

Jishan Liu

List of Publications by Year in descending order

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121
papers

6,704
citations

44042

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64755

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docs citations

121
times ranked

2283
citing authors

#	ARTICLE	IF	CITATIONS
1	Long-term effect of desorption-induced matrix shrinkage on the evolution of coal permeability during coalbed methane production. <i>Journal of Petroleum Science and Engineering</i> , 2022, 208, 109378.	2.1	11
2	Shale gas production from reservoirs with hierarchical multiscale structural heterogeneities. <i>Journal of Petroleum Science and Engineering</i> , 2022, 208, 109380.	2.1	14
3	Yield stress and microstructure of composite halloysite-LAPONITE® gels: Effects of mixing ratio, surface chemistry, and ageing time. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 640, 128472.	2.3	1
4	A transient dual porosity/permeability model for coal multiphysics. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2022, 8, 1.	1.3	5
5	Characterization of gas transport in shale: A multi-mechanism permeability modeling approach. <i>Chemical Engineering Journal</i> , 2022, 438, 135604.	6.6	27
6	A fully coupled multidomain and multiphysics model considering stimulation patterns and thermal effects for evaluation of coalbed methane (CBM) extraction. <i>Journal of Petroleum Science and Engineering</i> , 2022, 214, 110506.	2.1	9
7	Influence of Well Types on Optimizing the Co-production of Gas from Coal and Tight Formations. <i>Energy & Fuels</i> , 2022, 36, 6736-6754.	2.5	5
8	Water Liberating/Sealing effects on shale gas Extraction: A fully coupled multidomain and multiphysics model. <i>Fuel</i> , 2022, 325, 124953.	3.4	7
9	A critical review of coal permeability models. <i>Fuel</i> , 2022, 326, 125124.	3.4	15
10	Shale gas reservoir modeling and production evaluation considering complex gas transport mechanisms and dispersed distribution of kerogen. <i>Petroleum Science</i> , 2021, 18, 195-218.	2.4	27
11	Rod plate interactions in sepiolite-LAPONITE® gels: microstructure, surface chemistry and rheology. <i>Soft Matter</i> , 2021, 17, 2614-2623.	1.2	8
12	Constraints of Pore-Bulk Strain Ratio and Interference Time on the Evolution of Coal Permeability during CO2 Injection. <i>Geofluids</i> , 2021, 2021, 1-16.	0.3	0
13	A fully coupled hydromechanical XFEM model for the simulation of 3D non-planar fluid-driven fracture propagation. <i>Computers and Geotechnics</i> , 2021, 132, 103971.	2.3	15
14	Impact of equilibration time lag between matrix and fractures on the evolution of coal permeability. <i>Fuel</i> , 2021, 290, 120029.	3.4	18
15	Experimental Observations of Gas-sorption-Induced Strain Gradients and their Implications on Permeability Evolution of Shale. <i>Rock Mechanics and Rock Engineering</i> , 2021, 54, 3927-3943.	2.6	10
16	A process-based coal swelling model: Bridging the gaps between localized swelling and bulk swelling. <i>Fuel</i> , 2021, 293, 120360.	3.4	16
17	A pore geometry-based permeability model for tight rocks and new sight of impact of stress on permeability. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 91, 103958.	2.1	7
18	Effect of adsorption-induced matrix swelling on coal permeability evolution of micro-fracture with the real geometry. <i>Petroleum Science</i> , 2021, 18, 1143-1152.	2.4	17

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19	Differential Strain Index-Based Multiphysics Model for Coal Seam Gas Production. <i>Energy & Fuels</i> , 2021, 35, 15642-15656.	2.5	2
20	Evolution of Coal Permeability under Constant Effective Stresses: Direct Measurements and Numerical Modeling. <i>Energy & Fuels</i> , 2021, 35, 15489-15501.	2.5	12
21	A critical analysis of shale laboratory permeability evolution data. <i>Energy</i> , 2021, 236, 121405.	4.5	14
22	Advances in in-situ modified mining by fluidization and in unconventional geomechanics. <i>Advances in Geo-Energy Research</i> , 2021, 5, 1-4.	3.1	4
23	Microstructure and Time-Dependent Behavior of STx-1b Calcium Montmorillonite Suspensions. <i>Clays and Clay Minerals</i> , 2021, 69, 787.	0.6	2
24	Impact of shale matrix mechanical interactions on gas transport during production. <i>Journal of Petroleum Science and Engineering</i> , 2020, 184, 106524.	2.1	25
25	Analytical solutions for multi-stage fractured shale gas reservoirs with damaged fractures and stimulated reservoir volumes. <i>Journal of Petroleum Science and Engineering</i> , 2020, 187, 106686.	2.1	20
26	A Dual Fractal Poroelastic Model for Characterizing Fluid Flow in Fractured Coal Masses. <i>Geofluids</i> , 2020, 2020, 1-13.	0.3	4
27	Effects of Heterogeneous Local Swelling and Multiple Pore Types on Coal and Shale Permeability Evolution. , 2020, , .		4
28	A fully coupled multidomain and multiphysics model for evaluation of shale gas extraction. <i>Fuel</i> , 2020, 278, 118214.	3.4	73
29	Surface Chemistry, Microstructure, and Rheology of Thixotropic 1-D Sepiolite Gels. <i>Clays and Clay Minerals</i> , 2020, 68, 9-22.	0.6	17
30	Evolution of Shale Permeability under the Influence of Gas Diffusion from the Fracture Wall into the Matrix. <i>Energy & Fuels</i> , 2020, 34, 4393-4406.	2.5	29
31	Evolution and analysis of gas sorption-induced coal fracture strain data. <i>Petroleum Science</i> , 2020, 17, 376-392.	2.4	12
32	Experimental observations of heterogeneous strains inside a dual porosity sample under the influence of gas-sorption: A case study of fractured coal. <i>International Journal of Coal Geology</i> , 2020, 223, 103450.	1.9	26
33	Controlling effects of differential swelling index on evolution of coal permeability. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2020, 12, 461-472.	3.7	36
34	Complete coal permeability models from initial to ultimate equilibrium. <i>Fuel</i> , 2020, 271, 117612.	3.4	9
35	STUDY ON EVOLUTION OF FRACTAL DIMENSION FOR FRACTURED COAL SEAM UNDER MULTI-FIELD COUPLING. <i>Fractals</i> , 2020, 28, 2050072.	1.8	34
36	Modification of Eclipse simulator for microbial enhanced oil recovery. <i>Journal of Petroleum Exploration and Production</i> , 2019, 9, 2247-2261.	1.2	8

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37	Preliminary study on the feasibility of co-exploitation of coal and uranium. International Journal of Rock Mechanics and Minings Sciences, 2019, 123, 104098.	2.6	29
38	Long-Term Evolution of Coal Permeability Under Effective Stresses Gap Between Matrix and Fracture During CO2 Injection. Transport in Porous Media, 2019, 130, 969-983.	1.2	24
39	A Critical Review of the Application of Nanomaterials in Frac Fluids: The State of the Art and Challenges. , 2019, , .		7
40	Impact of Local Effects on the Evolution of Unconventional Rock Permeability. Energies, 2019, 12, 478.	1.6	8
41	Surface chemistry, rheology and microstructure of as-received SHCa-1 hectorite gels. Clay Minerals, 2019, 54, 269-275.	0.2	8
42	A fractal approach to fully-couple coal deformation and gas flow. Fuel, 2019, 240, 219-236.	3.4	58
43	Influence of gas adsorption induced non-uniform deformation on the evolution of coal permeability. International Journal of Rock Mechanics and Minings Sciences, 2019, 114, 71-78.	2.6	51
44	Micro-scale investigation on coupling of gas diffusion and mechanical deformation of shale. Journal of Petroleum Science and Engineering, 2019, 175, 961-970.	2.1	36
45	Characterizing Gas Transfer from the Inorganic Matrix and Kerogen to Fracture Networks: A Comprehensive Analytical Modeling Approach. , 2019, , .		3
46	Laboratory study of proppant on shale fracture permeability and compressibility. Fuel, 2018, 222, 83-97.	3.4	81
47	Coal permeability maps under the influence of multiple coupled processes. International Journal of Coal Geology, 2018, 187, 71-82.	1.9	70
48	A Gaussian Decomposition Method and its applications to the prediction of shale gas production. Fuel, 2018, 224, 331-347.	3.4	9
49	Why shale permeability changes under variable effective stresses: New insights. Fuel, 2018, 213, 55-71.	3.4	83
50	The Influence of Fracturing Fluids on Fracturing Processes: A Comparison Between Water, Oil and SC-CO2. Rock Mechanics and Rock Engineering, 2018, 51, 299-313.	2.6	110
51	Evolution of permeability during the process of shale gas extraction. Journal of Natural Gas Science and Engineering, 2018, 49, 94-109.	2.1	51
52	Impact of gas adsorption-induced coal damage on the evolution of coal permeability. International Journal of Rock Mechanics and Minings Sciences, 2018, 101, 89-97.	2.6	60
53	Evolution of shale apparent permeability under variable boundary conditions. Fuel, 2018, 215, 46-56.	3.4	32
54	Application of Transient Electromagnetic Method for Investigating the Water-Enriched Mined-Out Area. Applied Sciences (Switzerland), 2018, 8, 1800.	1.3	14

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55	Evolution of Coal Permeability during Gas Injection—From Initial to Ultimate Equilibrium. <i>Energies</i> , 2018, 11, 2800.	1.6	16
56	Triple-Porosity Modelling for the Simulation of Multiscale Flow Mechanisms in Shale Reservoirs. <i>Geofluids</i> , 2018, 2018, 1-11.	0.3	31
57	Experimental study of impact of anisotropy and heterogeneity on gas flow in coal. Part II: Permeability. <i>Fuel</i> , 2018, 230, 397-409.	3.4	63
58	Surface chemistry, rheology and microstructure of purified natural and synthetic hectorite suspensions. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 19221-19233.	1.3	17
59	Mechanistic analysis of coal permeability evolution data under stress-controlled conditions. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2018, 110, 36-47.	2.6	52
60	A multiscale-multiphase simulation model for the evaluation of shale gas recovery coupled the effect of water flowback. <i>Fuel</i> , 2017, 199, 191-205.	3.4	77
61	Experimental study of permeability and its anisotropy for shale fracture supported with proppant. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 44, 250-264.	2.1	94
62	Simulation of coal permeability under non-isothermal CO ₂ injection. <i>International Journal of Oil, Gas and Coal Technology</i> , 2017, 15, 190.	0.1	9
63	Experimental study of coal matrix-cleat interaction under constant volume boundary condition. <i>International Journal of Coal Geology</i> , 2017, 181, 124-132.	1.9	40
64	Impact of coal matrix strains on the evolution of permeability. <i>Fuel</i> , 2017, 189, 270-283.	3.4	66
65	General Gas Permeability Model for Porous Media: Bridging the Gaps Between Conventional and Unconventional Natural Gas Reservoirs. <i>Energy & Fuels</i> , 2016, 30, 5492-5505.	2.5	49
66	Effects of gas diffusion from fractures to coal matrix on the evolution of coal strains: Experimental observations. <i>International Journal of Coal Geology</i> , 2016, 162, 74-84.	1.9	50
67	Evolution of shale apparent permeability from stress-controlled to displacement-controlled conditions. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 34, 1453-1460.	2.1	27
68	Yield stress and microstructure of washed oxide suspensions at the isoelectric point: experimental and model fractal structure. <i>Rheologica Acta</i> , 2016, 55, 847-856.	1.1	12
69	Quantitative study on coal permeability evolution with consideration of shear dilation. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 36, 1199-1207.	2.1	10
70	A fully coupled multiscale shale deformation-gas transport model for the evaluation of shale gas extraction. <i>Fuel</i> , 2016, 178, 103-117.	3.4	128
71	Combined impact of flow regimes and effective stress on the evolution of shale apparent permeability. <i>Journal of Unconventional Oil and Gas Resources</i> , 2016, 14, 32-43.	3.5	50
72	Simulation of coal self-heating processes in underground methane-rich coal seams. <i>International Journal of Coal Geology</i> , 2015, 141-142, 1-12.	1.9	108

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73	Rapid decompression and desorption induced energetic failure in coal. <i>Journal of Rock Mechanics and Geotechnical Engineering</i> , 2015, 7, 345-350.	3.7	42
74	A sequential model of shale gas transport under the influence of fully coupled multiple processes. <i>Journal of Natural Gas Science and Engineering</i> , 2015, 27, 808-821.	2.1	51
75	Permeability evolution of propped artificial fractures in coal on injection of CO ₂ . <i>Journal of Petroleum Science and Engineering</i> , 2015, 133, 695-704.	2.1	51
76	Effect of CO ₂ injection on heterogeneously permeable coalbed reservoirs. <i>Fuel</i> , 2014, 135, 509-521.	3.4	58
77	Benchmark assessment of coal permeability models on the accuracy of permeability prediction. <i>Fuel</i> , 2014, 132, 194-203.	3.4	27
78	Impact of matrix swelling area propagation on the evolution of coal permeability under coupled multiple processes. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 18, 451-466.	2.1	48
79	A fully coupled coal deformation and compositional flow model for the control of the pre-mining coal seam gas extraction. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2014, 72, 138-148.	2.6	114
80	Direct observation of coal-gas interactions under thermal and mechanical loadings. <i>International Journal of Coal Geology</i> , 2014, 131, 274-287.	1.9	38
81	Why coal permeability changes under free swellings: New insights. <i>International Journal of Coal Geology</i> , 2014, 133, 35-46.	1.9	94
82	Evaluation of the pre-drained coal seam gas quality. <i>Fuel</i> , 2014, 130, 296-305.	3.4	91
83	Mechanical Behavior of Methane Infiltrated Coal: the Roles of Gas Desorption, Stress Level and Loading Rate. <i>Rock Mechanics and Rock Engineering</i> , 2013, 46, 945-958.	2.6	84
84	Permeability evolution during progressive deformation of intact coal and implications for instability in underground coal seams. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2013, 58, 34-45.	2.6	201
85	Combined effects of directional compaction, non-Darcy flow and anisotropic swelling on coal seam gas extraction. <i>International Journal of Coal Geology</i> , 2013, 109-110, 1-14.	1.9	75
86	Roles of coal heterogeneity on evolution of coal permeability under unconstrained boundary conditions. <i>Journal of Natural Gas Science and Engineering</i> , 2013, 15, 38-52.	2.1	52
87	An improved relative permeability model for coal reservoirs. <i>International Journal of Coal Geology</i> , 2013, 109-110, 45-57.	1.9	125
88	Impact of Various Parameters on the Production of Coalbed Methane. <i>SPE Journal</i> , 2013, 18, 910-923.	1.7	34
89	Surface force arising from adsorbed graphene oxide in alumina suspensions with different shape and size. <i>AIChE Journal</i> , 2013, 59, 3633-3641.	1.8	10
90	Modeling and Simulation of Moisture Effect on Gas Storage and Transport in Coal Seams. <i>Energy & Fuels</i> , 2012, 26, 1695-1706.	2.5	73

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91	Characteristic of anisotropic coal permeability and its impact on optimal design of multi-lateral well for coalbed methane production. <i>Journal of Petroleum Science and Engineering</i> , 2012, 88-89, 13-28.	2.1	70
92	A mechanistic model for permeability evolution in fractured sorbing media. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	55
93	Influence of the effective stress coefficient and sorption-induced strain on the evolution of coal permeability: Model development and analysis. <i>International Journal of Greenhouse Gas Control</i> , 2012, 8, 101-110.	2.3	136
94	Complex evolution of coal permeability during CO ₂ injection under variable temperatures. <i>International Journal of Greenhouse Gas Control</i> , 2012, 9, 281-293.	2.3	82
95	Optimizing enhanced coalbed methane recovery for unhindered production and CO ₂ injectivity. <i>International Journal of Greenhouse Gas Control</i> , 2012, 11, 86-97.	2.3	67
96	Effects of non-Darcy flow on the performance of coal seam gas wells. <i>International Journal of Coal Geology</i> , 2012, 93, 62-74.	1.9	114
97	Modeling and Upscaling of Binary Gas Coal Interactions in CO ₂ Enhanced Coalbed Methane Recovery. <i>Procedia Environmental Sciences</i> , 2012, 12, 926-939.	1.3	12
98	Impact of Rock Heterogeneity on Interactions of Microbial-Enhanced Oil Recovery Processes. <i>Transport in Porous Media</i> , 2012, 92, 373-396.	1.2	6
99	Effect of the effective stress coefficient and sorption-induced strain on the evolution of coal permeability: Experimental observations. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 1284-1293.	2.3	143
100	Interactions of multiple processes during CBM extraction: A critical review. <i>International Journal of Coal Geology</i> , 2011, 87, 175-189.	1.9	359
101	Impact of transition from local swelling to macro swelling on the evolution of coal permeability. <i>International Journal of Coal Geology</i> , 2011, 88, 31-40.	1.9	143
102	Evolution of coal permeability: Contribution of heterogeneous swelling processes. <i>International Journal of Coal Geology</i> , 2011, 88, 152-162.	1.9	73
103	Interactions of Microbial-Enhanced Oil Recovery Processes. <i>Transport in Porous Media</i> , 2011, 87, 77-104.	1.2	41
104	Permeability evolution in fractured coal: The roles of fracture geometry and water-content. <i>International Journal of Coal Geology</i> , 2011, 87, 13-25.	1.9	284
105	Permeability evolution of fluid-infiltrated coal containing discrete fractures. <i>International Journal of Coal Geology</i> , 2011, 85, 202-211.	1.9	113
106	A dual poroelastic model for CO ₂ -enhanced coalbed methane recovery. <i>International Journal of Coal Geology</i> , 2011, 86, 177-189.	1.9	124
107	Evolution of coal permeability from stress-controlled to displacement-controlled swelling conditions. <i>Fuel</i> , 2011, 90, 2987-2997.	3.4	156
108	Sensitivity simulation and analysis of CO ₂ injection for enhanced coalbed methane recovery. , 2011, , .		0

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109	Multiphysics of Coal-Gas Interactions: The Scientific Foundation for CBM Production and CO ₂ Storage in Coal. , 2010, , .		1
110	Impact of Rock Microstructures on the Supercritical CO ₂ Enhanced Gas Recovery. , 2010, , .		4
111	Linking gas-sorption induced changes in coal permeability to directional strains through a modulus reduction ratio. International Journal of Coal Geology, 2010, 83, 21-30.	1.9	136
112	Development of anisotropic permeability during coalbed methane production. Journal of Natural Gas Science and Engineering, 2010, 2, 197-210.	2.1	135
113	Dual poroelastic response of a coal seam to CO ₂ injection. International Journal of Greenhouse Gas Control, 2010, 4, 668-678.	2.3	193
114	Impact of CO ₂ injection and differential deformation on CO ₂ injectivity under in-situ stress conditions. International Journal of Coal Geology, 2010, 81, 97-108.	1.9	93
115	Evaluation of stress-controlled coal swelling processes. International Journal of Coal Geology, 2010, 83, 446-455.	1.9	137
116	On evaluating the stability of the Baiyan ancient landslide in the Three Gorges Reservoir area, Yangtze River: a geological history analysis. Environmental Geology, 2008, 55, 1699-1711.	1.2	10
117	How sorption-induced matrix deformation affects gas flow in coal seams: A new FE model. International Journal of Rock Mechanics and Minings Sciences, 2008, 45, 1226-1236.	2.6	413
118	Spontaneous Switching between Permeability Enhancement and Degradation in Fractures in Carbonate: Lumped Parameter Representation of Mechanically- and Chemically-Mediated Dissolution. Transport in Porous Media, 2006, 65, 385-409.	1.2	26
119	Dissolution-induced preferential flow in a limestone fracture. Journal of Contaminant Hydrology, 2005, 78, 53-70.	1.6	21
120	Simulations of a coupled hydro-chemo-mechanical system in rocks. Geotechnical and Geological Engineering, 2004, 22, 121-133.	0.8	7
121	Spontaneous switching of permeability changes in a limestone fracture with net dissolution. Water Resources Research, 2004, 40, .	1.7	106