

Sohrab Zendehboudi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1690425/publications.pdf>

Version: 2024-02-01

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	Suppression of liquid slugs and phase separation through pipeline bends. Canadian Journal of Chemical Engineering, 2022, 100, 1778-1795.	1.7	0
2	Experimental and numerical study of cuttings transport in inclined drilling operations. Journal of Petroleum Science and Engineering, 2022, 208, 109394.	4.2	12
3	A Connectionist Model for Dynamic Economic Risk Analysis of Hydrocarbons Production Systems. Risk Analysis, 2022, 42, 1541-1570.	2.7	2
4	Relative Permeability Modeling Using Extra Trees, ANFIS, and Hybrid LSSVM-CSA Methods. Natural Resources Research, 2022, 31, 571-600.	4.7	5
5	Deterministic tools to estimate induction time for methane hydrate formation in the presence of Luvicap 55 W solutions. Journal of Molecular Liquids, 2022, 348, 118374.	4.9	6
6	Computational fluid dynamic modeling of methane hydrate formation in a subsea jumper. Journal of Natural Gas Science and Engineering, 2022, 98, 104381.	4.4	4
7	Effects of asphaltene structure and polythiophene-coated magnetite nanoparticles on surface topography and wettability alteration of silica surface. Journal of Molecular Liquids, 2022, 349, 118470.	4.9	12
8	Hydrogen production from biomass through integration of anaerobic digestion and biogas dry reforming. Applied Energy, 2022, 309, 118442.	10.1	29
9	Modeling Approach to Determine Static Rivulet Height in Regular Polygonal Capillary Tubes. ACS Omega, 2022, 7, 9310-9321.	3.5	1
10	How Does a Microfluidic Platform Tune the Morphological Properties of Polybenzimidazole Nanoparticles?. Journal of Physical Chemistry B, 2022, 126, 308-326.	2.6	5
11	Reliable connectionist tools to determine biodiesel cetane number based on fatty acids methyl esters content. Energy Conversion and Management, 2022, 264, 115601.	9.2	6
12	Hybrid smart model to determine concentration of acidic gases in absorption tower of sweetening process. Canadian Journal of Chemical Engineering, 2022, 100, 2355-2373.	1.7	2
13	Numerical simulation of homogeneous fluidization behaviour of G -eldart G -roup A particles in gas tapered fluidized beds. Canadian Journal of Chemical Engineering, 2022, 100, 2632-2647.	1.7	3
14	Performance Analysis and Simulation of the Gas Condensate Stabilization Process: Energy and Exergy Aspects. Industrial & Engineering Chemistry Research, 2022, 61, 9149-9164.	3.7	1
15	Logic-Based Data-Driven Operational Risk Model for Augmented Downhole Petroleum Production Systems. Computers and Chemical Engineering, 2022, , 107914.	3.8	2
16	Mass transfer during transient condensate vaporization: Experimental and modeling study. Journal of Molecular Liquids, 2021, 325, 114022.	4.9	8
17	Evaluation of hybridized performance of amine scrubbing plant based on exergy, energy, environmental, and economic prospects: A gas sweetening plant case study. Energy, 2021, 214, 118715.	8.8	33
18	Hybrid connectionist models to assess recovery performance of low salinity water injection. Journal of Petroleum Science and Engineering, 2021, 197, 107833.	4.2	20

#	ARTICLE	IF	CITATIONS
19	Modeling stability conditions of methane Clathrate hydrate in ionic liquid aqueous solutions. <i>Journal of Molecular Liquids</i> , 2021, 325, 114804.	4.9	11
20	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
21	Asphaltene and asphaltene precipitation/deposition. , 2021, , 1-29.		0
22	Modeling and simulation investigations of asphaltene deposition control by chemical inhibitors. , 2021, , 181-218.		0
23	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
24	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
25	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
26	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
27	Advanced Exergy Analysis of an Acid Gas Removal Plant to Explore Operation Improvement Potential toward Cleaner Production. <i>Energy & Fuels</i> , 2021, 35, 9570-9588.	5.1	12
28	On the Evaluation of Interfacial Tension (IFT) of CO ₂ -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
29	Use of hybrid-ANFIS and ensemble methods to calculate minimum miscibility pressure of CO ₂ - reservoir oil system in miscible flooding process. <i>Journal of Molecular Liquids</i> , 2021, 331, 115369.	4.9	16
30	Molecular dynamics simulation to investigate the effect of polythiophene-coated Fe ₃ O ₄ nanoparticles on asphaltene precipitation. <i>Chemical Engineering Science</i> , 2021, 237, 116417.	3.8	27
31	Dynamic risk modeling of complex hydrocarbon production systems. <i>Chemical Engineering Research and Design</i> , 2021, 151, 71-84.	5.6	30
32	New insights into forced and free fall gravity drainage performance in a fractured physical model. <i>Journal of Petroleum Science and Engineering</i> , 2021, 203, 108568.	4.2	4
33	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
34	Probabilistic Assessment of Lateral Pipeline-Backfill-Trench Interaction. <i>Journal of Pipeline Systems Engineering and Practice</i> , 2021, 12, .	1.6	3
35	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
36	Anaerobic Digestion of Blood from Slaughtered Livestock: A Review. <i>Energies</i> , 2021, 14, 5666.	3.1	14

#	ARTICLE	IF	CITATIONS
37	Exergy and Exergoeconomic Assessment of an Acid Gas Removal Unit in a Gas Refinery Plant. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 14591-14612.	3.7	7
38	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
39	Systematic Energy and Exergy Assessment of a Hydropurification Process: Theoretical and Practical Insights. <i>Energy</i> , 2021, 239, 122023.	8.8	2
40	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
41	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
42	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
43	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
44	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
45	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
46	Application of Gene Expression Programming (GEP) in Modeling Hydrocarbon Recovery in WAG Injection Process. <i>Energies</i> , 2021, 14, 7131.	3.1	7
47	A Systematic Study to Assess Displacement Performance of a Naturally-Derived Surfactant in Flow Porous Systems. <i>Energies</i> , 2021, 14, 8310.	3.1	4
48	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
49	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
50	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
51	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
52	Deterministic tools to predict recovery performance of carbonated water injection. <i>Journal of Molecular Liquids</i> , 2020, 301, 111911.	4.9	20
53	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
54	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

#	ARTICLE	IF	CITATIONS
55	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
56	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
57	Experimental study of asphaltene precipitation and metastable zone in the presence of polythiophene-coated Fe ₃ O ₄ nanoparticles. <i>Journal of Molecular Liquids</i> , 2020, 301, 112254.	4.9	26
58	An integrated dynamic failure assessment model for offshore components under microbiologically influenced corrosion. <i>Ocean Engineering</i> , 2020, 218, 108082.	4.3	29
59	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
60	Estimation of CO ₂ solubility in ionic liquids using connectionist tools based on thermodynamic and structural characteristics. <i>Fuel</i> , 2020, 279, 117984.	6.4	20
61	New Molecular Insights into Aggregation of Pure and Mixed Asphaltenes in the Presence of <i>n</i> -Octylphenol Inhibitor. <i>Energy & Fuels</i> , 2020, 34, 13186-13207.	5.1	35
62	Product quality control in hydropurification process by monitoring reactor feed impurities: Dynamic mathematical modeling. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 92, 62-76.	5.8	3
63	Production optimization of hydrocarbon reservoirs by entropy generation minimization. <i>Journal of Natural Gas Science and Engineering</i> , 2020, 83, 103538.	4.4	3
64	Experimental Study of Cuttings Transport with Non-Newtonian Fluid in an Inclined Well Using Visualization and ERT Techniques. , 2020, , .		1
65	Systematic sensitivity analysis to investigate performance of carbonated water injection based on computational dynamic modeling. <i>Fuel</i> , 2020, 274, 117318.	6.4	5
66	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. <i>Nanomaterials</i> , 2020, 10, 890.	4.1	40
67	New insights into bulk and interface properties of [Bmim][Ac]/[Bmim][BF ₄] ionic liquid/CO ₂ systems "Molecular dynamics simulation approach. <i>Journal of Molecular Liquids</i> , 2020, 317, 113497.	4.9	15
68	Machine Learning Approach to Model Rock Strength: Prediction and Variable Selection with Aid of Log Data. <i>Rock Mechanics and Rock Engineering</i> , 2020, 53, 4691-4715.	5.4	42
69	Application of nanoparticles for asphaltenes adsorption and oxidation: A critical review of challenges and recent progress. <i>Fuel</i> , 2020, 279, 117763.	6.4	44
70	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
71	Reliability assessment of drag embedment anchors in sand and the effect of idealized anchor geometry. <i>Safety in Extreme Environments</i> , 2020, 2, 37-55.	3.1	2
72	Effect of Water on Molecular and Transport Phenomena Behaviors of [Bmim][Ac]/Water/CO ₂ , Using Molecular Dynamics Strategy. <i>Journal of Physical Chemistry B</i> , 2020, 124, 7368-7378.	2.6	4

#	ARTICLE	IF	CITATIONS
73	Central-Moments-Based Lattice Boltzmann for Associating Fluids: A New Integrated Approach. Journal of Physical Chemistry B, 2020, 124, 2900-2913.	2.6	7
74	Decision tree-based diagnosis of coronary artery disease: CART model. Computer Methods and Programs in Biomedicine, 2020, 192, 105400.	4.7	141
75	New insight into foam stability enhancement mechanism, using polyvinyl alcohol (PVA) and nanoparticles. Journal of Molecular Liquids, 2020, 307, 112755.	4.9	58
76	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
77	Exergetic and economic evaluation of carbon dioxide liquefaction process in a hybridized system of water desalination, power generation, and liquefied natural gas regasification. Energy Conversion and Management, 2020, 205, 112374.	9.2	53
78	Clathrate hydrate based approach for concentration of sugar aqueous solution, orange juice, and tomato juice: Phase equilibrium modeling using a thermodynamic framework. Fluid Phase Equilibria, 2020, 512, 112460.	2.5	10
79	Bi-fractal and bi-Gaussian theories to evaluate impact of polythiophene-coated Fe ₃ O ₄ nanoparticles on asphaltene precipitation and surface topography. Fuel, 2020, 272, 117535.	6.4	23
80	Development of a new scaling model for asphaltene precipitation in light, medium, and heavy crude oils. Journal of Molecular Liquids, 2020, 312, 112974.	4.9	7
81	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
82	PC-SAFT/UNIQUAC model assesses formation condition of methane hydrate in the presence of imidazolium-based ionic liquid systems. Fuel, 2020, 266, 116757.	6.4	13
83	A hybrid intelligent model for reservoir production and associated dynamic risks. Journal of Natural Gas Science and Engineering, 2020, 83, 103512.	4.4	13
84	Evaluation of phase equilibrium conditions of clathrate hydrates using connectionist modeling strategies. Fuel, 2019, 255, 115649.	6.4	15
85	An efficient tool to determine physical properties of ternary mixtures containing 1-alkyl-3-methylimidazolium based ILs and molecular solvents. Chemical Engineering Research and Design, 2019, 152, 415-432.	5.6	7
86	Meso- and molecular-scale modeling to provide new insights into interfacial and structural properties of hydrocarbon/water/surfactant systems. Journal of Molecular Liquids, 2019, 295, 111357.	4.9	28
87	Evaluation of mass transfer coefficient for gas condensates in porous systems: Experimental and modeling. Fuel, 2019, 255, 115507.	6.4	14
88	Population balance model determines size distribution of Caspian Sea tarball aggregates in the presence of poloxamine copolymer. Fuel, 2019, 254, 115271.	6.4	1
89	Hybridized method of pseudopotential lattice Boltzmann and cubic-plus-association equation of state assesses thermodynamic characteristics of associating fluids. Physical Review E, 2019, 100, 043302.	2.1	4
90	Efficient hybrid modeling of CO ₂ absorption in aqueous solution of piperazine: Applications to energy and environment. Chemical Engineering Research and Design, 2019, 144, 405-417.	5.6	46

#	ARTICLE	IF	CITATIONS
91	CFD Analysis of Pressure Losses and Deposition Velocities in Horizontal Annuli. International Journal of Chemical Engineering, 2019, 2019, 1-17.	2.4	13
92	Molecular dynamic simulations to evaluate dissociation of hydrate structure II in the presence of inhibitors: A mechanistic study. Chemical Engineering Research and Design, 2019, 149, 81-94.	5.6	23
93	A comprehensive review of asphaltene deposition in petroleum reservoirs: Theory, challenges, and tips. Fuel, 2019, 252, 753-791.	6.4	165
94	A modeling strategy to investigate carbonated water injection for EOR and CO ₂ sequestration. Fuel, 2019, 252, 710-721.	6.4	25
95	An experimental investigation of nanoemulsion enhanced oil recovery: Use of unconsolidated porous systems. Fuel, 2019, 251, 754-762.	6.4	46
96	Effects of Salt and Surfactant on Interfacial Characteristics of Water/Oil Systems: Molecular Dynamic Simulations and Dissipative Particle Dynamics. Industrial & Engineering Chemistry Research, 2019, 58, 8817-8834.	3.7	93
97	Primary evaluation of a natural surfactant for inhibiting clay swelling. Journal of Petroleum Science and Engineering, 2019, 178, 878-891.	4.2	60
98	New deterministic tools to systematically investigate fouling occurrence in membrane bioreactors. Chemical Engineering Research and Design, 2019, 144, 334-353.	5.6	38
99	New insights into methane hydrate dissociation: Utilization of molecular dynamics strategy. Fuel, 2019, 249, 264-276.	6.4	60
100	Decision tree-based methodology to select a proper approach for wart treatment. Computers in Biology and Medicine, 2019, 108, 400-409.	7.0	25
101	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
102	Influence of poloxamine copolymeric surfactant on wetting behavior of tarballs in southwestern Caspian coast. Journal of Molecular Liquids, 2019, 281, 216-224.	4.9	4
103	Reliability assessment of drag embedment anchors in sand and the effect of idealized anchor geometry. Safety in Extreme Environments, 2019, 1, 39-57.	3.1	0
104	A novel strategy to evaluate titration-based asphaltene precipitation in various viscosity oil systems: Laboratory and modelling investigations. Chemical Engineering Research and Design, 2019, 143, 127-139.	5.6	4
105	Solubility of hydrocarbon and non-hydrocarbon gases in aqueous electrolyte solutions: A reliable computational strategy. Fuel, 2019, 241, 1026-1035.	6.4	9
106	A new efficient algorithm to determine three-phase equilibrium conditions in the presence of aqueous phase: Phase stability and computational cost. Fluid Phase Equilibria, 2019, 486, 139-158.	2.5	3
107	Pore-level visual analysis of heavy oil recovery using chemical-assisted waterflooding process " Use of a new chemical agent. Fuel, 2019, 239, 202-218.	6.4	37
108	Assessment of carbon dioxide solubility in ionic liquid/toluene/water systems by extended PR and PC-SAFT EOSs: Carbon capture implication. Journal of Molecular Liquids, 2019, 275, 323-337.	4.9	33

#	ARTICLE	IF	CITATIONS
109	New efficient tool diagnoses asphaltene stability: Utilization of refractive index. Canadian Journal of Chemical Engineering, 2019, 97, 1939-1948.	1.7	2
110	Comprehensive review of carbonated water injection for enhanced oil recovery. Fuel, 2019, 237, 1086-1107.	6.4	98
111	New reliable tools to mathematically model chemical reaction systems. Chemical Engineering Research and Design, 2019, 141, 156-169.	5.6	1
112	Effects of ultrasonic cavitation on neutralization process of low molecular weight polyethylene glycol. Canadian Journal of Chemical Engineering, 2019, 97, 395-405.	1.7	3
113	Evaluation of productivity index in unconventional reservoir systems: An extended Distributed Volumetric Sources method. Journal of Natural Gas Science and Engineering, 2019, 61, 1-17.	4.4	5
114	A Comprehensive Review on Emulsions and Emulsion Stability in Chemical and Energy Industries. Canadian Journal of Chemical Engineering, 2019, 97, 281-309.	1.7	338
115	A new model to conduct hydraulic fracture design in coalbed methane reservoirs by incorporating stress variations. Journal of Petroleum Science and Engineering, 2019, 174, 1208-1222.	4.2	11
116	Current Status and Future Prospects of Membrane Bioreactors (MBRs) and Fouling Phenomena: A Systematic Review. Canadian Journal of Chemical Engineering, 2019, 97, 32-58.	1.7	79
117	A biosurfactant for inhibiting clay hydration in aqueous solutions: Applications to petroleum industry. Canadian Journal of Chemical Engineering, 2019, 97, 384-394.	1.7	23
118	Validation of CFD model of multiphase flow through pipeline and annular geometries. Particulate Science and Technology, 2019, 37, 685-697.	2.1	18
119	Chapter 3 Asphaltenes Review: Characterization and Modeling. , 2019, , 39-77.		2
120	A COMPREHENSIVE REVIEW ON FLUID AND ROCK CHARACTERIZATION OF OFFSHORE PETROLEUM RESERVOIRS: TESTS, EMPIRICAL AND THEORETICAL TOOLS. Journal of Porous Media, 2019, 22, 1697-1755.	1.9	5
121	New Modeling Strategies Evaluate Bubble Growth in Systems of Finite Extent: Energy and Environment Implications. Industrial & Engineering Chemistry Research, 2018, 57, 5680-5689.	3.7	4
122	Developing a robust proxy model of CO ₂ injection: Coupling Boxâ€™Behnken design and a connectionist method. Fuel, 2018, 215, 904-914.	6.4	37
123	Hybrid connectionist model determines CO ₂ â€™oil swelling factor. Petroleum Science, 2018, 15, 591-604.	4.9	14
124	A comprehensive review on Enhanced Oil Recovery by Water Alternating Gas (WAG) injection. Fuel, 2018, 227, 218-246.	6.4	174
125	Evolution of tar ball aggregates in Caspian Sea: Implications of connectionist tools linked with image analysis. Environmental Progress and Sustainable Energy, 2018, 37, 2016-2025.	2.3	1
126	Combined benefits of capillary barrier and injection pressure control to improve fluid recovery at breakthrough upon gas injection: An experimental study. Fuel, 2018, 211, 638-648.	6.4	14

#	ARTICLE	IF	CITATIONS
127	How do metal oxide nanoparticles influence on interfacial tension of asphaltic oil-Supercritical CO ₂ systems?. Journal of Supercritical Fluids, 2018, 135, 1-7.	3.2	14
128	Determination of Performance of Multiple-Fracture Horizontal Well by Incorporating Fracture-Fluid Leakoff. SPE Reservoir Evaluation and Engineering, 2018, 21, 907-926.	1.8	6
129	Dynamic Modeling Strategy To Assess Impacts of Hydrodynamic Parameters on Industrial Hydropurification Process by Considering Catalyst Deactivation. Industrial & Engineering Chemistry Research, 2018, 57, 13671-13688.	3.7	3
130	Evaluation of Gas Hydrate Formation Temperature for Gas/Water/Salt/Alcohol Systems: Utilization of Extended UNIQUAC Model and PC-SAFT Equation of State. Industrial & Engineering Chemistry Research, 2018, 57, 13833-13855.	3.7	34
131	A systematic review on CO ₂ capture with ionic liquids: Current status and future prospects. Renewable and Sustainable Energy Reviews, 2018, 96, 502-525.	16.4	368
132	A Dynamic Heterogeneous Dispersion Model Evaluates Performance of Industrial Catalytic Hydrotreating Systems. Industrial & Engineering Chemistry Research, 2018, 57, 8267-8282.	3.7	6
133	Data Analytics Techniques for Performance Prediction of Steamflooding in Naturally Fractured Carbonate Reservoirs. Energies, 2018, 11, 292.	3.1	4
134	A comprehensive study on multiphase flow through annular pipe using CFD approach. AIP Conference Proceedings, 2018, , .	0.4	0
135	Applications of hybrid models in chemical, petroleum, and energy systems: A systematic review. Applied Energy, 2018, 228, 2539-2566.	10.1	238
136	Modeling investigation of low salinity water injection in sandstones and carbonates: Effect of Na ⁺ and SO ₄ ²⁻ . Fuel, 2018, 232, 362-373.	6.4	59
137	CFD and experimental approach on three phase gas-liquid-solid Newtonian fluid flow in horizontal pipes. International Journal of Computational Methods and Experimental Measurements, 2018, 7, 33-44.	0.2	2
138	A cutting edge solution to monitor formation damage due to scale deposition: Application to oil recovery. Canadian Journal of Chemical Engineering, 2017, 95, 991-1003.	1.7	5
139	Systematic investigation of asphaltene precipitation by experimental and reliable deterministic tools. Canadian Journal of Chemical Engineering, 2017, 95, 1388-1398.	1.7	19
140	Pattern recognition insight into drilling optimization of shaly formations. Journal of Petroleum Science and Engineering, 2017, 156, 322-339.	4.2	12
141	A triterpenoid saponin as an environmental friendly and biodegradable clay swelling inhibitor. Journal of Molecular Liquids, 2017, 247, 269-280.	4.9	62
142	A review on simulation of methane production from gas hydrate reservoirs: Molecular dynamics prospective. Journal of Petroleum Science and Engineering, 2017, 159, 754-772.	4.2	72
143	A new experimental and modeling strategy to determine asphaltene precipitation in crude oil. Chemical Engineering Research and Design, 2017, 128, 162-173.	5.6	15
144	Equilibrium ratio of hydrocarbons and non-hydrocarbons at reservoir conditions: Experimental and modeling study. Fuel, 2017, 210, 315-328.	6.4	3

#	ARTICLE	IF	CITATIONS
145	A reliable strategy to calculate minimum miscibility pressure of CO ₂ -oil system in miscible gas flooding processes. <i>Fuel</i> , 2017, 208, 117-126.	6.4	35
146	CFD Simulation of Three Phase Gas-Liquid-Solid Flow in Horizontal Pipes. , 2017, , .		1
147	Regional tectonic state and poro-thermo-elasticity analysis of near wellbore zone in field development plan: Utilization of an uncoupled approach. <i>Journal of Natural Gas Science and Engineering</i> , 2017, 46, 615-636.	4.4	2
148	Optimization of miscible CO ₂ 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
149	Evolving simple-to-use method to determine water-oil relative permeability in petroleum reservoirs. <i>Petroleum</i> , 2016, 2, 67-78.	2.8	28
150	Rigorous Modeling of Solution Gas-Oil Ratios for a Wide Ranges of Reservoir Fluid Properties. <i>Journal of Petroleum & Environmental Biotechnology</i> , 2016, 07, .	0.3	2
151	A novel modeling approach to optimize oxygen-steam ratios in coal gasification process. <i>Fuel</i> , 2015, 153, 1-5.	6.4	55
152	New tools predict monoethylene glycol injection rate for natural gas hydrate inhibition. <i>Journal of Loss Prevention in the Process Industries</i> , 2015, 33, 222-231.	3.3	48
153	PVTX characteristics of oil inclusions from Asmari formation in Kuh-e-Mond heavy oil field in Iran. <i>International Journal of Earth Sciences</i> , 2015, 104, 603-623.	1.8	2
154	Effective Method To Determine Supersaturation of Tar Balls Deposited along the Caspian Sea. <i>Energy & Fuels</i> , 2015, 29, 2931-2939.	5.1	5
155	Natural Sorbent for Oil Spill Cleanup from Water Surface: Environmental Implication. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 10615-10621.	3.7	36
156	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
157	Rigorous models to optimise stripping gas rate in natural gas dehydration units. <i>Fuel</i> , 2015, 140, 421-428.	6.4	57
158	A new method estimates TEG purity versus reconcentrator temperature at different levels of pressure in gas dehydration systems. <i>International Journal of Oil, Gas and Coal Technology</i> , 2014, 7, 85.	0.2	5
159	Estimation of the depth of frost penetration in both uniform and layered soils in frost-affected regions. <i>International Journal of Pavement Engineering</i> , 2014, 15, 599-605.	4.4	1
160	A novel method to estimate the specific gravity and refractive index of seawater. <i>Desalination and Water Treatment</i> , 2014, 52, 3012-3018.	1.0	3
161	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
162	Estimation of breakthrough time for water coning in fractured systems: Experimental study and connectionist modeling. <i>AIChE Journal</i> , 2014, 60, 1905-1919.	3.6	48

#	ARTICLE	IF	CITATIONS
163	Estimation of triethylene glycol (TEG) purity in natural gas dehydration units using fuzzy neural network. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 17, 26-32.	4.4	51
164	Prediction of the aqueous solubility of BaSO ₄ using pitzer ion interaction model and LSSVM algorithm. <i>Fluid Phase Equilibria</i> , 2014, 374, 48-62.	2.5	56
165	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
166	Prediction of Air Specific Heat Ratios at Elevated Pressures Using a Novel Modeling Approach. <i>Chemical Engineering and Technology</i> , 2014, 37, 2047-2055.	1.5	50
167	ESTIMATION OF CONFIGURATION FACTOR FOR RADIATION FROM A RECTANGLE TO A PARALLEL SMALL ELEMENT OF SURFACE LYING ON THE PERPENDICULAR TO A CORNER OF THE RADIATOR. <i>Chemical Engineering Communications</i> , 2014, 201, 287-299.	2.6	0
168	Connectionist Model to Estimate Performance of Steam-Assisted Gravity Drainage in Fractured and Unfractured Petroleum Reservoirs: Enhanced Oil Recovery Implications. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 1645-1662.	3.7	27
169	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
170	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
171	Recovery Rate of Vapor Extraction in Heavy Oil Reservoirs—Experimental, Statistical, and Modeling Studies. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 16091-16106.	3.7	17
172	Experimental and Numerical Modeling Study of Gravity Drainage Considering Asphaltene Deposition. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 11512-11526.	3.7	21
173	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
174	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
175	Assessing the Dynamic Viscosity of NaCl-CaCl ₂ -H ₂ O Aqueous Solutions at High-Pressure and High-Temperature Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 11488-11500.	3.7	58
176	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
177	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
178	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
179	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
180	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

#	ARTICLE	IF	CITATIONS
181	A new screening tool for evaluation of steamflooding performance in Naturally Fractured Carbonate Reservoirs. <i>Fuel</i> , 2013, 108, 502-514.	6.4	98
182	Droplets evolution during ex situ dissolution technique for geological CO ₂ sequestration: Experimental and mathematical modelling. <i>International Journal of Greenhouse Gas Control</i> , 2013, 13, 201-214.	4.6	19
183	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
184	Practical and Economic Aspects of the Ex-Situ Process: Implications for CO ₂ Sequestration. <i>Energy & Fuels</i> , 2013, 27, 401-413.	5.1	35
185	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
186	An overview of renewable energy potential and utilisation in Australia. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 21, 582-589.	16.4	21
187	Utilization of support vector machine to calculate gas compressibility factor. <i>Fluid Phase Equilibria</i> , 2013, 358, 189-202.	2.5	50
188	CALCULATING PSEUDO-STEADY-STATE HORIZONTAL OIL WELL PRODUCTIVITY IN RECTANGULAR DRAINAGE AREAS USING A SIMPLE METHOD. <i>Chemical Engineering Communications</i> , 2013, 200, 222-234.	2.6	4
189	An overview of Australia's hydropower energy: Status and future prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 20, 565-569.	16.4	42
190	Thermodynamic Investigation of Asphaltene Precipitation during Primary Oil Production: Laboratory and Smart Technique. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 6009-6031.	3.7	86
191	A developed smart technique to predict minimum miscible pressure for implications. <i>Canadian Journal of Chemical Engineering</i> , 2013, 91, 1325-1337.	1.7	92
192	Mathematical Model for Steamflooding Naturally Fractured Carbonate Reservoirs. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 7993-8008.	3.7	12
193	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
194	A novel analytical method predicts plug boundaries of bingham plastic fluids for laminar flow through annulus. <i>Canadian Journal of Chemical Engineering</i> , 2013, 91, 1590-1596.	1.7	2
195	Colloidal interaction and connectionist modelling of protein osmotic pressure and the effect of physicochemical properties. <i>Canadian Journal of Chemical Engineering</i> , 2013, 91, 1621-1631.	1.7	3
196	Estimation of the Combined Effect of Temperature and Carbon Dioxide Pressure on Dissolved Calcium Carbonate Concentration in Oilfield Brines. <i>Journal of Dispersion Science and Technology</i> , 2013, 34, 793-799.	2.4	2
197	Biomass Leachate Treatment and Nutrient Recovery Using Reverse Osmosis: Experimental Study and Hybrid Artificial Neural Network Modeling. <i>Energy & Fuels</i> , 2012, 26, 7155-7163.	5.1	20
198	Modeling of CO ₂ 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

#	ARTICLE	IF	CITATIONS
199	Nonionic Surfactant for Enhanced Oil Recovery from Carbonates: Adsorption Kinetics and Equilibrium. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 9894-9905.	3.7	143
200	Estimation of characteristic temperature ratios for panel radiator and high temperature radiant strip systems to calculate heat loss within a room space. <i>Energy and Buildings</i> , 2012, 55, 508-514.	6.7	2
201	Prediction of Condensate-to-Gas Ratio for Retrograde Gas Condensate Reservoirs Using Artificial Neural Network with Particle Swarm Optimization. <i>Energy & Fuels</i> , 2012, 26, 3432-3447.	5.1	137
202	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
203	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
204	Dimensional Analysis and Scale-up of Immiscible Two-Phase Flow Displacement in Fractured Porous Media under Controlled Gravity Drainage. <i>Energy & Fuels</i> , 2011, 25, 1731-1750.	5.1	67
205	Effect of Wettability in Free-Fall and Controlled Gravity Drainage in Fractionally Wet Porous Media with Fractures. <i>Energy & Fuels</i> , 2011, 25, 4452-4468.	5.1	23
206	<i>Ex Situ</i> Dissolution of CO ₂ : A New Engineering Methodology Based on Mass-Transfer Perspective for Enhancement of CO ₂ Sequestration. <i>Energy & Fuels</i> , 2011, 25, 3323-3333.	5.1	51
207	Empirical Modeling of Gravity Drainage in Fractured Porous Media. <i>Energy & Fuels</i> , 2011, 25, 1229-1241.	5.1	51
208	Laboratory Investigation of Free Fall Gravity Drainage in Fractured Porous Systems Using Unconsolidated Macromodels. <i>Energy & Fuels</i> , 2011, 25, 2356-2372.	5.1	11
209	Experimental Study of Controlled Gravity Drainage in Fractured Porous Media. <i>Journal of Canadian Petroleum Technology</i> , 2011, 50, 56-71.	2.3	31
210	Two-Phase Slug Flow Correlations for Severe Slugging in Subsea Pipelines. , 0, , .		1