

# Sohrab Zendehboudi

## List of Publications by Year in descending order

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210  
papers

6,700  
citations

53794

45  
h-index

82547

72  
g-index

212  
all docs

212  
docs citations

212  
times ranked

4480  
citing authors

#	ARTICLE	IF	CITATIONS
1	A systematic review on CO <sub>2</sub> capture with ionic liquids: Current status and future prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 96, 502-525.	16.4	368
2	A Comprehensive Review on Emulsions and Emulsion Stability in Chemical and Energy Industries. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 281-309.	1.7	338
3	Applications of hybrid models in chemical, petroleum, and energy systems: A systematic review. <i>Applied Energy</i> , 2018, 228, 2539-2566.	10.1	238
4	Reservoir permeability prediction by neural networks combined with hybrid genetic algorithm and particle swarm optimization. <i>Geophysical Prospecting</i> , 2013, 61, 582-598.	1.9	179
5	A comprehensive review on Enhanced Oil Recovery by Water Alternating Gas (WAG) injection. <i>Fuel</i> , 2018, 227, 218-246.	6.4	174
6	A comprehensive review of asphaltene deposition in petroleum reservoirs: Theory, challenges, and tips. <i>Fuel</i> , 2019, 252, 753-791.	6.4	165
7	Asphaltene precipitation and deposition in oil reservoirs – Technical aspects, experimental and hybrid neural network predictive tools. <i>Chemical Engineering Research and Design</i> , 2014, 92, 857-875.	5.6	146
8	Nonionic Surfactant for Enhanced Oil Recovery from Carbonates: Adsorption Kinetics and Equilibrium. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 9894-9905.	3.7	143
9	Decision tree-based diagnosis of coronary artery disease: CART model. <i>Computer Methods and Programs in Biomedicine</i> , 2020, 192, 105400.	4.7	141
10	Prediction of Condensate-to-Gas Ratio for Retrograde Gas Condensate Reservoirs Using Artificial Neural Network with Particle Swarm Optimization. <i>Energy &amp; Fuels</i> , 2012, 26, 3432-3447.	5.1	137
11	Application of decision tree-based ensemble learning in the classification of breast cancer. <i>Computers in Biology and Medicine</i> , 2021, 128, 104089.	7.0	106
12	A new screening tool for evaluation of steamflooding performance in Naturally Fractured Carbonate Reservoirs. <i>Fuel</i> , 2013, 108, 502-514.	6.4	98
13	Comprehensive review of carbonated water injection for enhanced oil recovery. <i>Fuel</i> , 2019, 237, 1086-1107.	6.4	98
14	Effects of Salt and Surfactant on Interfacial Characteristics of Water/Oil Systems: Molecular Dynamic Simulations and Dissipative Particle Dynamics. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 8817-8834.	3.7	93
15	A developed smart technique to predict minimum miscible pressure – eor implications. <i>Canadian Journal of Chemical Engineering</i> , 2013, 91, 1325-1337.	1.7	92
16	Experimental study on adsorption of a new surfactant onto carbonate reservoir samples – application to EOR. <i>Canadian Journal of Chemical Engineering</i> , 2013, 91, 1439-1449.	1.7	86
17	Thermodynamic Investigation of Asphaltene Precipitation during Primary Oil Production: Laboratory and Smart Technique. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 6009-6031.	3.7	86
18	Current Status and Future Prospects of Membrane Bioreactors (MBRs) and Fouling Phenomena: A Systematic Review. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 32-58.	1.7	79

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19	A review on simulation of methane production from gas hydrate reservoirs: Molecular dynamics prospective. <i>Journal of Petroleum Science and Engineering</i> , 2017, 159, 754-772.	4.2	72
20	Dimensional Analysis and Scale-up of Immiscible Two-Phase Flow Displacement in Fractured Porous Media under Controlled Gravity Drainage. <i>Energy &amp; Fuels</i> , 2011, 25, 1731-1750.	5.1	67
21	Application of soft computing approaches for modeling saturation pressure of reservoir oils. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 20, 8-15.	4.4	66
22	Prediction of natural gas flow through chokes using support vector machine algorithm. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 18, 155-163.	4.4	62
23	A triterpenoid saponin as an environmental friendly and biodegradable clay swelling inhibitor. <i>Journal of Molecular Liquids</i> , 2017, 247, 269-280.	4.9	62
24	Primary evaluation of a natural surfactant for inhibiting clay swelling. <i>Journal of Petroleum Science and Engineering</i> , 2019, 178, 878-891.	4.2	60
25	New insights into methane hydrate dissociation: Utilization of molecular dynamics strategy. <i>Fuel</i> , 2019, 249, 264-276.	6.4	60
26	Novel methods predict equilibrium vapor methanol content during gas hydrate inhibition. <i>Journal of Natural Gas Science and Engineering</i> , 2013, 15, 69-75.	4.4	59
27	Integration of LSSVM technique with PSO to determine asphaltene deposition. <i>Journal of Petroleum Science and Engineering</i> , 2014, 124, 243-253.	4.2	59
28	Modeling investigation of low salinity water injection in sandstones and carbonates: Effect of Na <sup>+</sup> and SO <sub>4</sub> <sup>2-</sup> . <i>Fuel</i> , 2018, 232, 362-373.	6.4	59
29	Assessing the Dynamic Viscosity of Na <sup>+</sup> –Ca <sup>2+</sup> –Cl <sup>-</sup> –H <sub>2</sub> O Aqueous Solutions at High-Pressure and High-Temperature Conditions. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 11488-11500.	3.7	58
30	New insight into foam stability enhancement mechanism, using polyvinyl alcohol (PVA) and nanoparticles. <i>Journal of Molecular Liquids</i> , 2020, 307, 112755.	4.9	58
31	Rigorous models to optimise stripping gas rate in natural gas dehydration units. <i>Fuel</i> , 2015, 140, 421-428.	6.4	57
32	Prediction of the aqueous solubility of BaSO <sub>4</sub> using pitzer ion interaction model and LSSVM algorithm. <i>Fluid Phase Equilibria</i> , 2014, 374, 48-62.	2.5	56
33	A novel modeling approach to optimize oxygen–steam ratios in coal gasification process. <i>Fuel</i> , 2015, 153, 1-5.	6.4	55
34	Estimation of the water content of natural gas dried by solid calcium chloride dehydrator units. <i>Fuel</i> , 2014, 117, 33-42.	6.4	53
35	Optimization of miscible CO <sub>2</sub> EOR and storage using heuristic methods combined with capacitance/resistance and Gentil fractional flow models. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 32, 304-318.	4.4	53
36	Exergetic and economic evaluation of carbon dioxide liquefaction process in a hybridized system of water desalination, power generation, and liquefied natural gas regasification. <i>Energy Conversion and Management</i> , 2020, 205, 112374.	9.2	53

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37	<i>Ex Situ</i> Dissolution of CO <sub>2</sub> : A New Engineering Methodology Based on Mass-Transfer Perspective for Enhancement of CO <sub>2</sub> Sequestration. Energy & Fuels, 2011, 25, 3323-3333.	5.1	51
38	Empirical Modeling of Gravity Drainage in Fractured Porous Media. Energy & Fuels, 2011, 25, 1229-1241.	5.1	51
39	Estimation of triethylene glycol (TEG) purity in natural gas dehydration units using fuzzy neural network. Journal of Natural Gas Science and Engineering, 2014, 17, 26-32.	4.4	51
40	Determination of bubble point pressure and oil formation volume factor: Extra trees compared with LSSVM-CSA hybrid and ANFIS models. Fuel, 2020, 269, 116834.	6.4	51
41	Utilization of support vector machine to calculate gas compressibility factor. Fluid Phase Equilibria, 2013, 358, 189-202.	2.5	50
42	Prediction of Air Specific Heat Ratios at Elevated Pressures Using a Novel Modeling Approach. Chemical Engineering and Technology, 2014, 37, 2047-2055.	1.5	50
43	Estimation of breakthrough time for water coning in fractured systems: Experimental study and connectionist modeling. AIChE Journal, 2014, 60, 1905-1919.	3.6	48
44	New tools predict monoethylene glycol injection rate for natural gas hydrate inhibition. Journal of Loss Prevention in the Process Industries, 2015, 33, 222-231.	3.3	48
45	Log data-driven model and feature ranking for water saturation prediction using machine learning approach. Journal of Petroleum Science and Engineering, 2020, 194, 107291.	4.2	47
46	Efficient hybrid modeling of CO <sub>2</sub> absorption in aqueous solution of piperazine: Applications to energy and environment. Chemical Engineering Research and Design, 2019, 144, 405-417.	5.6	46
47	An experimental investigation of nanoemulsion enhanced oil recovery: Use of unconsolidated porous systems. Fuel, 2019, 251, 754-762.	6.4	46
48	Application of nanoparticles for asphaltenes adsorption and oxidation: A critical review of challenges and recent progress. Fuel, 2020, 279, 117763.	6.4	44
49	An overview of Australia's hydropower energy: Status and future prospects. Renewable and Sustainable Energy Reviews, 2013, 20, 565-569.	16.4	42
50	Machine Learning Approach to Model Rock Strength: Prediction and Variable Selection with Aid of Log Data. Rock Mechanics and Rock Engineering, 2020, 53, 4691-4715.	5.4	42
51	Artificial Intelligence Based Methods for Asphaltenes Adsorption by Nanocomposites: Application of Group Method of Data Handling, Least Squares Support Vector Machine, and Artificial Neural Networks. Nanomaterials, 2020, 10, 890.	4.1	40
52	New deterministic tools to systematically investigate fouling occurrence in membrane bioreactors. Chemical Engineering Research and Design, 2019, 144, 334-353.	5.6	38
53	Molecular dynamics simulations in reservoir analysis of offshore petroleum reserves: A systematic review of theory and applications. Earth-Science Reviews, 2019, 192, 194-213.	9.1	38
54	Developing a robust proxy model of CO <sub>2</sub> injection: Coupling Box-Cox Behnken design and a connectionist method. Fuel, 2018, 215, 904-914.	6.4	37

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55	Pore-level visual analysis of heavy oil recovery using chemical-assisted waterflooding process – Use of a new chemical agent. <i>Fuel</i> , 2019, 239, 202-218.	6.4	37
56	Natural Sorbent for Oil Spill Cleanup from Water Surface: Environmental Implication. <i>Industrial &amp; Engineering Chemistry Research</i> , 2015, 54, 10615-10621.	3.7	36
57	Offshore system safety and reliability considering microbial influenced multiple failure modes and their interdependencies. <i>Reliability Engineering and System Safety</i> , 2021, 215, 107862.	8.9	36
58	Practical and Economic Aspects of the Ex-Situ Process: Implications for CO <sub>2</sub> Sequestration. <i>Energy &amp; Fuels</i> , 2013, 27, 401-413.	5.1	35
59	A reliable strategy to calculate minimum miscibility pressure of CO <sub>2</sub> -oil system in miscible gas flooding processes. <i>Fuel</i> , 2017, 208, 117-126.	6.4	35
60	Molecular scale modeling approach to evaluate stability and dissociation of methane and carbon dioxide hydrates. <i>Journal of Molecular Liquids</i> , 2020, 297, 111503.	4.9	35
61	New Molecular Insights into Aggregation of Pure and Mixed Asphaltenes in the Presence of <i>n</i> -Octylphenol Inhibitor. <i>Energy &amp; Fuels</i> , 2020, 34, 13186-13207.	5.1	35
62	Evaluation of Gas Hydrate Formation Temperature for Gas/Water/Salt/Alcohol Systems: Utilization of Extended UNIQUAC Model and PC-SAFT Equation of State. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 13833-13855.	3.7	34
63	Dynamic risk analysis of marine and offshore systems suffering microbial induced stochastic degradation. <i>Reliability Engineering and System Safety</i> , 2021, 207, 107388.	8.9	34
64	Assessment of carbon dioxide solubility in ionic liquid/toluene/water systems by extended PR and PC-SAFT EOSs: Carbon capture implication. <i>Journal of Molecular Liquids</i> , 2019, 275, 323-337.	4.9	33
65	Evaluation of hybridized performance of amine scrubbing plant based on exergy, energy, environmental, and economic prospects: A gas sweetening plant case study. <i>Energy</i> , 2021, 214, 118715.	8.8	33
66	Modeling of CO <sub>2</sub> droplets shrinkage in ex situ dissolution approach with application to geological sequestration: Analytical solutions and feasibility study. <i>Chemical Engineering Journal</i> , 2012, 197, 448-458.	12.7	32
67	Experimental Study of Controlled Gravity Drainage in Fractured Porous Media. <i>Journal of Canadian Petroleum Technology</i> , 2011, 50, 56-71.	2.3	31
68	Semi-analytical solution for productivity evaluation of a multi-fractured horizontal well in a bounded dual-porosity reservoir. <i>Journal of Hydrology</i> , 2020, 581, 124288.	5.4	30
69	Dynamic risk modeling of complex hydrocarbon production systems. <i>Chemical Engineering Research and Design</i> , 2021, 151, 71-84.	5.6	30
70	An integrated dynamic failure assessment model for offshore components under microbiologically influenced corrosion. <i>Ocean Engineering</i> , 2020, 218, 108082.	4.3	29
71	Hydrogen production from biomass through integration of anaerobic digestion and biogas dry reforming. <i>Applied Energy</i> , 2022, 309, 118442.	10.1	29
72	Evolving simple-to-use method to determine water-oil relative permeability in petroleum reservoirs. <i>Petroleum</i> , 2016, 2, 67-78.	2.8	28

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73	Meso- and molecular-scale modeling to provide new insights into interfacial and structural properties of hydrocarbon/water/surfactant systems. <i>Journal of Molecular Liquids</i> , 2019, 295, 111357.	4.9	28
74	Development of an integrated structure of hydrogen and oxygen liquefaction cycle using wind turbines, Kalina power generation cycle, and electrolyzer. <i>Energy</i> , 2021, 221, 119653.	8.8	28
75	Connectionist Model to Estimate Performance of Steam-Assisted Gravity Drainage in Fractured and Unfractured Petroleum Reservoirs: Enhanced Oil Recovery Implications. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 1645-1662.	3.7	27
76	Molecular dynamics simulation to investigate the effect of polythiophene-coated Fe <sub>3</sub> O <sub>4</sub> nanoparticles on asphaltene precipitation. <i>Chemical Engineering Science</i> , 2021, 237, 116417.	3.8	27
77	Experimental study of asphaltene precipitation and metastable zone in the presence of polythiophene-coated Fe <sub>3</sub> O <sub>4</sub> nanoparticles. <i>Journal of Molecular Liquids</i> , 2020, 301, 112254.	4.9	26
78	A modeling strategy to investigate carbonated water injection for EOR and CO <sub>2</sub> sequestration. <i>Fuel</i> , 2019, 252, 710-721.	6.4	25
79	Decision tree-based methodology to select a proper approach for wart treatment. <i>Computers in Biology and Medicine</i> , 2019, 108, 400-409.	7.0	25
80	Systematic sensitivity analysis of cuttings transport in drilling operation using computational fluid dynamics approach. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 81, 103386.	4.4	24
81	Energy, exergy, and economic analyses of a new integrated system for generation of power and liquid fuels using liquefied natural gas regasification and solar collectors. <i>Energy Conversion and Management</i> , 2020, 219, 112915.	9.2	24
82	Effect of Wettability in Free-Fall and Controlled Gravity Drainage in Fractionally Wet Porous Media with Fractures. <i>Energy &amp; Fuels</i> , 2011, 25, 4452-4468.	5.1	23
83	Molecular dynamic simulations to evaluate dissociation of hydrate structure II in the presence of inhibitors: A mechanistic study. <i>Chemical Engineering Research and Design</i> , 2019, 149, 81-94.	5.6	23
84	A biosurfactant for inhibiting clay hydration in aqueous solutions: Applications to petroleum industry. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 384-394.	1.7	23
85	Bi-fractal and bi-Gaussian theories to evaluate impact of polythiophene-coated Fe <sub>3</sub> O <sub>4</sub> nanoparticles on asphaltene precipitation and surface topography. <i>Fuel</i> , 2020, 272, 117535.	6.4	23
86	On the Evaluation of Interfacial Tension (IFT) of CO <sub>2</sub> -Paraffin System for Enhanced Oil Recovery Process: Comparison of Empirical Correlations, Soft Computing Approaches, and Parachor Model. <i>Energies</i> , 2021, 14, 3045.	3.1	23
87	New tools to determine bubble point pressure of crude oils: Experimental and modeling study. <i>Journal of Petroleum Science and Engineering</i> , 2014, 123, 207-216.	4.2	22
88	A dual approach for modelling and optimisation of industrial urea reactor: Smart technique and grey box model. <i>Canadian Journal of Chemical Engineering</i> , 2014, 92, 469-485.	1.7	22
89	Estimation of air concentration in dissolved air flotation (DAF) systems using a simple predictive tool. <i>Chemical Engineering Research and Design</i> , 2013, 91, 184-190.	5.6	21
90	An overview of renewable energy potential and utilisation in Australia. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 21, 582-589.	16.4	21

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91	Experimental and Numerical Modeling Study of Gravity Drainage Considering Asphaltene Deposition. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 11512-11526.	3.7	21
92	Prediction of methanol loss in liquid hydrocarbon phase during natural gas hydrate inhibition using rigorous models. <i>Journal of Loss Prevention in the Process Industries</i> , 2015, 33, 1-9.	3.3	21
93	Dynamic risk assessment of reservoir production using data-driven probabilistic approach. <i>Journal of Petroleum Science and Engineering</i> , 2020, 184, 106486.	4.2	21
94	Biomass Leachate Treatment and Nutrient Recovery Using Reverse Osmosis: Experimental Study and Hybrid Artificial Neural Network Modeling. <i>Energy &amp; Fuels</i> , 2012, 26, 7155-7163.	5.1	20
95	Deterministic tools to predict recovery performance of carbonated water injection. <i>Journal of Molecular Liquids</i> , 2020, 301, 111911.	4.9	20
96	Estimation of CO <sub>2</sub> solubility in ionic liquids using connectionist tools based on thermodynamic and structural characteristics. <i>Fuel</i> , 2020, 279, 117984.	6.4	20
97	Hybrid connectionist models to assess recovery performance of low salinity water injection. <i>Journal of Petroleum Science and Engineering</i> , 2021, 197, 107833.	4.2	20
98	EFFECTS OF FRACTURE PROPERTIES ON THE BEHAVIOR OF FREE-FALL AND CONTROLLED GRAVITY DRAINAGE PROCESSES. <i>Journal of Porous Media</i> , 2012, 15, 343-369.	1.9	20
99	Droplets evolution during ex situ dissolution technique for geological CO <sub>2</sub> sequestration: Experimental and mathematical modelling. <i>International Journal of Greenhouse Gas Control</i> , 2013, 13, 201-214.	4.6	19
100	Systematic investigation of asphaltene precipitation by experimental and reliable deterministic tools. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 1388-1398.	1.7	19
101	Mathematical modeling and simulation of water-alternating-gas (WAG) process by incorporating capillary pressure and hysteresis effects. <i>Fuel</i> , 2020, 263, 116362.	6.4	19
102	Validation of CFD model of multiphase flow through pipeline and annular geometries. <i>Particulate Science and Technology</i> , 2019, 37, 685-697.	2.1	18
103	Technical and Non-technical Challenges of Development of Offshore Petroleum Reservoirs: Characterization and Production. <i>Natural Resources Research</i> , 2020, 29, 2147-2189.	4.7	18
104	Performance analysis and modeling of catalytic trickle-bed reactors: a comprehensive review. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 103, 1-41.	5.8	18
105	Recovery Rate of Vapor Extraction in Heavy Oil Reservoirs—Experimental, Statistical, and Modeling Studies. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 16091-16106.	3.7	17
106	A numerical simulation to effectively assess impacts of flow channels characteristics on solid oxide fuel cell performance. <i>Energy Conversion and Management</i> , 2021, 244, 114280.	9.2	17
107	Use of hybrid-ANFIS and ensemble methods to calculate minimum miscibility pressure of CO <sub>2</sub> - reservoir oil system in miscible flooding process. <i>Journal of Molecular Liquids</i> , 2021, 331, 115369.	4.9	16
108	Estimation of potential barium sulfate (barite) precipitation in oilfield brines using a simple predictive tool. <i>Environmental Progress and Sustainable Energy</i> , 2013, 32, 860-865.	2.3	15

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109	A new experimental and modeling strategy to determine asphaltene precipitation in crude oil. <i>Chemical Engineering Research and Design</i> , 2017, 128, 162-173.	5.6	15
110	Evaluation of phase equilibrium conditions of clathrate hydrates using connectionist modeling strategies. <i>Fuel</i> , 2019, 255, 115649.	6.4	15
111	New insights into bulk and interface properties of [Bmim][Ac]/[Bmim][BF <sub>4</sub> ] ionic liquid/CO <sub>2</sub> systems â€” Molecular dynamics simulation approach. <i>Journal of Molecular Liquids</i> , 2020, 317, 113497.	4.9	15
112	A combination of artificial neural network and genetic algorithm to optimize gas injection: A case study for EOR applications. <i>Journal of Molecular Liquids</i> , 2021, 339, 116654.	4.9	15
113	Hybrid connectionist model determines CO <sub>2</sub> â€”oil swelling factor. <i>Petroleum Science</i> , 2018, 15, 591-604.	4.9	14
114	Combined benefits of capillary barrier and injection pressure control to improve fluid recovery at breakthrough upon gas injection: An experimental study. <i>Fuel</i> , 2018, 211, 638-648.	6.4	14
115	How do metal oxide nanoparticles influence on interfacial tension of asphaltic oil-Supercritical CO <sub>2</sub> systems?. <i>Journal of Supercritical Fluids</i> , 2018, 135, 1-7.	3.2	14
116	Evaluation of mass transfer coefficient for gas condensates in porous systems: Experimental and modeling. <i>Fuel</i> , 2019, 255, 115507.	6.4	14
117	Anaerobic Digestion of Blood from Slaughtered Livestock: A Review. <i>Energies</i> , 2021, 14, 5666.	3.1	14
118	Estimation of the effect of biomass moisture content on the direct combustion of sugarcane bagasse in boilers. <i>International Journal of Sustainable Energy</i> , 2014, 33, 349-356.	2.4	13
119	CFD Analysis of Pressure Losses and Deposition Velocities in Horizontal Annuli. <i>International Journal of Chemical Engineering</i> , 2019, 2019, 1-17.	2.4	13
120	Investigation of cuttings transport in a horizontal well with high-speed visualization and electrical resistance tomography technique. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 92, 103968.	4.4	13
121	A critical review of biomass kinetics and membrane filtration models for membrane bioreactor systems. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106406.	6.7	13
122	PC-SAFT/UNIQUAC model assesses formation condition of methane hydrate in the presence of imidazolium-based ionic liquid systems. <i>Fuel</i> , 2020, 266, 116757.	6.4	13
123	A hybrid intelligent model for reservoir production and associated dynamic risks. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 83, 103512.	4.4	13
124	Mathematical Model for Steamflooding Naturally Fractured Carbonate Reservoirs. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 7993-8008.	3.7	12
125	Pattern recognition insight into drilling optimization of shaly formations. <i>Journal of Petroleum Science and Engineering</i> , 2017, 156, 322-339.	4.2	12
126	Fluid dynamic modeling of multiphase flow in heterogeneous porous media with matrix, fracture, and skin. <i>Journal of Hydrology</i> , 2020, 583, 124510.	5.4	12



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127	Experimental and modeling investigation of non-equilibrium condensate vaporization in porous systems: Effective determination of mass transfer coefficient. <i>Fuel</i> , 2020, 262, 116011.	6.4	12
128	Connectionist and mutual information tools to determine water saturation and rank input log variables. <i>Journal of Petroleum Science and Engineering</i> , 2020, 190, 106741.	4.2	12
129	Advanced Exergy Analysis of an Acid Gas Removal Plant to Explore Operation Improvement Potential toward Cleaner Production. <i>Energy &amp; Fuels</i> , 2021, 35, 9570-9588.	5.1	12
130	Experimental and numerical study of cuttings transport in inclined drilling operations. <i>Journal of Petroleum Science and Engineering</i> , 2022, 208, 109394.	4.2	12
131	Effects of asphaltene structure and polythiophene-coated magnetite nanoparticles on surface topography and wettability alteration of silica surface. <i>Journal of Molecular Liquids</i> , 2022, 349, 118470.	4.9	12
132	Laboratory Investigation of Free Fall Gravity Drainage in Fractured Porous Systems Using Unconsolidated Macromodels. <i>Energy &amp; Fuels</i> , 2011, 25, 2356-2372.	5.1	11
133	A new model to conduct hydraulic fracture design in coalbed methane reservoirs by incorporating stress variations. <i>Journal of Petroleum Science and Engineering</i> , 2019, 174, 1208-1222.	4.2	11
134	Modeling stability conditions of methane Clathrate hydrate in ionic liquid aqueous solutions. <i>Journal of Molecular Liquids</i> , 2021, 325, 114804.	4.9	11
135	Simple predictive tool to estimate relative humidity using wet bulb depression and dry bulb temperature. <i>Applied Thermal Engineering</i> , 2013, 50, 511-515.	6.0	10
136	Clathrate hydrate based approach for concentration of sugar aqueous solution, orange juice, and tomato juice: Phase equilibrium modeling using a thermodynamic framework. <i>Fluid Phase Equilibria</i> , 2020, 512, 112460.	2.5	10
137	Model development for shear sonic velocity using geophysical log data: Sensitivity analysis and statistical assessment. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 88, 103778.	4.4	10
138	Effects of inhibitor concentration and thermodynamic conditions on n-octylphenol-asphaltene molecular behaviours. <i>Journal of Molecular Liquids</i> , 2021, 340, 116897.	4.9	10
139	Solubility of hydrocarbon and non-hydrocarbon gases in aqueous electrolyte solutions: A reliable computational strategy. <i>Fuel</i> , 2019, 241, 1026-1035.	6.4	9
140	Experimental Study of Cuttings Transport with Non-Newtonian Fluid in an Inclined Well Using Visualization and Electrical Resistance Tomography Techniques. <i>SPE Drilling and Completion</i> , 2021, 36, 745-762.	1.6	9
141	Hybrid mathematical modelling of three-phase flow in porous media: Application to water-alternating-gas injection. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 94, 103966.	4.4	9
142	Mass transfer during transient condensate vaporization: Experimental and modeling study. <i>Journal of Molecular Liquids</i> , 2021, 325, 114022.	4.9	8
143	NUMERICAL SIMULATION OF FREE FALL AND CONTROLLED GRAVITY DRAINAGE PROCESSES IN POROUS MEDIA. <i>Journal of Porous Media</i> , 2012, 15, 211-232.	1.9	7
144	An efficient tool to determine physical properties of ternary mixtures containing 1-alkyl-3-methylimidazolium based ILs and molecular solvents. <i>Chemical Engineering Research and Design</i> , 2019, 152, 415-432.	5.6	7

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145	Central-Moments-Based Lattice Boltzmann for Associating Fluids: A New Integrated Approach. <i>Journal of Physical Chemistry B</i> , 2020, 124, 2900-2913.	2.6	7
146	Development of a new scaling model for asphaltene precipitation in light, medium, and heavy crude oils. <i>Journal of Molecular Liquids</i> , 2020, 312, 112974.	4.9	7
147	Exergy and Exergoeconomic Assessment of an Acid Gas Removal Unit in a Gas Refinery Plant. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 14591-14612.	3.7	7
148	Modeling of well productivity enhancement in a gas-condensate reservoir through wettability alteration: A comparison between smart optimization strategies. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 94, 104059.	4.4	7
149	Application of Gene Expression Programming (GEP) in Modeling Hydrocarbon Recovery in WAG Injection Process. <i>Energies</i> , 2021, 14, 7131.	3.1	7
150	Determination of Performance of Multiple-Fracture Horizontal Well by Incorporating Fracture-Fluid Leakoff. <i>SPE Reservoir Evaluation and Engineering</i> , 2018, 21, 907-926.	1.8	6
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