## Quansheng Liu

List of Publications by Year in descending order

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| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Comparison and correlation between the laboratory, semi-theoretical and empirical methods in predicting the field excavation performance of tunnel boring machine (TBM). Acta Geotechnica, 2022, 17, 653-676.                               | 5.7 | 8         |
| 2  | Extremely large deformation of tunnel induced by rock mass fracture using GPGPU parallel FDEM.<br>International Journal for Numerical and Analytical Methods in Geomechanics, 2022, 46, 1782-1807.  | 3.3 | 12        |
| 3  | Investigate the Mode I Fracture Characteristics of Granite After Heating/-LN2 Cooling Treatments.<br>Rock Mechanics and Rock Engineering, 2022, 55, 4477-4496.  | 5.4 | 14        |
| 4  | A self-dissolved grouting reinforcement method for water-rich soft rock roadway. Bulletin of<br>Engineering Geology and the Environment, 2022, 81, .  | 3.5 | 7         |
| 5  | Development of a Real-Time Monitoring and Calculation Method for TBM Disc-Cutter's Cutting Force<br>in Complex Ground. Geotechnical Testing Journal, 2022, 45, 961-984.   | 1.0 | 2         |
| 6  | Stress redistribution and formation of the pressure arch above underground excavation in rock mass. European Journal of Environmental and Civil Engineering, 2021, 25, 722-736.   | 2.1 | 7         |
| 7  | Experimental study on the influence of height and dip angle of asperity on the mechanical properties of rock joints. Bulletin of Engineering Geology and the Environment, 2021, 80, 443-471.  | 3.5 | 14        |
| 8  | A numerical study of the influence of cyclic grouting and consolidation using TOUGH2. Bulletin of Engineering Geology and the Environment, 2021, 80, 145-155.   | 3.5 | 7         |
| 9  | Strength of Stacking Technique of Ensemble Learning in Rockburst Prediction with Imbalanced Data:<br>Comparison of Eight Single and Ensemble Models. Natural Resources Research, 2021, 30, 1795-1815.                                       | 4.7 | 66        |
| 10 | Analytical Solution for Lined Circular Tunnels in Deep Viscoelastic Burgers Rock Considering the<br>Longitudinal Discontinuous Excavation and Sequential Installation of Liners. Journal of Engineering<br>Mechanics - ASCE, 2021, 147, .   | 2.9 | 58        |
| 11 | Experimental Study on Pipe Strength and Field Performance of Pipe Jacking TBM in Deep-Buried Coal<br>Mines. International Journal of Civil Engineering, 2021, 19, 1327-1338.  | 2.0 | 3         |
| 12 | Effects of Rock Specimen Size on Mechanical Properties in Laboratory Testing. Journal of<br>Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .  | 3.0 | 16        |
| 13 | Evaluating the Microstructure Evolution Behaviors of Saturated Sandstone Using NMR Testing Under<br>Uniaxial Short-Term and Creep Compression. Rock Mechanics and Rock Engineering, 2021, 54, 4905-4927.                                    | 5.4 | 42        |
| 14 | A novel tree-based algorithm for real-time prediction of rockburst risk using field microseismic monitoring. Environmental Earth Sciences, 2021, 80, 1.   | 2.7 | 15        |
| 15 | Numerical Investigation of Coupled Effects of Temperature and Confining Pressure on Rock<br>Mechanical Properties in Fractured Rock Mass Using Thermal-Stress-Aperture Coupled Model.<br>International Journal of Geomechanics, 2021, 21, . | 2.7 | 11        |
| 16 | Experimental study on mechanical properties of fractured rock mass under different anchoring modes. European Journal of Environmental and Civil Engineering, 2020, 24, 931-948.   | 2.1 | 9         |
| 17 | Thermal cracking simulation of functionally graded materials using the combined finite–discrete element method. Computational Particle Mechanics, 2020, 7, 903-917.   | 3.0 | 11        |
| 18 | A New Way to Replicate the Highly Stressed Soft Rock: 3D Printing Exploration. Rock Mechanics and<br>Rock Engineering, 2020, 53, 467-476.   | 5.4 | 26        |

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| 19 | Full-scale linear cutting tests to check and modify a widely used semi-theoretical model for disc cutter cutting force prediction. Acta Geotechnica, 2020, 15, 1481-1500.                                       | 5.7 | 13        |
| 20 | Influence of heating/cooling cycles on the micro/macrocracking characteristics of Rucheng granite<br>under unconfined compression. Bulletin of Engineering Geology and the Environment, 2020, 79,<br>1289-1309. | 3.5 | 51        |
| 21 | Dynamic Mechanical Properties of Dry and Water-Saturated Siltstones Under Sub-Zero Temperatures.<br>Rock Mechanics and Rock Engineering, 2020, 53, 4381-4401.   | 5.4 | 48        |
| 22 | Parallelized combined finiteâ€discrete element (FDEM) procedure using multiâ€GPU with CUDA.<br>International Journal for Numerical and Analytical Methods in Geomechanics, 2020, 44, 208-238.                   | 3.3 | 26        |
| 23 | Investigation on relationship of the burial depth and mechanical properties for sedimentary rock.<br>Arabian Journal of Geosciences, 2020, 13, 1.   | 1.3 | 7         |
| 24 | Analysis of Damage and Permeability Evolution for Mudstone Material under Coupled Stress-Seepage.<br>Materials, 2020, 13, 3755.   | 2.9 | 8         |
| 25 | Investigation of thermal-induced damage in fractured rock mass by coupled FEM-DEM method.<br>Computational Geosciences, 2020, 24, 1833-1843.  | 2.4 | 22        |
| 26 | A Modified Bursting Energy Index for Evaluating Coal Burst Proneness and Its Application in Ordos<br>Coalfield, China. Energies, 2020, 13, 1729.  | 3.1 | 12        |
| 27 | Frost Deformation and a Quasi-Elastic-Plastic-Creep Constitutive Model for Isotropic Freezing Rock.<br>International Journal of Geomechanics, 2020, 20, .   | 2.7 | 18        |
| 28 | Numerical Simulation of Cracking Process in Rock Mass Under the Coupled Thermo-Mechanical<br>Condition. International Journal of Computational Methods, 2020, 17, 1950065.                                      | 1.3 | 13        |
| 29 | New Algorithm for Simulating Grout Diffusion and Migration in Fractured Rock Masses. International<br>Journal of Geomechanics, 2020, 20, .  | 2.7 | 11        |
| 30 | Analytical Solutions for Deep-Buried Lined Tunnels Considering Longitudinal Discontinuous<br>Excavation in Rheological Rock Mass. Journal of Engineering Mechanics - ASCE, 2020, 146, .                         | 2.9 | 40        |
| 31 | Full-scale linear cutting test in Chongqing Sandstone and the comparison with field TBM excavation performance. Acta Geotechnica, 2019, 14, 1249-1268.  | 5.7 | 29        |
| 32 | Numerical Analysis of Degradation Characteristics for Heterogeneous Rock under Coupled<br>Thermomechanical Conditions. International Journal of Geomechanics, 2019, 19, 04019111.                               | 2.7 | 11        |
| 33 | Full-Scale Linear Cutting Tests to Propose Some Empirical Formulas for TBM Disc Cutter Performance<br>Prediction. Rock Mechanics and Rock Engineering, 2019, 52, 4763-4783.                                     | 5.4 | 43        |
| 34 | A Novel in Situ Stress Monitoring Technique for Fracture Rock Mass and Its Application in Deep Coal<br>Mines. Applied Sciences (Switzerland), 2019, 9, 3742.  | 2.5 | 9         |
| 35 | Modelling Hydraulic Fracturing with a Point-Based Approximation for the Maximum Principal Stress<br>Criterion. Rock Mechanics and Rock Engineering, 2019, 52, 1781-1801.  | 5.4 | 17        |
| 36 | Failure Behavior for Rocklike Material with Cross Crack under Biaxial Compression. Journal of Materials in Civil Engineering, 2019, 31, .   | 2.9 | 31        |

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|----|---|-----|-----------|
| 37 | Evaluating Damage and Microcracking Behavior of Granite Using NMR Testing under Different Levels of Unconfined Compression. International Journal of Geomechanics, 2019, 19, .                            | 2.7 | 34        |
| 38 | Micro/macro physical and mechanical variation of red sandstone subjected to cyclic heating and cooling: an experimental study. Bulletin of Engineering Geology and the Environment, 2019, 78, 1485-1499.  | 3.5 | 72        |
| 39 | Mechanism and forecasting model for shield jamming during TBM tunnelling through deep soft ground. European Journal of Environmental and Civil Engineering, 2019, 23, 1035-1068.                          | 2.1 | 15        |
| 40 | Updates to Grasselli's Peak Shear Strength Model. Rock Mechanics and Rock Engineering, 2018, 51, 2115-2133.   | 5.4 | 43        |
| 41 | Full-Scale Linear Cutting Tests in Chongqing Sandstone to Study the Influence of Confining Stress on<br>Rock Cutting Forces by TBM Disc Cutter. Rock Mechanics and Rock Engineering, 2018, 51, 1697-1713. | 5.4 | 41        |
| 42 | Improved Nonlinear Strength Criterion for Jointed Rock Masses Subject to Complex Stress States.<br>International Journal of Geomechanics, 2018, 18, 04017164.   | 2.7 | 13        |
| 43 | Experimental Investigation of the Peak Shear Strength Criterion Based on Three-Dimensional Surface<br>Description. Rock Mechanics and Rock Engineering, 2018, 51, 1005-1025.                              | 5.4 | 51        |
| 44 | Investigation of the Rock Fragmentation Process by a Single TBM Cutter Using a Voronoi<br>Element-Based Numerical Manifold Method. Rock Mechanics and Rock Engineering, 2018, 51, 1137-1152.              | 5.4 | 24        |
| 45 | Experimental study on rock indentation using infrared thermography and acoustic emission techniques. Journal of Geophysics and Engineering, 2018, 15, 1864-1877.  | 1.4 | 21        |
| 46 | Full-Scale Rotary Cutting Test to Study the Influence of Disc Cutter Installment Radius on Rock<br>Cutting Forces. Rock Mechanics and Rock Engineering, 2018, 51, 2223-2236.                              | 5.4 | 35        |
| 47 | Four-Node Quadrilateral Element with Continuous Nodal Stress for Geometrical Nonlinear Analysis.<br>International Journal of Computational Methods, 2018, 15, 1850005.                                    | 1.3 | 3         |
| 48 | 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         |
| 49 | Modelling transient heat conduction of granular materials by numerical manifold method.<br>Engineering Analysis With Boundary Elements, 2018, 86, 45-55.  | 3.7 | 31        |
| 50 | Freezing Strain Model for Estimating the Unfrozen Water Content of Saturated Rock under Low<br>Temperature. International Journal of Geomechanics, 2018, 18, .  | 2.7 | 71        |
| 51 | Comparison between experimental and semi-theoretical disc cutter cutting forces: implications for frame stiffness of the linear cutting machine. Arabian Journal of Geosciences, 2018, 11, 1.             | 1.3 | 16        |
| 52 | Modeling Simultaneous Multiple Fracturing Using the Combined Finite-Discrete Element Method.<br>Geofluids, 2018, 2018, 1-20.  | 0.7 | 7         |
| 53 | Geothermal-Related Thermo-Elastic Fracture Analysis by Numerical Manifold Method. Energies, 2018, 11, 1380.   | 3.1 | 10        |
| 54 | Prediction of the Peak Shear Strength of Sandstone and Mudstone Joints Infilled with High<br>Water–Cement Ratio Grouts. Rock Mechanics and Rock Engineering, 2017, 50, 2021-2037.                         | 5.4 | 22        |

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|----|---|-----|-----------|
| 55 | Mechanism of Cracking in Dams Using a Hybrid FE-Meshfree Method. International Journal of Geomechanics, 2017, 17, .   | 2.7 | 9         |
| 56 | Micro-mechanical modeling of the macro-mechanical response and fracture behavior of rock using the numerical manifold method. Engineering Geology, 2017, 225, 49-60.        | 6.3 | 163       |
| 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 | Experimental Investigation on the Mechanical Behavior of a New Three-Dimensional Pressure<br>Transducer. Arabian Journal for Science and Engineering, 2016, 41, 4855-4866.  | 1.1 | 6         |
| 59 | An improved numerical manifold method incorporating hybrid crack element for crack propagation simulation. International Journal of Fracture, 2016, 199, 21-38.             | 2.2 | 24        |
| 60 | The role of flaws on crack growth in rock-like material assessed by AE technique. International<br>Journal of Fracture, 2015, 193, 99-115.                                  | 2.2 | 68        |
| 61 | ON EFFECT OF NON-PERSISTENT JOINTS ON HYDRO-MECHANICAL BEHAVIOR OF JOINTED ROCK MASS IN UDEC. , 2011, , .   |     | 0         |