# Abdolhossein Hemmati-Sarapardeh

List of Publications by Year
in descending order

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|---|---|---|---|
| 184 papers | 5,720 citations | 61857 43 h-index | 123241 61 g-index |
| 188 all docs | 188 docs citations | 188 times ranked | 2626 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Toward mechanistic understanding of heavy crude oil/brine interfacial tension: The roles of salinity, temperature and pressure. Fluid Phase Equilibria, 2014, 375, 191-200. | 1.4 | 225 |
| 2 | On the evaluation of the viscosity of nanofluid systems: Modeling and data assessment. Renewable and Sustainable Energy Reviews, 2018, 81, 313-329. | 8.2 | 183 |
| 3 | Experimental Determination of Interfacial Tension and Miscibility of the CO<sub>2</sub>â€“Crude Oil System; Temperature, Pressure, and Composition Effects. Journal of Chemical & Engineering Data, 2014, 59, 61-69. | 1.0 | 157 |
| 4 | Toward a predictive model for estimating viscosity of ternary mixtures containing ionic liquids. Journal of Molecular Liquids, 2014, 200, 340-348. | 2.3 | 127 |
| 5 | Reservoir oil viscosity determination using a rigorous approach. Fuel, 2014, 116, 39-48. | 3.4 | 122 |
| 6 | Toward mechanistic understanding of natural surfactant flooding in enhanced oil recovery processes: The role of salinity, surfactant concentration and rock type. Journal of Molecular Liquids, 2016, 222, 632-639. | 2.3 | 104 |
| 7 | Toward mechanistic understanding of asphaltene aggregation behavior in toluene: The roles of asphaltene structure, aging time, temperature, and ultrasonic radiation. Journal of Molecular Liquids, 2018, 264, 410-424. | 2.3 | 101 |
| 8 | Asphaltene precipitation due to natural depletion of reservoir: Determination using a SARA fraction based intelligent model. Fluid Phase Equilibria, 2013, 354, 177-184. | 1.4 | 95 |
| 9 | Toward reservoir oil viscosity correlation. Chemical Engineering Science, 2013, 90, 53-68. | 1.9 | 86 |
| 10 | Prediction of sour gas compressibility factor using an intelligent approach. Fuel Processing Technology, 2013, 116, 209-216. | 3.7 | 84 |
| 11 | Application of adaptive neuro fuzzy interface system optimized with evolutionary algorithms for modeling CO 2 -crude oil minimum miscibility pressure. Fuel, 2017, 205, 34-45. | 3.4 | 80 |
| 12 | Modeling minimum miscibility pressure during pure and impure CO2 flooding using hybrid of radial basis function neural network and evolutionary techniques. Fuel, 2018, 220, 270-282. | 3.4 | 76 |
| 13 | Predicting solubility of CO2 in brine by advanced machine learning systems: Application to carbon capture and sequestration. Journal of CO2 Utilization, 2019, 33, 83-95. | 3.3 | 75 |
| 14 | Application of constrained multi-variable search methods for prediction of PVT properties of crude oil systems. Fluid Phase Equilibria, 2014, 363, 121-130. | 1.4 | 69 |
| 15 | Modeling of CO2 solubility in crude oil during carbon dioxide enhanced oil recovery using gene expression programming. Fuel, 2017, 210, 768-782. | 3.4 | 65 |
| 16 | Accurate determination of the CO<sub>2</sub>â€crude oil minimum miscibility pressure of pure and impure CO<sub>2</sub> streams: A robust modelling approach. Canadian Journal of Chemical Engineering, 2016, 94, 253-261. | 0.9 | 64 |
| 17 | Modeling CO<sub>2</sub> Solubility in Water at High Pressure and Temperature Conditions. Energy & Fuels, 2020, 34, 4761-4776. | 2.5 | 63 |
| 18 | Effect of operational parameters on SAGD performance in a dip heterogeneous fractured reservoir. Fuel, 2014, 122, 82-93. | 3.4 | 62 |

| # | Article | IF | Citations |
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| 19 | Modeling interfacial tension and minimum miscibility pressure in paraffin-nitrogen systems: Application to gas injection processes. Fuel, 2017, 205, 80-89. | 3.4 | 59 |
| 20 | Asphaltenes Adsorption onto Metal Oxide Nanoparticles: A Critical Evaluation of Measurement Techniques. Energy & Fuels, 2018, 32, 2213-2223. | 2.5 | 57 |
| 21 | On determination of natural gas density: Least square support vector machine modeling approach. Journal of Natural Gas Science and Engineering, 2015, 22, 348-358. | 2.1 | 55 |
| 22 | On the evaluation of asphaltene precipitation titration data: Modeling and data assessment. Fluid Phase Equilibria, 2016, 415, 88-100. | 1.4 | 55 |
| 23 | A soft computing approach for the determination of crude oil viscosity: Light and intermediate crude oil systems. Journal of the Taiwan Institute of Chemical Engineers, 2016, 59, 1-10. | 2.7 | 54 |
| 24 | Toward genetic programming (GP) approach for estimation of hydrocarbon/water interfacial tension. Journal of Molecular Liquids, 2017, 230, 175-189. | 2.3 | 54 |
| 25 | Rigorous prognostication of permeability of heterogeneous carbonate oil reservoirs: Smart modeling and correlation development. Fuel, 2019, 236, 110-123. | 3.4 | 53 |
| 26 | Modeling gas/vapor viscosity of hydrocarbon fluids using a hybrid GMDH-type neural network system. Journal of Molecular Liquids, 2017, 236, 162-171. | 2.3 | 52 |
| 27 | Rheological Behavior of Surface Modified Silica Nanoparticles Dispersed in Partially Hydrolyzed Polyacrylamide and Xanthan Gum Solutions: Experimental Measurements, Mechanistic Understanding, and Model Development. Energy & Fuels, 2018, 32, 10628-10638. | 2.5 | 52 |
| 28 | Modeling hydrogen solubility in hydrocarbons using extreme gradient boosting and equations of state. Scientific Reports, 2021, 11, 17911. | 1.6 | 52 |
| 29 | Effective Thermal Conductivity Modeling of Sandstones: SVM Framework Analysis. International Journal of Thermophysics, 2016, 37, 1. | 1.0 | 51 |
| 30 | Toward prediction of petroleum reservoir fluids properties: A rigorous model for estimation of solution gas-oil ratio. Journal of Natural Gas Science and Engineering, 2016, 29, 506-516. | 2.1 | 51 |
| 31 | Rigorous prognostication of natural gas viscosity: Smart modeling and comparative study. Fuel, 2018, 222, 766-778. | 3.4 | 51 |
| 32 | Modeling temperature-based oil-water relative permeability by integrating advanced intelligent models with grey wolf optimization: Application to thermal enhanced oil recovery processes. Fuel, 2019, 242, 649-663. | 3.4 | 51 |
| 33 | Application of Wilcoxon generalized radial basis function network for prediction of natural gas compressibility factor. Journal of the Taiwan Institute of Chemical Engineers, 2015, 50, 131-141. | 2.7 | 50 |
| 34 | Using an artificial neural network to predict carbon dioxide compressibility factor at high pressure and temperature. Korean Journal of Chemical Engineering, 2015, 32, 2087-2096. | 1.2 | 50 |
| 35 | Genetic programming (GP) approach for prediction of supercritical CO 2 thermal conductivity. Chemical Engineering Research and Design, 2017, 122, 164-175. | 2.7 | 50 |
| 36 | Application of cascade forward neural network and group method of data handling to modeling crude oil pyrolysis during thermal enhanced oil recovery. Journal of Petroleum Science and Engineering, 2021, 205, 108836. | 2.1 | 50 |

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| 37 | A smooth model for the estimation of gas/vapor viscosity of hydrocarbon fluids. Journal of Natural Gas Science and Engineering, 2015, 26, 1452-1459. | 2.1 | 49 |
| 38 | Experimental assessment of a lysine derivative surfactant for enhanced oil recovery in carbonate rocks: Mechanistic and core displacement analysis. Journal of Molecular Liquids, 2017, 232, 310-318. | 2.3 | 49 |
| 39 | Application of nanofluids for treating fines migration during hydraulic fracturing: Experimental study and mechanistic understanding. Advances in Geo-Energy Research, 2019, 3, 198-206. | 3.1 | 48 |
| 40 | Characterizing the CO2-brine interfacial tension (IFT) using robust modeling approaches: A comparative study. Journal of Molecular Liquids, 2017, 246, 32-38. | 2.3 | 47 |
| 41 | Integrating synthesized citric acid-coated magnetite nanoparticles with magnetic fields for enhanced oil recovery: Experimental study and mechanistic understanding. Journal of Petroleum Science and Engineering, 2019, 174, 425-436. | 2.1 | 47 |
| 42 | Modeling interfacial tension in N2/n-alkane systems using corresponding state theory: Application to gas injection processes. Fuel, 2018, 222, 779-791. | 3.4 | 46 |
| 43 | Accurate estimation of CO 2 adsorption on activated carbon with multi-layer feed-forward neural network (MLFNN) algorithm. Egyptian Journal of Petroleum, 2018, 27, 65-73. | 1.2 | 46 |
| 44 | Experimental Determination of Equilibrium Interfacial Tension for Nitrogen-Crude Oil during the Gas Injection Process: The Role of Temperature, Pressure, and Composition. Journal of Chemical & Engineering Data, 2014, 59, 3461-3469. | 1.0 | 45 |
| 45 | Experimental measurement and modeling of saturated reservoir oil viscosity. Korean Journal of Chemical Engineering, 2014, 31, 1253-1264. | 1.2 | 44 |
| 46 | Application of nanoparticles for asphaltenes adsorption and oxidation: A critical review of challenges and recent progress. Fuel, 2020, 279, 117763. | 3.4 | 44 |
| 47 | A rigorous approach for determining interfacial tension and minimum miscibility pressure in paraffin-CO2 systems: Application to gas injection processes. Journal of the Taiwan Institute of Chemical Engineers, 2016, 63, 107-115. | 2.7 | 43 |
| 48 | Applying SVM framework for modeling of CO2 solubility in oil during CO2 flooding. Fuel, 2018, 214, 73-87. | 3.4 | 43 |
| 49 | Estimation of tetracycline antibiotic photodegradation from wastewater by heterogeneous metal-organic frameworks photocatalysts. Chemosphere, 2022, 287, 132135. | 4.2 | 43 |
| 50 | A rigorous approach to predict nitrogen-crude oil minimum miscibility pressure of pure and nitrogen mixtures. Fluid Phase Equilibria, 2015, 399, 30-39. | 1.4 | 42 |
| 51 | Data-driven modeling of interfacial tension in impure CO2-brine systems with implications for geological carbon storage. International Journal of Greenhouse Gas Control, 2019, 90, 102811. | 2.3 | 40 |
| 52 | 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. | 1.9 | 40 |
| 53 | Insights into the Effects of Pore Size Distribution on the Flowing Behavior of Carbonate Rocks: Linking a Nano-Based Enhanced Oil Recovery Method to Rock Typing. Nanomaterials, 2020, 10, 972. | 1.9 | 39 |
| 54 | Determination of minimum miscibility pressure in N2â€“crude oil system: A robust compositional model. Fuel, 2016, 182, 402-410. | 3.4 | 37 |

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| 55 | Efficient estimation of hydrolyzed polyacrylamide (HPAM) solution viscosity for enhanced oil recovery process by polymer flooding. Oil and Gas Science and Technology, 2018, 73, 22. | 1.4 | 37 |
| 56 | Modeling minimum miscibility pressure of pure/impure CO2-crude oil systems using adaptive boosting support vector regression: Application to gas injection processes. Journal of Petroleum Science and Engineering, 2020, 184, 106499. | 2.1 | 36 |
| 57 | Toward smart schemes for modeling CO2 solubility in crude oil: Application to carbon dioxide enhanced oil recovery. Fuel, 2021, 285, 119147. | 3.4 | 35 |
| 58 | On the evaluation of Fast-SAGD process in naturally fractured heavy oil reservoir. Fuel, 2015, 143, 155-164. | 3.4 | 34 |
| 59 | Modeling heat capacity of ionic liquids using group method of data handling: A hybrid and structure-based approach. International Journal of Heat and Mass Transfer, 2019, 129, 7-17. | 2.5 | 34 |
| 60 | Modeling of CO2 adsorption capacity by porous metal organic frameworks using advanced decision tree-based models. Scientific Reports, 2021, 11, 24468. | 1.6 | 34 |
| 61 | Development of robust generalized models for estimating the normal boiling points of pure chemical compounds. Journal of Molecular Liquids, 2017, 242, 59-69. | 2.3 | 33 |
| 62 | Modeling oil-brine interfacial tension at high pressure and high salinity conditions. Journal of Petroleum Science and Engineering, 2019, 183, 106413. | 2.1 | 33 |
| 63 | Effect of asphaltene structure on its aggregation behavior in toluene-normal alkane mixtures. Journal of Molecular Structure, 2020, 1220, 128605. | 1.8 | 33 |
| 64 | Development of a robust model for prediction of under-saturated reservoir oil viscosity. Journal of Molecular Liquids, 2017, 229, 89-97. | 2.3 | 31 |
| 65 | Application of Nanosilica for inhibition of fines migration during low salinity water injection: Experimental study, mechanistic understanding, and model development. Fuel, 2019, 242, 846-862. | 3.4 | 31 |
| 66 | Estimation of minimum miscibility pressure (MMP) in enhanced oil recovery (EOR) process by N2 flooding using different computational schemes. Fuel, 2019, 235, 1455-1474. | 3.4 | 31 |
| 67 | Comparison of LSSVM model results with artificial neural network model for determination of the solubility of SO2 in ionic liquids. Journal of Molecular Liquids, 2020, 304, 112771. | 2.3 | 31 |
| 68 | Accurate determination of permeability in carbonate reservoirs using Gaussian Process Regression. Journal of Petroleum Science and Engineering, 2021, 196, 107807. | 2.1 | 31 |
| 69 | Experimental measurement and compositional modeling of crude oil viscosity at reservoir conditions. Journal of the Taiwan Institute of Chemical Engineers, 2020, 109, 35-50. | 2.7 | 30 |
| 70 | Modeling relative permeability of gas condensate reservoirs: Advanced computational frameworks. Journal of Petroleum Science and Engineering, 2020, 189, 106929. | 2.1 | 29 |
| 71 | State-of-the-art modeling permeability of the heterogeneous carbonate oil reservoirs using robust computational approaches. Fuel, 2020, 268, 117389. | 3.4 | 29 |
| 72 | Accurate prediction of water dewpoint temperature in natural gas dehydrators using gene expression programming approach. Journal of Molecular Liquids, 2017, 243, 196-204. | 2.3 | 28 |

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| 73 | Implementation of soft computing approaches for prediction of physicochemical properties of ionic liquid mixtures. Korean Journal of Chemical Engineering, 2017, 34, 425-439. | 1.2 | 28 |
| 74 | Modeling dew point pressure of gas condensate reservoirs: Comparison of hybrid soft computing approaches, correlations, and thermodynamic models. Journal of Petroleum Science and Engineering, 2020, 184, 106558. | 2.1 | 28 |
| 75 | Modeling interfacial tension of methane-brine systems at high pressure and high salinity conditions. Journal of the Taiwan Institute of Chemical Engineers, 2020, 114, 125-141. | 2.7 | 28 |
| 76 | New empirical correlations for determination of Minimum Miscibility Pressure (MMP) during N2-contaminated lean gas flooding. Journal of the Taiwan Institute of Chemical Engineers, 2018, 91, 369-382. | 2.7 | 27 |
| 77 | Toward mechanistic understanding of wettability alteration in calcite and dolomite rocks: The effects of resin, asphaltene, anionic surfactant, and hydrophilic nano particles. Journal of Molecular Liquids, 2021, 321, 114672. | 2.3 | 27 |
| 78 | Viscosity of Ionic Liquids: Application of the Eyringâ€™s Theory and a Committee Machine Intelligent System. Molecules, 2021, 26, 156. | 1.7 | 27 |
| 79 | On the evaluation of thermal conductivity of ionic liquids: Modeling and data assessment. Journal of Molecular Liquids, 2016, 224, 648-656. | 2.3 | 26 |
| 80 | A lysine amino acid-based surfactant: Application in enhanced oil recovery. Petroleum Science and Technology, 2016, 34, 1521-1526. | 0.7 | 26 |
| 81 | Modeling temperature dependency of oil - water relative permeability in thermal enhanced oil recovery processes using group method of data handling and gene expression programming. Engineering Applications of Computational Fluid Mechanics, 2019, 13, 724-743. | 1.5 | 26 |
| 82 | On the evaluation of density of ionic liquids: towards a comparative study. Chemical Engineering Research and Design, 2019, 147, 648-663. | 2.7 | 26 |
| 83 | A review on asphaltenes characterization by X-ray diffraction: Fundamentals, challenges, and tips. Journal of Molecular Structure, 2021, 1238, 130425. | 1.8 | 26 |
| 84 | Application of robust machine learning methods to modeling hydrogen solubility in hydrocarbon fuels. International Journal of Hydrogen Energy, 2022, 47, 320-338. | 3.8 | 26 |
| 85 | Modeling solubility of CO2â€“N2 gas mixtures in aqueous electrolyte systems using artificial intelligence techniques and equations of state. Scientific Reports, 2022, 12, 3625. | 1.6 | 26 |
| 86 | On the evaluation of density of ionic liquid binary mixtures: Modeling and data assessment. Journal of Molecular Liquids, 2016, 222, 745-751. | 2.3 | 25 |
| 87 | Determination of asphaltene precipitation conditions during natural depletion of oil reservoirs: A robust compositional approach. Fluid Phase Equilibria, 2016, 412, 235-248. | 1.4 | 25 |
| 88 | Toward gene expression programming for accurate prognostication of the critical oil flow rate through the choke: correlation development. Asia-Pacific Journal of Chemical Engineering, 2017, 12, 884-893. | 0.8 | 25 |
| 89 | Toward generalized models for estimating molecular weights and acentric factors of pure chemical compounds. International Journal of Hydrogen Energy, 2018, 43, 2699-2717. | 3.8 | 25 |
| 90 | Development of a powerful zeolitic imidazolate framework (ZIF-8)/carbon fiber nanocomposite for separation of hydrocarbons and crude oil from wastewater. Microporous and Mesoporous Materials, 2020, 307, 110463. | 2.2 | 25 |

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| 91 | Modeling of wax disappearance temperature (WDT) using soft computing approaches: Tree-based models and hybrid models. Journal of Petroleum Science and Engineering, 2022, 208, 109774. | 2.1 | 25 |
| 92 | Integrating functionalized magnetite nanoparticles with low salinity water and surfactant solution: Interfacial tension study. Fuel, 2020, 281, 118641. | 3.4 | 24 |
| 93 | Comparative Analysis of Machine Learning Models for Nanofluids Viscosity Assessment. Nanomaterials, 2020, 10, 1767. | 1.9 | 24 |
| 94 | Predicting formation damage of oil fields due to mineral scaling during water-flooding operations: Gradient boosting decision tree and cascade-forward back-propagation network. Journal of Petroleum Science and Engineering, 2022, 208, 109315. | 2.1 | 24 |
| 95 | A computational intelligence scheme for estimating electrical conductivity of ternary mixtures containing ionic liquids. Journal of Molecular Liquids, 2016, 221, 624-632. | 2.3 | 23 |
| 96 | On the Evaluation of Interfacial Tension (IFT) of CO2â€“Paraffin System for Enhanced Oil Recovery Process: Comparison of Empirical Correlations, Soft Computing Approaches, and Parachor Model. Energies, 2021, 14, 3045. | 1.6 | 23 |
| 97 | Modeling surface tension of ionic liquids by chemical structure-intelligence based models. Journal of Molecular Liquids, 2021, 342, 116961. | 2.3 | 23 |
| 98 | Evaluation of asphaltene adsorption on minerals of dolomite and sandstone formations in two and three-phase systems. Advances in Geo-Energy Research, 2021, 5, 39-52. | 3.1 | 23 |
| 99 | Application of a supervised learning machine for accurate prognostication of higher heating values of solid wastes. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 558-564. | 1.2 | 22 |
| 100 | Rapid method for the determination of solution gas-oil ratios of petroleum reservoir fluids. Journal of Natural Gas Science and Engineering, 2015, 24, 500-509. | 2.1 | 21 |
| 101 | On the evaluation of thermal conductivity of nanofluids using advanced intelligent models. International Communications in Heat and Mass Transfer, 2020, 118, 104825. | 2.9 | 21 |
| 102 | Modeling of methane adsorption capacity in shale gas formations using white-box supervised machine learning techniques. Journal of Petroleum Science and Engineering, 2022, 208, 109226. | 2.1 | 21 |
| 103 | On the evaluation of crude oil oxidation during thermogravimetry by generalised regression neural network and gene expression programming: application to thermal enhanced oil recovery. Combustion Theory and Modelling, 2021, 25, 1268-1295. | 1.0 | 21 |
| 104 | Modeling natural gas compressibility factor using a hybrid group method of data handling. Engineering Applications of Computational Fluid Mechanics, 2020, 14, 27-37. | 1.5 | 20 |
| 105 | Experimental measurement and modeling of water-based drilling mud density using adaptive boosting decision tree, support vector machine, and K-nearest neighbors: A case study from the South Pars gas field. Journal of Petroleum Science and Engineering, 2021, 207, 109132. | 2.1 | 20 |
| 106 | Predicting viscosity of CO2â€“N2 gaseous mixtures using advanced intelligent schemes. Journal of Petroleum Science and Engineering, 2022, 208, 109359. | 2.1 | 20 |
| 107 | Integrating advanced soft computing techniques with experimental studies for pore structure analysis of Qingshankou shale in Southern Songliao Basin, NE China. International Journal of Coal Geology, 2022, 257, 103998. | 1.9 | 20 |
| 108 | On modeling of bitumen/nâ€tetradecane mixture viscosity: Application in solventâ€assisted recovery method. Asia-Pacific Journal of Chemical Engineering, 2018, 13, e2152. | 0.8 | 19 |

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| 109 | Laboratory evaluation of nitrogen injection for enhanced oil recovery: Effects of pressure and induced fractures. Fuel, 2019, 253, 607-614. | 3.4 | 19 |
| 110 | Integrating new emerging technologies for enhanced oil recovery: Ultrasonic, microorganism, and emulsion. Journal of Petroleum Science and Engineering, 2020, 192, 107229. | 2.1 | 19 |
| 111 | Generalized models for predicting the critical properties of pure chemical compounds. Journal of Molecular Liquids, 2017, 240, 777-793. | 2.3 | 18 |
| 112 | Smart modeling of viscosity of viscoelastic surfactant self-diverting acids. Journal of Petroleum Science and Engineering, 2021, 196, 107617. | 2.1 | 18 |
| 113 | An experimental study of Nanosilica application in reducing calcium sulfate scale at high temperatures during high and low salinity water injection. Journal of Petroleum Science and Engineering, 2019, 179, 7-18. | 2.1 | 17 |
| 114 | A review on zeolitic imidazolate frameworks use for crude oil spills cleanup. Advances in Geo-Energy Research, 2019, 3, 320-342. | 3.1 | 17 |
| 115 | Experimental measurement of equilibrium interfacial tension of enriched miscible gasâ€“crude oil systems. Journal of Molecular Liquids, 2015, 211, 63-70. | 2.3 | 16 |
| 116 | Experimental study and modeling of asphaltene deposition on metal surfaces via electrodeposition process: The role of ultrasonic radiation, asphaltene concentration and structure. Journal of Petroleum Science and Engineering, 2020, 195, 107734. | 2.1 | 16 |
| 117 | Modeling thermal conductivity of ionic liquids: A comparison between chemical structure and thermodynamic properties-based models. Journal of Molecular Liquids, 2021, 322, 114911. | 2.3 | 16 |
| 118 | Modeling hydrogen solubility in alcohols using machine learning models and equations of state. Journal of Molecular Liquids, 2022, 346, 117807. | 2.3 | 16 |
| 119 | A comprehensive study of phase equilibria in binary mixtures of carbon dioxide + alcohols: Application of a hybrid intelligent model (CSA-LSSVM). Journal of Molecular Liquids, 2016, 224, 745-756. | 2.3 | 15 |
| 120 | Modeling of H2S solubility in ionic liquids using deep learning: A chemical structure-based approach. Journal of Molecular Liquids, 2022, 351, 118418. | 2.3 | 15 |
| 121 | On the evaluation of steam assisted gravity drainage in naturally fractured oil reservoirs. Petroleum, 2017, 3, 273-279. | 1.3 | 14 |
| 122 | Modelling asphaltene precipitation titration data: A committee of machines and a group method of data handling. Canadian Journal of Chemical Engineering, 2019, 97, 431-441. | 0.9 | 14 |
| 123 | Modeling viscosity of light and intermediate dead oil systems using advanced computational frameworks and artificial neural networks. Journal of Petroleum Science and Engineering, 2020, 193, 107388. | 2.1 | 14 |
| 124 | Predicting the surfactant-polymer flooding performance in chemical enhanced oil recovery: Cascade neural network and gradient boosting decision tree. AEJ - Alexandria Engineering Journal, 2022, 61, 7715-7731. | 3.4 | 14 |
| 125 | Toward predicting SO2 solubility in ionic liquids utilizing soft computing approaches and equations of state. Journal of the Taiwan Institute of Chemical Engineers, 2022, 133, 104220. | 2.7 | 14 |
| 126 | On the evaluation of Alkalineâ€Surfactantâ€Polymer flooding in a field scale: Screening, modelling, and optimization. Canadian Journal of Chemical Engineering, 2017, 95, 1615-1625. | 0.9 | 13 |

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| 127 | Modeling interfacial tension of normal alkane-supercritical CO2 systems: Application to gas injection processes. Fuel, 2019, 253, 1436-1445. | 3.4 | 13 |
| 128 | Modeling asphaltene precipitation during natural depletion of reservoirs and evaluating screening criteria for stability of crude oils. Journal of Petroleum Science and Engineering, 2019, 181, 106127. | 2.1 | 13 |
| 129 | Iterative Ensemble Kalman Filter and genetic algorithm for automatic reconstruction of relative permeability curves in the subsurface multi-phase flow. Journal of Petroleum Science and Engineering, 2020, 192, 107264. | 2.1 | 13 |
| 130 | Application of gene expression programming for predicting density of binary and ternary mixtures of ionic liquids and molecular solvents. Journal of the Taiwan Institute of Chemical Engineers, 2020, 117, 63-74. | 2.7 | 13 |
| 131 | Modeling thermal conductivity of nanofluids using advanced correlative approaches: Group method of data handling and gene expression programming. International Communications in Heat and Mass Transfer, 2022, 131, 105818. | 2.9 | 13 |
| 132 | Modeling of nitrogen solubility in normal alkanes using machine learning methods compared with cubic and PC-SAFT equations of state. Scientific Reports, 2021, 11, 24403. | 1.6 | 13 |
| 133 | Machine learning assisted Structure-based models for predicting electrical conductivity of ionic liquids. Journal of Molecular Liquids, 2022, 362, 119509. | 2.3 | 13 |
| 134 | Enhanced Oil Recovery Using CO2. , 2018, , 61-99. | | 12 |
| 135 | Conformance Control in Oil Reservoirs by Citric Acid-Coated Magnetite Nanoparticles. ACS Omega, 2021, 6, 9001-9012. | 1.6 | 12 |
| 136 | Modeling of gas viscosity at high pressure-high temperature conditions: Integrating radial basis function neural network with evolutionary algorithms. Journal of Petroleum Science and Engineering, 2022, 208, 109328. | 2.1 | 12 |
| 137 | Modeling of nitrogen solubility in unsaturated, cyclic, and aromatic hydrocarbons: Deep learning methods and SAFT equation of state. Journal of the Taiwan Institute of Chemical Engineers, 2021, 131, 104124-104124. | 2.7 | 12 |
| 138 | Application of a new approach for modeling the oil field formation damage due to mineral scaling. Oil and Gas Science and Technology, 2019, 74, 62. | 1.4 | 11 |
| 139 | Toward mechanistic understanding of asphaltene adsorption onto quartz surface: The roles of size, concentration, and hydrophobicity of quartz, asphaltene composition, flow condition, and aqueous phase. Journal of Petroleum Science and Engineering, 2021, 205, 108820. | 2.1 | 11 |
| 140 | Modeling Interfacial Tension of N2/CO2 Mixture + n-Alkanes with Machine Learning Methods: Application to EOR in Conventional and Unconventional Reservoirs by Flue Gas Injection. Minerals (Basel, Switzerland), 2022, 12, 252. | 0.8 | 11 |
| 141 | A CSA-LSSVM Model to Estimate Diluted Heavy Oil Viscosity in the Presence of Kerosene. Petroleum Science and Technology, 2015, 33, 1085-1092. | 0.7 | 10 |
| 142 | Modeling the permeability of heterogeneous oil reservoirs using a robust method. Geosciences Journal, 2016, 20, 259-271. | 0.6 | 10 |
| 143 | A soft-computing technique for prediction of water activity in PEG solutions. Colloid and Polymer Science, 2017, 295, 421-432. | 1.0 | 10 |
| 144 | Evolving new strategies to estimate reservoir oil formation volume factor: Smart modeling and correlation development. Journal of Petroleum Science and Engineering, 2019, 181, 106180. | 2.1 | 10 |

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| 145 | Estimating n-tetradecane/bitumen mixture viscosity in solvent-assisted oil recovery process using GEP and GMDH modeling approaches. Petroleum Science and Technology, 2019, 37, 1640-1647. | 0.7 | 10 |
| 146 | Experimental Measurement and Equilibrium Modeling of Adsorption of Asphaltenes from Various Origins onto the Magnetite Surface under Static and Dynamic Conditions. ACS Omega, 2021, 6, 24256-24268. | 1.6 | 10 |
| 147 | Modeling viscosity of crude oil using k-nearest neighbor algorithm. Advances in Geo-Energy Research, 2020, 4, 435-447. | 3.1 | 10 |
| 148 | Modelling density of pure and binary mixtures of normal alkanes: Comparison of hybrid soft computing techniques, gene expression programming, and equations of state. Journal of Petroleum Science and Engineering, 2022, 208, 109737. | 2.1 | 10 |
| 149 | ZIF-8/carbon fiber for continuous adsorption of sodium dodecyl sulfate (SDS) from aqueous solutions: Kinetics and equilibrium studies. Journal of Water Process Engineering, 2021, 44, 102437. | 2.6 | 10 |
| 150 | Modelling rate of penetration in drilling operations using RBF, MLP, LSSVM, and DT models. Scientific Reports, 2022, 12, . | 1.6 | 10 |
| 151 | Modeling of carbon dioxide solubility in ionic liquids based on group method of data handling. Engineering Applications of Computational Fluid Mechanics, 2021, 15, 23-42. | 1.5 | 9 |
| 152 | On the evaluation of permeability of heterogeneous carbonate reservoirs using rigorous data-driven techniques. Journal of Petroleum Science and Engineering, 2022, 208, 109685. | 2.1 | 9 |
| 153 | Experimental evaluation of thermal maturity of crude oil samples by asphaltene fraction: Raman spectroscopy and X-ray diffraction. Journal of Petroleum Science and Engineering, 2021, 199, 108269. | 2.1 | 8 |
| 154 | Magnetic Î³-Fe<sub>2</sub>O<sub>3</sub>/ZIF-7 Composite Particles and Their Application for Oily Water Treatment. ACS Omega, 2022, 7, 3700-3712. | 1.6 | 8 |
| 155 | On the evaluation of asphaltene adsorption onto dolomite surface: The roles of flow condition, composition of asphaltene, and dolomite size. AEJ - Alexandria Engineering Journal, 2022, 61, 9411-9425. | 3.4 | 8 |
| 156 | Experimental study and modelling of asphaltene deposition on metal surfaces with superhydrophobic and low sliding angle inner coatings. Scientific Reports, 2021, 11, 16812. | 1.6 | 7 |
| 157 | New method for predictingn-tetradecane/bitumen mixture density: correlation development. Oil and Gas Science and Technology, 2018, 73, 35. | 1.4 | 6 |
| 158 | Rigorous framework determining residual gas saturations during spontaneous and forced imbibition using gene expression programming. Journal of Natural Gas Science and Engineering, 2020, 84, 103644. | 2.1 | 6 |
| 159 | Proposing a rigorous empirical model for estimating the bubble point pressure in heterogeneous carbonate reservoirs. Advances in Geo-Energy Research, 2020, 4, 126-134. | 3.1 | 6 |
| 160 | Designing a committee of machines for modeling viscosity of water-based nanofluids. Engineering Applications of Computational Fluid Mechanics, 2021, 15, 1967-1987. | 1.5 | 6 |
| 161 | Experimental measurement and compositional modeling of bubble point pressure in crude oil systems: Soft computing approaches, correlations, and equations of state. Journal of Petroleum Science and Engineering, 2022, 212, 110271. | 2.1 | 6 |
| 162 | An advanced computational intelligent framework to predict shear sonic velocity with application to mechanical rock classification. Scientific Reports, 2022, 12, 5579. | 1.6 | 6 |

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