007, 14, 430-435.	0.5	2
82	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
83	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
84	Improved genetic algorithm freely searching for dangerous slip surface of slope. Central South University, 2005, 12, 749-752.	0.5	12
85	Mechanism analysis on pillar instability induced by micro-disturbance under critical condition. Central South University, 2005, 12, 346-348.	0.5	1
86	Catastrophe analysis on pillar instability considered mining effect. Central South University, 2005, 12, 102-106.	0.5	6
87	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