

Quansheng Liu

List of Publications by Year in descending order

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61
papers

1,524
citations

304743

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h-index

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all docs

61
docs citations

61
times ranked

878
citing authors

#	ARTICLE	IF	CITATIONS
1	Micro-mechanical modeling of the macro-mechanical response and fracture behavior of rock using the numerical manifold method. <i>Engineering Geology</i> , 2017, 225, 49-60.	6.3	163
2	Micro/macro physical and mechanical variation of red sandstone subjected to cyclic heating and cooling: an experimental study. <i>Bulletin of Engineering Geology and the Environment</i> , 2019, 78, 1485-1499.	3.5	72
3	Freezing Strain Model for Estimating the Unfrozen Water Content of Saturated Rock under Low Temperature. <i>International Journal of Geomechanics</i> , 2018, 18, .	2.7	71
4	The role of flaws on crack growth in rock-like material assessed by AE technique. <i>International Journal of Fracture</i> , 2015, 193, 99-115.	2.2	68
5	Strength of Stacking Technique of Ensemble Learning in Rockburst Prediction with Imbalanced Data: Comparison of Eight Single and Ensemble Models. <i>Natural Resources Research</i> , 2021, 30, 1795-1815.	4.7	66
6	Analytical Solution for Lined Circular Tunnels in Deep Viscoelastic Burgers Rock Considering the Longitudinal Discontinuous Excavation and Sequential Installation of Liners. <i>Journal of Engineering Mechanics - ASCE</i> , 2021, 147, .	2.9	58
7	Experimental Investigation of the Peak Shear Strength Criterion Based on Three-Dimensional Surface Description. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 1005-1025.	5.4	51
8	Influence of heating/cooling cycles on the micro/macroc cracking characteristics of Rucheng granite under unconfined compression. <i>Bulletin of Engineering Geology and the Environment</i> , 2020, 79, 1289-1309.	3.5	51
9	Dynamic Mechanical Properties of Dry and Water-Saturated Siltstones Under Sub-Zero Temperatures. <i>Rock Mechanics and Rock Engineering</i> , 2020, 53, 4381-4401.	5.4	48
10	Updates to Grasselli's Peak Shear Strength Model. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 2115-2133.	5.4	43
11	Full-Scale Linear Cutting Tests to Propose Some Empirical Formulas for TBM Disc Cutter Performance Prediction. <i>Rock Mechanics and Rock Engineering</i> , 2019, 52, 4763-4783.	5.4	43
12	Evaluating the Microstructure Evolution Behaviors of Saturated Sandstone Using NMR Testing Under Uniaxial Short-Term and Creep Compression. <i>Rock Mechanics and Rock Engineering</i> , 2021, 54, 4905-4927.	5.4	42
13	Full-Scale Linear Cutting Tests in Chongqing Sandstone to Study the Influence of Confining Stress on Rock Cutting Forces by TBM Disc Cutter. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 1697-1713.	5.4	41
14	Analytical Solutions for Deep-Buried Lined Tunnels Considering Longitudinal Discontinuous Excavation in Rheological Rock Mass. <i>Journal of Engineering Mechanics - ASCE</i> , 2020, 146, .	2.9	40
15	Full-Scale Rotary Cutting Test to Study the Influence of Disc Cutter Installment Radius on Rock Cutting Forces. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 2223-2236.	5.4	35
16	Evaluating Damage and Microcracking Behavior of Granite Using NMR Testing under Different Levels of Unconfined Compression. <i>International Journal of Geomechanics</i> , 2019, 19, .	2.7	34
17	Modelling transient heat conduction of granular materials by numerical manifold method. <i>Engineering Analysis With Boundary Elements</i> , 2018, 86, 45-55.	3.7	31
18	Failure Behavior for Rocklike Material with Cross Crack under Biaxial Compression. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, .	2.9	31

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19	Full-scale linear cutting test in Chongqing Sandstone and the comparison with field TBM excavation performance. <i>Acta Geotechnica</i> , 2019, 14, 1249-1268.	5.7	29
20	A New Way to Replicate the Highly Stressed Soft Rock: 3D Printing Exploration. <i>Rock Mechanics and Rock Engineering</i> , 2020, 53, 467-476.	5.4	26
21	Parallelized combined finite–discrete element (FDEM) procedure using multi–GPU with CUDA. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2020, 44, 208-238.	3.3	26
22	An improved numerical manifold method incorporating hybrid crack element for crack propagation simulation. <i>International Journal of Fracture</i> , 2016, 199, 21-38.	2.2	24
23	Investigation of the Rock Fragmentation Process by a Single TBM Cutter Using a Voronoi Element-Based Numerical Manifold Method. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 1137-1152.	5.4	24
24	Prediction of the Peak Shear Strength of Sandstone and Mudstone Joints Infilled with High Water–Cement Ratio Grouts. <i>Rock Mechanics and Rock Engineering</i> , 2017, 50, 2021-2037.	5.4	22
25	Investigation of thermal-induced damage in fractured rock mass by coupled FEM-DEM method. <i>Computational Geosciences</i> , 2020, 24, 1833-1843.	2.4	22
26	Experimental study on rock indentation using infrared thermography and acoustic emission techniques. <i>Journal of Geophysics and Engineering</i> , 2018, 15, 1864-1877.	1.4	21
27	Frost Deformation and a Quasi-Elastic-Plastic-Creep Constitutive Model for Isotropic Freezing Rock. <i>International Journal of Geomechanics</i> , 2020, 20, .	2.7	18
28	Modelling Hydraulic Fracturing with a Point-Based Approximation for the Maximum Principal Stress Criterion. <i>Rock Mechanics and Rock Engineering</i> , 2019, 52, 1781-1801.	5.4	17
29	Comparison between experimental and semi-theoretical disc cutter cutting forces: implications for frame stiffness of the linear cutting machine. <i>Arabian Journal of Geosciences</i> , 2018, 11, 1.	1.3	16
30	Effects of Rock Specimen Size on Mechanical Properties in Laboratory Testing. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2021, 147, .	3.0	16
31	Mechanism and forecasting model for shield jamming during TBM tunnelling through deep soft ground. <i>European Journal of Environmental and Civil Engineering</i> , 2019, 23, 1035-1068.	2.1	15
32	A novel tree-based algorithm for real-time prediction of rockburst risk using field microseismic monitoring. <i>Environmental Earth Sciences</i> , 2021, 80, 1.	2.7	15
33	Experimental study on the influence of height and dip angle of asperity on the mechanical properties of rock joints. <i>Bulletin of Engineering Geology and the Environment</i> , 2021, 80, 443-471.	3.5	14
34	Investigate the Mode I Fracture Characteristics of Granite After Heating/LN2 Cooling Treatments. <i>Rock Mechanics and Rock Engineering</i> , 2022, 55, 4477-4496.	5.4	14
35	Improved Nonlinear Strength Criterion for Jointed Rock Masses Subject to Complex Stress States. <i>International Journal of Geomechanics</i> , 2018, 18, 04017164.	2.7	13
36	Full-scale linear cutting tests to check and modify a widely used semi-theoretical model for disc cutter cutting force prediction. <i>Acta Geotechnica</i> , 2020, 15, 1481-1500.	5.7	13

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37	Numerical Simulation of Cracking Process in Rock Mass Under the Coupled Thermo-Mechanical Condition. <i>International Journal of Computational Methods</i> , 2020, 17, 1950065.	1.3	13
38	A Modified Bursting Energy Index for Evaluating Coal Burst Proneness and Its Application in Ordos Coalfield, China. <i>Energies</i> , 2020, 13, 1729.	3.1	12
39	Extremely large deformation of tunnel induced by rock mass fracture using GPGPU parallel FDEM. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2022, 46, 1782-1807.	3.3	12
40	Numerical Analysis of Degradation Characteristics for Heterogeneous Rock under Coupled Thermomechanical Conditions. <i>International Journal of Geomechanics</i> , 2019, 19, 04019111.	2.7	11
41	Thermal cracking simulation of functionally graded materials using the combined finiteâ€“discrete element method. <i>Computational Particle Mechanics</i> , 2020, 7, 903-917.	3.0	11
42	New Algorithm for Simulating Grout Diffusion and Migration in Fractured Rock Masses. <i>International Journal of Geomechanics</i> , 2020, 20, .	2.7	11
43	Numerical Investigation of Coupled Effects of Temperature and Confining Pressure on Rock Mechanical Properties in Fractured Rock Mass Using Thermal-Stress-Aperture Coupled Model. <i>International Journal of Geomechanics</i> , 2021, 21, .	2.7	11
44	Geothermal-Related Thermo-Elastic Fracture Analysis by Numerical Manifold Method. <i>Energies</i> , 2018, 11, 1380.	3.1	10
45	Mechanism of Cracking in Dams Using a Hybrid FE-Meshfree Method. <i>International Journal of Geomechanics</i> , 2017, 17, .	2.7	9
46	A Novel in Situ Stress Monitoring Technique for Fracture Rock Mass and Its Application in Deep Coal Mines. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3742.	2.5	9
47	Experimental study on mechanical properties of fractured rock mass under different anchoring modes. <i>European Journal of Environmental and Civil Engineering</i> , 2020, 24, 931-948.	2.1	9
48	Analysis of Damage and Permeability Evolution for Mudstone Material under Coupled Stress-Seepage. <i>Materials</i> , 2020, 13, 3755.	2.9	8
49	Comparison and correlation between the laboratory, semi-theoretical and empirical methods in predicting the field excavation performance of tunnel boring machine (TBM). <i>Acta Geotechnica</i> , 2022, 17, 653-676.	5.7	8
50	Modeling Simultaneous Multiple Fracturing Using the Combined Finite-Discrete Element Method. <i>Geofluids</i> , 2018, 2018, 1-20.	0.7	7
51	Investigation on relationship of the burial depth and mechanical properties for sedimentary rock. <i>Arabian Journal of Geosciences</i> , 2020, 13, 1.	1.3	7
52	Stress redistribution and formation of the pressure arch above underground excavation in rock mass. <i>European Journal of Environmental and Civil Engineering</i> , 2021, 25, 722-736.	2.1	7
53	A numerical study of the influence of cyclic grouting and consolidation using TOUGH2. <i>Bulletin of Engineering Geology and the Environment</i> , 2021, 80, 145-155.	3.5	7
54	A self-dissolved grouting reinforcement method for water-rich soft rock roadway. <i>Bulletin of Engineering Geology and the Environment</i> , 2022, 81, .	3.5	7

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55	Experimental Investigation on the Mechanical Behavior of a New Three-Dimensional Pressure Transducer. Arabian Journal for Science and Engineering, 2016, 41, 4855-4866.	1.1	6
56	Stability Analysis and Failure Forecasting of Deep-Buried Underground Caverns Based on Microseismic Monitoring. Arabian Journal for Science and Engineering, 2018, 43, 1709-1719.	3.0	5
57	Structural Foamed Concrete with Lightweight Aggregate and Polypropylene Fiber: Product Design through Orthogonal Tests. Polymers and Polymer Composites, 2016, 24, 173-178.	1.9	3
58	Four-Node Quadrilateral Element with Continuous Nodal Stress for Geometrical Nonlinear Analysis. International Journal of Computational Methods, 2018, 15, 1850005.	1.3	3
59	Experimental Study on Pipe Strength and Field Performance of Pipe Jacking TBM in Deep-Buried Coal Mines. International Journal of Civil Engineering, 2021, 19, 1327-1338.	2.0	3
60	Development of a Real-Time Monitoring and Calculation Method for TBM Disc-Cutter's Cutting Force in Complex Ground. Geotechnical Testing Journal, 2022, 45, 961-984.	1.0	2
61	ON EFFECT OF NON-PERSISTENT JOINTS ON HYDRO-MECHANICAL BEHAVIOR OF JOINTED ROCK MASS IN UDEC. , 2011, , .		0