## Mikhail A Varfolomeev

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Liquid Organic Hydrogen Carriers: Thermophysical and Thermochemical Studies of Benzyl- and Dibenzyl-toluene Derivatives. Industrial & Engineering Chemistry Research, 2015, 54, 7967-7976.	1.8	196
2	Thermochemistry of Halogen-Substituted Methylbenzenes. Journal of Chemical & Engineering Data, 2015, 60, 89-103.	1.0	170
3	Thermal decomposition of Tatarstan Ashal'cha heavy crude oil and its SARA fractions. Fuel, 2016, 186, 122-127.	3.4	117
4	Crude oil characterization using TGA-DTA, TGA-FTIR and TGA-MS techniques. Journal of Petroleum Science and Engineering, 2017, 154, 537-542.	2.1	97
5	A new method for the extraction of specific interaction enthalpy from the enthalpy of solvation. Journal of Physical Organic Chemistry, 2005, 18, 49-61.	0.9	91
6	Oxidation Behavior and Kinetics of Light, Medium, and Heavy Crude Oils Characterized by Thermogravimetry Coupled with Fourier Transform Infrared Spectroscopy. Energy & Fuels, 2018, 32, 5571-5580.	2.5	86
7	New method for determination of vaporization and sublimation enthalpy of aromatic compounds at 298.15 K using solution calorimetry technique and group-additivity scheme. Thermochimica Acta, 2015, 622, 88-96.	1.2	81
8	Oxidation Behavior of Light Crude Oil and Its SARA Fractions Characterized by TG and DSC Techniques: Differences and Connections. Energy & Fuels, 2018, 32, 801-808.	2.5	79
9	Solution calorimetry as a complementary tool for the determination of enthalpies of vaporization and sublimation of low volatile compounds at 298.15 K. Thermochimica Acta, 2014, 589, 164-173.	1.2	76
10	Hydrothermal upgrading of heavy oil in the presence of water at sub-critical, near-critical and supercritical conditions. Journal of Petroleum Science and Engineering, 2020, 184, 106592.	2.1	67
11	Liquid Organic Hydrogen Carriers: Thermophysical and Thermochemical Studies of Carbazole Partly and Fully Hydrogenated Derivatives. Industrial & Engineering Chemistry Research, 2015, 54, 7953-7966.	1.8	66
12	In-situ catalytic upgrading of heavy oil using oil-soluble transition metal-based catalysts. Fuel, 2020, 281, 118753.	3.4	66
13	Calorimetric determination of hydrogen-bonding enthalpy for neat aliphatic alcohols. Journal of Physical Organic Chemistry, 2005, 18, 1132-1137.	0.9	65
14	Enthalpy of cooperative hydrogen bonding in complexes of tertiary amines with aliphatic alcohols: Calorimetric study. Journal of Chemical Thermodynamics, 2011, 43, 1083-1090.	1.0	62
15	Hydrogen Storage: Thermochemical Studies of <i>N</i> -Alkylcarbazoles and Their Derivatives as a Potential Liquid Organic Hydrogen Carriers. Journal of Physical Chemistry C, 2015, 119, 26381-26389.	1.5	62
16	Pairwise Substitution Effects, Inter- and Intramolecular Hydrogen Bonds in Methoxyphenols and Dimethoxybenzenes. Thermochemistry, Calorimetry, and First-Principles Calculations. Journal of Physical Chemistry B, 2010, 114, 16503-16516.	1.2	59
17	Hydrogen donating capacity of water in catalytic and non-catalytic aquathermolysis of extra-heavy oil: Deuterium tracing study. Fuel, 2021, 283, 118957.	3.4	58
18	Sulfonated chitosan as green and high cloud point kinetic methane hydrate and corrosion inhibitor: Experimental and theoretical studies. Carbohydrate Polymers, 2020, 236, 116035.	5.1	56

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19	Effect of copper stearate as catalysts on the performance of in-situ combustion process for heavy oil recovery and upgrading. Journal of Petroleum Science and Engineering, 2021, 207, 109125.	2.1	51
20	Thermal characterization of crude oils in the presence of limestone matrix by TGA-DTG-FTIR. Journal of Petroleum Science and Engineering, 2017, 154, 495-501.	2.1	48
21	Thermodynamic functions of hydrogen bonding of amines in methanol derived from solution calorimetry data and headspace analysis. Thermochimica Acta, 2012, 535, 8-16.	1.2	46
22	Waterborne polymers as kinetic/anti-agglomerant methane hydrate and corrosion inhibitors: A new and promising strategy for flow assurance. Journal of Natural Gas Science and Engineering, 2020, 77, 103235.	2.1	46
23	Enthalpies of Vaporization and Sublimation of the Halogen-Substituted Aromatic Hydrocarbons at 298.15 K: Application of Solution Calorimetry Approach. Journal of Chemical & Engineering Data, 2015, 60, 748-761.	1.0	45
24	A new class of promising biodegradable kinetic/anti-agglomerant methane hydrate inhibitors based on castor oil. Chemical Engineering Science, 2019, 206, 507-517.	1.9	43
25	Contribution of thermal analysis and kinetics of Siberian and Tatarstan regions crude oils for in situ combustion process. Journal of Thermal Analysis and Calorimetry, 2015, 122, 1375-1384.	2.0	42
26	Copper stearate as a catalyst for improving the oxidation performance of heavy oil in in-situ combustion process. Applied Catalysis A: General, 2018, 564, 79-89.	2.2	42
27	Low-temperature combustion behavior of crude oils in porous media under air flow condition for in-situ combustion (ISC) process. Fuel, 2020, 259, 116293.	3.4	42
28	Thermal Behavior and Kinetic Triplets of Heavy Crude Oil and Its SARA Fractions during Combustion by High-Pressure Differential Scanning Calorimetry. Energy & Fuels, 2019, 33, 3176-3186.	2.5	41
29	Waterborne Polyurethanes as a New and Promising Class of Kinetic Inhibitors for Methane Hydrate Formation. Scientific Reports, 2019, 9, 9797.	1.6	40
30	A new method for the determination of cooperative hydrogen bonding enthalpy of proton acceptors with associated species of alcohols. Journal of Physical Organic Chemistry, 2006, 19, 263-268.	0.9	39
31	FTIR study of H-bonds cooperativity in complexes of 1,2-dihydroxybenzene with proton acceptors in aprotic solvents: Influence of the intramolecular hydrogen bond. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 77, 965-972.	2.0	39
32	Low-temperature oxidation of light and heavy oils via thermal analysis: Kinetic analysis and temperature zone division. Journal of Petroleum Science and Engineering, 2018, 168, 246-255.	2.1	39
33	Synthesis of fully bio-based and solvent free non-isocyanate poly (ester amide/urethane) networks with improved thermal stability onÂthe basis of vegetable oils. Polymer Degradation and Stability, 2018, 155, 111-121.	2.7	39
34	Enthalpies of fusion and enthalpies of solvation of aromatic hydrocarbons derivatives: Estimation of sublimation enthalpies at 298.15 K. Thermochimica Acta, 2016, 627-629, 77-82.	1.2	38
35	Comparison of oxidation behavior of linear and branched alkanes. Fuel Processing Technology, 2019, 188, 203-211.	3.7	38
36	Calorimetric study approach for crude oil combustion in the presence of clay as catalyst. Petroleum Science and Technology, 2016, 34, 1624-1630.	0.7	37

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37	Study of the Radical Chain Mechanism of Hydrocarbon Oxidation for In Situ Combustion Process. Journal of Combustion, 2017, 2017, 1-11.	0.5	37
38	Comprehensive investigations into low temperature oxidation of heavy crude oil. Journal of Petroleum Science and Engineering, 2018, 171, 835-842.	2.1	37
39	Thermochemistry of Dihalogen-Substituted Benzenes: Data Evaluation Using Experimental and Quantum Chemical Methods. Journal of Physical Chemistry B, 2014, 118, 14479-14492.	1.2	36
40	Enthalpies of solution, enthalpies of fusion and enthalpies of solvation of polyaromatic hydrocarbons: Instruments for determination of sublimation enthalpy at 298.15K. Thermochimica Acta, 2015, 622, 107-112.	1.2	36
41	Effects of interfacial tension and emulsification on displacement efficiency in dilute surfactant flooding. RSC Advances, 2016, 6, 50640-50649.	1.7	36
42	A preliminary feasibility analysis of in situ combustion in a deep fractured-cave carbonate heavy oil reservoir. Journal of Petroleum Science and Engineering, 2019, 174, 446-455.	2.1	36
43	Toward a bio-based hybrid inhibition of gas hydrate and corrosion for flow assurance. Energy, 2020, 210, 118549.	4.5	36
44	Gas Hydrate and Corrosion Inhibition Performance of the Newly Synthesized Polyurethanes: Potential Dual Function Inhibitors. Energy & Fuels, 2021, 35, 6113-6124.	2.5	36
45	Experimental and Theoretical Thermodynamic Study of Distillable Ionic Liquid 1,5-Diazabicyclo[4.3.0]non-5-enium Acetate. Industrial & Engineering Chemistry Research, 2016, 55, 10445-10454.	1.8	35
46	Aquathermolysis of heavy oil in reservoir conditions with the use of oil-soluble catalysts: part III – changes in composition resins and asphaltenes. Petroleum Science and Technology, 2018, 36, 1857-1863.	0.7	35
47	Accelerated Methane Hydrate Formation by Ethylene Diamine Tetraacetamide As an Efficient Promoter for Methane Storage without Foam Formation. Industrial & Engineering Chemistry Research, 2019, 58, 7752-7760.	1.8	34
48	Use of Kinetic Inhibitors of Gas Hydrate Formation in Oil and Gas Production Processes: Current State and Prospects of Development. Chemistry and Technology of Fuels and Oils, 2017, 53, 377-381.	0.2	33
49	Examination of hydrogen-bonding interactions between dissolved solutes and alkylbenzene solvents based on Abraham model correlations derived from measured enthalpies of solvation. Thermochimica Acta, 2014, 594, 68-79.	1.2	32
50	Modified solution calorimetry approach for determination of vaporization and sublimation enthalpies of branched-chain aliphatic and alkyl aromatic compounds at T= 298.15 K. Journal of Chemical Thermodynamics, 2015, 91, 204-210.	1.0	32
51	Oxidation Behavior and Kinetics of Eight C <sub>20</sub> –C <sub>54</sub> <i>n</i> -Alkanes by High Pressure Differential Scanning Calorimetry (HP-DSC). Energy & Fuels, 2018, 32, 7933-7942.	2.5	32
52	Reconsideration of the micellization theory: Promotion or inhibition of gas hydrate formation for gas storage and flow assurance applications. Chemical Engineering Journal, 2022, 427, 131852.	6.6	32
53	Speed of Sound, Density, and Related Thermodynamic Excess Properties of Binary Mixtures of Butan-2-one with Cl–C4 <i>n</i> -Alkanols and Chloroform. Journal of Chemical & Engineering Data, 2014, 59, 4118-4132.	1.0	31
54	Benchmark thermochemistry of methylbenzonitriles: Experimental and theoretical study. Journal of Chemical Thermodynamics, 2015, 91, 186-193.	1.0	31

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55	Aquathermolysis of heavy oil in reservoir conditions with the use of oil-soluble catalysts: part I – changes in composition of saturated hydrocarbons. Petroleum Science and Technology, 2018, 36, 1829-1836.	0.7	31
56	EPR as a complementary tool for the analysis of low-temperature oxidation reactions of crude oils. Journal of Petroleum Science and Engineering, 2018, 169, 673-682.	2.1	31
57	New thermochemical parameter for describing solvent effects on IR stretching vibration frequencies. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 64, 397-404.	2.0	30
58	Aquathermolysis of heavy oil in reservoir conditions with the use of oil-soluble catalysts: part II – changes in composition of aromatic hydrocarbons. Petroleum Science and Technology, 2018, 36, 1850-1856.	0.7	30
59	Dual-Function Synergists Based on Glucose and Sucrose for Gas Hydrate and Corrosion Inhibition. Energy & Fuels, 2020, 34, 13717-13727.	2.5	30
60	Thermal, kinetics, and oxidation mechanism studies of light crude oils in limestone and sandstone matrix using TG-DTG-DTA: Effect of heating rate and mesh size. Petroleum Science and Technology, 2016, 34, 1647-1653.	0.7	29
61	Mechanistic and kinetic insight into catalytic oxidation process of heavy oil in in-situ combustion process using copper (â;) stearate as oil soluble catalyst. Fuel, 2021, 284, 118981.	3.4	29
62	Effect of halogen substitution on the enthalpies of solvation and hydrogen bonding of organic solutes in chlorobenzene and 1,2-dichlorobenzene derived using multi-parameter correlations. Thermochimica Acta, 2015, 617, 8-20.	1.2	28
63	Chemical evaluation and kinetics of Siberian, north regions of Russia and Republic of Tatarstan crude oils. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2016, 38, 1031-1038.	1.2	28
64	Cooperative hydrogen bonding in solution: Influence of molecule structure. Vibrational Spectroscopy, 2007, 43, 380-386.	1.2	27
65	Thermochemical Properties of Formamide Revisited: New Experiment and Quantum Mechanical Calculations. Journal of Chemical & Engineering Data, 2011, 56, 4183-4187.	1.0	27
66	Enthalpy of solvation correlations for organic solutes and gases dissolved in dichloromethane and 1,4-dioxane. Structural Chemistry, 2013, 24, 1841-1853.	1.0	27
67	Thermodynamics of hydrogen bonding and van der Waals interactions of organic solutes in solutions of imidazolium based ionic liquids: "Structure-property―relationships. Thermochimica Acta, 2016, 633, 12-23.	1.2	27
68	Thermal behavior and kinetics of heavy crude oil during combustion by high pressure differential scanning calorimetry and accelerating rate calorimetry. Journal of Petroleum Science and Engineering, 2019, 181, 106225.	2.1	27
69	Thermal effect caused by low temperature oxidation of heavy crude oil and its in-situ combustion behavior. Journal of Petroleum Science and Engineering, 2020, 184, 106521.	2.1	27
70	Low-field NMR-relaxometry as fast and simple technique for in-situ determination of SARA-composition of crude oils. Journal of Petroleum Science and Engineering, 2021, 196, 107990.	2.1	27
71	High pressure air injection kinetic model for Bazhenov Shale Formation based on a set of oxidation studies. Journal of Petroleum Science and Engineering, 2019, 172, 1120-1132.	2.1	26
72	New thermochemical parameter for describing solvent effects on IR stretching vibration frequencies. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 64, 405-411.	2.0	25

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73	Calorimetric determination of the enthalpy of specific interaction of chloroform with a number of proton-acceptor compounds. Russian Journal of Physical Chemistry A, 2006, 80, 1790-1794.	0.1	25
74	Calorimetric Investigation of Hydrogen Bonding of Formamide and Its Methyl Derivatives in Organic Solvents and Water. International Journal of Thermophysics, 2013, 34, 710-724.	1.0	25
75	Enthalpies of solution and enthalpies of solvation of organic solutes in ethylene glycol at 298.15 K: Prediction and analysis of intermolecular interaction contributions. Thermochimica Acta, 2017, 648, 91-99.	1.2	25
76	CO2-responsive preformed gel particles with interpenetrating networks for controlling CO2 breakthrough in tight reservoirs. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 613, 126065.	2.3	25
77	Deep Insights into Heavy Oil Upgrading Using Supercritical Water by a Comprehensive Analysis of GC, GC–MS, NMR, and SEM–EDX with the Aid of EPR as a Complementary Technical Analysis. ACS Omega, 2021, 6, 135-147.	1.6	25
78	Characterization and Kinetics of Siberian and Tatarstan Regions Crude Oils Using Differential Scanning Calorimetry. Petroleum Science and Technology, 2015, 33, 865-871.	0.7	24
79	Enthalpies of Solution and Enthalpies of Solvation in Water: The Anion Effect in Ionic Liquids with Common 1-Ethyl-3-methyl-imidazolium Cation. Journal of Solution Chemistry, 2015, 44, 811-823.	0.6	24
80	Inhibition Performance of Chitosan- <i>graft</i> -Polyacrylamide as an Environmentally Friendly and High-Cloud-Point Inhibitor of Nucleation and Growth of Methane Hydrate. Crystal Growth and Design, 2020, 20, 1771-1778.	1.4	24
81	Integrative Investigation of Low-Temperature Oxidation Characteristics and Mechanisms of Heavy Crude Oil. Industrial & Engineering Chemistry Research, 2019, 58, 14595-14602.	1.8	23
82	Performance of Waterborne Polyurethanes in Inhibition of Gas Hydrate Formation and Corrosion: Influence of Hydrophobic Fragments. Molecules, 2020, 25, 5664.	1.7	23
83	Effect of decalin as hydrogen-donor for in-situ upgrading of heavy crude oil in presence of nickel-based catalyst. Fuel, 2022, 313, 122652.	3.4	23
84	On the use of metallic nanoparticulated catalysts for in-situ oil upgrading. Fuel, 2022, 313, 122677.	3.4	23
85	Thermodynamics of hydrogen bonding of weak bases in alcohol solutions: Calorimetry of solution, IR-spectroscopy and vapor pressure analysis. Journal of Molecular Structure, 2012, 1018, 14-20.	1.8	22
86	Structure–property relationships in ionic liquids: Influence of branched and cyclic groups on vaporization enthalpies of imidazolium-based ILs. Journal of Chemical Thermodynamics, 2016, 93, 151-156.	1.0	22
87	Qualitative and Quantitative Analysis of Heavy Crude Oil Samples and Their SARA Fractions with 13C Nuclear Magnetic Resonance. Processes, 2020, 8, 995.	1.3	21
88	Oxidation characteristics of heavy oil and its SARA fractions during combustion using TG-FTIR. Journal of Petroleum Science and Engineering, 2020, 192, 107331.	2.1	21
89	Thermochemistry of halogenobenzoic acids as an access to PC-SAFT solubility modeling. Fluid Phase Equilibria, 2016, 409, 399-407.	1.4	20
90	Determination of SARA fractions of crude oils by NMR technique. Journal of Petroleum Science and Engineering, 2019, 179, 1-6.	2.1	20

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91	Crude Oil Oxidation in an Air Injection Based Enhanced Oil Recovery Process: Chemical Reaction Mechanism and Catalysis. Energy & Fuels, 2022, 36, 5209-5227.	2.5	20
92	Wax appearance temperature (WAT) determinations of different origin crude oils by differential scanning calorimetry. Journal of Petroleum Science and Engineering, 2018, 168, 542-545.	2.1	19
93	Combustion behavior of aromatics and their interaction with n-alkane in in-situ combustion enhanced oil recovery process: Thermochemistry. Journal of Industrial and Engineering Chemistry, 2019, 76, 467-475.	2.9	19
94	Catalytic effect of clay rocks as natural catalysts on the combustion of heavy oil. Applied Clay Science, 2020, 193, 105662.	2.6	19
95	Vaporization enthalpies of a series of the fluoro- and chloro-substituted methylbenzenes. Fluid Phase Equilibria, 2014, 380, 67-75.	1.4	18
96	Enthalpies of solution and enthalpies of solvation of chloro- and nitro-substituted benzenes in 1-butyl-3-methyl imidazolium based ionic liquids at 298.15 K: Additivity of group contributions. Thermochimica Acta, 2016, 645, 1-6.	1.2	18
97	TGA and DSC investigation of different clay mineral effects on the combustion behavior and kinetics of crude oil from Kazan region, Russia. Journal of Petroleum Science and Engineering, 2021, 200, 108364.	2.1	18
98	Dual Promotion–Inhibition Effects of Novel Ethylenediaminetetraacetic Acid Bisamides on Methane Hydrate Formation for Gas Storage and Flow Assurance Applications. Energy & Fuels, 2022, 36, 290-297.	2.5	18
99	Positive and Negative Contributions in the Solvation Enthalpy due to Specific Interactions in Binary Mixtures of Cl–C4 <i>n</i> -Alkanols and Chloroform with Butan-2-one. Journal of Physical Chemistry B, 2015, 119, 8125-8134.	1.2	17
100	Analysis of solute-pyridine intermolecular interactions based on experimental enthalpies of solution and enthalpies of solvation of solutes dissolved in pyridine. Thermochimica Acta, 2018, 660, 11-17.	1.2	17
101	Low-temperature oxidation reactions of crude oils using TGA–DSC techniques. Journal of Thermal Analysis and Calorimetry, 2020, 141, 775-781.	2.0	17
102	Hydrothermal conversion of oil shale: Synthetic oil generation and micro-scale pore structure change. Fuel, 2022, 312, 122786.	3.4	17
103	Enthalpy of cooperative hydrogen bonding in the complexes of triethyl- and tri-n-butylamines with alcohols: Effect of the alkyl chain length. Russian Journal of General Chemistry, 2010, 80, 402-407.	0.3	16
104	Thermal Analysis and Calorimetric Study of the Combustion of Hydrolytic Wood Lignin and Products of Its Pyrolysis. Chemistry and Technology of Fuels and Oils, 2015, 51, 140-145.	0.2	16
105	Thermochemistry of hydrogen bonding of linear and cyclic amides in proton acceptors media. Thermochimica Acta, 2017, 652, 34-38.	1.2	16
106	Thermodynamics of the hydrogen bonding of nitrogen-containing cyclic and aromatic compounds with proton donors: The structure-property relationship. Russian Journal of Physical Chemistry A, 2014, 88, 2023-2028.	0.1	15
107	Thermodynamic of dissolution and hydrogen bond of the pyrrole, N -methylpyrrole with proton acceptors. Thermochimica Acta, 2016, 640, 19-25.	1.2	15
108	Speed of Sound, Density, and Related Thermodynamic Excess Properties of Binary Mixtures of 2-Pyrrolidone and <i>N</i> -Methyl-2-pyrrolidone with Acetonitrile and Chloroform. Journal of Chemical & Marting Data, 2016, 61, 1032-1046.	1.0	15

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109	Vapour pressures and enthalpies of vaporisation of alkyl formamides. Fluid Phase Equilibria, 2019, 494, 228-238.	1.4	15
110	Oil-Dispersed α-Fe <sub>2</sub> O <sub>3</sub> Nanoparticles as a Catalyst for Improving Heavy Oil Oxidation. Energy & Fuels, 2021, 35, 10498-10511.	2.5	15
111	Hydrogen bonding of aliphatic and aromatic amines in aqueous solution: thermochemistry of solvation. Russian Journal of General Chemistry, 2012, 82, 1669-1674.	0.3	14
112	Vaporization enthalpies of a series of the halogen-substituted fluorobenzenes. Fluid Phase Equilibria, 2015, 387, 160-168.	1.4	14
113	Experimental Study of In-Situ CO2 Foam Technique and Application in Yangsanmu Oilfield. Journal of Surfactants and Detergents, 2016, 19, 1231-1240.	1.0	14
114	Thermodynamic Properties of 1,4-Benzoquinones in Gaseous and Condensed Phases: Experimental and Theoretical Studies. Journal of Chemical & Engineering Data, 2017, 62, 2413-2422.	1.0	14
115	The ability of ionic liquids to form hydrogen bonds with organic solutes evaluated by different experimental techniques. Part I. Alkyl substituted imidazolium and sulfonium based ionic liquids. Journal of Molecular Liquids, 2018, 265, 238-242.	2.3	14
116	Thermal characterization of crude oils by pressurized differential scanning calorimeter (PDSC). Journal of Petroleum Science and Engineering, 2019, 177, 540-543.	2.1	14
117	Interaction between aromatics and n-alkane for in-situ combustion process. Journal of Petroleum Science and Engineering, 2020, 187, 106770.	2.1	14
118	Low-temperature combustion characteristics of heavy oils by a self-designed porous medium thermo-effect cell. Journal of Petroleum Science and Engineering, 2020, 195, 107863.	2.1	14
119	Isothermal oxidation behavior of heavy crude oil and its low-temperature oxidized oils: Implications for in-situ upgrading of heavy oil. Fuel, 2022, 313, 122704.	3.4	14
120	Using the oil-soluble copper-based catalysts with different organic ligands for in-situ catalytic upgrading of heavy oil. Fuel, 2022, 312, 122914.	3.4	14
121	A novel numerical model of gas transport in multiscale shale gas reservoirs with considering surface diffusion and Langmuir slip conditions. Energy Science and Engineering, 2019, 7, 1315-1332.	1.9	13
122	Influence of Water Saturation, Grain Size of Quartz Sand and Hydrate-Former on the Gas Hydrate Formation. Energies, 2021, 14, 1272.	1.6	13
123	Evolution of mass losses and evolved gases of crude oil and its SARA components during low-temperature oxidation by isothermal TG–FTIR analyses. Journal of Thermal Analysis and Calorimetry, 2022, 147, 4099-4112.	2.0	13
124	Solvent effect on H-bond cooperativity factors in ternary complexes of methanol, octan-1-ol, 2,2,2-trifluoroethanol with some bases. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2008, 69, 985-990.	2.0	12
125	Effect of side groups on the properties of cationic polyaspartamides. European Polymer Journal, 2017, 93, 805-814.	2.6	12
126	Entropy-stabilized metal oxide nanoparticles supported on reduced graphene oxide as a highly active heterogeneous catalyst for selective and solvent-free oxidation of toluene: a combined experimental and numerical investigation. Journal of Materials Chemistry A, 2022, 10, 14488-14500.	5.2	12

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127	Group additivity approach for determination of solvation enthalpies of aromatic compounds in 1-butyl-3-methylimidazolium tetrafluoroborate based on solution calorimetry data. Journal of Molecular Liquids, 2017, 236, 278-282.	2.3	11
128	Isoconversional methods to determine the kinetics of crude oils -thermogravimetry approach. Journal of Petroleum Science and Engineering, 2018, 167, 480-485.	2.1	11
129	Oxidation kinetic evaluation of the low temperature oxidized products of Tahe heavy oil characterized by the distributed activation energy model. Journal of Petroleum Science and Engineering, 2019, 181, 106155.	2.1	11
130	Effect of calcite and dolomite on crude oil combustion characterized by TG-FTIR. Journal of Petroleum Science and Engineering, 2020, 184, 106550.	2.1	11
131	Cooperative effect of hydrogen bonds in the complexes of aliphatic alcohols with proton acceptors in chloroform. Russian Journal of General Chemistry, 2008, 78, 2283-2292.	0.3	10
132	FTIR – spectroscopy of intermolecular interactions of pyrrole in solutions: The influence of media and cooperativity of hydrogen bonds. Journal of Molecular Liquids, 2019, 277, 200-206.	2.3	10
133	State of the Art and Prospects for the Development of the Hydrate-based Technology for Natural Gas Storage and Transportation (A Review). Petroleum Chemistry, 2022, 62, 127-140.	0.4	10
134	Regulating the Spin State of Single Noble Metal Atoms by Hydroxyl for Selective Dehydrogenation of CH <sub>4</sub> Direct Conversion to CH <sub>3</sub> OH. ACS Applied Materials & Interfaces, 2022, 14, 13344-13351.	4.0	10
135	A method for calculating the enthalpy of hydrophobic effect. Russian Journal of Physical Chemistry A, 2006, 80, 659-662.	0.1	9
136	The Vaporization Enthalpy and Vapor Pressure of ( <i>d</i> )-Amphetamine and of Several Primary Amines Used as Standards at <i>T</i> /K = 298 As Evaluated by Correlation Gas Chromatography and Transpiration. Journal of Chemical & Engineering Data, 2013, 58, 2018-2027.	1.0	9
137	Thermochemistry of dissolution, solvation, and hydrogen bonding of anilines in proton-acceptor organic solvents at 298.15 K. Russian Journal of General Chemistry, 2014, 84, 1676-1682.	0.3	9
138	Enthalpies of solution of 1-ethyl- and 1-butyl-3-methylimidazolium based ionic liquids in tetrahydrofuran and chloroform at 298.15 K: Thermochemical proton acceptor scale of anions. Thermochimica Acta, 2016, 641, 71-78.	1.2	9
139	Petroleum Coke Combustion in Fixed Fluidized Bed Mode in the Presence of Metal Catalysts. ACS Omega, 2020, 5, 22171-22178.	1.6	9
140	Oxidation Characteristics and Kinetics of Shale Oil Using High-Pressure Differential Scanning Calorimetry. Energy & Fuels, 2021, 35, 18726-18732.	2.5	9
141	FTIR spectral study of intermolecular interactions of C=O groups of amides in solution. Journal of Molecular Liquids, 2022, 354, 118838.	2.3	9
142	Application of different <i>EOR</i> techniques for the energy and recovery of <i>Ashal'cha</i> oil field. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 645-653.	1.2	8
143	Hydrogen bonding of molecular solutes in protic and aprotic ionic liquids. Journal of Molecular Liquids, 2018, 271, 815-819.	2.3	8
144	Factors influencing hydrogen peroxide decomposition dynamics for thermochemical treatment of bottomhole zone. Journal of Petroleum Exploration and Production, 2022, 12, 2587-2598.	1.2	8

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145	Solvent effect on stretching vibration frequencies of the N-H and O-H groups of diphenylamine and phenol in complexes with various proton acceptors: Cooperative effect. Russian Journal of General Chemistry, 2007, 77, 1742-1748.	0.3	7
146	"Additive―cooperativity of hydrogen bonds in complexes of catechol with proton acceptors in the gas phase: FTIR spectroscopy and quantum chemical calculations. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2012, 91, 75-82.	2.0	7
147	Comprehensive study of the thermodynamic properties for 2-methyl-3-buten-2-ol. Journal of Chemical Thermodynamics, 2015, 91, 459-473.	1.0	7
148	Molecular Aggregation in Binary Mixtures of Pyrrolidine, <i>N</i> -Methylpyrrolidine, Piperidine, and <i>N</i> -Methylpiperidine with Water: Thermodynamic, SANS, and Theoretical Studies. Journal of Physical Chemistry B, 2017, 121, 3070-3086.	1.2	7
149	Thermochemistry of hydrogen bonding of proton acceptors in the media of linear and cyclic amides. Cooperativity effects in multi-particle complexes of amides. Thermochimica Acta, 2017, 657, 20-25.	1.2	7
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