

# Jianchao Cai

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8594065/publications.pdf>

Version: 2024-02-01

197  
papers

8,074  
citations

41344

49  
h-index

56724

83  
g-index

200  
all docs

200  
docs citations

200  
times ranked

4649  
citing authors

#	ARTICLE	IF	CITATIONS
1	Generalized Modeling of Spontaneous Imbibition Based on Hagen-Poiseuille Flow in Tortuous Capillaries with Variably Shaped Apertures. <i>Langmuir</i> , 2014, 30, 5142-5151.	3.5	475
2	Recent advances in carbon dioxide utilization. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 125, 109799.	16.4	369
3	A Discussion of the Effect of Tortuosity on the Capillary Imbibition in Porous Media. <i>Transport in Porous Media</i> , 2011, 89, 251-263.	2.6	365
4	Fractal Characterization of Spontaneous Co-current Imbibition in Porous Media. <i>Energy &amp; Fuels</i> , 2010, 24, 1860-1867.	5.1	300
5	An analytical model for spontaneous imbibition in fractal porous media including gravity. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012, 414, 228-233.	4.7	252
6	Progress in enhancement of CO <sub>2</sub> absorption by nanofluids: A mini review of mechanisms and current status. <i>Renewable Energy</i> , 2018, 118, 527-535.	8.9	252
7	Electrical conductivity models in saturated porous media: A review. <i>Earth-Science Reviews</i> , 2017, 171, 419-433.	9.1	219
8	Investigation on the pore structure and multifractal characteristics of tight oil reservoirs using NMR measurements: Permian Lucaogou Formation in Jimusaer Sag, Junggar Basin. <i>Marine and Petroleum Geology</i> , 2017, 86, 1067-1081.	3.3	212
9	Lucas-Washburn Equation-Based Modeling of Capillary-Driven Flow in Porous Systems. <i>Langmuir</i> , 2021, 37, 1623-1636.	3.5	165
10	An electrical conductivity model for fractal porous media. <i>Geophysical Research Letters</i> , 2015, 42, 4833-4840.	4.0	151
11	Recent developments on fractal-based approaches to nanofluids and nanoparticle aggregation. <i>International Journal of Heat and Mass Transfer</i> , 2017, 105, 623-637.	4.8	148
12	Fractal analysis of invasion depth of extraneous fluids in porous media. <i>Chemical Engineering Science</i> , 2010, 65, 5178-5186.	3.8	147
13	FRactal CHARACTERIZATION OF DYNAMIC FRACTURE NETWORK EXTENSION IN POROUS MEDIA. <i>Fractals</i> , 2017, 25, 1750023.	3.7	146
14	Shale gas transport model in 3D fractal porous media with variable pore sizes. <i>Marine and Petroleum Geology</i> , 2018, 98, 437-447.	3.3	122
15	Prediction and analysis of net ecosystem carbon exchange based on gradient boosting regression and random forest. <i>Applied Energy</i> , 2020, 262, 114566.	10.1	110
16	RECENT ADVANCES ON FRACTAL MODELING OF PERMEABILITY FOR FIBROUS POROUS MEDIA. <i>Fractals</i> , 2015, 23, 1540006.	3.7	109
17	Fractal dimension, lacunarity and succolarity analyses on CT images of reservoir rocks for permeability prediction. <i>Journal of Hydrology</i> , 2019, 579, 124198.	5.4	106
18	A fractal model for the starting pressure gradient for Bingham fluids in porous media. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 1402-1408.	4.8	104

#	ARTICLE	IF	CITATIONS
19	The critical factors for permeability-formation factor relation in reservoir rocks: Pore-throat ratio, tortuosity and connectivity. <i>Energy</i> , 2019, 188, 116051.	8.8	92
20	A simple permeability model for shale gas and key insights on relative importance of various transport mechanisms. <i>Fuel</i> , 2019, 252, 210-219.	6.4	89
21	On the Physical Properties of Apparent Two-Phase Fractal Porous Media. <i>Vadose Zone Journal</i> , 2009, 8, 177-186.	2.2	88
22	Kozeny-Carman constant of porous media: Insights from fractal-capillary imbibition theory. <i>Fuel</i> , 2018, 234, 1373-1379.	6.4	88
23	A NEW METHOD FOR CALCULATING FRACTAL DIMENSIONS OF POROUS MEDIA BASED ON PORE SIZE DISTRIBUTION. <i>Fractals</i> , 2018, 26, 1850006.	3.7	85
24	Laboratory Investigation Into the Formation and Dissociation Process of Gas Hydrate by Low-Field NMR Technique. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 3339-3346.	3.4	83
25	Analysis of seepage characters in fractal porous media. <i>International Journal of Heat and Mass Transfer</i> , 2009, 52, 3272-3278.	4.8	81
26	PREDICTION OF MAXIMUM PORE SIZE OF POROUS MEDIA BASED ON FRACTAL GEOMETRY. <i>Fractals</i> , 2010, 18, 417-423.	3.7	81
27	High-pressure methane adsorption behavior on deep shales: Experiments and modeling. <i>Physics of Fluids</i> , 2021, 33, .	4.0	80
28	The influence of salinity and mineral components on spontaneous imbibition in tight sandstone. <i>Fuel</i> , 2020, 269, 117087.	6.4	79
29	Microdistribution and mobility of water in gas shale: A theoretical and experimental study. <i>Marine and Petroleum Geology</i> , 2019, 102, 496-507.	3.3	76
30	An improved model for estimating the TOC in shale formations. <i>Marine and Petroleum Geology</i> , 2017, 83, 174-183.	3.3	74
31	Creeping microstructure and fractal permeability model of natural gas hydrate reservoir. <i>Marine and Petroleum Geology</i> , 2020, 115, 104282.	3.3	73
32	A simulation method for permeability of porous media based on multiple fractal model. <i>International Journal of Engineering Science</i> , 2015, 95, 76-84.	5.0	70
33	Research on Relative Permeability of Nanofibers with Capillary Pressure Effect by Means of Fractal-Monte Carlo Technique. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 6811-6817.	0.9	70
34	Spontaneous imbibition in shale: A review of recent advances. <i>Capillarity</i> , 2019, 2, 17-32.	2.2	70
35	FRACTAL CHARACTERIZATION OF TIGHT OIL RESERVOIR PORE STRUCTURE USING NUCLEAR MAGNETIC RESONANCE AND MERCURY INTRUSION POROSIMETRY. <i>Fractals</i> , 2018, 26, 1840017.	3.7	69
36	Screening improved recovery methods in tight-oil formations by injecting and producing through fractures. <i>International Journal of Heat and Mass Transfer</i> , 2018, 116, 977-993.	4.8	68

#	ARTICLE	IF	CITATIONS
37	Nanogeosciences: Research History, Current Status, and Development Trends. Journal of Nanoscience and Nanotechnology, 2017, 17, 5930-5965.	0.9	67
38	CO2-water-shale interaction induced shale microstructural alteration. Fuel, 2020, 263, 116642.	6.4	65
39	Estimation of gas-in-place content in coal and shale reservoirs: A process analysis method and its preliminary application. Fuel, 2020, 259, 116266.	6.4	61
40	Fractal characteristics of unsaturated sands and implications to relative permeability in hydrate-bearing sediments. Journal of Natural Gas Science and Engineering, 2019, 66, 11-17.	4.4	60
41	A fractal model of effective thermal conductivity for porous media with various liquid saturation. International Journal of Heat and Mass Transfer, 2019, 128, 1149-1156.	4.8	60
42	Rapid imbibition of water in fractures within unsaturated sedimentary rock. Advances in Water Resources, 2015, 77, 82-89.	3.8	59
43	The effects of solvent extraction on nanoporosity of marine-continental coal and mudstone. Fuel, 2019, 235, 72-84.	6.4	56
44	Removal of trace metals and improvement of dredged sediment dewaterability by bioleaching combined with Fenton-like reaction. Journal of Hazardous Materials, 2015, 288, 51-59.	12.4	55
45	A novel analytical solution for gas diffusion in multi-scale fuel cell porous media. Journal of Power Sources, 2017, 362, 73-79.	7.8	54
46	FRactal ANALYSIS OF FRACTURE INCREASING SPONTANEOUS IMBIBITION IN POROUS MEDIA WITH GAS-SATURATED. International Journal of Modern Physics C, 2013, 24, 1350056.	1.7	53
47	PREDICTION OF EFFECTIVE PERMEABILITY IN POROUS MEDIA BASED ON SPONTANEOUS IMBIBITION EFFECT. International Journal of Modern Physics C, 2012, 23, 1250054.	1.7	52
48	An analysis of the radial flow in the heterogeneous porous media based on fractal and constructural tree networks. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 6471-6483.	2.6	51
49	Investigation of Organic Related Pores in Unconventional Reservoir and Its Quantitative Evaluation. Energy & Fuels, 2016, 30, 4699-4709.	5.1	51
50	Fractal and multifractal analysis of different hydraulic flow units based on micro-CT images. Journal of Natural Gas Science and Engineering, 2017, 48, 145-156.	4.4	51
51	Experimental investigation of gas mass transport and diffusion coefficients in porous media with nanopores. International Journal of Heat and Mass Transfer, 2017, 115, 566-579.	4.8	51
52	Fractal Model for Thermal Contact Conductance. Journal of Heat Transfer, 2008, 130, .	2.1	50
53	Multifractal analysis of pore structure of Middle Bakken formation using low temperature N2 adsorption and NMR measurements. Journal of Petroleum Science and Engineering, 2019, 176, 312-320.	4.2	50
54	Oil recovery by spontaneous imbibition from partially water-covered matrix blocks with different boundary conditions. Journal of Petroleum Science and Engineering, 2019, 172, 454-464.	4.2	50

#	ARTICLE	IF	CITATIONS
55	A NUMERICAL STUDY ON FRACTAL DIMENSIONS OF CURRENT STREAMLINES IN TWO-DIMENSIONAL AND THREE-DIMENSIONAL PORE FRACTAL MODELS OF POROUS MEDIA. <i>Fractals</i> , 2015, 23, 1540012.	3.7	45
56	Hydrate growth in quartzitic sands and implication of pore fractal characteristics to hydraulic, mechanical, and electrical properties of hydrate-bearing sediments. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 75, 103109.	4.4	44
57	Capillary imbibition and flow of wetting liquid in irregular capillaries: A 100-year review. <i>Advances in Colloid and Interface Science</i> , 2022, 304, 102654.	14.7	44
58	Adsorbed and Free Oil in Lacustrine Nanoporous Shale: A Theoretical Model and a Case Study. <i>Energy &amp; Fuels</i> , 2018, 32, 12247-12258.	5.1	41
59	Pore Fractal Characteristics of Hydrate-Bearing Sands and Implications to the Saturated Water Permeability. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018721.	3.4	41
60	NUMERICAL SIMULATION OF TORTUOSITY FOR FLUID FLOW IN TWO-DIMENSIONAL PORE FRACTAL MODELS OF POROUS MEDIA. <i>Fractals</i> , 2014, 22, 1450015.	3.7	40
61	Effects of microstructure on water imbibition in sandstones using X-ray computed tomography and neutron radiography. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 4963-4981.	3.4	39
62	Key factors of marine shale conductivity in southern China—Part II: The influence of pore system and the development direction of shale gas saturation models. <i>Journal of Petroleum Science and Engineering</i> , 2022, 209, 109516.	4.2	39
63	A mechanistic model for multi-scale sorption dynamics in shale. <i>Fuel</i> , 2018, 234, 996-1014.	6.4	36
64	Estimating thermal maturity of organic-rich shale from well logs: Case studies of two shale plays. <i>Fuel</i> , 2019, 235, 1195-1206.	6.4	35
65	Review on space energy. <i>Applied Energy</i> , 2021, 292, 116896.	10.1	35
66	Fractal analysis of the effect of particle aggregation distribution on thermal conductivity of nanofluids. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2016, 380, 2953-2956.	2.1	34
67	Estimating permeability of shale-gas reservoirs from porosity and rock compositions. <i>Geophysics</i> , 2018, 83, MR283-MR294.	2.6	34
68	The Characteristics and Evolution of Micro-Nano Scale Pores in Shales and Coals. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 6124-6138.	0.9	33
69	COMPARISON OF PORE FRACTAL CHARACTERISTICS BETWEEN MARINE AND CONTINENTAL SHALES. <i>Fractals</i> , 2018, 26, 1840016.	3.7	32
70	A fractal analysis of dropwise condensation heat transfer. <i>International Journal of Heat and Mass Transfer</i> , 2009, 52, 4823-4828.	4.8	31
71	A new model of pore structure typing based on fractal geometry. <i>Marine and Petroleum Geology</i> , 2018, 98, 291-305.	3.3	31
72	A FRACTAL MODEL FOR LOW-VELOCITY NON-DARCY FLOW IN TIGHT OIL RESERVOIRS CONSIDERING BOUNDARY-LAYER EFFECT. <i>Fractals</i> , 2018, 26, 1850077.	3.7	30

#	ARTICLE	IF	CITATIONS
73	Health Risks of Heavy Metals Uptake by Crops Grown in a Sewage Irrigation Area in China. Polish Journal of Environmental Studies, 2015, 24, 1379-1386.	1.2	29
74	Ant colony optimisation inversion of surface and borehole magnetic data under lithological constraints. Journal of Applied Geophysics, 2015, 112, 115-128.	2.1	28
75	A Study of the Role of Microfractures in Counter-Current Spontaneous Imbibition by Lattice Boltzmann Simulation. Transport in Porous Media, 2020, 133, 313-332.	2.6	28
76	A brief review of dynamic capillarity effect and its characteristics in low permeability and tight reservoirs. Journal of Petroleum Science and Engineering, 2020, 189, 106959.	4.2	28
77	Stabilized Energy Factorization Approach for Allen's Cahn Equation with Logarithmic Flory-Huggins Potential. Journal of Scientific Computing, 2020, 82, 1.	2.3	26
78	Symmetry is not always perfect. International Journal of Heat and Mass Transfer, 2010, 53, 5022-5024.	4.8	25
79	Saturated imbibition under the influence of gravity and geometry. Journal of Colloid and Interface Science, 2018, 521, 226-231.	9.4	25
80	Experimental and Fractal Characterization of the Microstructure of Shales from Sichuan Basin, China. Energy & Fuels, 2021, 35, 3899-3914.	5.1	25
81	Adsorption Characteristics and Thermodynamic Analysis of CH <sub>4</sub> and CO <sub>2</sub> on Continental and Marine Shale. Transport in Porous Media, 2021, 140, 763-788.	2.6	25
82	Detection of the deep crustal structure of the Qiangtang terrane using magnetotelluric imaging. Tectonophysics, 2015, 661, 180-189.	2.2	24
83	Lattice Boltzmann simulation and fractal analysis of effective thermal conductivity in porous media. Applied Thermal Engineering, 2020, 180, 115562.	6.0	24
84	Advances in multiscale numerical and experimental approaches for multiphysics problems in porous media. Advances in Geo-Energy Research, 2021, 5, 233-238.	6.0	24
85	Numerical Study of Lorentz Force Interaction with Micro Structure in Channel Flow. Energies, 2021, 14, 4286.	3.1	24
86	FRACTAL ANALYSIS OF STRESS SENSITIVITY OF PERMEABILITY IN POROUS MEDIA. Fractals, 2015, 23, 1550001.	3.7	23
87	FRACTAL CHARACTERISTICS OF PORES IN TAIYUAN FORMATION SHALE FROM HEDONG COAL FIELD, CHINA. Fractals, 2018, 26, 1840006.	3.7	23
88	A Feature-Based Stochastic Permeability of Shale: Part 1—Validation and Two-Phase Permeability in a Utica Shale Sample. Transport in Porous Media, 2019, 126, 527-560.	2.6	23
89	Heavy Metals in Wheat Grown in Sewage Irrigation: A Distribution and Prediction Model. Polish Journal of Environmental Studies, 2016, 25, 413-418.	1.2	21
90	The convective heat transfer of branched structure. International Journal of Heat and Mass Transfer, 2018, 116, 813-816.	4.8	20

#	ARTICLE	IF	CITATIONS
91	Recent advances in spontaneous imbibition with different boundary conditions. <i>Capillarity</i> , 2018, 1, 19-26.	2.2	20
92	A more generalized model for relative permeability prediction in unsaturated fractal porous media. <i>Journal of Natural Gas Science and Engineering</i> , 2019, 67, 82-92.	4.4	19
93	Energy stable and mass conservative numerical method for a generalized hydrodynamic phase-field model with different densities. <i>Physics of Fluids</i> , 2020, 32, .	4.0	19
94	Impact of coal ranks on dynamic gas flow: An experimental investigation. <i>Fuel</i> , 2017, 194, 17-26.	6.4	18
95	AN INTRODUCTION TO FRACTAL-BASED APPROACHES IN UNCONVENTIONAL RESERVOIRS " PART I. <i>Fractals</i> , 2018, 26, 1802001.	3.7	18
96	Effects of microstructural and petrophysical properties on spontaneous imbibition in tight sandstone reservoirs. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 96, 104225.	4.4	18
97	Influence of fractal surface roughness on multiphase flow behavior: Lattice Boltzmann simulation. <i>International Journal of Multiphase Flow</i> , 2021, 134, 103497.	3.4	17
98	Permeability estimation of tight sandstone from pore structure characterization. <i>Marine and Petroleum Geology</i> , 2022, 135, 105382.	3.3	17
99	Controlling Factor Analysis of Microstructural Property and Storage Capacity of Deep Longmaxi Formation Shale in Sichuan Basin. <i>Energy &amp; Fuels</i> , 2021, 35, 20092-20102.	5.1	17
100	Impacts of gas properties and transport mechanisms on the permeability of shale at pore and core scale. <i>Energy</i> , 2022, 244, 122707.	8.8	17
101	Permeability Evolution at Various Pressure Gradients in Natural Gas Hydrate Reservoir at the Shenhu Area in the South China Sea. <i>Energies</i> , 2019, 12, 3688.	3.1	16
102	Scaling of Countercurrent Imbibition in 2D Matrix Blocks With Different Boundary Conditions. <i>SPE Journal</i> , 2019, 24, 1179-1191.	3.1	16
103	Capillary Pressure Curve Determination Based on a 2D Cross-Section Analysis Via Fractal Geometry: A Bridge Between 2D and 3D Pore Structure of Porous Media. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 2352-2367.	3.4	16
104	AN INTRODUCTION TO FLOW AND TRANSPORT IN FRACTAL MODELS OF POROUS MEDIA: PART I. <i>Fractals</i> , 2014, 22, 1402001.	3.7	15
105	A UNIFIED FRACTAL MODEL FOR PERMEABILITY COEFFICIENT OF UNSATURATED SOIL. <i>Fractals</i> , 2019, 27, 1940012.	3.7	15
106	Fractal analyses on saturation exponent in Archie's law for electrical properties of hydrate-bearing porous media. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 107642.	4.2	15
107	Fractal analysis of spontaneous imbibition mechanism in fractured-porous dual media reservoir. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2013, 62, 014701.	0.5	15
108	Magnetotelluric Imaging of the Zhangzhou Basin Geothermal Zone, Southeastern China. <i>Energies</i> , 2018, 11, 2170.	3.1	14

#	ARTICLE	IF	CITATIONS
109	A Feature-Based Stochastic Permeability of Shale: Part 2“Predicting Field-Scale Permeability. Transport in Porous Media, 2019, 126, 561-578.	2.6	14
110	The dynamic effect in capillary pressure during the displacement process in ultra-low permeability sandstone reservoirs. Capillarity, 2018, 1, 11-18.	2.2	14
111	Fractal Analysis of Pore Structure Differences Between Shale and Sandstone Based on the Nitrogen Adsorption Method. Natural Resources Research, 2022, 31, 1759-1773.	4.7	14
112	Analysis of transient flow and starting pressure gradient of power-law fluid in fractal porous media. International Journal of Modern Physics C, 2015, 26, 1550045.	1.7	13
113	Influence of Capillarity on Relative Permeability in Fractional Flows. Water Resources Research, 2020, 56, e2020WR027624.	4.2	13
114	Experimental and Numerical Study on the Anisotropic and Nonlinear Gas Flow Behavior of a Single Coal Fracture under Loading. Energy & Fuels, 2020, 34, 4230-4242.	5.1	13
115	Key factors of marine shale conductivity in southern China“Part I: The influence factors other than porosity. Journal of Petroleum Science and Engineering, 2021, 205, 108698.	4.2	13
116	Nanoporous Structure and Gas Occurrence of Organic-Rich Shales. Journal of Nanoscience and Nanotechnology, 2017, 17, 6942-6950.	0.9	12
117	An improved pulse sequence and inversion algorithm of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml19" display="inline" overflow="scroll" altimg="si1.gif" > \langle \text{mml:mrow} > \langle \text{mml:mi} > T < / \text{mml:mi} > < / \text{mml:mrow} > \langle \text{mml:mrow} > \langle \text{mml:mn} > 2 < / \text{mml:mn} > < / \text{mml:mrow} > < / \text{mml:math} \rangle$ spectrum. Computer Physics Communications, 2017, 212, 82-89.	7.5	12
118	Micro-Nanopore Structure and Fractal Characteristics of Tight Sandstone Gas Reservoirs in the Eastern Ordos Basin, China. Journal of Nanoscience and Nanotechnology, 2021, 21, 234-245.	0.9	12
119	Effects of Fracture Characteristics on Spontaneous Imbibition in a Tight Reservoir. Energy & Fuels, 2021, 35, 15995-16006.	5.1	12
120	Effects of grain shape and packing pattern on spontaneous imbibition under different boundary conditions: Pore-scale simulation. Journal of Hydrology, 2022, 607, 127484.	5.4	12
121	Experiments and phase-field simulation of counter-current imbibition in porous media with different pore structure. Journal of Hydrology, 2022, 608, 127670.	5.4	12
122	An implementation of differential search algorithm (DSA) for inversion of surface wave data. Journal of Applied Geophysics, 2014, 111, 334-345.	2.1	11
123	Recent Advances in Flow and Transport Properties of Unconventional Reservoirs. Energies, 2019, 12, 1865.	3.1	11
124	A Mathematical Model for Determining Oil Migration Characteristics in Low-Permeability Porous Media Based on Fractal Theory. Transport in Porous Media, 2019, 129, 633-652.	2.6	10
125	Prediction of new vortices in single-phase nanofluid due to dipole interaction. Journal of Thermal Analysis and Calorimetry, 2022, 147, 461-475.	3.6	10
126	FRactal Analyses of the Shape Factor in Kozeny“Carmen Equation for Hydraulic Permeability in Hydrate-Bearing Sediments. Fractals, 2021, 29, .	3.7	10



#	ARTICLE	IF	CITATIONS
127	Influence of Pore Morphology on Permeability through Digital Rock Modeling: New Insights from the Euler Number and Shape Factor. <i>Energy &amp; Fuels</i> , 2022, 36, 7519-7530.	5.1	10
128	A self-similarity model for dielectric constant of porous ultra low- $\kappa$ dielectrics. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 5377-5382.	2.8	9
129	AN ANALYSIS OF MINE WATER INRUSH BASED ON FRACTAL AND NON-DARCY SEEPAGE THEORY. <i>Fractals</i> , 2014, 22, 1440008.	3.7	9
130	A model for transient flow in porous media embedded with randomly distributed tree-shaped fractal networks. <i>International Journal of Modern Physics B</i> , 2015, 29, 1550135.	2.0	9
131	AN INTRODUCTION TO FLOW AND TRANSPORT IN FRACTAL MODELS OF POROUS MEDIA: PART II. <i>Fractals</i> , 2015, 23, 1502001.	3.7	9
132	Inversion of borehole magnetic data for prospecting deep-buried minerals in areas with near-surface magnetic distortions: a case study from the Daye iron-ore deposit in Hubei, central China. <i>Near Surface Geophysics</i> , 2017, 15, 298-310.	1.2	9
133	A Fractal Approach for Predicting Unsaturated Hydraulic Conductivity of Deformable Clay. <i>Geofluids</i> , 2019, 2019, 1-9.	0.7	9
134	Fractal analysis of shape factor for matrix-fracture transfer function in fractured reservoirs. <i>Oil and Gas Science and Technology</i> , 2020, 75, 47.	1.4	9
135	A Digital Twin for Unconventional Reservoirs: A Multiscale Modeling and Algorithm to Investigate Complex Mechanisms. <i>Geofluids</i> , 2020, 2020, 1-12.	0.7	9
136	Experimental Investigation of Spontaneous Imbibition of Water into Hydrate Sediments Using Nuclear Magnetic Resonance Method. <i>Energies</i> , 2020, 13, 445.	3.1	9
137	Pore-scale heterogeneity of tight gas sandstone: Origins and impacts. <i>Journal of Natural Gas Science and Engineering</i> , 2021, , 104248.	4.4	9
138	A new semi-analytical method for calculating well productivity near discrete fractures. <i>Journal of Natural Gas Science and Engineering</i> , 2018, 57, 216-223.	4.4	8
139	Unsteady flow to a partially penetrating pumping well with wellbore storage in a dual-permeability confined aquifer. <i>Journal of Hydrology</i> , 2020, 591, 125345.	5.4	8
140	A fractal-based approach to evaluate the effect of microstructure on the permeability of two-dimensional porous media. <i>Applied Geochemistry</i> , 2021, 131, 105013.	3.0	8
141	Full-Scale and Multi-Method Combined Characterization of Micro/Nano Pores in Organic Shale. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 6634-6644.	0.9	7
142	Emerging Advances in Petrophysics: Porous Media Characterization and Modeling of Multiphase Flow. <i>Energies</i> , 2019, 12, 282.	3.1	7
143	Microscopic Studies of Immiscible Displacement Behavior in Interconnected Fractures and Cavities. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2019, 141, .	2.3	7
144	A Pore Network Approach to Study Throat Size Effect on the Permeability of Reconstructed Porous Media. <i>Water (Switzerland)</i> , 2022, 14, 77.	2.7	7

#	ARTICLE	IF	CITATIONS
145	ANALYSIS ON UNSTEADY FLOW FOR POWER-LAW FLUIDS IN DUAL FRACTAL MEDIA. <i>Journal of Porous Media</i> , 2017, 20, 1071-1086.	1.9	6
146	Permeability of Fractured Shale and Two-Phase Relative Permeability in Fractures. , 2019, , 105-132.		6
147	Oscillations of free surface at the edge of short capillary tubes. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 591, 124572.	4.7	6
148	A Comprehensive Review of Factors Affecting Dynamic Capillary Effect in Two-Phase Flow. <i>Transport in Porous Media</i> , 2022, 144, 33-54.	2.6	6
149	Dielectric constant of porous ultra low-k dielectrics by fractal-Monte Carlo simulations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 1978-1982.	2.1	5
150	An algorithm Walktrap-SPM for detecting overlapping community structure. <i>International Journal of Modern Physics B</i> , 2017, 31, 1750121.	2.0	5
151	A Practical Method to Compensate for the Effect of Echo Spacing on the Shale NMR T <sub>2</sub> Spectrum. <i>Earth and Space Science</i> , 2019, 6, 1489-1497.	2.6	5
152	FRACTAL MODELS FOR GAS-WATER TRANSPORT IN SHALE POROUS MEDIA CONSIDERING WETTING CHARACTERISTICS. <i>Fractals</i> , 2020, 28, 2050138.	3.7	5
153	Semi-analytical model for pumping tests in discretely fractured aquifers. <i>Journal of Hydrology</i> , 2021, 593, 125737.	5.4	5
154	Simulation of coal microstructure characteristics under temperature-pressure coupling based on micro-computer tomography. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 91, 103906.	4.4	5
155	A HIERARCHICAL MODEL FOR MULTI-PHASE FRACTAL MEDIA. <i>Fractals</i> , 2010, 18, 53-64.	3.7	4
156	An analysis of fractal dimension and tortuosity based on 2D numerical reconstruction model of reservoir rocks. <i>Interpretation</i> , 2019, 7, SJ1-SJ6.	1.1	4
157	Numerical Investigation for Three-Dimensional Multiscale Fracture Networks Based on a Coupled Hybrid Model. <i>Energies</i> , 2021, 14, 6354.	3.1	4
158	Chemical Potential-Based Modeling of Shale Gas Transport. <i>Geofluids</i> , 2021, 2021, 1-16.	0.7	4
159	A FRACTAL APPROACH TO SPONTANEOUS IMBIBITION HEIGHT IN NATURAL POROUS MEDIA. <i>International Journal of Modern Physics C</i> , 2013, 24, 1350063.	1.7	3
160	Stable Casein-Hydroxypropyl Cellulose Complexes at Low pH. <i>Journal of Food Quality</i> , 2016, 39, 292-300.	2.6	3
161	Nano Sulfur-Coated Diatomite for Enhanced Chromate Removal by Sulfide Reduction. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 6686-6691.	0.9	3
162	A Coupled Model of Two-Phase Fluid Flow and Heat Transfer to Transient Temperature Distribution and Seepage Characteristics for Water-Flooding Production Well with Multiple Pay Zones. <i>Energies</i> , 2019, 12, 1854.	3.1	3

#	ARTICLE	IF	CITATIONS
163	Advances in Modelling of Heat and Mass Transfer in Porous Materials. Advances in Materials Science and Engineering, 2019, 2019, 1-2.	1.8	3
164	Subsurface temperature prediction by means of the coefficient correction method of the optimal temperature: A case study in the Xiongâ€™an New Area, China. Geophysics, 2022, 87, B269-B285.	2.6	3
165	A unified effective medium modeling framework for quantitative characterization of hydrate reservoirs. Geophysics, 2022, 87, MR219-MR234.	2.6	3
166	Polymer Brushes: Promising Platforms for Adsorptive Removal of Heavy Metal Ions from Aqueous Solution. Journal of Nanoscience and Nanotechnology, 2017, 17, 5966-5979.	0.9	2
167	Characterization of Petrophysical Properties in Tight Sandstone Reservoirs. , 2019, , 37-59.		2
168	Multifractal Analysis of Pore Structure of Tight Oil Reservoirs Using Low-Field NMR Measurements. , 2019, , 61-82.		2
169	Dynamic Gas Flow in Coals and Its Evaluation. , 2019, , 277-300.		2
170	A brief introduction to flow and transport in fractal porous media. , 2021, , 1-10.		2
171	Pore-Scale Modelling of Three-Phase Capillary Pressure Curves Directly in Uniformly Wet Rock Images. Geofluids, 2021, 2021, 1-15.	0.7	2
172	Fractal structural parameters from images: Fractal dimension, lacunarity, and succolarity. , 2021, , 11-24.		2
173	Transport property and application of tree-shaped network. , 2021, , 141-163.		2
174	A fractal model for the relative permeability prediction of hydrate-bearing sediments. Scientia Sinica: Physica, Mechanica Et Astronomica, 2019, 49, 034614.	0.4	2
175	Transport Phenomena in Porous Media and Fractal Geometry. Journal of Chemistry, 2015, 2015, 1-2.	1.9	1
176	A Special Issue on Emerging Nanogeosciences Nanogeosciences: A Revolutionary Challenge in Geosciences. Journal of Nanoscience and Nanotechnology, 2017, 17, 5919-5929.	0.9	1
177	PREFACE: ENERGY ISSUES IN CARBON CAPTURE. International Journal of Energy for A Clean Environment, 2018, 19, v-vii.	1.1	1
178	Fractal analysis of polymer electrolyte fuel cell performance influenced by rough contact between microporous layer and catalyst layer. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 2792-2798.	2.3	1
179	Microscale flow and separation process analysis in the nanoporous crystal layer. , 2018, , 175-206.		1
180	Editorial to the Special Issue: Modeling and Characterization of Low Permeability (Tight) and Nanoporous Reservoirs. Transport in Porous Media, 2019, 126, 523-525.	2.6	1

#	ARTICLE	IF	CITATIONS
181	Fractal analysis on conductive heat transfer in porous media. , 2021, , 119-139.		1
182	Tortuosity in two-dimensional and three-dimensional fractal porous media: A numerical analysis. , 2021, , 25-36.		1
183	Hydraulic fracturing of unconventional reservoirs aided by simulation technologies. , 2022, , 107-141.		1
184	Capillarity in porous media: Recent advances and challenges. Oil and Gas Science and Technology, 2021, 76, E3.	1.4	1
185	Recent Advances in Multiscale Petrophysics Characterization and Multiphase Flow in Unconventional Reservoirs. Energies, 2022, 15, 2874.	3.1	1
186	Analytical Time-Dependent Shape Factor for Counter-Current Imbibition in Fractal Fractured Reservoirs. SPE Journal, 2022, 27, 3783-3801.	3.1	1
187	Response to "Comments on the "On the Physical Properties of Apparent Two-Phase Fractal Porous Medium" Vadose Zone Journal, 2010, 9, 194.	2.2	0
188	A synthetic study of SNMR tomography with complex data. , 2015, , .		0
189	Analysis of Spontaneous Imbibition in Carbon Nanotube. , 2018, , 793-798.		0
190	Modeling for mass transport of porous nanofibers using a fractal approach. , 2018, , 153-173.		0
191	Modeling of capillary-driven flow in nanoporous media. , 2018, , 139-151.		0
192	Investigation and Quantitative Evaluation of Organic-Related Pores in Unconventional Reservoirs. , 2019, , 83-103.		0
193	Fractal characteristics of pore structure and its impact on adsorption and flow behaviors in shale. , 2021, , 37-77.		0
194	Electrical conductivity modeling in fractal non-saturated porous media. , 2018, , .		0
195	CO2 Capture via Nanofluids. , 2019, , 479-489.		0
196	Pore-scale characterization and fractal analysis for gas migration mechanisms in shale gas reservoirs. , 2022, , 1-27.		0
197	Application of few-shot semisupervised deep learning in organic matter content logging evaluation. , 2022, , 197-218.		0