

Feng Gao

List of Publications by Year in descending order

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Version: 2024-02-01

103
papers

3,196
citations

159525

30
h-index

168321

53
g-index

103
all docs

103
docs citations

103
times ranked

2215
citing authors

#	ARTICLE	IF	CITATIONS
1	Study on Coal Seam Damage Caused by Liquid Nitrogen Under Different Ground Temperature Conditions. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2022, 144, .	1.4	5
2	Differences in Petrophysical and Mechanical Properties Between Low- and Middle-Rank Coal Subjected to Liquid Nitrogen Cooling in Coalbed Methane Mining. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2022, 144, .	1.4	9
3	Changes in mechanical properties and fracture behaviors of heated marble subjected to liquid nitrogen cooling. <i>Engineering Fracture Mechanics</i> , 2022, 261, 108256.	2.0	14
4	Effect of liquid nitrogen cooling on mechanical characteristics and fracture morphology of layer coal under Brazilian splitting test. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2022, 151, 105026.	2.6	69
5	Experimental investigation on the nonlinear characteristics of energy evolution and failure characteristics of coal under different gas pressures. <i>Bulletin of Engineering Geology and the Environment</i> , 2022, 81, 1.	1.6	82
6	Influence of Various Control Factors on Fracture Toughness and Fracture Energy of Sandstone Subjected to Liquid Nitrogen Cooling. <i>Energy & Fuels</i> , 2022, 36, 397-406.	2.5	4
7	A FRACTAL PERSPECTIVE ON STRUCTURAL DAMAGE AND FRACTURE CHARACTERISTICS OF COAL SUBJECTED TO LIQUID NITROGEN COOLING AT LABORATORY-SCALE. <i>Fractals</i> , 2022, 30, .	1.8	6
8	Identification of Coal and Gas Outburst-Hazardous Zones by Electric Potential Inversion During Mining Process in Deep Coal Seam. <i>Rock Mechanics and Rock Engineering</i> , 2022, 55, 3439-3450.	2.6	29
9	Effect of Different Cooling Treatments on the Tensile Properties and Fracture Modes of Granite Heated at Different Temperatures. <i>Natural Resources Research</i> , 2022, 31, 817-833.	2.2	4
10	Effect of liquid nitrogen thermal shock on structure damage and brittleness properties of high-temperature marble. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2022, 8, 1.	1.3	5
11	Numerical Evaluation on Stress and Permeability Evolution of Overlying Coal Seams for Gas Drainage and Gas Disaster Elimination in Protective Layer Mining. <i>Mining, Metallurgy and Exploration</i> , 2022, 39, 1027-1043.	0.4	5
12	Influence of Liquid Nitrogen Cooling State on Mechanical Properties and Fracture Characteristics of Coal. <i>Rock Mechanics and Rock Engineering</i> , 2022, 55, 3817-3836.	2.6	16
13	Variations in Stress Thresholds for Heated Granite Subjected to Rapid Cooling under Different Confining Pressures. <i>Natural Resources Research</i> , 2022, 31, 2653-2671.	2.2	3
14	Effect of Confining Pressure on Mechanical and Energy Conversion Properties of Gas-Containing Coal under Loads. <i>Geofluids</i> , 2022, 2022, 1-23.	0.3	4
15	Analytical Solutions for Gas-Water Two-Phase Flow in Multiseam Coalbed Methane Production. <i>Geofluids</i> , 2021, 2021, 1-15.	0.3	1
16	3D Multi-scale Reconstruction of Fractured Shale and Influence of Fracture Morphology on Shale Gas Flow. <i>Natural Resources Research</i> , 2021, 30, 2463-2481.	2.2	65
17	Constraints of Pore-Bulk Strain Ratio and Interference Time on the Evolution of Coal Permeability during CO ₂ Injection. <i>Geofluids</i> , 2021, 2021, 1-16.	0.3	0
18	Characteristics of Stress, Crack Evolution, and Energy Conversion of Gas-Containing Coal under Different Gas Pressures. <i>Geofluids</i> , 2021, 2021, 1-18.	0.3	1

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19	A Complex Network Approach for Quantitative Characterization and Robustness Analysis of Sandstone Pore Network Structure. <i>Geofluids</i> , 2021, 2021, 1-10.	0.3	0
20	Analytical and Numerical Study of the Ground Pressure of the Work Face Crossing the Fault. <i>Advances in Materials Science and Engineering</i> , 2021, 2021, 1-15.	1.0	1
21	Quantitative visualization and characteristics of gas flow in 3D pore-fracture system of tight rock based on Lattice Boltzmann simulation. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 89, 103867.	2.1	55
22	A FRACTAL PERSPECTIVE ON FRACTURE INITIATION AND PROPAGATION OF RESERVOIR ROCKS UNDER WATER AND NITROGEN FRACTURING. <i>Fractals</i> , 2021, 29, .	1.8	45
23	Experimental Study on the Damage and Cracking Characteristics of Bedded Coal Subjected to Liquid Nitrogen Cooling. <i>Rock Mechanics and Rock Engineering</i> , 2021, 54, 5731-5744.	2.6	19
24	A MULTI-FIELD COUPLED SEEPAGE MODEL FOR COAL SEAM WITH FRACTURES OF POWER LAW LENGTH DISTRIBUTIONS. <i>Fractals</i> , 2021, 29, 2150140.	1.8	2
25	Effect of liquid nitrogen freeze-thaw cycle on fracture toughness and energy release rate of saturated sandstone. <i>Engineering Fracture Mechanics</i> , 2021, 258, 108066.	2.0	37
26	Migration of the Industrial Wastewater in Fractured Rock Masses Based on the Thermal-Hydraulic-Mechanical Coupled Model. <i>Geofluids</i> , 2021, 2021, 1-13.	0.3	2
27	Experimental study on coal permeability and cracking characteristics under LN2 freeze-thaw cycles. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 83, 103526.	2.1	29
28	Research on the energy evolution characteristics and the failure intensity of rocks. <i>International Journal of Mining Science and Technology</i> , 2020, 30, 705-713.	4.6	57
29	ANALYSIS OF PERMEABILITY EVOLUTION CHARACTERISTICS BASED ON DUAL FRACTAL COUPLING MODEL FOR COAL SEAM. <i>Fractals</i> , 2020, 28, 2050133.	1.8	19
30	A Complex Network Model for Analysis of Fractured Rock Permeability. <i>Advances in Civil Engineering</i> , 2020, 2020, 1-10.	0.4	2
31	An Energy Preservation Index for Evaluating the Rockburst Potential Based on Energy Evolution. <i>Energies</i> , 2020, 13, 3636.	1.6	11
32	A Dual Fractal Poroelastic Model for Characterizing Fluid Flow in Fractured Coal Masses. <i>Geofluids</i> , 2020, 2020, 1-13.	0.3	4
33	Experiment Study on Topological Characteristics of Sandstone Coating by Micro CT. <i>Coatings</i> , 2020, 10, 1143.	1.2	6
34	A Study on the Structure of Rock Engineering Coatings Based on Complex Network Theory. <i>Coatings</i> , 2020, 10, 1152.	1.2	13
35	Cohesive energy measurement of van der Waals heterostructures by the shaft loaded blister test. <i>Extreme Mechanics Letters</i> , 2020, 41, 100987.	2.0	13
36	Shale gas transport mechanisms in inorganic and organic pores based on lattice Boltzmann simulation. <i>Energy Reports</i> , 2020, 6, 2641-2650.	2.5	20

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37	Quantitatively Deciphering Paleostrain From Digital Outcrops Model and its Application in the Eastern Tian Shan, China. <i>Tectonics</i> , 2020, 39, e2019TC005999.	1.3	2
38	Study on the surface crack propagation mechanism of coal and sandstone subjected to cryogenic cooling with liquid nitrogen. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 81, 103436.	2.1	30
39	The Interface Behavior of Multiple Piezoelectric Films Attaching to a Finite-Thickness Gradient Substrate. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2020, 87, .	1.1	17
40	Exact Travelling Wave Solutions for Local Fractional Partial Differential Equations in Mathematical Physics. <i>Advances in Dynamics, Patterns, Cognition</i> , 2019, , 175-191.	0.2	18
41	Wrinkling and failure behavior of single-layer MoS ₂ sheets under in-plane shear. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 19115-19125.	1.3	8
42	Numerical Simulations on the Front Motion of Water Permeation into Anisotropic Porous Media. <i>Geofluids</i> , 2019, 2019, 1-13.	0.3	2
43	Theoretical and technological exploration of deep in situ fluidized coal mining. <i>Frontiers in Energy</i> , 2019, 13, 603-611.	1.2	65
44	Mass flow rate prediction of shale gas considering gas diffusion and water film evaporation. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2019, 76, 285-310.	0.6	1
45	EXACT TRAVELING-WAVE SOLUTIONS FOR ONE-DIMENSIONAL MODIFIED KORTEWEGâ€“DE VRIES EQUATION DEFINED ON CANTOR SETS. <i>Fractals</i> , 2019, 27, 1940010.	1.8	30
46	Experimental Investigation of Perceptual Characteristics of Functional Cemented Backfilling Materials in Coal Mines. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 55.	0.8	12
47	An Experimental Study on Triaxial Compression Tests and Cone Penetration Tests in Planetary Regolith Simulant under Low Gravity Fields. <i>Journal of Testing and Evaluation</i> , 2019, 47, 1677-1700.	0.4	5
48	New mathematical models in anomalous viscoelasticity from the derivative with respect to another function view point. <i>Thermal Science</i> , 2019, 23, 1555-1561.	0.5	23
49	The mechanical properties and fractal characteristics of the coal under temperature-gas-confining pressure. <i>Thermal Science</i> , 2019, 23, 789-798.	0.5	3
50	Energy evolution of coal subjected to thermo-gas-mechanical coupling. <i>Thermal Science</i> , 2019, 23, 685-692.	0.5	0
51	CT Identification and Fractal Characterization of 3D Propagation and Distribution of Hydrofracturing Cracks in Low-Permeability Heterogeneous Rocks. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 2156-2173.	1.4	42
52	Numerical Analysis of Hydrofracturing Behaviors and Mechanisms of Heterogeneous Reservoir Glutenite, Using the Continuum-Based Discrete Element Method While Considering Hydromechanical Coupling and Leak-Off Effects. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 3621-3644.	1.4	28
53	Laboratory In Situ CT Observation of the Evolution of 3D Fracture Networks in Coal Subjected to Confining Pressures and Axial Compressive Loads: A Novel Approach. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 3361-3375.	2.6	70
54	Visualization method for stress-field evolution during rapid crack propagation using 3D printing and photoelastic testing techniques. <i>Scientific Reports</i> , 2018, 8, 4353.	1.6	27

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55	Analytical Solution for Shale Gas Productivity of a Multiple-Fractured Horizontal Well Based on a Diffusion Model. <i>Arabian Journal for Science and Engineering</i> , 2018, 43, 2563-2579.	1.7	4
56	A new computational approach for solving nonlinear local fractional PDEs. <i>Journal of Computational and Applied Mathematics</i> , 2018, 339, 285-296.	1.1	184
57	Numerical simulation on the flow field characteristics and impact capability of liquid nitrogen jet. <i>Energy Exploration and Exploitation</i> , 2018, 36, 989-1005.	1.1	5
58	Thermo-mechanical coupling damage constitutive model of rock based on the Hoek-Brown strength criterion. <i>International Journal of Damage Mechanics</i> , 2018, 27, 1213-1230.	2.4	61
59	Numerical Study of Fracture Network Evolution during Nitrogen Fracturing Processes in Shale Reservoirs. <i>Energies</i> , 2018, 11, 2503.	1.6	16
60	Fundamental solutions of the general fractional-order diffusion equations. <i>Mathematical Methods in the Applied Sciences</i> , 2018, 41, 9312-9320.	1.2	84
61	Thermal damage constitutive model for rock considering damage threshold and residual strength. <i>Journal of Central South University</i> , 2018, 25, 2523-2536.	1.2	60
62	A New Analysis Model for Potential Contamination of a Shallow Aquifer from a Hydraulically-Fractured Shale. <i>Energies</i> , 2018, 11, 3010.	1.6	3
63	Deformation, Permeability and Acoustic Emission Characteristics of Coal Masses under Mining-Induced Stress Paths. <i>Energies</i> , 2018, 11, 2233.	1.6	26
64	A Comparative Study on Fracture Characteristics of the Red Sandstone under Water and Nitrogen Gas Fracturing. <i>Advances in Civil Engineering</i> , 2018, 2018, 1-15.	0.4	2
65	Influence of Temperature on the Microstructure Deterioration of Sandstone. <i>Energies</i> , 2018, 11, 1753.	1.6	53
66	The effect of liquid nitrogen cooling on coal cracking and mechanical properties. <i>Energy Exploration and Exploitation</i> , 2018, 36, 1609-1628.	1.1	30
67	On Linear and Nonlinear Electric Circuits: A Local Fractional Calculus Approach. , 2018, , 329-355.		3
68	Numerical Analysis of Heat and Gas Transfer Characteristics during Heat Injection Processes Based on a Thermo-Hydro-Mechanical Model. <i>Energies</i> , 2018, 11, 1722.	1.6	7
69	Analytical Solution of Tunnel Surrounding Rock for Stress and Displacement Based on Lade's Duncan Criterion. <i>Advances in Civil Engineering</i> , 2018, 2018, 1-7.	0.4	6
70	Three-dimensional numerical reconstruction method for irregular structures of granular geomaterials. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2018, 4, 327-341.	1.3	8
71	A Two-Phase Flowback Model for Multiscale Diffusion and Flow in Fractured Shale Gas Reservoirs. <i>Geofluids</i> , 2018, 2018, 1-15.	0.3	12
72	Anomalous Advection-Dispersion Equations within General Fractional-Order Derivatives: Models and Series Solutions. <i>Entropy</i> , 2018, 20, 78.	1.1	5

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73	A Multi-Parameter Optimization Model for the Evaluation of Shale Gas Recovery Enhancement. <i>Energies</i> , 2018, 11, 654.	1.6	55
74	A Fully Coupled Numerical Model for Microwave Heating Enhanced Shale Gas Recovery. <i>Energies</i> , 2018, 11, 1608.	1.6	29
75	Researches on Damage Evolution and Acoustic Emission Characteristics of Rocks. <i>Advances in Civil Engineering</i> , 2018, 2018, 1-7.	0.4	10
76	Exact travelling wave solutions for the local fractional two-dimensional Burgers-type equations. <i>Computers and Mathematics With Applications</i> , 2017, 73, 203-210.	1.4	225
77	Effect of pore pressure distribution on fracture behavior of sandstone in nitrogen fracturing. <i>Energy Exploration and Exploitation</i> , 2017, 35, 609-626.	1.1	16
78	Numerical analysis of the effect of natural microcracks on the supercritical CO ₂ fracturing crack network of shale rock based on bonded particle models. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2017, 41, 1992-2013.	1.7	31
79	ESTIMATION OF THE FRACTAL DIMENSION OF WEIERSTRASS' MANDELBROT FUNCTION BASED ON CUCKOO SEARCH METHODS. <i>Fractals</i> , 2017, 25, 1750065.	1.8	9
80	Non-Darcy interfacial dynamics of air-water two-phase flow in rough fractures under drainage conditions. <i>Scientific Reports</i> , 2017, 7, 4570.	1.6	9
81	A new fractional derivative involving the normalized sinc function without singular kernel. <i>European Physical Journal: Special Topics</i> , 2017, 226, 3567-3575.	1.2	100
82	A new technology for solving diffusion and heat equations. <i>Thermal Science</i> , 2017, 21, 133-140.	0.5	91
83	Exact traveling-wave solutions for linear and nonlinear heat-transfer equations. <i>Thermal Science</i> , 2017, 21, 2307-2311.	0.5	19
84	General fractional calculus in non-singular power-law kernel applied to model anomalous diffusion phenomena in heat transfer problems. <i>Thermal Science</i> , 2017, 21, 11-18.	0.5	28
85	Strength, Deformability and X-ray Micro-CT Observations of Deeply Buried Marble Under Different Confining Pressures. <i>Rock Mechanics and Rock Engineering</i> , 2016, 49, 4227-4244.	2.6	50
86	Simulation and visualization of the displacement between CO ₂ and formation fluids at pore-scale levels and its application to the recovery of shale gas. <i>International Journal of Coal Science and Technology</i> , 2016, 3, 351-369.	2.7	15
87	A fully coupling coal-gas model associated with inertia and slip effects for CBM migration. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	1.3	15
88	Effect of the layer orientation on mechanics and energy evolution characteristics of shales under uniaxial loading. <i>International Journal of Mining Science and Technology</i> , 2016, 26, 857-862.	4.6	49
89	CO ₂ permeability of fractured coal subject to confining pressures and elevated temperature: Experiments and modeling. <i>Science China Technological Sciences</i> , 2016, 59, 1931-1942.	2.0	21
90	Theoretical and Numerical Simulation of the Mining-Enhanced Permeability Model of Damaged Coal Seam. <i>Geotechnical and Geological Engineering</i> , 2016, 34, 1425-1433.	0.8	5

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91	Impact of Water Film Evaporation on Gas Transport Property in Fractured Wet Coal Seams. <i>Transport in Porous Media</i> , 2016, 113, 357-382.	1.2	29
92	Effect of Gas Pressure on Rock Burst Proneness Indexes and Energy Dissipation of Coal Samples. <i>Geotechnical and Geological Engineering</i> , 2016, 34, 1737-1748.	0.8	25
93	Flow Consistency Between Non-Darcy Flow in Fracture Network and Nonlinear Diffusion in Matrix to Gas Production Rate in Fractured Shale Gas Reservoirs. <i>Transport in Porous Media</i> , 2016, 111, 97-121.	1.2	41
94	Evaluation of coal damage and cracking characteristics due to liquid nitrogen cooling on the basis of the energy evolution laws. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 29, 30-36.	2.1	95
95	Fractional Maxwell fluid with fractional derivative without singular kernel. <i>Thermal Science</i> , 2016, 20, 871-877.	0.5	50
96	Theoretical and experimental validation of mining-enhanced permeability for simultaneous exploitation of coal and gas. <i>Environmental Earth Sciences</i> , 2015, 73, 5951-5962.	1.3	83
97	Experimental investigation on the energy evolution of dry and water-saturated red sandstones. <i>International Journal of Mining Science and Technology</i> , 2015, 25, 383-388.	4.6	82
98	Effect of damage evolution of coal on permeability variation and analysis of gas outburst hazard with coal mining. <i>Natural Hazards</i> , 2015, 79, 999-1013.	1.6	70
99	Finite Deformation Analysis on Sandstone Subjected to Thermo-Hydro-Mechanical (T-H-M) Coupling. <i>Rock Mechanics and Rock Engineering</i> , 2015, 48, 159-177.	2.6	6
100	Energy Dissipation and Release During Coal Failure Under Conventional Triaxial Compression. <i>Rock Mechanics and Rock Engineering</i> , 2015, 48, 509-526.	2.6	251
101	Researches on the Constitutive Models of Artificial Frozen Silt in Underground Engineering. <i>Advances in Materials Science and Engineering</i> , 2014, 2014, 1-8.	1.0	7
102	Lattice-Boltzmann simulation of microscale CH ₄ flow in porous rock subject to force-induced deformation. <i>Science Bulletin</i> , 2014, 59, 3292-3303.	1.7	15
103	An experimental investigation on the mechanism of fluid flow through single rough fracture of rock. <i>Science China Technological Sciences</i> , 2013, 56, 2070-2080.	2.0	56