Lifeng Fan

List of Publications by Year
in descending order

78 papers	2,611 citations	172386 29 h-index	206029 48 g-index
81 all docs	81 docs citations	81 times ranked	1283 citing authors

#	Article	IF	Citations
1	Experimental investigation of thermal effects on dynamic behavior of granite. Applied Thermal Engineering, 2017, 125, 94-103.	3.0	250
2	An investigation of thermal effects on micro-properties of granite by X-ray CT technique. Applied Thermal Engineering, 2018, 140, 505-519.	3.0	185
3	Micro-mechanical modeling of the macro-mechanical response and fracture behavior of rock using the numerical manifold method. Engineering Geology, 2017, 225, 49-60.	2.9	163
4	NUMERICAL MANIFOLD METHOD (NMM) SIMULATION OF STRESS WAVE PROPAGATION THROUGH FRACTURED ROCK MASS. International Journal of Applied Mechanics, 2013, 05, 1350022.	1.3	122
5	Spatial gradient distributions of thermal shock-induced damage to granite. Journal of Rock Mechanics and Geotechnical Engineering, 2020, 12, 917-926.	3.7	120
6	Experimental and discrete element modeling on cracking behavior of sandstone containing a single oval flaw under uniaxial compression. Engineering Fracture Mechanics, 2018, 194, 154-174.	2.0	66
7	Investigation of the characteristics of rock fracture process zone using coupled FEM/DEM method. Engineering Fracture Mechanics, 2018, 200, 355-374.	2.0	63
8	Pipe network model for unconfined seepage analysis in fractured rock masses. International Journal of Rock Mechanics and Minings Sciences, 2016, 88, 183-196.	2.6	61
9	Numerical study of the effect of confining pressure on the rock breakage efficiency and fragment size distribution of a TBM cutter using a coupled FEM-DEM method. Tunnelling and Underground Space Technology, 2019, 88, 260-275.	3.0	59
10	Analytical scrutiny of loosening pressure on deep twin-tunnels in rock formations. Tunnelling and Underground Space Technology, 2019, 83, 373-380.	3.0	57
11	Equivalent discrete fracture networks for modelling fluid flow in highly fractured rock mass. Engineering Geology, 2017, 229, 21-30.	2.9	55
12	An Experimental Study of Effect of High Temperature on the Permeability Evolution and Failure Response of Granite Under Triaxial Compression. Rock Mechanics and Rock Engineering, 2020, 53, 4403-4427.	2.6	54
13	Dynamic Study on Fracture Problems in Viscoelastic Sedimentary Rocks Using the Numerical Manifold Method. Rock Mechanics and Rock Engineering, 2013, 46, 1415-1427.	2.6	52
14	Nonlocal vibration and biaxial buckling of double-viscoelastic-FGM-nanoplate system with viscoelastic Pasternak medium in between. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 1228-1235.	0.9	51
15	Effects of Microfracture on Wave Propagation through Rock Mass. International Journal of Geomechanics, 2017, 17, .	1.3	50
16	Two-phase flow pipe network method for simulation of CO_2 sequestration in fractured saline aquifers. International Journal of Rock Mechanics and Minings Sciences, 2017, 98, 39-53.	2.6	48
17	Experimental Study on Viscoelastic Behavior of Sedimentary Rock under Dynamic Loading. Rock Mechanics and Rock Engineering, 2012, 45, 433-438.	2.6	47
18	Study of microstructure effect on the nonlinear mechanical behavior and failure process of rock using an image-based-FDEM model. Computers and Geotechnics, 2020, 121, 103480.	2.3	46

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19	Mesomechanism of the dynamic tensile fracture and fragmentation behaviour of concrete with heterogeneous mesostructure. Construction and Building Materials, 2019, 217, 573-591.	3.2	44
20	The numerical manifold method for elastic wave propagation in rock with time-dependent absorbing boundary conditions. Engineering Analysis With Boundary Elements, 2014, 46, 41-50.	2.0	43
21	Seismic wave propagation through an in-situ stressed rock mass. Journal of Applied Geophysics, 2015, 121, 13-20.	0.9	42
22	Simulation of two-phase flow in horizontal fracture networks with numerical manifold method. Advances in Water Resources, 2017, 108, 293-309.	1.7	41
23	An investigation of mechanical behavior of cement-stabilized crushed rock material using different compaction methods. Construction and Building Materials, 2013, 48, 508-515.	3.2	40
24	The numerical manifold method for 2D transient heat conduction problems in functionally graded materials. Engineering Analysis With Boundary Elements, 2018, 88, 145-155.	2.0	40
25	Micro-failure process and failure mechanism of brittle rock under uniaxial compression using continuous real-time wave velocity measurement. Journal of Central South University, 2021, 28, 556-571.	1.2	40
26	Effects of cyclic freezing and thawing on the mechanical behavior of dried and saturated sandstone. Bulletin of Engineering Geology and the Environment, 2020, 79, 755-765.	1.6	39
27	Thermal shock analysis of 2D cracked solids using the numerical manifold method and precise time integration. Engineering Analysis With Boundary Elements, 2017, 75, 46-56.	2.0	38
28	Evaluation of equivalent medium methods for stress wave propagation in jointed rock mass. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 701-715.	1.7	32
29	An investigation of non-straight fissures cracking under uniaxial compression. Engineering Fracture Mechanics, 2018, 191, 300-310.	2.0	31
30	Micro-mechanism of brittle creep in saturated sandstone and its mechanical behavior after creep damage. International Journal of Rock Mechanics and Minings Sciences, 2022, 149, 104994.	2.6	30
31	Modeling of 2D cracked FGMs under thermo-mechanical loadings with the numerical manifold method. International Journal of Mechanical Sciences, 2018, 148, 103-117.	3.6	28
32	Experimental investigation and modeling of viscoelastic behavior of concrete. Construction and Building Materials, 2013, 48, 814-821.	3.2	26
33	Analyses of transverse vibrations of axially pretensioned viscoelastic nanobeams with small size and surface effects. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 2294-2299.	0.9	26
34	The numerical manifold method for crack modeling of two-dimensional functionally graded materials under thermal shocks. Engineering Fracture Mechanics, 2019, 208, 90-106.	2.0	25
35	Debris characteristics and scattering pattern analysis of reinforced concrete slabs subjected to internal blast loads–a numerical study. International Journal of Impact Engineering, 2019, 131, 1-16.	2.4	24
36	An experimental investigation of optimal asphalt–aggregate ratio for different compaction methods. Construction and Building Materials, 2015, 91, 111-115.	3.2	23

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37	Application of the four-dimensional lattice spring model for blasting wave propagation around the underground rock cavern. Tunnelling and Underground Space Technology, 2018, 82, 135-147.	3.0	22
38	Thermal Cycling Effects on Micro-property Variation of Granite by a Spatial Micro-observation. Rock Mechanics and Rock Engineering, 2020, 53, 2921-2928.	2.6	22
39	Effect of Nonlinear Deformational Macrojoint on Stress Wave Propagation Through a Double-Scale Discontinuous Rock Mass. Rock Mechanics and Rock Engineering, 2021, 54, 1077-1090.	2.6	22
40	Modeling 2D transient heat conduction problems by the numerical manifold method on Wachspress polygonal elements. Applied Mathematical Modelling, 2017, 48, 607-620.	2.2	21
41	Investigation of stress wave induced cracking behavior of underground rock mass by the numerical manifold method. Tunnelling and Underground Space Technology, 2019, 92, 103032.	3.0	20
42	Effects of Hydraulic Gradient, Intersecting Angle, Aperture, and Fracture Length on the Nonlinearity of Fluid Flow in Smooth Intersecting Fractures: An Experimental Investigation. Geofluids, 2018, 2018, 1-14.	0.3	17
43	A Split Three-Characteristics Method for Stress Wave Propagation Through a Rock Mass with Double-Scale Discontinuities. Rock Mechanics and Rock Engineering, 2020, 53, 5767-5779.	2.6	17
44	Real-Time Visual Analysis of the Microcracking Behavior of Thermally Damaged Granite Under Uniaxial Loading. Rock Mechanics and Rock Engineering, 2021, 54, 6549-6564.	2.6	17
45	Effect of the composition and concentration of geopolymer pore solution on the passivation characteristics of reinforcement. Construction and Building Materials, 2022, 319, 126128.	3.2	16
46	Segmented two-phase flow analysis in fractured geological medium based on the numerical manifold method. Advances in Water Resources, 2018, 121, 112-129.	1.7	15
47	Evaluation of the effects of three different cooling methods on the dynamic mechanical properties of thermal-treated sandstone. Bulletin of Engineering Geology and the Environment, 2022, 81, 1.	1.6	15
48	Performance of constructing a double-deck subway station by combining the shield method and cavern–pile method. Tunnelling and Underground Space Technology, 2017, 67, 120-131.	3.0	14
49	Computation of T-stresses for multiple-branched and intersecting cracks with the numerical manifold method. Engineering Analysis With Boundary Elements, 2019, 107, 149-158.	2.0	14
50	A fracture aperture dependent thermal-cohesive coupled model for modelling thermal conduction in fractured rock mass. Computers and Geotechnics, 2019, 114, 103108.	2.3	14
51	Research and engineering application of pre-stressed cementing technology for preventing micro-annulus caused by cyclic loading-unloading in deep shale gas horizontal wells. Journal of Petroleum Science and Engineering, 2021, 200, 108359.	2.1	14
52	An extended numerical manifold method for two-phase seepage–stress coupling process modelling in fractured porous medium. Computer Methods in Applied Mechanics and Engineering, 2022, 391, 114514.	3.4	14
53	Effective viscoelastic behaviour of rock mass with double-scale discontinuities. Geophysical Journal International, 2012, 191, 147-154.	1.0	13
54	A micro–macro method for predicting the shear strength of brittle rock under compressive loading. Mechanics Research Communications, 2016, 75, 13-19.	1.0	13

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55	Evaluation of stress wave propagation through rock mass using a modified dominate frequency method. Journal of Applied Geophysics, 2016, 132, 53-59.	0.9	13
56	T-stress evaluation for multiple cracks in FGMs by the numerical manifold method and the interaction integral. Theoretical and Applied Fracture Mechanics, 2020, 105, 102436.	2.1	13
57	A unified pipe-network-based numerical manifold method for simulating immiscible two-phase flow in geological media. Journal of Hydrology, 2019, 568, 119-134.	2.3	12
58	Spatial Failure Mode Analysis of Frozen Sandstone Under Uniaxial Compression Based on CT Technology. Rock Mechanics and Rock Engineering, 2022, 55, 4123-4138.	2.6	11
59	Thermal cycling effects on the dynamic behavior of granite and microstructural observations. Bulletin of Engineering Geology and the Environment, 2021, 80, 8711-8723.	1.6	10
60	An experimental investigation of pre-loading effects on the dynamic behaviour of concrete. Magazine of Concrete Research, 2017, 69, 586-594.	0.9	9
61	Mechanism and numerical simulation of a new device of bypass cementing device for controlling casing shear deformation induced by fault slipping. Journal of Petroleum Science and Engineering, 2021, 196, 107820.	2.1	8
62	Enhanced compressive performance of concrete via 3D-printing reinforcement. Journal of Zhejiang University: Science A, 2019, 20, 675-684.	1.3	7
63	Non-attenuation Behavior of Stress Wave Propagation Through a Rock Mass. Rock Mechanics and Rock Engineering, 2022, 55, 3807-3815.	2.6	7
64	Spatially distributed damage in sandstone under stress-freeze-thaw coupling conditions. Journal of Rock Mechanics and Geotechnical Engineering, 2022, 14, 1910-1922.	3.7	7
65	Investigation of three different cooling treatments on dynamic mechanical properties and fragmentation characteristics of granite subjected to thermal cycling. Underground Space (China), 2022, 7, 847-861.	3.4	6
66	Effects of cooling thermal shock on the P-wave velocity of granite and its microstructure analysis under immersion in water, half immersion in water, and near-water cooling conditions. Bulletin of Engineering Geology and the Environment, 2022, 81, 1.	1.6	6
67	Determination of Wave Propagation Coefficients of the Granite by High-Speed Digital Image Correlation (HDIC). Rock Mechanics and Rock Engineering, 2022, 55, 4497-4505.	2.6	6
68	Simulation of viscoelastic behavior of defected rock by using numerical manifold method. Frontiers of Architecture and Civil Engineering in China, 2011, 5, 199-207.	0.4	5
69	Equivalent Viscoelastic Behavior of High-Temperature Granite Under Seismic Wave. Rock Mechanics and Rock Engineering, 2022, 55, 967-979.	2.6	5
70	Effective velocity of reflected wave in rock mass with different wave impedances of normal incidence of stress wave. International Journal for Numerical and Analytical Methods in Geomechanics, 0, , .	1.7	5
71	Dual-Mesh Three Characteristic Lines Method for Stress Wave Propagation Through a Microdefected Rock Mass with a Thin-Layer Filled Macrojoint. Rock Mechanics and Rock Engineering, 2021, 54, 6621-6632.	2.6	4
72	Degradation of Mechanical Behavior of Sandstone under Freeze-Thaw Conditions with Different Low Temperatures. Applied Sciences (Switzerland), 2021, 11, 10653.	1.3	4

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73	Research on the establishment of gas channeling barrier for preventing SCP caused by cyclic loading-unloading in shale gas horizontal wells. Journal of Petroleum Science and Engineering, 2022, 208, 109640.	2.1	3
74	Theoretical Investigation on Thermo-mechanical Stresses in Laminated Cylindrical Panels. Journal of Thermoplastic Composite Materials, 2010, 23, 111-136.	2.6	2
75	Influences of Morphology Parameters on the Contact Behavior of a Steel Interface. International Journal of Applied Mechanics, 2020, 12, 2050009.	1.3	2
76	Investigation of wave reflection at the joint with different wave impedances on two sides. Waves in Random and Complex Media, 0, , 1-17.	1.6	2
77	Critical Angles of Obliquely Incident Stress Wave Through a Single Joint with Different Mediums on Both Sides. Rock Mechanics and Rock Engineering, 0, , .	2.6	1
78	A New Equivalent Medium Model for P-Wave Propagation Through Rock Mass with Parallel Joints. , 2009, , .		0