Siavash Riahi

List of Publications by Year
in descending order

74 papers	1,784 citations	279487 23 h-index	301761 39 g-index
74 all docs	74 docs citations	74 times ranked	1411 citing authors

#	Article	IF	Citations
1	An insight review on formation damage induced by drilling fluids. Reviews in Chemical Engineering, 2023, 39, 387-415.	2.3	6
2	Experimental study of secondary and tertiary modes combined low salinity water and polymer flooding in sandstone porous media. Canadian Journal of Chemical Engineering, 2023, 101, 1095-1108.	0.9	1
3	The use of nanotechnology to prevent and mitigate fine migration: a comprehensive review. Reviews in Chemical Engineering, 2022, 38, 1-16.	2.3	16
4	A Comparison of Different Nanoparticlesâ€™ Effect on Fine Migration by Low Salinity Water Injection for Oil Recovery: Introducing an Optimum Condition. Journal of Energy Resources Technology, Transactions of the ASME, 2022, 144, .	1.4	10
5	Elemental analysis of scale inhibitors' effect on water incompatibility in carbonate reservoirs: Modeling, bulk and core scales studies. Journal of Petroleum Science and Engineering, 2022, 208, 109580.	2.1	4
6	Developing novel bio-nano catalyst well clean up fluid to remove formation damage induced by polymeric water-based drilling fluids. Journal of Petroleum Science and Engineering, 2022, 210, 109809.	2.1	8
7	Effects of nanosilica on fine migration and location distribution of blockage at different <scp>pH</scp> and temperatures: Modelling and experimental studies. Canadian Journal of Chemical Engineering, 2022, 100, 2881-2893.	0.9	3
8	A structure-property model for the prediction of pKa values of different amines in the CO2 capture process of concern to the prediction of thermodynamic properties. Chemical Engineering Research and Design, 2022, 180, 13-24.	2.7	3
9	Experimental Evaluation of a Polymer Foam Agent on the Foam Stability, Concern to Surfactant, Nanoparticle, and Salinity. SPE Journal, 2022, 27, 1462-1479.	1.7	4
10	Synergetic effects of PVP/HEC polymers on rheology and stability of polymeric solutions for enhanced oil recovery at harsh reservoirs. Journal of Petroleum Science and Engineering, 2022, 215, 110619.	2.1	4
11	The Effect of Blending Polymeric and Phosphonate Scale Inhibitors on Fluid/Fluid and Rock/Fluid Interactions: A Comprehensive Experimental and Theoretical Study. SPE Journal, 2022, 27, 3611-3629.	1.7	2
12	Investigation of foaming tendency of aqueous mixture of MDEA+IPAE for carbon dioxide absorption. Journal of CO2 Utilization, 2022, 62, 102079.	3.3	0
13	Design of potential anti-tumor PARP-1 inhibitors by QSAR and molecular modeling studies. Molecular Diversity, 2021, 25, 263-277.	2.1	8
14	Interfacial tension behavior of a nonionic surfactant in oil/water system; salinity, pH, temperature, and ionic strength effects. Journal of Petroleum Science and Engineering, 2021, 198, 108177.	2.1	20
15	A simple and robust model to predict the inhibitory activity of Î±-glucosidase inhibitors through combined QSAR modeling and molecular docking techniques. Molecular Diversity, 2021, 25, 1811-1825.	2.1	3
16	Effects of salinity and ionic composition of smart water on mineral scaling in carbonate reservoirs during water flooding. Petroleum Exploration and Development, 2021, 48, 421-429.	3.0	9
17	Molecular investigation of amine performance in the carbon capture process: Least squares support vector machine approach. Korean Journal of Chemical Engineering, 2020, 37, 72-79.	1.2	13
18	Effect of host fluid and hydrophilicity of multi-walled carbon nanotubes on stability and CO2 absorption of amine-based and water-based nanofluids. Journal of Environmental Chemical Engineering, 2020, 8, 103580.	3.3	27

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19	A simple, robust and efficient structural model to predict CO2 absorption for different amine solutions: Concern to design new amine compounds. Journal of Environmental Chemical Engineering, 2020, 8, 104572.	3.3	6
20	Experimental Investigation of Water Incompatibility and Rock/Fluid and Fluid/Fluid Interactions in the Absence and Presence of Scale Inhibitors. SPE Journal, 2020, 25, 2615-2631.	1.7	15
21	Molecular docking, linear and nonlinear QSAR studies on factor Xa inhibitors. Structural Chemistry, 2020, 31, 2023-2040.	1.0	1
22	Predictive QSAR models for the anti-cancer activity of topoisomerase IÎ± catalytic inhibitors against breast cancer cell line HCT15: GA-MLR and LS-SVM modeling. Structural Chemistry, 2020, 31, 2129-2145.	1.0	2
23	Investigation of the CO2 absorption in pure water and MDEA aqueous solution including amine functionalized multi-wall carbon nano tubes. Journal of Molecular Liquids, 2019, 293, 111431.	2.3	19
24	Modification of multi-walled carbon nanotubes by 1,3-diaminopropane to increase CO2 adsorption capacity. Journal of Environmental Management, 2019, 242, 81-89.	3.8	54
25	Prediction of Amines Capacity for Carbon Dioxide Absorption Based on Structural Characteristics. Industrial & Engineering Chemistry Research, 2019, 58, 8763-8771.	1.8	15
26	Experimental modeling of the solubility of carbon dioxide in aqueous solution of monoethanolamine +1, 3-diaminopropane. Journal of Molecular Liquids, 2019, 281, 415-422.	2.3	11
27	Effect of salinity and ion type on formation damage due to inorganic scale deposition and introducing optimum salinity. Journal of Petroleum Science and Engineering, 2019, 177, 270-281.	2.1	42
28	Investigation on kinetics of carbon dioxide absorption in aqueous solutions of monoethanolamine + 1, 3-diaminopropane. Separation Science and Technology, 2019, 54, 2800-2808.	1.3	11
29	Application of nano particle for enhancement of foam stability in the presence of crude oil: Experimental investigation. Journal of Molecular Liquids, 2018, 264, 499-509.	2.3	54
30	Descriptive and predictive models for Henryâ€™s law constant of CO 2 in ionic liquids: A QSPR study. Chemical Engineering Research and Design, 2017, 120, 15-25.	2.7	26
31	Exploring beneficial structural features of ionic surfactants for wettability alteration of carbonate rocks using QSPR modeling technique. Journal of Molecular Liquids, 2017, 240, 196-208.	2.3	4
32	Quantitative structure-property relationship (QSPR) for prediction of CO2 Henryâ€™s law constant in some physical solvents with consideration of temperature effects. Korean Journal of Chemical Engineering, 2017, 34, 1405-1415.	1.2	14
33	The QSPR models to predict the solubility of CO 2 in ionic liquids based on least-squares support vector machines and genetic algorithm-multi linear regression. Journal of Molecular Liquids, 2017, 225, 521-530.	2.3	33
34	Prediction of CO 2 loading of amines in carbon capture process using membrane contactors: A molecular modeling. Journal of Natural Gas Science and Engineering, 2016, 33, 388-396.	2.1	17
35	Experimental study of nanoparticle-surfactant-stabilized CO2 foam: Stability and mobility control. Chemical Engineering Research and Design, 2016, 111, 449-460.	2.7	118
36	Monitoring wettability alteration of porous media by streaming potential measurements: Experimental and modeling investigation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 497, 182-193.	2.3	11

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37	An investigation into the electrical behavior of oil/water/reservoir rock interfaces: The implication for improvement in wettability prediction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 490, 268-282.	2.3	43
38	A molecular structure based model for predicting optimal salinity of anionic surfactants. Fluid Phase Equilibria, 2016, 409, 354-360.	1.4	14
39	Assessment of total oil production in gas-lift process of wells using Boxâ€“Behnken design of experiments in comparison with traditional approach. Journal of Natural Gas Science and Engineering, 2015, 27, 1455-1461.	2.1	14
40	An investigation into the relationship between molecular structure and rich/lean loading of linear amine-based CO 2 absorbents. International Journal of Greenhouse Gas Control, 2015, 42, 157-164.	2.3	13
41	Adaptive neuro-fuzzy approach for reservoir oil bubble point pressure estimation. Journal of Natural Gas Science and Engineering, 2014, 20, 214-220.	2.1	25
42	Prediction of amines capacity for carbon dioxide absorption in gas sweetening processes. Journal of Natural Gas Science and Engineering, 2014, 21, 442-450.	2.1	18
43	Development of 3â€hydroxybutyrate dehydrogenase enzyme biosensor based on carbon nanotubeâ€modified screenâ€printed electrode. IET Nanobiotechnology, 2013, 7, 1-6.	1.9	24
44	Density-Functional Theory on the Oxidation Potentials and Geometry Parameters of Thioxanthen Derivatives: Theory and Experiment: Corrigendum (Anal. Lett., 40: 2574â€“2588, 2007). Analytical Letters, 2012, 45, 430-430.	1.0	0
45	Experimental and QSPR Studies on the Effect of Ionic Surfactants on nâ€Decaneâ€“Water Interfacial Tension. Journal of Surfactants and Detergents, 2012, 15, 477-484.	1.0	20
46	Prediction of Solubility of Fullerene C60in Various Organic Solvents by Genetic Algorithm-Multiple Linear Regression. Fullerenes Nanotubes and Carbon Nanostructures, 2011, 19, 585-598.	1.0	16
47	A new technique for spectrophotometric determination of Pseudoephedrine and Guaifenesin in syrup and synthetic mixture. Drug Testing and Analysis, 2011, 3, 319-324.	1.6	25
48	Computational Studies on Effects of MDMA as an Anticancer Drug on DNA. Chemical Biology and Drug Design, 2010, 76, 425-432.	1.5	16
49	Rapid and Direct Spectrofluorometric and Chemometrics Methods for the Simultaneous Determination of Two Dansyl Derivatives. Spectroscopy Letters, 2010, 43, 226-234.	0.5	2
50	INTERACTION OF EMODIN WITH DNA BASES: A DENSITY FUNCTIONAL THEORY. Journal of Theoretical and Computational Chemistry, 2010, 09, 875-888.	1.8	5
51	A computational approach to studying monomer selectivity towards the template in an imprinted polymer. Journal of Molecular Modeling, 2009, 15, 829-836.	0.8	52
52	Support Vector Machineâ€Based Quantitative Structureâ€“Activity Relationship Study of Cholesteryl Ester Transfer Protein Inhibitors. Chemical Biology and Drug Design, 2009, 73, 558-571.	1.5	14
53	Quantitative Structureâ€“Activity Relationship Study on the Antiâ€HIVâ€1 Activity of Novel 6â€Naphthylthio HEPT Analogs. Chemical Biology and Drug Design, 2009, 74, 165-172.	1.5	7
54	Quantitative structureâ€“property relationship study on first reduction and oxidation potentials of donor-substituted phenylquinolinylethynes and phenylisoquinolinylethynes: Quantum chemical investigation. Electrochimica Acta, 2009, 54, 5368-5375.	2.6	11

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55	Investigation of different linear and nonlinear chemometric methods for modeling of retention index of essential oil components: Concerns to support vector machine. Journal of Hazardous Materials, 2009, 166, 853-859.	6.5	90
56	Determination of the formation constant for the inclusion complex between Lanthanide ions and Dansyl chloride derivative by fluorescence spectroscopy: Theoretical and experimental investigation. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2009, 74, 253-258.	2.0	13
57	Quantum chemical calculations to reveal the relationship between the chemical structure and the fluorescence characteristics of phenylquinolinylethynes and phenylisoquinolinylethynes derivatives, and to predict their relative fluorescence intensity. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2009, 74, 1077-1083.	2.0	12
58	Application of genetic algorithm-support vector machine (GA-SVM) for prediction of BK-channels activity. European Journal of Medicinal Chemistry, 2009, 44, 5023-5028.	2.6	93
59	Encapsulation of Hydrogen Molecule in Fullerene (C₆₀). Fullerenes Nanotubes and Carbon Nanostructures, 2009, 17, 159-170.	1.0	21
60	Molecular geometry, vibrations and electrode potentials of 2-(4,5-dihydroxy-2-methylphenyl)-2-phenyl-2H-indene-1,3-dione; experimental and theoretical attempts. Journal of Molecular Modeling, 2008, 14, 325-333.	0.8	8
61	A novel QSPR study of normalized migration time for drugs in capillary electrophoresis by new descriptors: Quantum chemical investigation. Electrophoresis, 2008, 29, 4027-4035.	1.3	11
62	Structural study of 2-(1-oxo-1 H-inden-3-yl)-2H-indene-1,3-dione by DFT calculations, NMR and IR spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2008, 70, 94-98.	2.0	45
63	Experimental and quantum chemical study on the IR, UV and electrode potential of 6-(2,3-dihydro-1,3-dioxo-2-phenyl-1H-inden-2-yl)-2,3-dihydroxybenzaldehyde. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2008, 71, 1390-1396.	2.0	33
64	Application of GA-MLR, GA-PLS and the DFT quantum mechanical (QM) calculations for the prediction of the selectivity coefficients of a histamine-selective electrode. Sensors and Actuators B: Chemical, 2008, 132, 13-19.	4.0	79
65	QSRR Study of GC Retention Indices of Essential-Oil Compounds by Multiple Linear Regression with a Genetic Algorithm. Chromatographia, 2008, 67, 917-922.	0.7	62
66	A Theoretical Study on Interactions Between Mitoxantrone as an Anticancer Drug and DNA: Application in Drug Design. Chemical Biology and Drug Design, 2008, 71, 474-482.	1.5	28
67	Exploring QSARs for Antiviral Activity of 4â€Alkylaminoâ€6â€(2â€hydroxyethyl)â€2â€methylthiopyrimidines by Support Vector Machine. Chemical Biology and Drug Design, 2008, 72, 205-216.	1.5	26
68	QSAR Study of 2â€(1â€Propylpiperidinâ€4â€yl)â€1Hâ€Benzimidazoleâ€4â€Carboxamide as PARP Inhibitors for Treatment of Cancer. Chemical Biology and Drug Design, 2008, 72, 575-584.	1.5	22
69	Schiff's Bases and Crown Ethers as Supramolecular Sensing Materials in the Construction of Potentiometric Membrane Sensors. Sensors, 2008, 8, 1645-1703.	2.1	196
70	QSPR Study of the Distribution Coefficient Property for Hydantoin and 5â€Arylidene Derivatives. A Genetic Algorithm Application for the Variable Selection in the MLR and PLS Methods. Journal of the Chinese Chemical Society, 2008, 55, 1086-1093.	0.8	12
71	Partition Coefficient Prediction of a Large Set of Various Drugs and Poisons by a Genetic Algorithm and Artificial Neural Network. Journal of the Chinese Chemical Society, 2008, 55, 345-355.	0.8	14
72	An Asymetric Lutetium(III) Microsensor Based on Nâ€(2â€Furylmethylene) Pyridineâ€2,6â€Diamine for Determination of Lutetium(III) Ions. Analytical Letters, 2007, 40, 1923-1938.	1.0	28

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73	Lanthanide Recognition: Monitoring of Praseodymium(III) by a Novel Praseodymium(III) Microsensor Based on N$'$-(Pyridin-2-Ylmethylene)Benzohydrazide. IEEE Sensors Journal, 2007, 7, 1138-1144.	2.4	71
74	Densityâ€functional Theory on the Oxidation Potentials and Geometry Parameters of Thioxanthen Derivatives: Theory and Experiment. Analytical Letters, 2007, 40, 2574-2588.	1.0	7