Tayfun

List of Publications by Year in descending order

249 papers	6,981 citations	53751 45 h-index	102432 66 g-index
250 all docs	250 docs citations	250 times ranked	3517 citing authors

#	ARTICLE	IF	CITATIONS
1	Wettability alteration: A comprehensive review of materials/methods and testing the selected ones on heavy-oil containing oil-wet systems. Advances in Colloid and Interface Science, 2015, 220, 54-77.	7.0	224
2	Status of electromagnetic heating for enhanced heavy oil/bitumen recovery and future prospects: A review. Applied Energy, 2015, 151, 206-226.	5.1	216
3	SAGD laboratory experimental and numerical simulation studies: A review of current status and future issues. Journal of Petroleum Science and Engineering, 2009, 68, 135-150.	2.1	160
4	Development of mature oil fields â€" A review. Journal of Petroleum Science and Engineering, 2007, 57, 221-246.	2.1	154
5	Effects of fractal surface roughness and lithology on single and multiphase flow in a single fracture: An experimental investigation. International Journal of Multiphase Flow, 2015, 68, 40-58.	1.6	123
6	Viscosity reduction of heavy oil/bitumen using micro- and nano-metal particles during aqueous and non-aqueous thermal applications. Journal of Petroleum Science and Engineering, 2014, 119, 210-220.	2.1	122
7	A grain based modeling study of mineralogical factors affecting strength, elastic behavior and micro fracture development during compression tests in granites. Engineering Fracture Mechanics, 2015, 147, 261-275.	2.0	120
8	Hot water generation for oil sands processing from enhanced geothermal systems: Process simulation for different hydraulic fracturing scenarios. Applied Energy, 2014, 113, 524-547.	5.1	112
9	Experimental and visual analysis of single-phase flow through rough fracture replicas. International Journal of Rock Mechanics and Minings Sciences, 2015, 73, 139-155.	2.6	102
10	Evaluation of EOR methods for heavy-oil recovery in naturally fractured reservoirs. Journal of Petroleum Science and Engineering, 2003, 37, 25-37.	2.1	95
11	Fractal characteristics of rocks fractured under tension. Theoretical and Applied Fracture Mechanics, 2003, 39, 73-88.	2.1	95
12	Scaling of Cocurrent and Countercurrent Capillary Imbibition for Surfactant and Polymer Injection in Naturally Fractured Reservoirs. SPE Journal, 2001, 6, 465-478.	1.7	93
13	A developed smart technique to predict minimum miscible pressureâ€"eor implications. Canadian Journal of Chemical Engineering, 2013, 91, 1325-1337.	0.9	92
14	In-Situ Upgrading of Heavy Oil/Bitumen During Steam Injection by Use of Metal Nanoparticles: A Study on In-Situ Catalysis and Catalyst Transportation. SPE Reservoir Evaluation and Engineering, 2013, 16, 333-344.	1.1	90
15	Dynamics of Capillary Imbibition When Surfactant, Polymer, and Hot Water Are Used as Aqueous Phase for Oil Recovery. Journal of Colloid and Interface Science, 2002, 246, 203-213.	5.0	85
16	A Review of Permeability-Prediction Methods for Carbonate Reservoirs Using Well-Log Data. SPE Reservoir Evaluation and Engineering, 2004, 7, 75-88.	1.1	84
17	Quantification of Natural Fracture Surfaces Using Fractal Geometry. Mathematical Geosciences, 1998, 30, 971-998.	0.9	80
18	Enhancement of the efficiency of in situ combustion technique for heavy-oil recovery by application of nickel ions. Fuel, 2013, 105, 397-407.	3.4	80

#	Article	IF	Citations
19	A grain based modeling study of fracture branching during compression tests in granites. International Journal of Rock Mechanics and Minings Sciences, 2015, 77, 152-162.	2.6	77
20	Effective fracture network permeability of geothermal reservoirs. Geothermics, 2011, 40, 25-38.	1.5	76
21	Temperature effect on heavy-oil recovery by imbibition in fractured reservoirs. Journal of Petroleum Science and Engineering, 1996, 14, 197-208.	2.1	69
22	Pore-scale studies of spontaneous imbibition into oil-saturated porous media. Physical Review E, 2008, 77, 066311.	0.8	69
23	Potential for enhanced geothermal systems in Alberta, Canada. Energy, 2014, 69, 578-591.	4.5	66
24	Oil recovery by counter-current spontaneous imbibition: Effects of matrix shape factor, gravity, IFT, oil viscosity, wettability, and rock type. Journal of Petroleum Science and Engineering, 2007, 59, 106-122.	2.1	63
25	Use of nano-metal particles as catalyst under electromagnetic heating for in-situ heavy oil recovery. Journal of Petroleum Science and Engineering, 2013, 112, 258-265.	2.1	62
26	Experimental and visual analysis of co- and counter-current spontaneous imbibition for different viscosity ratios, interfacial tensions, and wettabilities. Journal of Petroleum Science and Engineering, 2010, 70, 214-228.	2.1	61
27	Quantitative and visual analysis of proppant transport in rough fractures. Journal of Natural Gas Science and Engineering, 2016, 33, 1291-1307.	2.1	61
28	A hybrid discrete/finite element modeling study of complex hydraulic fracture development for enhanced geothermal systems (EGS) in granitic basements. Geothermics, 2016, 64, 362-381.	1.5	59
29	Temperature effects on the heavy oil/water relative permeabilities of carbonate rocks. Journal of Petroleum Science and Engineering, 2007, 59, 27-42.	2.1	58
30	Influence of intensity and frequency of ultrasonic waves on capillary interaction and oil recovery from different rock types. Ultrasonics Sonochemistry, 2010, 17, 500-508.	3.8	57
31	Heavy oil and bitumen recovery by hot solvent injection. Journal of Petroleum Science and Engineering, 2011, 78, 637-645.	2.1	55
32	Mechanics of Heavy-Oil and Bitumen Recovery by Hot Solvent Injection. SPE Reservoir Evaluation and Engineering, 2012, 15, 182-194.	1.1	53
33	Effect of native and injected nano-particles on the efficiency of heavy oil recovery by radio frequency electromagnetic heating. Journal of Petroleum Science and Engineering, 2017, 153, 244-256.	2.1	53
34	Pore-Scale Investigation of the Matrixâ˜'Fracture Interaction During CO₂Injection in Naturally Fractured Oil Reservoirs. Energy & Fuels, 2010, 24, 1421-1430.	2.5	52
35	Mathematical modeling and field application of heavy oil recovery by Radio-Frequency Electromagnetic stimulation. Journal of Petroleum Science and Engineering, 2011, 78, 646-653.	2.1	50
36	Relationship between percolationâ€“fractal properties and permeability of 2-D fracture networks. International Journal of Rock Mechanics and Minings Sciences, 2013, 60, 353-362.	2.6	49

#	Article	IF	Citations
37	Asphaltene precipitation, flocculation and deposition during solvent injection at elevated temperatures for heavy oil recovery. Fuel, 2014, 124, 202-211.	3.4	49
38	Experimental and Numerical Simulation of Oil Recovery from Oil Shales by Electrical Heating. Energy & Fuels, 2008, 22, 3976-3985.	2.5	48
39	Analysis of capillary interaction and oil recovery under ultrasonic waves. Transport in Porous Media, 2007, 70, 231-255.	1.2	47
40	Numerical Simulation of Complex Fracture Network Development by Hydraulic Fracturing in Naturally Fractured Ultratight Formations. Journal of Energy Resources Technology, Transactions of the ASME, 2014, 136, .	1.4	47
41	Efficient oil displacement near the chamber edge in ES-SAGD. Journal of Petroleum Science and Engineering, 2014, 118, 99-113.	2.1	47
42	Optimal Application Conditions for Steam/Solvent Coinjection. SPE Reservoir Evaluation and Engineering, 2015, 18, 20-38.	1.1	47
43	Philosophy of EOR. Journal of Petroleum Science and Engineering, 2020, 188, 106930.	2.1	47
44	Oil Recovery and Sequestration Potential of Naturally Fractured Reservoirs During CO₂Injection. Energy & Fuels, 2009, 23, 4025-4036.	2.5	46
45	Kinetics of the In-Situ Upgrading of Heavy Oil by Nickel Nanoparticle Catalysts and Its Effect on Cyclic-Steam-Stimulation Recovery Factor. SPE Reservoir Evaluation and Engineering, 2014, 17, 355-364.	1.1	46
46	Effect of surface roughness and lithology on the waterâ€“gas and waterâ€“oil relative permeability ratios of oil-wet single fractures. International Journal of Multiphase Flow, 2015, 75, 68-81.	1.6	46
47	Comprehensive review on heavy-oil emulsions: Colloid science and practical applications. Chemical Engineering Science, 2020, 228, 115962.	1.9	45
48	Experimental and Numerical Modeling of Heavy-Oil Recovery by Electrical Heating. , 2008, , .		44
49	Effects of Nano Sized Metals on Viscosity Reduction of Heavy Oil/Bitumen During Thermal Applications. , 2010, , .		44
50	Wettability Alteration of Heavy-Oil-Bitumen-Containing Carbonates by Use of Solvents, High-pH Solutions, and Nano/Ionic Liquids. SPE Reservoir Evaluation and Engineering, 2017, 20, 363-371.	1.1	44
51	Fractal analysis of 2-D fracture networks of geothermal reservoirs in south-western Turkey. Journal of Volcanology and Geothermal Research, 2001, 112, 83-103.	0.8	43
52	Effect of injection parameters on proppant transport in rough vertical fractures: An experimental analysis on visual models. Journal of Petroleum Science and Engineering, 2019, 180, 380-395.	2.1	43
53	Laboratory and Field Scale Analysis of Steam Over Solvent Injection in Fractured Reservoirs (SOS-FR) for Heavy-Oil Recovery. , 2009, , .		41
54	Selection of proper enhanced oil recovery fluid for efficient matrix recovery in fractured oil reservoirs. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 223, 157-175.	2.3	40

#	Article	IF	Citations
55	Investigations on matrix recovery during steam injection into heavy-oil containing carbonate rocks. Journal of Petroleum Science and Engineering, 2007, 58, 259-274.	2.1	40
56	Effects of Electrical and Radio-Frequency Electromagnetic Heating on the Mass-Transfer Process during Miscible Injection for Heavy-Oil Recovery. Energy & Fuels, 2011, 25, 482-486.	2.5	40
57	High Temperature Density, Viscosity, and Interfacial Tension Measurements of Bitumenâ€“Pentaneâ€“Biodiesel and Process Water Mixtures. Journal of Chemical & Engineering Data, 2012, 57, 2878-2889.	1.0	40
58	Efficiency of diffusion controlled miscible displacement in fractured porous media. Transport in Porous Media, 2008, 71, 379-394.	1.2	39
59	Heavy-Oil Recovery in Naturally Fractured Reservoirs with Varying Wettability by Steam Solvent Co-Injection. , 2008, , .		39
60	Use of Nickel Nanoparticles for Promoting Aquathermolysis Reaction During Cyclic Steam Stimulation. SPE Journal, 2018, 23, 145-156.	1.7	39
61	A new computer-controlled surface-scanning device for measurement of fracture surface roughness. Computers and Geosciences, 2001, 27, 265-277.	2.0	38
62	Analysis of Oil Recovery by Spontaneous Imbibition of Surfactant Solution. Oil and Gas Science and Technology, 2005, 60, 697-710.	1.4	38
63	Pore-scale interfacial dynamics and oilâ€“water relative permeabilities of capillary driven counter-current flow in fractured porous media. Journal of Petroleum Science and Engineering, 2013, 103, 106-114.	2.1	37
64	Feasibility assessment of heavy-oil recovery by CO2 injection after cold production with sands: Lab-to-field scale modeling considering non-equilibrium foamy oil behavior. Applied Energy, 2017, 205, 615-625.	5.1	37
65	Steam-over-Solvent Injection in Fractured Reservoirs (SOS-FR) Technique as a New Approach for Heavy-Oil and Bitumen Recovery: An Overview of the Method. Energy & Fuels, 2011, 25, 4528-4539.	2.5	36
66	Performance Comparison of Novel Chemical Agents for Mitigating Water-Blocking Problem in Tight Gas Sandstones. SPE Reservoir Evaluation and Engineering, 2020, 23, 1150-1158.	1.1	36
67	Experimental investigation of combined electromagnetic heating and solvent-assisted gravity drainage for heavy oil recovery. Journal of Petroleum Science and Engineering, 2017, 154, 589-601.	2.1	35
68	Transmissivity of aligned and displaced tensile fractures in granitic rocks during cyclic loading. International Journal of Rock Mechanics and Minings Sciences, 2016, 87, 69-84.	2.6	34
69	Heavy-oil recovery improvement by additives to steam injection: Identifying underlying mechanisms and chemical selection through visual experiments. Journal of Petroleum Science and Engineering, 2020, 188, 106897.	2.1	34
70	Displacement of oil by different interfacial tension fluids under ultrasonic waves. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 316, 176-189.	2.3	33
71	Solvent Selection Criteria and Optimal Application Conditions for Heavy-Oil/Bitumen Recovery at Elevated Temperatures: A Review and Comparative Analysis. Journal of Energy Resources Technology, Transactions of the ASME, 2016, 138, .	1.4	33
72	A visual experimental study on proppants transport in rough vertical fractures. International Journal of Rock Mechanics and Minings Sciences, 2020, 134, 104446.	2.6	33

#	Article	IF	Citations
73	A review of the mechanics of heavy-oil recovery by steam injection with chemical additives. Journal of Petroleum Science and Engineering, 2022, 208, 109717.	2.1	33
74	Scaling capillary imbibition during static thermal and dynamic fracture flow conditions. Journal of Petroleum Science and Engineering, 2002, 33, 223-239.	2.1	32
75	ON THE APPLICATION OF METHODS USED TO CALCULATE THE FRACTAL DIMENSION OF FRACTURE SURFACES. Fractals, 2001, 09, 105-128.	1.8	31
76	Oil recovery performances of surfactant solutions by capillary imbibition. Journal of Colloid and Interface Science, 2005, 282, 162-175.	5.0	31
77	Effects of ultrasonic waves on the interfacial forces between oil and water. Ultrasonics Sonochemistry, 2008, 15, 274-278.	3.8	30
78	Use of Biodiesel as an Additive in Thermal Recovery of Heavy Oil and Bitumen. Journal of Canadian Petroleum Technology, 2010, 49, 43-48.	2.3	30
79	Design of Solvent-Assisted SAGD Processes in Heterogeneous Reservoirs Using Hybrid Optimization Techniques. Journal of Canadian Petroleum Technology, 2012, 51, 437-448.	2.3	30
80	A Comparative Study of Lost Circulation Materials. Energy Sources Part A Recovery, Utilization, and Environmental Effects, 2004, 26, 1043-1051.	0.5	29
81	Experimental and numerical modeling of the mass transfer between rock matrix and fracture. Chemical Engineering Journal, 2009, 146, 194-204.	6.6	29
82	Fluid-fluid interaction during miscible and immiscible displacement under ultrasonic waves. European Physical Journal B, 2007, 60, 447-462.	0.6	28
83	Diffusion Mass Transfer in Miscible Oil Recovery: Visual Experiments and Simulation. Transport in Porous Media, 2008, 74, 169-184.	1.2	28
84	A semi-analytical solution to optimize single-component solvent coinjection with steam during SAGD. Fuel, 2015, 144, 400-414.	3.4	28
85	Field-Scale Analysis of Heavy-Oil Recovery by Electrical Heating. SPE Reservoir Evaluation and Engineering, 2010, 13, 131-142.	1.1	27
86	Experimental Investigation of Wettability Alteration in Oil-Wet Reservoirs Containing Heavy Oil. SPE Reservoir Evaluation and Engineering, 2016, 19, 633-644.	1.1	27
87	A laboratory feasibility study of dilute surfactant injection for the Yibal field, Oman. Journal of Petroleum Science and Engineering, 2005, 48, 37-52.	2.1	26
88	Steam-Over-Solvent Injection in Fractured Reservoirs (SOS-FR) for Heavy-Oil Recovery: Experimental Analysis of the Mechanism. , 2009, , .		26
89	Hot Solvent Injection for Heavy Oil/Bitumen Recovery from Fractured Reservoirs: An Experimental Approach To Determine Optimal Application Conditions. Energy & Fuels, 2016, 30, 2780-2790.	2.5	26
90	Title is missing!. Transport in Porous Media, 2000, 40, 323-344.	1.2	25

#	Article	IF	Citations
91	Evaluation of the critical parameters in oil recovery from fractured chalks by surfactant injection. Journal of Petroleum Science and Engineering, 2006, 54, 43-54.	2.1	25
92	Effect of Temperature, Phase Change, and Chemical Additives on Wettability Alteration During Steam Applications in Sands and Carbonates. SPE Reservoir Evaluation and Engineering, 2020, 23, 292-310.	1.1	25
93	Pore-scale investigation of immiscible displacement process in porous media under high-frequency sound waves. Journal of Fluid Mechanics, 2011, 680, 336-360.	1.4	24
94	Stabilization of Nanometal Catalysts and Their Interaction with Oleic Phase in Porous Media during Enhanced Oil Recovery. Industrial & Engineering Chemistry Research, 2014, 53, 8464-8475.	1.8	24
95	Performance comparison of novel chemical agents in improving oil recovery from tight sands through spontaneous imbibition. Petroleum Science, 2020, 17, 409-418.	2.4	24
96	Reconsideration of Steam Additives to Improve Heavy-Oil Recovery Efficiency: Can New Generation Chemicals Be a Solution for Steam-Induced Unfavorable Wettability Alteration?. Energy & Fuels, 2020, 34, 8283-8300.	2.5	24
97	Efficiency Analysis of Greenhouse Gas Sequestration during Miscible CO2Injection in Fractured Oil Reservoirs. Environmental Science & Technology, 2008, 42, 5473-5479.	4.6	23
98	A Sensitivity Analysis for Effective Parameters on 2D Fracture-Network Permeability. SPE Reservoir Evaluation and Engineering, 2009, 12, 455-469.	1.1	23
99	Heavy Oil Production by Electromagnetic Heating in Hydraulically Fractured Wells. Energy & Fuels, 2014, 28, 5737-5744.	2.5	23
100	Field scale modeling of CHOPS and solvent/thermal based post CHOPS EOR applications considering non-equilibrium foamy oil behavior and realistic representation of wormholes. Journal of Petroleum Science and Engineering, 2016, 137, 144-156.	2.1	23
101	Use of new generation chemicals and nano materials in heavy-oil recovery: Visual analysis through micro fluidics experiments. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 529, 346-355.	2.3	23
102	Optimization of methane use in cyclic solvent injection for heavy-oil recovery after primary production through experimental and numerical studies. Fuel, 2018, 214, 457-470.	3.4	23
103	Effects of Ultrasonic Waves on Immiscible and Miscible Displacement in Porous Media. , 2005, , .		22
104	Effect of Ultrasonic Waves on the Capillary Imbibition Recovery of Oil. , 2005, , .		22
105	Bitumen Recovery by the Steam-Over-Solvent Injection in Fractured Reservoirs (SOS-FR) Method: An Experimental Study on Grosmont Carbonates. Energy & Fuels, 2013, 27, 6501-6517.	2.5	22
106	Field scale applicability and efficiency analysis of Steam-Over-Solvent Injection in Fractured Reservoirs (SOS-FR) method for heavy oil recovery. Journal of Petroleum Science and Engineering, 2011, 78, 338-346.	2.1	21
107	Effect of Fracture Roughness, Shear Displacement, Fluid Type, and Proppant on the Conductivity of a Single Fracture: A Visual and Quantitative Analysis. SPE Reservoir Evaluation and Engineering, 2017, 20, 446-470.	1.1	21
108	Effect of roughness on fluid flow and solute transport in a single fracture: A review of recent developments, current trends, and future research. Journal of Natural Gas Science and Engineering, 2021, 91, 103971.	2.1	21

#	Article	IF	Citations
109	Experimental Investigation of Bitumen Recovery From Fractured Carbonates Using Hot Solvents. Journal of Canadian Petroleum Technology, 2013, 52, 289-295.	2.3	20
110	Pore-Scale Investigations on the Dynamics of Gravity-Driven Steam-Displacement Process for Heavy-Oil Recovery and Development of Residual Oil Saturation: A 2D Visual Analysis. SPE Journal, 2016, 21, 1943-1959.	1.7	20
111	Unravelling transport in complex natural fractures with fractal geometry: A comprehensive review and new insights. Journal of Hydrology, 2020, 587, 124937.	2.3	20
112	Transportation and Interaction of Nano and Micro Size Metal Particles Injected to Improve Thermal Recovery of Heavy-Oil. , 2011, , .		19
113	An Approach to Model CHOPS (Cold Heavy Oil Production with Sand) and Post-CHOPS Applications. , 2012, , .		19
114	Laboratory scale experimental analysis of Steam-Over-Solvent injection in Fractured Reservoirs (SOS-FR) for heavy-oil recovery. Journal of Petroleum Science and Engineering, 2012, 84-85, 42-56.	2.1	19
115	Use of Carbon Dioxide and Hydrocarbon Solvents During the Method of Steam-Over-Solvent Injection in Fractured Reservoirs for Heavy-Oil Recovery From Sandstones and Carbonates. SPE Reservoir Evaluation and Engineering, 2014, 17, 286-301.	1.1	19
116	Fracture network modeling conditioned to pressure transient and tracer test dynamic data. Journal of Petroleum Science and Engineering, 2010, 75, 154-167.	2.1	18
117	Modelling of Cold Heavy-Oil Production With Sand For Subsequent Thermal/Solvent Injection Applications. Journal of Canadian Petroleum Technology, 2014, 53, 095-108.	2.3	18
118	Improved Modeling of Oil/Water Flow in Naturally Fractured Reservoirs Using Effective Fracture Relative Permeabilities. , 1993, , .		17
119	Lattice-Boltzmann simulation of solvent diffusion into oil-saturated porous media. Physical Review E, 2007, 76, 066309.	0.8	17
120	Experimental and Numerical Investigations of Borehole Ballooning in Rough Fractures. SPE Drilling and Completion, 2009, 24, 256-265.	0.9	17
121	Experimental Investigations on the Flow Dynamics and Abandonment Pressure for CO2 Sequestration and Oil Recovery in Artificially Fractured Cores. Journal of Canadian Petroleum Technology, 2010, 49, 22-27.	2.3	17
122	Visual analysis of diffusion process during oil recovery using a Hele-Shaw model with hydrocarbon solvents and thermal methods. Chemical Engineering Journal, 2012, 181-182, 557-569.	6.6	17
123	A Sensitivity Analysis of Cyclic Solvent Stimulation for Post-CHOPS EOR: Application on an Actual Field Case. SPE Economics and Management, 2016, 8, 078-089.	0.8	17
124	Retrieval of solvent injected during heavy-oil recovery: Pore scale micromodel experiments at variable temperature conditions. International Journal of Heat and Mass Transfer, 2017, 112, 837-849.	2.5	17
125	Analysis of counter-current gasâ€“water capillary imbibition transfer at different temperatures. Journal of Petroleum Science and Engineering, 2007, 55, 277-293.	2.1	16
126	Primary and Secondary Oil Recovery From Different-Wettability Rocks by Countercurrent Diffusion and Spontaneous Imbibition. SPE Reservoir Evaluation and Engineering, 2008, 11, 418-428.	1.1	16

#	Article	IF	Citations
127	Evaluation of steam injection potential and improving ongoing CO2 injection of the Bati Raman field, Turkey. Journal of Petroleum Science and Engineering, 2009, 68, 107-117.	2.1	16
128	Wettability Alteration of Heavy-Oil/Bitumen Containing Carbonates Using Solvents, high pH Solutions and Nano/Ionic Liquids. , 2015, , .		16
129	Low temperature air injection with solvents in heavy-oil containing naturally fractured reservoirs: Effects of matrix/fracture properties and temperature on recovery. Fuel, 2016, 179, 376-390.	3.4	16
130	Comprehensive methodology for chemicals and nano materials screening for heavy oil recovery using microemulsion characterization. Journal of Petroleum Science and Engineering, 2018, 171, 1099-1112.	2.1	16
131	Mitigating greenhouse gas intensity through new generation techniques during heavy oil recovery. Journal of Cleaner Production, 2021, 286, 124980.	4.6	16
132	Scanline Method to Determine the Fractal Nature of 2-D Fracture Networks. Mathematical Geosciences, 2002, 34, 647-670.	0.9	15
133	Investigations on Capillary and Viscous Displacement Under Ultrasonic Waves. Journal of Canadian Petroleum Technology, 2006, 45, .	2.3	15
134	BioDiesel as Additive in High Pressure and Temperature Steam Recovery of Heavy Oil and Bitumen. Oil and Gas Science and Technology, 2012, 67, 413-421.	1.4	15
135	Evaluation of Engineered Geothermal Systems as a Heat Source for Oil Sands Production in Northern Alberta. Natural Resources Research, 2014, 23, 247-265.	2.2	15
136	Effect of waterflooding history on the efficiency of fully miscible tertiary solvent injection and optimal design of water-alternating-gas process. Journal of Petroleum Science and Engineering, 2015, 130, 114-122.	2.1	15
137	Recovery Improvement by Chemical Additives to Steam Injection: Identifying Underlying Mechanisms Through Core and Visual Experiments. , 2018, , .		15
138	A visual experimental study: Resin-coated ceramic proppants transport within rough vertical models. Journal of Petroleum Science and Engineering, 2020, 191, 107142.	2.1	15
139	Wettability State and Phase Distributions During Steam Injection with and without Chemical Additives: An Experimental Analysis Using Visual Micromodels. SPE Reservoir Evaluation and Engineering, 2020, 23, 1133-1149.	1.1	15
140	Improvement of the Recovery Factor Using Nano-Metal Particles at the Late Stages of Cyclic Steam Stimulation. , 2015, , .		14
141	In-situ recovery of heavy-oil from fractured carbonate reservoirs: Optimization of steam-over-solvent injection method. Journal of Petroleum Science and Engineering, 2015, 130, 77-85.	2.1	14
142	Selection of New Generation Chemicals as Steam Additive for Cost Effective Heavy-Oil Recovery Applications. , 2017, , .		14
143	Efficiency Improvement of Heavy-Oil Recovery by Steam-Assisted Gravity Drainage Injection Using New Generation Chemicals. Energy & Fuels, 2020, 34, 4433-4447.	2.5	14
144	Effects of Fractal Fracture Surface Roughness on Borehole Ballooning. Vadose Zone Journal, 2009, 8, 250-257.	1.3	13

#	Article	IF	Citations
145	Miscible Interaction Between Matrix and Fracture: A Visualization and Simulation Study. SPE Reservoir Evaluation and Engineering, 2010, 13, 109-117.	1.1	13
146	Optimization of SAGD and solvent additive SAGD applications: Comparative analysis of optimization techniques with improved algorithm configuration. Journal of Petroleum Science and Engineering, 2012, 98-99, 61-68.	2.1	13
147	Numerical simulation of heavy-oil/bitumen recovery by solvent injection at elevated temperatures. Journal of Petroleum Science and Engineering, 2013, 110, 199-209.	2.1	13
148	Quantitative and visual characterization of asphaltenic components of heavy-oil after solvent interaction at different temperatures and pressures. Fluid Phase Equilibria, 2014, 366, 74-87.	1.4	13
149	Multi-stage hydraulic fracturing and radio-frequency electromagnetic radiation for heavy-oil production. Journal of Unconventional Oil and Gas Resources, 2015, 12, 15-22.	3.5	13
150	Gas (air)â€“heavy oil displacement in capillary media at high temperatures: A CFD approach to model microfluidics experiments. Chemical Engineering Science, 2016, 140, 299-308.	1.9	13
151	Fractal analysis of single-phase water and polymer solution flow at high rates in open and horizontally displaced rough fractures. International Journal of Rock Mechanics and Minings Sciences, 2017, 92, 54-71.	2.6	13
152	Impact of Divalent Ions on Heavy Oil Recovery by in situ Emulsification. Journal of Surfactants and Detergents, 2019, 22, 1371-1385.	1.0	13
153	OPTIMUM STEAM INJECTION STRATEGIES FOR NATURALLY FRACTURED RESERVOIRS. Petroleum Science and Technology, 2000, 18, 375-405.	0.7	12
154	Evaluation of Matrix-Fracture Imbibition Transfer Functions for Different Types of Oil, Rock and Aqueous Phase. , 2004, , .		12
155	Immiscible displacement of oil by water in consolidated porous media due to capillary imbibition under ultrasonic waves. Journal of the Acoustical Society of America, 2007, 122, 1539-1555.	0.5	12
156	Consideration of an effect of interfacial area between oil and CO2 on oil swelling. Journal of Petroleum Exploration and Production, 2014, 4, 105-112.	1.2	12
157	Modified Random Walkâ€“Particle Tracking method to model early time behavior of EOR and sequestration of CO 2 in naturally fractured oil reservoirs. Journal of Petroleum Science and Engineering, 2015, 127, 65-81.	2.1	12
158	Selection of Optimal Solvent Type for High-Temperature Solvent Applications in Heavy-Oil and Bitumen Recovery. Energy & Fuels, 2016, 30, 2563-2573.	2.5	12
159	A Critical Analysis of the Relationship Between Statistical- and Fractal-Fracture-Network Characteristics and Effective Fracture-Network Permeability. SPE Reservoir Evaluation and Engineering, 2016, 19, 494-510.	1.1	12
160	Pore scale visual investigations on solvent retrieval during oil recovery at elevated temperatures: A micromodel study. Chemical Engineering Research and Design, 2016, 106, 59-73.	2.7	12
161	Alteration of Interfacial Properties by Chemicals and Nanomaterials To Improve Heavy Oil Recovery at Elevated Temperatures. Energy & Fuels, 2017, 31, 11866-11883.	2.5	12
162	Dynamics of emulsion generation and stability during heavy oil displacement with chemicals and nanoparticles: Qualitative analysis using visual 2D data. Fuel, 2020, 270, 117502.	3.4	12

#	Article	IF	Citations
163	Evaluation of Matrix-Fracture Transfer Functions for Counter-Current Capillary Imbibition. Transport in Porous Media, 2009, 80, 17-56.	1.2	11
164	Changing interfacial tension and wettability using new generation chemicals and nano metal particles at elevated temperatures and pressures: An analysis through a new experimental design for heavy-oil recovery applications. Journal of Dispersion Science and Technology, 2019, 40, 1785-1794.	1.3	11
165	Initial screening of new generation chemicals using sandpack flooding tests for recovery improvement of gravity driven steam applications. Journal of Petroleum Science and Engineering, 2020, 194, 107462.	2.1	11
166	Experimental and visual analysis of diffusive mass transfer between matrix and fracture under static conditions. Journal of Petroleum Science and Engineering, 2010, 74, 31-40.	2.1	10
167	Design of Solvent-Assisted SAGD Processes in Heterogeneous Reservoirs Using Hybrid Optimization Techniques. , 2011, , .		10
168	Field-Scale Modeling of Tracer Injection in Naturally Fractured Reservoirs Using the Random-Walk Particle-Tracking Simulation. SPE Journal, 2012, 17, 580-592.	1.7	10
169	Drainage type oil and heavy-oil displacement in circular capillary tubes: Two- and three-phase flow characteristics and residual oil saturation development in the form of film at different temperatures. Journal of Petroleum Science and Engineering, 2014, 118, 61-73.	2.1	10
170	Selection of Proper Chemicals to Improve the Performance of Steam Based Thermal Applications in Sands and Carbonates. , 2016, , .		10
171	Laboratory Measurements and Numerical Simulation of Cyclic Solvent Stimulation with a Thermally Aided Solvent Retrieval Phase in the Presence of Wormholes after Cold Heavy Oil Production with Sand. Energy & Fuels, 2016, 30, 9181-9192.	2.5	10
172	Recovery Improvement of Gravity Driven Steam Applications Using New Generation Chemical Additives. , 2017, , .		10
173	Use of air to improve the efficiency of foamy flow and reservoir pressurization in heavy oil recovery. Journal of Petroleum Science and Engineering, 2018, 170, 166-176.	2.1	10
174	Optimal design of pickering emulsions for heavy-oil recovery improvement. Journal of Dispersion Science and Technology, 2020, 41, 2048-2062.	1.3	10
175	Determination of the effect of resin-coating on ceramic proppant settlement for optimal hydraulic fracturing applications. Powder Technology, 2020, 373, 109-117.	2.1	10
176	Generation of pickering emulsions by activating natural asphaltenes as nano materials: An experimental analysis for cost-effective heavy-oil recovery. Journal of Molecular Liquids, 2021, 339, 116759.	2.3	10
177	Capillary Interaction of Different Oleic and Aqueous Phases between Matrix and Fracture under Ultrasonic Waves (SPE94105). , 2005, , .		10
178	Characterization of Fracture Network System of the Midale Field. Journal of Canadian Petroleum Technology, 2009, 48, 30-39.	2.3	9
179	Combining solvent injection, electromagnetic heating, and hydraulic fracturing for multistage heavy oil recovery. Journal of Electromagnetic Waves and Applications, 2016, 30, 207-224.	1.0	9
180	Experimental Investigation of Combined Electromagnetic Heating and Solvent Assisted Gravity Drainage for Heavy Oil Recovery. , 2016, , .		9

#	Article	IF	Citations
181	Three dimensional visualization of solvent chamber growth during the VAPEX processes: An experimental approach using laser. Journal of Petroleum Science and Engineering, 2016, 142, 46-67.	2.1	9
182	Can water-alternating-solvent injection be an option for efficient heavy-oil recovery?: An experimental analysis for different reservoir conditions. Journal of Petroleum Science and Engineering, 2018, 170, 485-496.	2.1	9
183	Visual Analysis of SAGD with Chemical Additives. , 2019, , .		9
184	Can we generate stable pickering emulsions activating naturally occurring nanoparticles in the reservoir for cost effective heavy-oil recovery?. Fuel, 2021, 283, 118916.	3.4	9
185	Primary and Secondary Oil Recovery From Different Wettability Rocks by Countercurrent Diffusion and Spontaneous Imbibition. , 2006, , .		8
186	Effect of Ultrasonic Intensity and Frequency on Oil/Heavy-Oil Recovery from Different Wettability Rocks. , 2008, , .		8
187	Automatic fracture density update using smart well data and artificial neural networks. Computers and Geosciences, 2010, 36, 335-347.	2.0	8
188	Visual analysis of immiscible displacement processes in porous media under ultrasound effect. Physical Review E, 2011, 83, 056323.	0.8	8
189	Generating 3D Permeability Map of Fracture Networks Using Well, Outcrop, and Pressure-Transient Data. SPE Reservoir Evaluation and Engineering, 2011, 14, 215-224.	1.1	8
190	Modeling miscible injection in fractured porous media using random walk simulation. Chemical Engineering Science, 2012, 74, 93-104.	1.9	8
191	Selection of Optimal Solvent Type for High Temperature Solvent Applications in Heavy-Oil and Bitumen Recovery. , 2014, , .		8
192	Solvent-Selection Criteria Based on Diffusion Rate and Mixing Quality for Steam/Solvent Applications in Heavy-Oil and Bitumen Recovery. SPE Reservoir Evaluation and Engineering, 2016, 19, 620-632.	1.1	8
193	Efficiency of heavy-oil/bitumen recovery from fractured carbonates by hot-solvent injection. Journal of Petroleum Science and Engineering, 2018, 165, 752-764.	2.1	8
194	Effect of Temperature, Phase Change, and Chemical Additive on Wettability Alteration During Steam Applications in Sands and Carbonates. , 2018, , .		8
195	Stabilization of nickel nanoparticle suspensions with the aid of polymer and surfactant: static bottle tests and dynamic micromodel flow tests. Petroleum Science, 2020, 17, 1014-1024.	2.4	8
196	Capillary Interaction of Different Oleic and Aqueous Phases Between Matrix and Fracture Under Ultrasonic Waves. , 2005, , .		7
197	Clarifications on Oil/Heavy Oil Recovery Under Ultrasonic Radiation Through Core and 2D Visualization Experiments. Journal of Canadian Petroleum Technology, 2008, 47, .	2.3	7
198	Equivalent Fracture Network Permeability of Multilayer-Complex Naturally Fractured Reservoirs. Transport in Porous Media, 2012, 91, 339-362.	1.2	7

#	Article	IF	Citations
199	Quantitative and Visual Characterization of Asphaltenic Components of Heavy-Oil and Bitumen Samples after Solvent Interaction at Different Temperatures and Pressures. , 2013, , .		7
200	Field-Scale Deformation Analysis of Cyclic Solvent Stimulation in Thin Unconsolidated Heavy-Oil Reservoirs With Developed Wormhole Network. Journal of Canadian Petroleum Technology, 2015, 54, 341-350.	2.3	7
201	Bitumen Recovery from Carbonates by a Modified SOS-FR (Steam-Over-Solvent Injection in Fractured) Tj ETQq1 1 0.784314 rgBT /Ove	2.5	7
202	3-D visualization of diffusive and convective solvent transport processes in oil-saturated porous media using laser technology. Journal of Visualization, 2016, 19, 615-629.	1.1	7
203	Revisiting Kelvin equation and Pengâ€“Robinson equation of state for accurate modeling of hydrocarbon phase behavior in nano capillaries. Scientific Reports, 2021, 11, 6573.	1.6	7
204	Evaluation of Matrix-Fracture Transfer Functions for Countercurrent Capillary Imbibition. , 2005, , .		6
205	Effective Permeability Estimation for 2-D Fractal Permeability Fields. Mathematical Geosciences, 2006, 38, 33-50.	0.9	6
206	Biodiesel as Surfactant Additive in Steam Assisted Recovery of Heavy-Oil and Bitumen. , 2010, , .		6
207	Optimization of Solvent Additive SAGD Applications using Hybrid Optimization Techniques. , 2011, , .		6
208	Experimental Analysis of Heavy-Oil Recovery by Alternate Injection of Steam and Solvent (Hydrocarbon/CO2) in Unconsolidated Sand Reservoirs. Journal of Canadian Petroleum Technology, 2014, 53, 263-274.	2.3	6
209	Scaling of production data obtained from Random Walk Particle Tracking simulations in highly fractured porous media. Physica A: Statistical Mechanics and Its Applications, 2014, 405, 181-192.	1.2	6
210	Thermodynamics of Hydrocarbon Solvents at the Pore Scale During Hybrid Solvent-Thermal Application for Heavy-Oil Recovery. , 2018, , .		6
211	Experimental Study on the Effect of Injection Parameters on Proppant Transport in Rough Vertical Hydraulic Fractures. , 2018, , .		6
212	Revisiting Thomson equation for accurate modeling of pore scale thermodynamics of hydrocarbon solvents. Physics of Fluids, 2019, 31, 122004.	1.6	6
213	Testing the injection of air with methane as a new approach to reduce the cost of cold heavy oil recovery: An experimental analysis to determine optimal application conditions. Fuel, 2020, 265, 116954.	3.4	6
214	Thermodynamics of liquids in capillary medium. Journal of Fluid Mechanics, 2020, 905, .	1.4	6
215	Numerical Estimation of the Degree of Reservoir Permeability Heterogeneity Using Pressure Drawdown Tests. Transport in Porous Media, 2004, 57, 313-331.	1.2	5
216	Large scale applicability of the steam-over-solvent injection in fractured reservoirs (SOS-FR) method: Optimal operating conditions through numerical simulation. Journal of Petroleum Science and Engineering, 2014, 122, 497-506.	2.1	5

#	Article	IF	Citations
217	Field scale numerical modeling of low temperature air injection with propane for heavy-oil recovery from naturally fractured reservoirs. Fuel, 2015, 160, 140-152.	3.4	5
218	FRACTAL ASPECTS OF MISCIBLE DISPLACEMENT IN ROUGH FRACTURES: AN EXPERIMENTAL APPROACH. Fractals, 2015, 23, 1540005.	1.8	5
219	Multi-branched growth of fractures in shales for effective reservoir contact: A particle based distinct element modeling study. Journal of Natural Gas Science and Engineering, 2016, 35, 509-521.	2.1	5
220	Dynamics of diffusive and convective transport in porous media: A fractal analysis of 3-D images obtained by laser technology. Chaos, Solitons and Fractals, 2017, 95, 1-13.	2.5	5
221	Cost Effective EOR in Heavy-Oil Containing Sands by Gas Injection: Improvement of the Efficiency of Foamy Flow and Pressurization. , 2017, , .		5
222	Revisiting Thomson Equation for Accurate Modeling of Pore Scale Thermodynamics of Hydrocarbon Solvents. , 2017, , .		5
223	Microemulsion Flooding of Heavy Oil Using Biodiesel Under Cold Conditions. , 2018, , .		5
224	Use of Air with Methane in Cyclic Solvent Injection Applications for Improved Foam Stability and Cost Effective Heavy Oil Recovery. Energy & Fuels, 2020, 34, 278-293.	2.5	5
225	Underlying physics of heavy oil recovery by gas injection: An experimental parametric analysis when oil exists in the form of oil based emulsion. Chemical Engineering Research and Design, 2020, 163, 192-203.	2.7	5
226	ANALYSIS OF THE DISPLACEMENT IN FRACTAL LATTICES WITH DIFFERENT NUMBER OF GRIDS. Fractals, 2005, 13, 207-213.	1.8	4
227	Optimal Application Conditions for Heavy-Oil/Bitumen Recovery by Solvent Injection at Elevated Temperatures. , 2011, , .		4
228	Efficiency of Heavy Oil/Bitumen Recovery from Fractured Carbonates by Hot-Solvent Injection. , 2016, , .		4
229	An experimental study to determine suitable injection strategies for water-alternating-solvent process in green and brownfields. Journal of Petroleum Science and Engineering, 2018, 165, 136-150.	2.1	4
230	Mechanics of Foamy Oil during Methane-Based Cyclic Solvent Injection Process for Enhanced Heavy Oil Recovery: A Comprehensive Review. SPE Reservoir Evaluation and Engineering, 2020, 23, 1077-1092.	1.1	4
231	Wettability State and Phase Distributions during Steam Injection with and without Chemical Additives: An Experimental Analysis Using Visual Micro-Models. , 2020, , .		4
232	New Formulation of Tertiary Amines for Thermally Stable and Cost-Effective Chemical Additive: Synthesis Procedure and Displacement Tests for High-Temperature Tertiary Recovery in Steam Applications. SPE Journal, 2021, 26, 1572-1589.	1.7	4
233	Revisiting Kelvin Equation for Accurate Modeling of Pore Scale Thermodynamics of Different Solvent Gases. , 2019, , .		3
234	Propagation and Entrapment of Hydrocarbons in Porous Media under Capillarity Controlled Phase-Alteration Conditions: A Visual Microfluidics Analysis. ACS Applied Materials & Interfaces, 2021, 13, 27612-27621.	4.0	3

#	Article	IF	Citations
235	Viscous fingering during heavy-oil displacement by chemical solutions: Emulsion instability and partial-miscibility. Journal of Petroleum Science and Engineering, 2022, 209, 109954.	2.1	3
236	Improving Matrix Recovery Using Chemicals and Thermal Methods in Fractured Heavy-Oil Reservoirs. Petroleum Science and Technology, 2003, 21, 949-962.	0.7	2
237	Bitumen Recovery from Carbonates by Modified SOS-FR (Steam-Over-Solvent Injection in Fractured) Tj ETQq1 1 0.784314 rgBT /Over		2
238	Multilayer organic deposition on the rock surface with different wettabilities during solvent injection for heavy-oil recovery. Canadian Journal of Chemical Engineering, 2015, 93, 664-677.	0.9	2
239	Percolation characteristics of solvent invasion in rough fractures under miscible conditions. Journal of Contaminant Hydrology, 2017, 205, 25-36.	1.6	2
240	Numerical Modeling of Heavy-Oil Recovery Using Electromagnetic Radiation/Hydraulic Fracturing Considering Thermal Expansion Effect. Journal of Heat Transfer, 2018, 140, .	1.2	2
241	Use of Air with Different Solvents Mixtures for Improved Foam Stability and Cost Effective Heavy Oil Recovery. , 2018, , .		2
242	Effect of Wettability on Vaporization of Hydrocarbon Solvents in Nano Capillaries. , 2020, , .		2
243	Mechanics of SAGD Efficiency Improvement Using Combination of Chemicals: An Experimental Analysis through 2D Visual Models. SPE Reservoir Evaluation and Engineering, 2021, 24, 80-97.	1.1	2
244	Tertiary Recovery Improvement of Steam Injection Using Chemical Additives: Pore Scale Understanding of Challenges and Solutions Through Visual Experiments. , 2021, , .		2
245	A Review on the Use of Chemicals as Steam Additives for Thermal Oil Recovery Applications. Journal of Energy Resources Technology, Transactions of the ASME, 2022, 144, .	1.4	2
246	Experimental and Analytical Modeling of Gravity Drainage Dominated Heavy-Oil Recovery Under Non-Isothermal Conditions: A Microscale Approach. , 2011, , .		1
247	Diffusion and Dispersion Dominated Solvent Injection Processes in Oil Saturated Porous Media: 3-D Visualization Experiments Using Laser Technology. , 2014, , .		1
248	Modeling Heavy-Oil Recovery Using Electromagnetic Radiation/Hydraulic Fracturing Considering Adiabatic Effect and Thermal Expansion. , 2016, , .		1
249	New Formulation of Tertiary Amines for Thermally Stable and Cost-Effective Chemical Additive: Synthesis Procedure and Displacement Tests for High-Temperature Tertiary Recovery in Steam Applications. , 2020, , .		1