

# Jian Zhao

## List of Publications by Citations

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183  
papers

10,132  
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59  
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194  
ext. papers

11,945  
ext. citations

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avg, IF

6.79  
L-index

#	Paper	IF	Citations
183	A Review of Dynamic Experimental Techniques and Mechanical Behaviour of Rock Materials. <i>Rock Mechanics and Rock Engineering</i> , <b>2014</b> , 47, 1411-1478	5.7	565
182	Suggested methods for determining the dynamic strength parameters and mode-I fracture toughness of rock materials. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2012</b> , 49, 105-112	6.112	416
181	Dynamic Characteristics of Granite Subjected to Intermediate Loading Rate. <i>Rock Mechanics and Rock Engineering</i> , <b>2005</b> , 38, 21-39	5.7	287
180	Determination of mechanical properties and full-field strain measurements of rock material under dynamic loads. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2013</b> , 60, 423-439	6	233
179	A 3D distinct lattice spring model for elasticity and dynamic failure. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2011</b> , 35, 859-885	4	192
178	Micromechanical parameters in bonded particle method for modelling of brittle material failure. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2010</b> , 34, 1877-1895	4	191
177	Development of a rock mass characteristics model for TBM penetration rate prediction. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2009</b> , 46, 8-18	6	186
176	Applicability of Mohr-Coulomb and Hoek-Brown strength criteria to the dynamic strength of brittle rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2000</b> , 37, 1115-1121	6	182
175	Effect of loading rate on fracture toughness and failure micromechanisms in marble. <i>Engineering Fracture Mechanics</i> , <b>2013</b> , 102, 288-309	4.2	180
174	Numerical modeling of the effects of joint orientation on rock fragmentation by TBM cutters. <i>Tunnelling and Underground Space Technology</i> , <b>2005</b> , 20, 183-191	5.7	166
173	Effects of multiple parallel fractures on apparent attenuation of stress waves in rock masses. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2000</b> , 37, 661-682	6	162
172	Oscillation elimination in the Hopkinson bar apparatus and resultant complete dynamic stress-strain curves for rocks. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2000</b> , 37, 1055-1060	6	158
171	A new hard rock TBM performance prediction model for project planning. <i>Tunnelling and Underground Space Technology</i> , <b>2011</b> , 26, 595-603	5.7	155
170	Numerical modelling of the effects of joint spacing on rock fragmentation by TBM cutters. <i>Tunnelling and Underground Space Technology</i> , <b>2006</b> , 21, 46-55	5.7	147
169	Rock burst and slabbing failure and its influence on TBM excavation at headrace tunnels in Jinping II hydropower station. <i>Engineering Geology</i> , <b>2012</b> , 124, 98-108	6	146
168	Tunnelling through a frequently changing and mixed ground: A case history in Singapore. <i>Tunnelling and Underground Space Technology</i> , <b>2007</b> , 22, 388-400	5.7	144
167	A Unified Strength criterion for rock material. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2002</b> , 39, 975-989	6	142

166	Transmission of Elastic P-waves across Single Fractures with a Nonlinear Normal Deformational Behavior. <i>Rock Mechanics and Rock Engineering</i> , <b>2001</b> , 34, 3-22	5.7	140
165	A study of UDEC modelling for blast wave propagation in jointed rock masses. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>1998</b> , 35, 93-99	6	133
164	Effect of large excavation on deformation of adjacent MRT tunnels. <i>Tunnelling and Underground Space Technology</i> , <b>2001</b> , 16, 93-98	5.7	133
163	Joint surface matching and shear strength part B: JRC-JMC shear strength criterion. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>1997</b> , 34, 179-185	6	117
162	Influence of rock brittleness on TBM penetration rate in Singapore granite. <i>Tunnelling and Underground Space Technology</i> , <b>2007</b> , 22, 317-324	5.7	113
161	Damage evolution mechanisms of rock in deep tunnels induced by cut blasting. <i>Tunnelling and Underground Space Technology</i> , <b>2016</b> , 58, 257-270	5.7	112
160	Joint surface matching and shear strength part A: joint matching coefficient (JMC). <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>1997</b> , 34, 173-178	6	108
159	Structural health monitoring of underground facilities □Technological issues and challenges. <i>Tunnelling and Underground Space Technology</i> , <b>2005</b> , 20, 487-500	5.7	107
158	Experimental determination of dynamic tensile properties of a granite. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2000</b> , 37, 861-866	6	105
157	Analysis and prediction of TBM performance in blocky rock conditions at the L�schberg Base Tunnel. <i>Tunnelling and Underground Space Technology</i> , <b>2013</b> , 33, 131-142	5.7	100
156	A further study of P-wave attenuation across parallel fractures with linear deformational behaviour. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2006</b> , 43, 776-788	6	100
155	Numerical study on tunnel damage subject to blast-induced shock wave in jointed rock masses. <i>Tunnelling and Underground Space Technology</i> , <b>2014</b> , 43, 88-100	5.7	99
154	Dynamic uniaxial compression tests on a granite. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>1999</b> , 36, 273-277	6	98
153	Quasi-static and dynamic fracture behaviour of rock materials: phenomena and mechanisms. <i>International Journal of Fracture</i> , <b>2014</b> , 189, 1-32	2.3	97
152	Rock dynamics research related to cavern development for Ammunition storage. <i>Tunnelling and Underground Space Technology</i> , <b>1999</b> , 14, 513-526	5.7	94
151	Triaxial compression tests on a granite at different strain rates and confining pressures. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>1999</b> , 36, 1057-1063	6	90
150	Strength failure behavior and crack evolution mechanism of granite containing pre-existing non-coplanar holes: Experimental study and particle flow modeling. <i>Computers and Geotechnics</i> , <b>2017</b> , 88, 182-198	4.4	89
149	UDEC modelling on wave propagation across fractured rock masses. <i>Computers and Geotechnics</i> , <b>2008</b> , 35, 97-104	4.4	87

148	TBM tunnelling under adverse geological conditions: An overview. <i>Tunnelling and Underground Space Technology</i> , <b>2016</b> , 57, 4-17	5.7	86
147	Analysis of damage mechanisms and optimization of cut blasting design under high in-situ stresses. <i>Tunnelling and Underground Space Technology</i> , <b>2017</b> , 66, 19-33	5.7	85
146	Case studies of TBM tunneling performance in rockBoil interface mixed ground. <i>Tunnelling and Underground Space Technology</i> , <b>2013</b> , 38, 140-150	5.7	81
145	Seismic response of a single and a set of filled joints of viscoelastic deformational behaviour. <i>Geophysical Journal International</i> , <b>2011</b> , 186, 1315-1330	2.6	79
144	Viscous boundary of DDA for modeling stress wave propagation in jointed rock. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2007</b> , 44, 1070-1076	6	79
143	Two-Dimensional DDA Contact Constitutive Model for Simulating Rock Fragmentation. <i>Journal of Engineering Mechanics - ASCE</i> , <b>2012</b> , 138, 199-209	2.4	78
142	Micromechanical modelling of the mechanical properties of a granite under dynamic uniaxial compressive loads. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2000</b> , 37, 923-935	6	78
141	Modelling the time-dependent rheological behaviour of heterogeneous brittle rocks. <i>Geophysical Journal International</i> , <b>2012</b> , 189, 1781-1796	2.6	74
140	An SHPB test study on wave propagation across rock masses with different contact area ratios of joint. <i>International Journal of Impact Engineering</i> , <b>2017</b> , 105, 109-116	4	73
139	In situ TBM penetration tests and rock mass boreability analysis in hard rock tunnels. <i>Tunnelling and Underground Space Technology</i> , <b>2007</b> , 22, 303-316	5.7	72
138	Modelling the dynamic failure of brittle rocks using a hybrid continuum-discrete element method with a mixed-mode cohesive fracture model. <i>International Journal of Impact Engineering</i> , <b>2016</b> , 87, 146-155	4.5	70
137	High-Speed Photography and Digital Optical Measurement Techniques for Geomaterials: Fundamentals and Applications. <i>Rock Mechanics and Rock Engineering</i> , <b>2017</b> , 50, 1611-1659	5.7	68
136	2D numerical simulation on excavation damaged zone induced by dynamic stress redistribution. <i>Tunnelling and Underground Space Technology</i> , <b>2014</b> , 43, 315-326	5.7	67
135	A new model for TBM performance prediction in blocky rock conditions. <i>Tunnelling and Underground Space Technology</i> , <b>2014</b> , 43, 440-452	5.7	66
134	P-wave transmission across fractures with nonlinear deformational behaviour. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2006</b> , 30, 1097-1112	4	66
133	Overview on vertical and directional drilling technologies for the exploration and exploitation of deep petroleum resources. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , <b>2016</b> , 2, 365-395	3.8	65
132	Wellbore stability analysis and well path optimization based on the breakout width model and Mogi-Coulomb criterion. <i>Journal of Petroleum Science and Engineering</i> , <b>2015</b> , 135, 678-701	4.4	64
131	Introduction of an empirical TBM cutter wear prediction model for pyroclastic and mafic igneous rocks; a case history of Karaj water conveyance tunnel, Iran. <i>Tunnelling and Underground Space Technology</i> , <b>2014</b> , 43, 222-231	5.7	64

130	A time-domain recursive method to analyse transient wave propagation across rock joints. <i>Geophysical Journal International</i> , <b>2012</b> , 188, 631-644	2.6	64
129	Physical and mechanical behavior of granite containing pre-existing holes after high temperature treatment. <i>Archives of Civil and Mechanical Engineering</i> , <b>2017</b> , 17, 912-925	3.4	62
128	Heat transfer by water flow in rock fractures and the application to hot dry rock geothermal systems. <i>International Journal of Rock Mechanics and Mining Sciences</i> , <b>1993</b> , 30, 633-641		60
127	Strain Rate Effect on the Mechanical Behaviour of Sandstones with Different Grain Sizes. <i>Rock Mechanics and Rock Engineering</i> , <b>2015</b> , 48, 1883-1895	5.7	59
126	Three-Dimensional Numerical Simulation on Triaxial Failure Mechanical Behavior of Rock-Like Specimen Containing Two Unparallel Fissures. <i>Rock Mechanics and Rock Engineering</i> , <b>2016</b> , 49, 4711-4729	5.7	59
125	Stability analysis of underground oil storage caverns by an integrated numerical and microseismic monitoring approach. <i>Tunnelling and Underground Space Technology</i> , <b>2016</b> , 54, 81-91	5.7	59
124	Challenges and opportunities of using tunnel boring machines in mining. <i>Tunnelling and Underground Space Technology</i> , <b>2016</b> , 57, 287-299	5.7	59
123	Dynamic tensile behaviours of heterogeneous rocks: The grain scale fracturing characteristics on strength and fragmentation. <i>International Journal of Impact Engineering</i> , <b>2018</b> , 118, 98-118	4	58
122	Influence of the geometry of partially-spanning joints on mechanical properties of rock in uniaxial compression. <i>Engineering Geology</i> , <b>2013</b> , 167, 134-147	6	58
121	Construction and utilization of rock caverns in Singapore Part A: The Bukit Timah granite bedrock resource. <i>Tunnelling and Underground Space Technology</i> , <b>1996</b> , 11, 65-72	5.7	58
120	On modelling of incident boundary for wave propagation in jointed rock masses using discrete element method. <i>Computers and Geotechnics</i> , <b>2004</b> , 31, 57-66	4.4	56
119	Geological and geotechnical features of Singapore: an overview. <i>Tunnelling and Underground Space Technology</i> , <b>1999</b> , 14, 419-431	5.7	56
118	Dynamic fragmentation of rock material: Characteristic size, fragment distribution and pulverization law. <i>Engineering Fracture Mechanics</i> , <b>2018</b> , 199, 739-759	4.2	55
117	Study on rock mass boreability by TBM penetration test under different in situ stress conditions. <i>Tunnelling and Underground Space Technology</i> , <b>2014</b> , 43, 413-425	5.7	55
116	Wave propagation across rock joints filled with viscoelastic medium using modified recursive method. <i>Journal of Applied Geophysics</i> , <b>2012</b> , 86, 82-87	1.7	53
115	An equivalent viscoelastic model for rock mass with parallel joints. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		53
114	A thin-layer interface model for wave propagation through filled rock joints. <i>Journal of Applied Geophysics</i> , <b>2013</b> , 91, 31-38	1.7	51
113	Dynamic response of a rock fracture filled with viscoelastic materials. <i>Engineering Geology</i> , <b>2013</b> , 160, 1-7	6	51

112	Monitoring of rocks using smart sensors. <i>Tunnelling and Underground Space Technology</i> , <b>2007</b> , 22, 206-221	5.7	51
111	Assessment and planning of underground space use in Singapore. <i>Tunnelling and Underground Space Technology</i> , <b>2016</b> , 55, 249-256	5.7	49
110	Hydro-thermo-mechanical properties of joints in the Carnmenellis granite. <i>Quarterly Journal of Engineering Geology and Hydrogeology</i> , <b>1992</b> , 25, 279-290	1.4	48
109	3D polycrystalline discrete element method (3PDEM) for simulation of crack initiation and propagation in granular rock. <i>Computers and Geotechnics</i> , <b>2017</b> , 90, 96-112	4.4	46
108	Normal Transmission of S-Wave Across Parallel Fractures with Coulomb Slip Behavior. <i>Journal of Engineering Mechanics - ASCE</i> , <b>2006</b> , 132, 641-650	2.4	46
107	UDEC/AUTODYN Hybrid Modeling of a Large-Scale Underground Explosion Test. <i>Rock Mechanics and Rock Engineering</i> , <b>2015</b> , 48, 737-747	5.7	45
106	Role of filling materials in a P-wave interaction with a rock fracture. <i>Engineering Geology</i> , <b>2014</b> , 172, 77-84	4.4	45
105	Obliquely incident wave propagation across rock joints with virtual wave source method. <i>Journal of Applied Geophysics</i> , <b>2013</b> , 88, 23-30	1.7	42
104	Normally incident wave propagation across a joint set with the virtual wave source method. <i>Journal of Applied Geophysics</i> , <b>2011</b> , 73, 283-288	1.7	40
103	Dynamic Model of Fracture Normal Behaviour and Application to Prediction of Stress Wave Attenuation Across Fractures. <i>Rock Mechanics and Rock Engineering</i> , <b>2008</b> , 41, 671-693	5.7	40
102	Development of a 3D Hybrid Finite-Discrete Element Simulator Based on GPGPU-Parallelized Computation for Modelling Rock Fracturing Under Quasi-Static and Dynamic Loading Conditions. <i>Rock Mechanics and Rock Engineering</i> , <b>2020</b> , 53, 1079-1112	5.7	40
101	Parametric study of soil abrasivity for predicting wear issue in TBM tunneling projects. <i>Tunnelling and Underground Space Technology</i> , <b>2015</b> , 48, 43-57	5.7	39
100	Experimental Study on Wave Propagation Across a Rock Joint with Rough Surface. <i>Rock Mechanics and Rock Engineering</i> , <b>2015</b> , 48, 2225-2234	5.7	39
99	Loading Rate Dependency of Dynamic Responses of Rock Joints at Low Loading Rate. <i>Rock Mechanics and Rock Engineering</i> , <b>2012</b> , 45, 421-426	5.7	39
98	Analytical and numerical study of the effect of water pressure on the mechanical response of cylindrical lined tunnels in elastic and elasto-plastic porous media. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2009</b> , 46, 531-547	6	39
97	Prediction model of tunnel boring machine performance by ensemble neural networks. <i>Geomechanics and Geoengineering</i> , <b>2007</b> , 2, 123-128	1.4	39
96	Fracture pressure model for inclined wells in layered formations with anisotropic rock strengths. <i>Journal of Petroleum Science and Engineering</i> , <b>2017</b> , 149, 393-408	4.4	38
95	A further study on seismic response of a set of parallel rock fractures filled with viscoelastic materials. <i>Geophysical Journal International</i> , <b>2013</b> , 192, 671-675	2.6	37

94	Rock mass hydraulic conductivity of the Bukit Timah granite, Singapore. <i>Engineering Geology</i> , <b>1998</b> , 50, 211-216	6	37
93	Some Fundamental Issues and Verification of 3DEC in Modeling Wave Propagation in Jointed Rock Masses. <i>Rock Mechanics and Rock Engineering</i> , <b>2012</b> , 45, 943-951	5.7	36
92	Theoretical Methods for Wave Propagation across Jointed Rock Masses. <i>Rock Mechanics and Rock Engineering</i> , <b>2010</b> , 43, 799-809	5.7	36
91	Three-phase medium model for filled rock joint and interaction with stress waves. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2011</b> , 35, 97-110	4	35
90	TBM performance and disc cutter wear prediction based on ten years experience of TBM tunnelling in Iran. <i>Geomechanik Und Tunnelbau</i> , <b>2015</b> , 8, 239-247	0.6	34
89	An introduction to connectivity concept and an example of physical connectivity evaluation for underground space. <i>Tunnelling and Underground Space Technology</i> , <b>2016</b> , 55, 205-213	5.7	32
88	Brazilian Tensile Strength of Anisotropic Rocks: Review and New Insights. <i>Energies</i> , <b>2018</b> , 11, 304	3.1	32
87	Dynamic Fracturing Simulation of Brittle Material using the Distinct Lattice Spring Method with a Full Rate-Dependent Cohesive Law. <i>Rock Mechanics and Rock Engineering</i> , <b>2010</b> , 43, 717-726	5.7	32
86	Parallelization of the distinct lattice spring model. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2013</b> , 37, 51-74	4	29
85	Characteristics of Clay-Abundant Shale Formations: Use of CO <sub>2</sub> for Production Enhancement. <i>Energies</i> , <b>2017</b> , 10, 1887	3.1	29
84	Validation study of the distinct lattice spring model (DLSM) on P-wave propagation across multiple parallel joints. <i>Computers and Geotechnics</i> , <b>2011</b> , 38, 298-304	4.4	29
83	A novel collapse pressure model with mechanical-chemical coupling in shale gas formations with multi-weakness planes. <i>Journal of Natural Gas Science and Engineering</i> , <b>2016</b> , 36, 1151-1177	4.6	29
82	Analysis and estimation of gripper TBM performances in highly fractured and faulted rocks. <i>Tunnelling and Underground Space Technology</i> , <b>2016</b> , 52, 44-61	5.7	28
81	Analysis of Stochastic Seismic Wave Interaction with a Slippery Rock Fault. <i>Rock Mechanics and Rock Engineering</i> , <b>2011</b> , 44, 85-92	5.7	28
80	Geothermal testing and measurements of rock and rock fractures. <i>Geothermics</i> , <b>1994</b> , 23, 215-231	4.3	28
79	A numerical study of spalling and related rockburst under dynamic disturbance using a particle-based numerical manifold method (PNMM). <i>Tunnelling and Underground Space Technology</i> , <b>2018</b> , 81, 438-449	5.7	27
78	A review of mechanisms of induced earthquakes: from a view of rock mechanics. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , <b>2019</b> , 5, 171-196	3.8	26
77	Dynamic responses of non-welded and welded rock fractures and implications for P-wave attenuation in a rock mass. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2015</b> , 77, 174-181	6	25

76	Study of wave attenuation across parallel fractures using propagator matrix method. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2012</b> , 36, 1264-1279	4	25
75	Particle manifold method (PMM): A new continuum-discontinuum numerical model for geomechanics. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2013</b> , 37, 1711-1736	4	25
74	Particle-Based Numerical Manifold Method to Model Dynamic Fracture Process in Rock Blasting. <i>International Journal of Geomechanics</i> , <b>2017</b> , 17,	3.1	25
73	Modeling of Rheological Deformation of Inhomogeneous Rock and Associated Time-Dependent Response of Tunnels. <i>International Journal of Geomechanics</i> , <b>2012</b> , 12, 147-159	3.1	25
72	Hydrofracturing in situ stress measurements in Singapore granite. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2005</b> , 42, 577-583	6	25
71	A newly developed soil abrasion testing method for tunnelling using shield machines. <i>Quarterly Journal of Engineering Geology and Hydrogeology</i> , <b>2013</b> , 46, 63-74	1.4	24
70	Underground cavern development in the Jurong sedimentary rock formation. <i>Tunnelling and Underground Space Technology</i> , <b>1999</b> , 14, 449-459	5.7	24
69	On the Truly Meshless Solution of Heat Conduction Problems in Heterogeneous Media. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , <b>2009</b> , 55, 1-13	1.3	23
68	Construction and utilization of rock caverns in Singapore Part B: Development costs and utilization. <i>Tunnelling and Underground Space Technology</i> , <b>1996</b> , 11, 73-79	5.7	23
67	Effect of Water Content on P-Wave Attenuation Across a Rock Fracture Filled with Granular Materials. <i>Rock Mechanics and Rock Engineering</i> , <b>2015</b> , 48, 867-871	5.7	22
66	Effects of nozzle position and waterjet pressure on rock-breaking performance of roadheader. <i>Tunnelling and Underground Space Technology</i> , <b>2017</b> , 69, 18-27	5.7	21
65	Simulation of failure process of jointed rock. <i>Central South University</i> , <b>2008</b> , 15, 888-894		21
64	EPB tunneling challenges in bouldery ground: a new experience on the Tabriz metro line 1, Iran. <i>Bulletin of Engineering Geology and the Environment</i> , <b>2014</b> , 73, 429-440	4	20
63	A new parameter to describe the persistency of non-persistent joints. <i>Engineering Geology</i> , <b>2014</b> , 181, 71-77	6	20
62	Seismic response of adjacent filled parallel rock fractures with dissimilar properties. <i>Journal of Applied Geophysics</i> , <b>2013</b> , 96, 33-37	1.7	20
61	New formulation and validation of the three-dimensional extension of a static relaxation method. <i>Advances in Engineering Software</i> , <b>2004</b> , 35, 317-323	3.6	20
60	Nonlinear System Modeling and Velocity Feedback Compensation for Effective Force Testing. <i>Journal of Engineering Mechanics - ASCE</i> , <b>2005</b> , 131, 244-253	2.4	20
59	A Dynamic-induced Direct-shear Model for Dynamic Triggering of Frictional Slip on Simulated Granular Gouges. <i>Experimental Mechanics</i> , <b>2014</b> , 54, 605-613	2.6	19



58	Hugoniot equation of state of the Bukit Timah granite. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2000</b> , 37, 705-713	6	19
57	Numerical Investigation of Joint Effect on Shock Wave Propagation in Jointed Rock Masses. <i>Journal of Testing and Evaluation</i> , <b>2005</b> , 33, 12680	1	19
56	A coupled distinct lattice spring model for rock failure under dynamic loads. <i>Computers and Geotechnics</i> , <b>2012</b> , 42, 1-20	4.4	18
55	Rock Slope Stability and Stabilization Analysis Using the Coupled DDA and FEM Method: NDDA Approach. <i>International Journal of Geomechanics</i> , <b>2018</b> , 18, 04018044	3.1	16
54	A Further Study on Wave Propagation Across a Single Joint with Different Roughness. <i>Rock Mechanics and Rock Engineering</i> , <b>2016</b> , 49, 2701-2709	5.7	15
53	Wave Propagation in the Vicinities of Rock Fractures Under Obliquely Incident Wave. <i>Rock Mechanics and Rock Engineering</i> , <b>2016</b> , 49, 1789-1802	5.7	15
52	Application of the four-dimensional lattice spring model for blasting wave propagation around the underground rock cavern. <i>Tunnelling and Underground Space Technology</i> , <b>2018</b> , 82, 135-147	5.7	15
51	A numerical study of rock scratch tests using the particle-based numerical manifold method. <i>Tunnelling and Underground Space Technology</i> , <b>2018</b> , 78, 106-114	5.7	14
50	A Discrete Element Model for Predicting Shear Strength and Degradation of Rock Joint by Using Compressive and Tensile Test Data. <i>Rock Mechanics and Rock Engineering</i> , <b>2011</b> , 45, 695	5.7	14
49	Numerical study of the semi-circular bend dynamic fracture toughness test using discrete element models. <i>Science China Technological Sciences</i> , <b>2015</b> , 58, 1587-1595	3.5	13
48	A NUMERICAL MANIFOLD METHOD FOR PLANE MICROPOLAR ELASTICITY. <i>International Journal of Computational Methods</i> , <b>2010</b> , 07, 151-166	1.1	13
47	Computerization of Rock Engineering Systems Using Neural Networks with an Expert System. <i>Rock Mechanics and Rock Engineering</i> , <b>1998</b> , 31, 135-152	5.7	13
46	Propagation of Stress Waves Through Fully Saturated Rock Joint Under Undrained Conditions and Dynamic Response Characteristics of Filling Liquid. <i>Rock Mechanics and Rock Engineering</i> , <b>2020</b> , 53, 3637-3655	5.7	12
45	Study on wave propagation across a single rough fracture by the modified thin-layer interface model. <i>Journal of Applied Geophysics</i> , <b>2014</b> , 110, 106-114	1.7	12
44	A MLS-BASED LATTICE SPRING MODEL FOR SIMULATING ELASTICITY OF MATERIALS. <i>International Journal of Computational Methods</i> , <b>2012</b> , 09, 1250037	1.1	12
43	Dynamic asymmetrical instability of elastic-plastic beams. <i>International Journal of Mechanical Sciences</i> , <b>2005</b> , 47, 43-62	5.5	12
42	Construction and utilization of rock caverns in Singapore Part C: Planning and location selection. <i>Tunnelling and Underground Space Technology</i> , <b>1996</b> , 11, 81-84	5.7	12
41	The mechanism of hysteretic ground settlement caused by shield tunneling in mixed-face conditions. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , <b>2018</b> , 4, 51-61	3.8	11

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