

Fanhua Zeng

List of Publications by Year in descending order

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133
papers

2,862
citations

172207

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all docs

135
docs citations

135
times ranked

1707
citing authors

#	ARTICLE	IF	CITATIONS
1	A critical review of the CO ₂ huff 'n' puff process for enhanced heavy oil recovery. Fuel, 2018, 215, 813-824.	3.4	157
2	Conventional models and artificial intelligence-based models for energy consumption forecasting: A review. Journal of Petroleum Science and Engineering, 2019, 181, 106187.	2.1	131
3	Characteristics of oil distributions in forced and spontaneous imbibition of tight oil reservoir. Fuel, 2018, 224, 280-288.	3.4	112
4	Enhanced light oil recovery from tight formations through CO ₂ huff 'n' puff processes. Fuel, 2015, 154, 35-44.	3.4	108
5	Performance evaluation of CO ₂ flooding process in tight oil reservoir via experimental and numerical simulation studies. Fuel, 2019, 236, 730-746.	3.4	106
6	Daily natural gas consumption forecasting via the application of a novel hybrid model. Applied Energy, 2019, 250, 358-368.	5.1	92
7	Feasibility study of CO ₂ huff 'n' puff process to enhance heavy oil recovery via long core experiments. Applied Energy, 2019, 236, 526-539.	5.1	80
8	Foamy oil flow in heavy oil-solvent systems tested by pressure depletion in a sandpack. Fuel, 2016, 171, 210-223.	3.4	75
9	Composite linear flow model for multi-fractured horizontal wells in tight sand reservoirs with the threshold pressure gradient. Journal of Petroleum Science and Engineering, 2018, 165, 890-912.	2.1	68
10	A semi-analytical model for multi-stage fractured horizontal wells. Journal of Hydrology, 2013, 507, 201-212.	2.3	55
11	Rheological properties study of foam fracturing fluid using CO ₂ and surfactant. Chemical Engineering Science, 2017, 170, 720-730.	1.9	55
12	Composite linear flow model for multi-fractured horizontal wells in heterogeneous shale reservoir. Journal of Natural Gas Science and Engineering, 2017, 38, 527-548.	2.1	53
13	A new solvent-based enhanced heavy oil recovery method: Cyclic production with continuous solvent injection. Fuel, 2014, 115, 426-433.	3.4	52
14	Study of cyclic CO ₂ injection for low-pressure light oil recovery under reservoir conditions. Fuel, 2016, 174, 296-306.	3.4	52
15	A New Diminishing Interface Method for Determining the Minimum Miscibility Pressures of Light Oil-CO ₂ Systems in Bulk Phase and Nanopores. Energy & Fuels, 2017, 31, 12021-12034.	2.5	51
16	Experimental Study of Formation Damage Caused by Complete Water Vaporization and Salt Precipitation in Sandstone Reservoirs. Transport in Porous Media, 2015, 107, 205-218.	1.2	49
17	Experimental study on foamy oil behavior using a heavy oil-methane system in the bulk phase. Journal of Petroleum Science and Engineering, 2017, 158, 309-321.	2.1	47
18	A review of experimental methods for determining the Oil-Gas minimum miscibility pressures. Journal of Petroleum Science and Engineering, 2019, 183, 106366.	2.1	46

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19	Study on the Adsorption, Diffusion and Permeation Selectivity of Shale Gas in Organics. <i>Energies</i> , 2017, 10, 142.	1.6	43
20	Improving Steam-Assisted Gravity Drainage performance in oil sands with a top water zone using polymer injection and the fishbone well pattern. <i>Fuel</i> , 2016, 184, 449-465.	3.4	39
21	A Critical Review of the Solvent-Based Heavy Oil Recovery Methods. , 2014, , .		38
22	CO2 flooding strategy to enhance heavy oil recovery. <i>Petroleum</i> , 2017, 3, 68-78.	1.3	38
23	An Experimental Study of the Post-CHOPS Cyclic Solvent Injection Process. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2015, 137, .	1.4	35
24	Kinetic mechanics of the reactions between HCl/HF acid mixtures and sandstone minerals. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 34, 792-802.	2.1	34
25	Experimental studies on CO2 foam performance in the tight cores. <i>Journal of Petroleum Science and Engineering</i> , 2019, 175, 1136-1149.	2.1	34
26	Determining CO2 diffusion coefficient in heavy oil in bulk phase and in porous media using experimental and mathematical modeling methods. <i>Fuel</i> , 2020, 263, 116205.	3.4	34
27	Cleaner coal and greener oil production: An integrated CCUS approach in Yanchang Petroleum Group. <i>International Journal of Greenhouse Gas Control</i> , 2017, 62, 13-22.	2.3	33
28	Short-Term Forecasting of Natural Gas Consumption Using Factor Selection Algorithm and Optimized Support Vector Regression. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2019, 141, .	1.4	32
29	The optimal hydraulic fracture geometry under non-Darcy flow effects. <i>Journal of Petroleum Science and Engineering</i> , 2010, 72, 143-157.	2.1	31
30	Daily Natural Gas Load Forecasting Based on a Hybrid Deep Learning Model. <i>Energies</i> , 2019, 12, 218.	1.6	31
31	Gasflooding-assisted cyclic solvent injection (GA-CSI) for enhancing heavy oil recovery. <i>Fuel</i> , 2015, 140, 344-353.	3.4	30
32	Semianalytical Model for Reservoirs With Forchheimer's Non-Darcy Flow. <i>SPE Reservoir Evaluation and Engineering</i> , 2008, 11, 280-291.	1.1	26
33	Simulation of CO2-Oil Minimum Miscibility Pressure (MMP) for CO2 Enhanced Oil Recovery (EOR) using Neural Networks. <i>Energy Procedia</i> , 2013, 37, 6877-6884.	1.8	26
34	Modeling of heterogeneous reservoirs with damaged hydraulic fractures. <i>Journal of Hydrology</i> , 2019, 574, 774-793.	2.3	25
35	Forecasting the daily natural gas consumption with an accurate white-box model. <i>Energy</i> , 2021, 232, 121036.	4.5	24
36	Effect of Degree of Branching on the Mechanism of Hyperbranched Polymer To Establish the Residual Resistance Factor in High-Permeability Porous Media. <i>Energy & Fuels</i> , 2016, 30, 5576-5584.	2.5	23

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37	A comparison study between N-Solv method and cyclic hot solvent injection (CHSI) method. Journal of Petroleum Science and Engineering, 2019, 173, 258-268.	2.1	23
38	Application of predicted bubble-rising velocities for estimating the minimum miscibility pressures of the light crude oil-CO ₂ systems with the rising bubble apparatus. Fuel, 2018, 220, 412-419.	3.4	22
39	Semi-analytical solutions to one-dimensional advection-diffusion equations with variable diffusion coefficient and variable flow velocity. Applied Mathematics and Computation, 2013, 221, 268-281.	1.4	21
40	A circular solvent chamber model for simulating the VAPEX heavy oil recovery process. Journal of Petroleum Science and Engineering, 2014, 118, 27-39.	2.1	20
41	A correlation of steam chamber size and temperature falloff in the early-period of the SAGD Process. Fuel, 2015, 148, 168-177.	3.4	20
42	Optimizing the pressure decline rate on the cyclic solvent injection process for enhanced heavy oil recovery. Journal of Petroleum Science and Engineering, 2016, 145, 629-639.	2.1	20
43	Analytical solutions for multi-stage fractured shale gas reservoirs with damaged fractures and stimulated reservoir volumes. Journal of Petroleum Science and Engineering, 2020, 187, 106686.	2.1	20
44	Lab-on-a-chip systems in imbibition processes: A review and applications/issues for studying tight formations. Fuel, 2021, 306, 121603.	3.4	20
45	Nonlinear simulation of miscible displacements with concentration-dependent diffusion coefficient in homogeneous porous media. Chemical Engineering Science, 2017, 172, 528-544.	1.9	19
46	Experimental and mathematical modeling studies on foamy oil stability using a heavy oil-CO ₂ system under reservoir conditions. Fuel, 2020, 264, 116771.	3.4	19
47	Pressure Pulsing Cyclic Solvent Injection (PP-CSI): A New Way to Enhance the Recovery of Heavy Oil through Solvent-Based Enhanced Oil Recovery Techniques. , 2013, , .		18
48	Comparison analyses between the linear and non-linear pressure-decline methods in cyclic solvent injection (CSI) process for heavy oil recovery. Fuel, 2018, 224, 442-450.	3.4	18
49	Experimental study on foamy oil flow behavior of a heavy oil-N ₂ system under reservoir condition. Fuel, 2020, 265, 116949.	3.4	18
50	Data complexity of daily natural gas consumption: Measurement and impact on forecasting performance. Energy, 2022, 238, 122090.	4.5	18
51	Preparation and properties of hyperbranched polymer containing functionalized Nano-SiO ₂ for low-moderate permeability reservoirs. Russian Journal of Applied Chemistry, 2016, 89, 1681-1693.	0.1	17
52	Pressure transient analysis for vertical fractured wells with fishbone fracture patterns. Journal of Natural Gas Science and Engineering, 2018, 52, 187-201.	2.1	17
53	Investigation of concentration-dependent diffusion on frontal instabilities and mass transfer in homogeneous porous media. Canadian Journal of Chemical Engineering, 2018, 96, 323-338.	0.9	17
54	Viability of carbonated water injection (CWI) as a means of secondary oil recovery in heavy oil systems in presence and absence of wormholes: Microfluidic experiments. Fuel, 2019, 249, 286-293.	3.4	17

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55	Detecting CO ₂ leakage in vertical wellbore through temperature logging. <i>Fuel</i> , 2012, 94, 374-385.	3.4	16
56	Optimizing Cyclic CO ₂ Injection for Low- permeability Oil Reservoirs through Experimental Study. , 2013, , .		16
57	The material balance equation for fractured vuggy gas reservoirs with bottom water-drive combining stress and gravity effects. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 44, 96-108.	2.1	16
58	Characterization of gas-oil flow in Cyclic Solvent Injection (CSI) for heavy oil recovery. <i>Journal of Petroleum Science and Engineering</i> , 2017, 152, 639-652.	2.1	15
59	Study on salt precipitation induced by formation brine flow and its effect on a high-salinity tight gas reservoir. <i>Journal of Petroleum Science and Engineering</i> , 2019, 183, 106384.	2.1	15
60	Short-term load forecasting using detrend singular spectrum fluctuation analysis. <i>Energy</i> , 2022, 256, 124722.	4.5	15
61	Gas well production analysis with non-Darcy flow and real-gas PVT behavior. <i>Journal of Petroleum Science and Engineering</i> , 2007, 59, 169-182.	2.1	14
62	Evaluation of the hybrid process of electrical resistive heating and solvent injection through numerical simulations. <i>Fuel</i> , 2013, 105, 119-127.	3.4	14
63	Hybrid Hyperbranched Polymer Based on Modified Nano-SiO ₂ for Enhanced Oil Recovery. <i>Chemistry Letters</i> , 2016, 45, 1189-1191.	0.7	14
64	Investigation of dynamical properties of methane in slit-like quartz pores using molecular simulation. <i>RSC Advances</i> , 2018, 8, 33798-33816.	1.7	14
65	Using transient temperature analysis to evaluate steam circulation in SAGD start-up processes. <i>Journal of Petroleum Science and Engineering</i> , 2012, 100, 131-145.	2.1	13
66	An Experimental Study of the Post-CHOPS Cyclic Solvent Injection Process. , 2013, , .		13
67	Fluid behavior of gas condensate system with water vapor. <i>Fluid Phase Equilibria</i> , 2017, 438, 67-75.	1.4	13
68	Experimental and material balance equations analyses of cyclic solvent injection based on a large 3D physical model. <i>Fuel</i> , 2018, 215, 915-927.	3.4	13
69	Miscible displacements with concentration-dependent diffusion and velocity-induced dispersion in porous media. <i>Journal of Petroleum Science and Engineering</i> , 2017, 159, 344-359.	2.1	13
70	Experimental study on pressure control strategies for improving waterflooding potentials in a heavy oil-methane system. <i>Journal of Petroleum Science and Engineering</i> , 2017, 149, 126-137.	2.1	12
71	Experimental investigation of cyclic solvent injection based on mixture solvent of carbon dioxide and propane. <i>Fuel</i> , 2018, 225, 646-654.	3.4	11
72	Characterization of Foamy Oil and Gas/Oil Two-Phase Flow in Porous Media for a Heavy Oil/Methane System. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2019, 141, .	1.4	11

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73	Experimental study on the temperature effects of foamy oil flow in porous media. Fuel, 2020, 271, 117649.	3.4	11
74	Upscaling Study of Vapor Extraction Process Through Numerical Simulation. Transport in Porous Media, 2012, 95, 697-715.	1.2	10
75	Study of the Non-Equilibrium PVT Properties of Methane- and Propane-Heavy Oil Systems. , 2015, , .		10
76	A semi-analytical model for hydraulically fractured horizontal wells with stress-sensitive conductivities. Environmental Earth Sciences, 2016, 75, 1.	1.3	10
77	Production analysis of multifractured horizontal wells with composite models: Influence of complex heterogeneity. Journal of Hydrology, 2020, 583, 124542.	2.3	10
78	Dynamic solvent process (DSP) for enhancing heavy oil recovery. Canadian Journal of Chemical Engineering, 2015, 93, 832-841.	0.9	9
79	Upscaling study of the cyclic solvent injection process for post-chops reservoirs through numerical simulation. Canadian Journal of Chemical Engineering, 2016, 94, 1402-1412.	0.9	9
80	Numerical Simulation Study on Steam-Assisted Gravity Drainage Performance in a Heavy Oil Reservoir with a Bottom Water Zone. Energies, 2017, 10, 1999.	1.6	9
81	Estimation of Shale Intrinsic Permeability with Process-Based Pore Network Modeling Approach. Transport in Porous Media, 2018, 125, 127-148.	1.2	9
82	Enhanced Vapor Extraction through Foamy-oil flow. , 2013, , .		8
83	Analytical Model for Multifractured Horizontal Wells in Heterogeneous Shale Reservoirs. , 2016, , .		8
84	Experimental Investigation of the Damage Mechanisms of Drilling Mud in Fractured Tight gas Reservoir. Journal of Energy Resources Technology, Transactions of the ASME, 2019, 141, .	1.4	8
85	Guidelines for Economic Design of Multistage Hydraulic Fracturing, Yanchang Tight Formation, Ordos Basin. Natural Resources Research, 2020, 29, 1413-1426.	2.2	8
86	Experimental and numerical study of non-equilibrium dissolution and exsolution behavior of CO ₂ in a heavy oil system utilizing Hele-Shaw-like visual cell. Fuel, 2020, 270, 117501.	3.4	8
87	A novel visualization approach for foamy oil non-equilibrium phase behavior study of solvent/live heavy oil systems. Fuel, 2020, 272, 117648.	3.4	8
88	Prediction of Adsorption Isotherms of Multicomponent Gas Mixtures in Tight Porous Media by the Oil-Gas-Adsorption Three-Phase Vacancy Solution Model. Energy & Fuels, 2018, 32, 12166-12173.	2.5	7
89	Numerical simulation study on characterization of foamy oil behavior in heavy oil/propane system. Fuel, 2020, 262, 116559.	3.4	7
90	The effect of salt precipitation on the petrophysical properties and the adsorption capacity of shale matrix based on the porous structure reconstruction. Fuel, 2022, 310, 122287.	3.4	7

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91	Upscaling Study of Vapour Extraction Process through Numerical Simulation. , 2012, , .		6
92	Interaction of Dendrimer-Based Polymer with Sodium Dodecyl Benzenesulfonate: Characterization and Effect on Properties of Composites. Energy & Fuels, 2016, 30, 9362-9371.	2.5	6
93	A Comparison of Thermal Models for Temperature Profiles in Gas-Lift Wells. Energies, 2018, 11, 489.	1.6	6
94	Control of viscous fingering and mixing in miscible displacements with timeâ€dependent rates. AIChE Journal, 2019, 65, 360-371.	1.8	6
95	Feasibility Analysis and Optimal Design of Acidizing of Coalbed Methane Wells. Journal of Energy Resources Technology, Transactions of the ASME, 2019, 141, .	1.4	6
96	Upscaling Study of Cyclic Solvent Injection Process for Post-CHOPS Reservoirs through Numerical Simulation. , 2014, , .		5
97	Application of Genetic Algorithm (GA) in History Matching of the Vapour Extraction (VAPEX) Heavy Oil Recovery Process. Natural Resources Research, 2015, 24, 221-237.	2.2	5
98	Comparison Study of Two Different Methods on the Localised Enkf on SAGD Processes. , 2016, , .		5
99	The temperature-based localization for the application of EnKF on automatic history matching of the SAGD process. Computational Geosciences, 2016, 20, 187-212.	1.2	5
100	Laboratory measurements of solubility and swelling factor for CO ₂ /Brine and CO ₂ /heavy oil binary systems under lowâ€medium pressure and temperature. Canadian Journal of Chemical Engineering, 2019, 97, 2137-2145.	0.9	5
101	Inversing fracture parameters using early-time production data for fractured wells. Inverse Problems in Science and Engineering, 2020, 28, 674-694.	1.2	5
102	A semi-analytical mathematical model for the pressure transient analysis of multiple fractured horizontal well with secondary fractures. Journal of Petroleum Science and Engineering, 2022, 208, 109444.	2.1	5
103	A systematic integrated approach for waterflooding optimization. Journal of Petroleum Science and Engineering, 2013, 112, 129-138.	2.1	4
104	Gasflooding-Assisted Cyclic Solvent Injection (GA-CSI) for Enhancing Heavy Oil Recovery. , 2014, , .		4
105	Effects of Concentration-Dependent Diffusion on Mass Transfer and Frontal Instability in Solvent-Based Processes. , 2017, , .		4
106	Transient-Rate Analysis of Stress-Sensitive Hydraulic Fractures: Considering the Geomechanical Effect in Anisotropic Shale. SPE Reservoir Evaluation and Engineering, 2018, 21, 863-888.	1.1	4
107	An Empirical Model to Estimate Sweep Efficiency of a Surfactant-Alternating-Gas Foam Process in Heterogeneous Reservoirs. Journal of Energy Resources Technology, Transactions of the ASME, 2019, 141, .	1.4	4
108	Experimental analysis of optimal viscosity for optimizing foamy oil behavior in the porous media. Fuel, 2020, 262, 116602.	3.4	4

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109	Imbibition into Capillaries with Irregular Cross Sections: A Modified Imbibition Equation for Both Liquid-Gas and Liquid-Liquid Systems. <i>Transport in Porous Media</i> , 2020, 135, 633-658.	1.2	4
110	Phase-field simulations of precursor film in microcapillary imbibition for liquid-liquid systems. <i>International Journal of Multiphase Flow</i> , 2021, 144, 103789.	1.6	4
111	Experimental and numerical studies on non-equilibrium gaseous solvent dissolution in heavy oil: A continuum-scale approach based on bubble-scale dissolution behaviors. <i>Fuel</i> , 2022, 307, 121851.	3.4	4
112	Pressure Transient Behaviors of Vertical Fractured Wells With Asymmetric Fracture Patterns. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2020, 142, .	1.4	4
113	Experimental study on the feasibility of nitrogen huff-n-puff in a heavy oil reservoir. <i>Chemical Engineering Research and Design</i> , 2022, 184, 513-523.	2.7	4
114	Influence of Crankcase Oil Properties on Low-Speed Pre-Ignition Encountered in a Highly-Boosted Gasoline Direct Injection Engine. <i>SAE International Journal of Fuels and Lubricants</i> , 0, 9, 603-611.	0.2	3
115	Experimental and numerical studies of non-equilibrium solvent exsolution behavior and foamy oil stability under quiescent and convective conditions in a visualized porous media. <i>Fuel</i> , 2021, 291, 120146.	3.4	3
116	A Condensation Heating Model for Evaluating Early-Period SAGD Performance. <i>Transport in Porous Media</i> , 2014, 104, 363-383.	1.2	2
117	A Composite Model for Multi-Stage Fractured Horizontal Wells in Heterogeneous Reservoirs. , 2016, , .		2
118	Gas Adsorption Modeling in Multi-Scale Pore Structures of Shale. , 2018, , .		2
119	Solvent temperature: An injection condition to bring multiple changes in the heavy oil exploitation process based on the cyclic solvent injection (CSI) recovery method. <i>Energy Science and Engineering</i> , 2020, 8, 661-676.	1.9	2
120	Numerical Simulation Investigation on Foamy Oil Behavior for a System of Heavy Oil-Mixture Solvent in Porous Media. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2021, 143, .	1.4	2
121	Numerical and Orthogonal Study on Optimization Analysis of Structure Parameters of Bubble Breaker for Electrical Submersible Pump System. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2022, 144, .	1.4	2
122	An up-scaling approach for vapour extraction process in heavy oil reservoirs. <i>International Journal of Oil, Gas and Coal Technology</i> , 2015, 10, 60.	0.1	1
123	Semi-analytical Modeling of Multi-stage Fractured Horizontal Wells Coupled with Geomechanics: Considering Hydraulic Fracture Stress-sensitivity and Shale Anisotropy (Russian). , 2016, , .		1
124	Modeling of Foamy-Oil Flow in Solvent-Based Recovery Processes. , 2016, , .		1
125	An Optimal Injection Scheme for Maximizing Oil Recovery in CO2 Miscible Flooding. , 2017, , .		1
126	Analytical attractive functions and their derivatives in bulk and nanoconfined pores. <i>Canadian Journal of Chemical Engineering</i> , 2020, 98, 566-582.	0.9	1

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127	Tee-SVX: Enhanced Oil Flow Rate in Solvent Vapor Extraction Process. Natural Resources Research, 2012, 21, 83-93.	2.2	0
128	A Post-“Cold Production Solvent Vapor Extraction (SVX) Process Performance Evaluation by Numerical Simulation. Petroleum Science and Technology, 2015, 33, 1053-1061.	0.7	0
129	Semi-analytical Modeling of Multi-stage Fractured Horizontal Wells Coupled with Geomechanics: Considering Hydraulic Fracture Stress-sensitivity and Shale Anisotropy. , 2016, , .		0
130	Suppressing Frontal Instabilities and Stabilizing Miscible Displacements with Time-Dependent Rates for Improved Oil Recovery. , 2018, , .		0
131	Saturation-based localization within EnKF approach for history matching in SAGD processes. Fuel, 2020, 276, 118056.	3.4	0
132	Semianalytical model of complex fracture growth in vertical wells based on boundary element theory. Journal of Petroleum Science and Engineering, 2021, 208, 109801.	2.1	0
133	Experimental study on the effect of pressure decline rate on foamy oil flow characteristics in a heavy oil- CO_2 - CH_3H_8 system. Canadian Journal of Chemical Engineering, 2022, 100, 2707-2717.	0.9	0