

Murray R Gray

List of Publications by Year in descending order

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221
papers

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#	ARTICLE	IF	CITATIONS
1	Structure–Reactivity Relationships for Petroleum Asphaltenes. <i>Energy & Fuels</i> , 2022, 36, 4370-4380.	5.1	18
2	Whatsoever things are true: Hypothesis, artefact, and bias in chemical engineering research. <i>Canadian Journal of Chemical Engineering</i> , 2021, 99, 2055-2068.	1.7	4
3	Distributed Properties of Asphaltene Nanoaggregates in Crude Oils: A Review. <i>Energy & Fuels</i> , 2021, 35, 18078-18103.	5.1	37
4	Lessons Learned from a Decade-Long Assessment of Asphaltenes by Ultrahigh-Resolution Mass Spectrometry and Implications for Complex Mixture Analysis. <i>Energy & Fuels</i> , 2021, 35, 16335-16376.	5.1	21
5	Mechanisms of Asphaltene Aggregation: Puzzles and a New Hypothesis. <i>Energy & Fuels</i> , 2020, 34, 9094-9107.	5.1	90
6	Fundamentals of Partial Upgrading of Bitumen. <i>Energy & Fuels</i> , 2019, 33, 6843-6856.	5.1	57
7	Quantitative Modeling of Formation of Asphaltene Nanoaggregates. <i>Energy & Fuels</i> , 2019, 33, 8566-8575.	5.1	12
8	Agglomerate behavior in a recirculating fluidized bed with sheds: Effect of ring baffles. <i>Particuology</i> , 2018, 38, 143-151.	3.6	5
9	Agglomerate behavior in a recirculating fluidized bed with sheds: Effect of bed properties. <i>Powder Technology</i> , 2018, 325, 31-41.	4.2	3
10	Determination of Hansen Solubility Parameters of Asphaltene Model Compounds. <i>Energy & Fuels</i> , 2018, 32, 11296-11303.	5.1	31
11	Agglomerate behavior in a recirculating fluidized bed with sheds: Effect of sheds. <i>Advanced Powder Technology</i> , 2018, 29, 1758-1770.	4.1	8
12	Vacuum drying of cyclohexane from solvent-extracted oil sands gangue. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 459-466.	1.7	3
13	A viscosity-conversion model for thermal cracking of heavy oils. <i>Fuel</i> , 2017, 197, 82-90.	6.4	17
14	Transport and removal of a solvent in porous media in the presence of bitumen, a highly viscous solute. <i>Chemical Engineering Science</i> , 2017, 165, 229-239.	3.8	5
15	Influence of hydrophobicity distribution of particle mixtures on emulsion stabilization. <i>Journal of Colloid and Interface Science</i> , 2017, 491, 179-189.	9.4	14
16	Spatially resolved organic coating on clay minerals in bitumen froth revealed by atomic force microscopy adhesion mapping. <i>Fuel</i> , 2017, 191, 283-289.	6.4	23
17	Irreversible Adsorption of Asphaltenes on Kaolinite: Influence of Dehydroxylation. <i>Energy & Fuels</i> , 2017, 31, 9328-9336.	5.1	17
18	Solvent removal from cyclohexane-extracted oil sands gangue. <i>Canadian Journal of Chemical Engineering</i> , 2016, 94, 408-414.	1.7	16

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19	Adsorption of asphaltenes on kaolinite as an irreversible process. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 504, 280-286.	4.7	40
20	Influence of hydrothermal treatment on filterability of fine solids in bitumen froth. Fuel, 2016, 180, 314-323.	6.4	18
21	Role of water and fine solids in onset of coke formation during bitumen cracking. Fuel, 2016, 166, 152-156.	6.4	13
22	Sorption equilibrium and kinetics for cyclohexane, toluene, and water on Athabasca oil sands solids. Canadian Journal of Chemical Engineering, 2016, 94, 220-230.	1.7	11
23	Characterization of Fine Solids in Athabasca Bitumen Froth before and after Hydrothermal Treatment. Energy & Fuels, 2016, 30, 1965-1971.	5.1	13
24	Role of Liquid Concentration in Coke Yield from Model Vacuum Residueâ€“Coke Agglomerates. Industrial & Engineering Chemistry Research, 2015, 54, 9089-9096.	3.7	3
25	Scalable, Chromatography-Free Synthesis of Alkyl-Tethered Pyrene-Based Materials. Application to First-Generation â€œArchipelago Modelâ€“Asphaltene Compounds. Journal of Organic Chemistry, 2015, 80, 1719-1726.	3.2	9
26	Agglomerate behavior in a recirculating fluidized bed with sheds: Effect of agglomerate properties. Powder Technology, 2015, 275, 263-272.	4.2	14
27	Performance of Solvent Mixtures for Non-aqueous Extraction of Alberta Oil Sands. Energy & Fuels, 2015, 29, 2261-2267.	5.1	46
28	Binary Solvents with Ethanol for Effective Bitumen Displacement at Solvent/Mineral Interfaces. Energy & Fuels, 2015, 29, 4222-4226.	5.1	7
29	Addition Reactions of Olefins to Asphaltene Model Compounds. Energy & Fuels, 2015, 29, 1494-1502.	5.1	18
30	Catalytic Hydrodenitrogenation of Asphaltene Model Compounds. Energy & Fuels, 2015, 29, 6724-6733.	5.1	7
31	Steroid-Derived Naphthoquinoline Asphaltene Model Compounds: Hydriodic Acid Is the Active Catalyst in $I_{2\text{O}_5}$ -Promoted Multicomponent Cyclocondensation Reactions. Organic Letters, 2015, 17, 5930-5933.	4.6	13
32	Dependence of onset time for mesophase formation on operating parameters during catalytic hydroconversion of Athabasca vacuum residue. Fuel Processing Technology, 2015, 130, 165-171.	7.2	5
33	Thiophene mitigates high temperature fouling of metal surfaces in oil refining. Fuel, 2015, 139, 411-424.	6.4	15
34	Unconventional Oil and Gas. , 2014, , 95-116.		11
35	Study of Cyclohexane Diffusion in Athabasca Asphaltenes. Energy & Fuels, 2014, 28, 1004-1011.	5.1	12
36	Binary Interactions in Coke Formation from Model Compounds and Asphaltenes. Energy & Fuels, 2014, 28, 1692-1700.	5.1	5

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37	Evaluating steady-state and time-resolved fluorescence as a tool to study the behavior of asphaltene in toluene. Photochemical and Photobiological Sciences, 2014, 13, 917-928.	2.9	19
38	Monte Carlo Simulation of Asphaltenes and Products from Thermal Cracking. Energy & Fuels, 2014, 28, 2352-2364.	5.1	6
39	On correlating water solubility in ill-defined hydrocarbons. Fuel, 2014, 134, 644-658.	6.4	18
40	Migration of Fine Solids into Product Bitumen from Solvent Extraction of Alberta Oilsands. Energy & Fuels, 2014, 28, 2925-2932.	5.1	37
41	Elucidation of structural information achievable for asphaltenes via collision-activated dissociation of their molecular ions in MSn experiments: A model compound study. Fuel, 2014, 133, 106-114.	6.4	36
42	The phase behavior of Athabasca bitumen+toluene+water ternary mixtures. Fluid Phase Equilibria, 2014, 370, 75-84.	2.5	40
43	New Vanadium Compounds in Venezuela Heavy Crude Oil Detected by Positive-ion Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Scientific Reports, 2014, 4, 5373.	3.3	44
44	Suppression of Addition Reactions during Thermal Cracking Using Hydrogen and Sulfided Iron Catalyst. Energy & Fuels, 2013, 27, 6637-6645.	5.1	32
45	Effect of Asphaltene Stability on Fouling at Delayed Coking Process Furnace Conditions. Energy & Fuels, 2013, 27, 1856-1864.	5.1	13
46	Joint Industrial Case Study for Asphaltene Deposition. Energy & Fuels, 2013, 27, 1899-1908.	5.1	56
47	Density functional theory investigation of the effect of axial coordination and annelation on the absorption spectroscopy of nickel(II) and vanadyl porphyrins relevant to bitumen and crude oils. Canadian Journal of Chemistry, 2013, 91, 872-878.	1.1	21
48	Phase behavior of Athabasca bitumen+water mixtures at high temperature and pressure. Journal of Supercritical Fluids, 2013, 77, 142-152.	3.2	69
49	Volume of mixing and solubility of water in Athabasca bitumen at high temperature and pressure. Fluid Phase Equilibria, 2013, 358, 203-211.	2.5	48
50	Kinetics of Vapor-Phase Cracking of Bitumen-Derived Heavy Gas Oil. Energy & Fuels, 2013, 27, 2999-3005.	5.1	5
51	Characterization of Asphaltene Building Blocks by Cracking under Favorable Hydrogenation Conditions. Energy & Fuels, 2013, 27, 1817-1829.	5.1	69
52	Study of Asphaltene Adsorption on Kaolinite by X-ray Photoelectron Spectroscopy and Time-of-Flight Secondary Ion Mass Spectroscopy. Energy & Fuels, 2013, 27, 2465-2473.	5.1	53
53	Separation and Characterization of Vanadyl Porphyrins in Venezuela Orinoco Heavy Crude Oil. Energy & Fuels, 2013, 27, 2874-2882.	5.1	98
54	Use of a Microstructured Mixer for Reaction Kinetics of Thermal Cracking. Industrial & Engineering Chemistry Research, 2013, 52, 4011-4016.	3.7	0

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55	Dispersion of Asphaltene Nanoaggregates and the Role of Rayleigh Scattering in the Absorption of Visible Electromagnetic Radiation by These Nanoaggregates. <i>Energy & Fuels</i> , 2013, 27, 680-693.	5.1	25
56	Occlusion of Polyaromatic Compounds in Asphaltene Precipitates Suggests Porous Nanoaggregates. <i>Energy & Fuels</i> , 2013, 27, 1748-1751.	5.1	32
57	Solvent screening for non-aqueous extraction of Alberta oil sands. <i>Canadian Journal of Chemical Engineering</i> , 2013, 91, 1153-1160.	1.7	65
58	Effect of Chemical Structure on the Cracking and Coking of Archipelago Model Compounds Representative of Asphaltenes. <i>Energy & Fuels</i> , 2012, 26, 1828-1843.	5.1	34
59	In Situ Observation of Mesophase Formation and Coalescence in Catalytic Hydroconversion of Vacuum Residue Using a Stirred Hot-Stage Reactor. <i>Energy & Fuels</i> , 2012, 26, 3167-3178.	5.1	26
60	Density Functional Theory Investigation of the Contributions of π - π Stacking and Hydrogen-Bonding Interactions to the Aggregation of Model Asphaltene Compounds. <i>Energy & Fuels</i> , 2012, 26, 2727-2735.	5.1	113
61	Heterogeneity of Asphaltene Deposits on Gold Surfaces in Organic Phase Using Atomic Force Microscopy. <i>Energy & Fuels</i> , 2012, 26, 2891-2898.	5.1	13
62	Depolarized Light Scattering for Study of Heavy Oil and Mesophase Formation Mechanisms. <i>Energy & Fuels</i> , 2012, 26, 5408-5420.	5.1	24
63	Kinetics and Properties of Asphaltene Adsorption on Surfaces. <i>Energy & Fuels</i> , 2012, 26, 1009-1018.	5.1	57
64	Minimization of Coke in Thermal Cracking of Athabasca Vacuum Residue in a High-Temperature Short-Residence Time Continuous Flow Aerosol Reactor. <i>Energy & Fuels</i> , 2012, 26, 6292-6299.	5.1	15
65	Thermal Cracking of Substituted Cholestane-Benzoquinoline Asphaltene Model Compounds. <i>Energy & Fuels</i> , 2012, 26, 3592-3603.	5.1	20
66	Incorporation of steroidal biomarkers into petroleum model compounds. <i>Journal of Physical Organic Chemistry</i> , 2012, 25, 597-606.	1.9	15
67	The EmhABC efflux pump decreases the efficiency of phenanthrene biodegradation by <i>Pseudomonas fluorescens</i> strain LP6a. <i>Applied Microbiology and Biotechnology</i> , 2012, 95, 757-766.	3.6	10
68	Electrocatalytic hydrogenation of aromatic compounds in ionic liquid solutions over WS ₂ -on-glassy carbon and Raney nickel cathodes. <i>Fuel</i> , 2012, 93, 415-422.	6.4	13
69	Membrane Diffusion Measurements Do Not Detect Exchange between Asphaltene Aggregates and Solution Phase. <i>Energy & Fuels</i> , 2011, 25, 509-523.	5.1	56
70	Influence of Depressurization and Cooling on the Formation and Development of Mesophase. <i>Energy & Fuels</i> , 2011, 25, 5541-5548.	5.1	15
71	Regular Solution Theories Are Not Appropriate for Model Compounds for Petroleum Asphaltenes. <i>Energy & Fuels</i> , 2011, 25, 737-746.	5.1	19
72	Corrosion-Fouling of 316 Stainless Steel and Pure Iron by Hot Oil. <i>Energy & Fuels</i> , 2011, 25, 4540-4551.	5.1	19

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73	Formation of Archipelago Structures during Thermal Cracking Implicates a Chemical Mechanism for the Formation of Petroleum Asphaltenes. <i>Energy & Fuels</i> , 2011, 25, 2130-2136.	5.1	100
74	Quantitative Evidence for Bridged Structures in Asphaltenes by Thin Film Pyrolysis. <i>Energy & Fuels</i> , 2011, 25, 3581-3589.	5.1	90
75	Supramolecular Assembly Model for Aggregation of Petroleum Asphaltenes. <i>Energy & Fuels</i> , 2011, 25, 3125-3134.	5.1	385
76	Adhesion to the hydrocarbon phase increases phenanthrene degradation by <i>Pseudomonas fluorescens</i> LP6a. <i>Biodegradation</i> , 2011, 22, 485-496.	3.0	29
77	Molecular- and cultivation-based analyses of microbial communities in oil field water and in microcosms amended with nitrate to control H ₂ S production. <i>Applied Microbiology and Biotechnology</i> , 2011, 89, 2027-2038.	3.6	32
78	Influence of adhesion on aerobic biodegradation and bioremediation of liquid hydrocarbons. <i>Applied Microbiology and Biotechnology</i> , 2011, 92, 653-675.	3.6	90
79	Carbon disulfide reagent allows the characterization of nonpolar analytes by atmospheric pressure chemical ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2011, 25, 1924-1928.	1.5	29
80	Effectiveness and mobility of catalysts for gasification of bitumen coke. <i>Fuel</i> , 2011, 90, 120-125.	6.4	86
81	Kinetics of catalytic steam gasification of bitumen coke. <i>Fuel</i> , 2011, 90, 1285-1291.	6.4	58
82	Stability of agglomerates made from fluid coke at ambient temperature. <i>Powder Technology</i> , 2011, 209, 53-64.	4.2	22
83	Predicting agglomerate fragmentation and agglomerate material survival in fluidized beds. <i>Powder Technology</i> , 2011, 210, 87-102.	4.2	13
84	Selective Sorting of Cargo Proteins into Bacterial Membrane Vesicles. <i>Journal of Biological Chemistry</i> , 2011, 286, 1269-1276.	3.4	280
85	Coke yield and heat transfer in reaction of liquid-solids agglomerates of Athabasca vacuum residue. <i>Canadian Journal of Chemical Engineering</i> , 2010, 88, 48-54.	1.7	10
86	Evaluation of co-volume mixing rules for bitumen liquid density and bubble pressure estimation. <i>Fluid Phase Equilibria</i> , 2010, 293, 87-100.	2.5	16
87	Application of atomic force microscopy in bacterial research. <i>Scanning</i> , 2010, 32, 74-96.	1.5	73
88	Molecular Structures of Asphaltenes Based on the Dissociation Reactions of Their Ions in Mass Spectrometry. <i>Energy & Fuels</i> , 2010, 24, 5548-5559.	5.1	115
89	Chemistry and Association of Vanadium Compounds in Heavy Oil and Bitumen, and Implications for Their Selective Removal. <i>Energy & Fuels</i> , 2010, 24, 2795-2808.	5.1	191
90	Comparing Laser Desorption/Laser Ionization Mass Spectra of Asphaltenes and Model Compounds. <i>Energy & Fuels</i> , 2010, 24, 3589-3594.	5.1	60

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91	Computational and Experimental Study of the Structure, Binding Preferences, and Spectroscopy of Nickel(II) and Vanadyl Porphyrins in Petroleum. <i>Journal of Physical Chemistry B</i> , 2010, 114, 2180-2188.	2.6	55
92	Structures of Water Molecules at Solvent/Silica Interfaces. <i>Langmuir</i> , 2010, 26, 16397-16400.	3.5	15
93	Measurement of Cracking Kinetics of Pure Model Compounds by Thermogravimetric Analysis. <i>Energy & Fuels</i> , 2010, 24, 3998-4004.	5.1	19
94	Flocculation of Silica Particles from a Model Oil Solution: Effect of Adsorbed Asphaltenes. <i>Energy & Fuels</i> , 2010, 24, 3616-3623.	5.1	21
95	Electrocatalytic hydrogenation of 2-cyclohexen-1-one in a high sulfur environment using a carbon-supported nanostructured tungsten sulfide catalyst. <i>Catalysis Communications</i> , 2010, 12, 314-317.	3.3	10
96	Observation of Liquid Crystals in Heavy Petroleum Fractions. <i>Energy & Fuels</i> , 2010, 24, 4327-4332.	5.1	49
97	Sulfide persistence in oil field waters amended with nitrate and acetate. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2009, 36, 1499-1511.	3.0	22
98	Analysis of Asphaltenes and Asphaltene Model Compounds by Laser-Induced Acoustic Desorption/Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. <i>Energy & Fuels</i> , 2009, 23, 5564-5570.	5.1	118
99	Competitive Adsorption of Toluene and <i>n</i> -Alkanes at Binary Solution/Silica Interfaces. <i>Journal of Physical Chemistry C</i> , 2009, 113, 20355-20359.	3.1	36
100	Water Enhances the Aggregation of Model Asphaltenes in Solution via Hydrogen Bonding. <i>Energy & Fuels</i> , 2009, 23, 3687-3693.	5.1	66
101	Physics in the oil sands of Alberta. <i>Physics Today</i> , 2009, 62, 31-35.	0.3	40
102	Separation of Petroporphyrins from Asphaltenes by Chemical Modification and Selective Affinity Chromatography. <i>Energy & Fuels</i> , 2009, 23, 2600-2605.	5.1	35
103	Analysis of Force Interactions between AFM Tips and Hydrophobic Bacteria Using DLVO Theory. <i>Langmuir</i> , 2009, 25, 6968-6976.	3.5	96
104	Two different mechanisms for adhesion of Gram-negative bacterium, <i>Pseudomonas fluorescens</i> LP6a, to an oil/water interface. <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 62, 36-41.	5.0	58
105	Aerobic biotransformation of decalin (decahydronaphthalene) by <i>Rhodococcus</i> spp.. <i>Biodegradation</i> , 2008, 19, 785-794.	3.0	7
106	Rejuvenation of Residue Hydroconversion Catalysts by H-donor Solvents. <i>Catalysis Letters</i> , 2008, 125, 69-75.	2.6	6
107	Role of Pressure in Coking of Thin Films of Bitumen. <i>Canadian Journal of Chemical Engineering</i> , 2008, 85, 773-780.	1.7	9
108	Mechanical properties of hexadecane/water interfaces with adsorbed hydrophobic bacteria. <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 62, 273-279.	5.0	34

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109	Hydrophobic bacteria at the hexadecane-water interface: Examination of micrometre-scale interfacial properties. <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 67, 59-66.	5.0	32
110	Modeling of mass transfer and thermal cracking during the coking of Athabasca residues. <i>Chemical Engineering Science</i> , 2008, 63, 1683-1691.	3.8	25
111	Effect of agglomerate properties on agglomerate stability in fluidized beds. <i>Chemical Engineering Science</i> , 2008, 63, 4245-4256.	3.8	35
112	Associative π - π Interactions of Condensed Aromatic Compounds with Vanadyl or Nickel Porphyrin Complexes Are Not Observed in the Organic Phase. <i>Energy & Fuels</i> , 2008, 22, 2465-2469.	5.1	41
113	Pyrene Derivatives of 2,2'-Bipyridine as Models for Asphaltenes: Synthesis, Characterization, and Supramolecular Organization. <i>Energy & Fuels</i> , 2008, 22, 715-720.	5.1	52
114	Pyrolytic Decarboxylation and Cracking of Stearic Acid. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 5328-5336.	3.7	93
115	Atomic Force Microscopy Measurement of Heterogeneity in Bacterial Surface Hydrophobicity. <i>Langmuir</i> , 2008, 24, 4944-4951.	3.5	77
116	Potential Microbial Enhanced Oil Recovery Processes: A Critical Analysis. , 2008, , .		54
117	Agglomeration and Deposition of Coke during Cracking of Petroleum Vacuum Residue. <i>Energy & Fuels</i> , 2007, 21, 1205-1211.	5.1	17
118	Selectivity among organic sulfur compounds in one- and two-liquid-phase cultures of <i>Rhodococcus</i> sp. strain JVH1. <i>Biodegradation</i> , 2007, 18, 473-480.	3.0	17
119	Sulfur from benzothiophene and alkylbenzothiophenes supports growth of <i>Rhodococcus</i> sp. strain JVH1. <i>Biodegradation</i> , 2007, 18, 541-549.	3.0	21
120	Hexabenzocoronene Model Compounds for Asphaltene Fractions: Synthesis & Characterization. <i>Energy & Fuels</i> , 2006, 20, 2439-2447.	5.1	48
121	Agglomerate stability in fluidized beds of glass beads and silica sand. <i>Powder Technology</i> , 2006, 165, 115-127.	4.2	55
122	Mutations in the Central Cavity and Periplasmic Domain Affect Efflux Activity of the Resistance-Nodulation-Division Pump EmhB from <i>Pseudomonas fluorescens</i> cLP6a. <i>Journal of Bacteriology</i> , 2006, 188, 115-123.	2.2	33
123	Measurement of Vacuum Residue and Asphaltene Fluid Properties at Process Conditions. <i>Journal of the Japan Petroleum Institute</i> , 2005, 48, 181-188.	0.6	6
124	Association Behavior of Pyrene Compounds as Models for Asphaltenes. <i>Energy & Fuels</i> , 2005, 19, 1268-1271.	5.1	53
125	Fluid Properties of Asphaltenes at 310-530 °C. <i>Energy & Fuels</i> , 2005, 19, 2026-2033.	5.1	10
126	Use of a Novel Fluorinated Organosulfur Compound To Isolate Bacteria Capable of Carbon-Sulfur Bond Cleavage. <i>Applied and Environmental Microbiology</i> , 2004, 70, 1487-1493.	3.1	35

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127	Saturable, Energy-Dependent Uptake of Phenanthrene in Aqueous Phase by Mycobacterium sp. Strain RJGII-135. Applied and Environmental Microbiology, 2004, 70, 363-369.	3.1	61
128	Pyridine adsorption and reaction on Mo(110) and C/Nâ€“Mo(110): experiment and modeling. Surface Science, 2004, 569, 193-206.	1.9	10
129	Stabilization of Oil-Water Emulsions by Hydrophobic Bacteria. Applied and Environmental Microbiology, 2004, 70, 6333-6336.	3.1	166
130	Quantitative Molecular Representation and Sequential Optimization of Athabasca Asphaltenes. Energy & Fuels, 2004, 18, 1377-1384.	5.1	202
131	Inhibition and Deactivation of Hydrodenitrogenation (HDN) Catalysts by Narrow-Boiling Fractions of Athabasca Coker Gas Oil. Energy & Fuels, 2004, 18, 539-546.	5.1	31
132	Melting and Fluid Behavior of Asphaltene Films at 200âˆ“500 Â°C. Energy & Fuels, 2004, 18, 1419-1423.	5.1	28
133	Fluid Properties at Coking Process Conditions. Industrial & Engineering Chemistry Research, 2004, 43, 2929-2935.	3.7	23
134	Kinetics of Cracking and Devolatilization during Coking of Athabasca Residues. Industrial & Engineering Chemistry Research, 2004, 43, 5438-5445.	3.7	51
135	Kinetics of Hydrocracking and Hydrotreating of Coker and Oilsands Gas Oils. Petroleum Science and Technology, 2003, 21, 997-1015.	1.5	20
136	Coking Kinetics of Asphaltenes as a Function of Chemical Structure. Energy & Fuels, 2003, 17, 1048-1056.	5.1	51
137	Trapping of Aromatic Compounds during Coking of Athabasca Vacuum Residue. Energy & Fuels, 2003, 17, 282-284.	5.1	2
138	Measurement of Adhesive Forces during Coking of Athabasca Vacuum Residue. Industrial & Engineering Chemistry Research, 2003, 42, 3549-3554.	3.7	5
139	Consistency of Asphaltene Chemical Structures with Pyrolysis and Coking Behavior. Energy & Fuels, 2003, 17, 1566-1569.	5.1	110
140	Liquid-Phase Behavior during the Cracking of Asphaltenes. Industrial & Engineering Chemistry Research, 2003, 42, 4101-4108.	3.7	31
141	Identification and Characterization of the emhABC Efflux System for Polycyclic Aromatic Hydrocarbons in Pseudomonas fluorescens cLP6a. Journal of Bacteriology, 2003, 185, 6233-6240.	2.2	69
142	Transport and Reaction Processes in Bioremediation of Organic Contaminants. 1. Review of Bacterial Degradation and Transport. International Journal of Chemical Reactor Engineering, 2003, 1, .	1.1	16
143	Measurement of Efficiency of Distribution of Liquid Feed in a Gas-Solid Fluidized Bed Reactor. International Journal of Chemical Reactor Engineering, 2003, 1, .	1.1	15
144	Dibenzyl Sulfide Metabolism by White Rot Fungi. Applied and Environmental Microbiology, 2003, 69, 1320-1324.	3.1	51

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145	Hydrotreating Chemistry of Model Products from Bioprocessing of Carbazoles. Energy & Fuels, 2002, 16, 1076-1086.	5.1	14
146	Quality of Distillates from Repeated Recycle of Residue. Energy & Fuels, 2002, 16, 477-484.	5.1	54
147	Kinetics of Solvent Interactions with Asphaltenes during Coke Formation. Energy & Fuels, 2002, 16, 148-154.	5.1	65
148	Role of Chain Reactions and Olefin Formation in Cracking, Hydroconversion, and Coking of Petroleum and Bitumen Fractions. Energy & Fuels, 2002, 16, 756-766.	5.1	137
149	Selective transport and accumulation of alkanes by <i>Rhodococcus erythropolis</i> S+14He. Biotechnology and Bioengineering, 2002, 80, 650-659.	3.3	49
150	Pressure buildup in gas-liquid flow through packed beds due to deposition of fine particles. Canadian Journal of Chemical Engineering, 2002, 80, 346-354.	1.7	41
151	Fundamentals of bitumen coking processes analogous to granulations: A critical review. Canadian Journal of Chemical Engineering, 2002, 80, 393-401.	1.7	57
152	Kinetics of biodegradation of mixtures of polycyclic aromatic hydrocarbons. Applied Microbiology and Biotechnology, 2002, 60, 361-366.	3.6	46
153	Use of ¹³ C Tracers to Determine Mass-Transfer Limitations on Thermal Cracking of Thin Films of Bitumen. Energy & Fuels, 2001, 15, 1087-1093.	5.1	17
154	Coupling of Mass Transfer and Reaction in Coking of Thin Films of an Athabasca Vacuum Residue. Industrial & Engineering Chemistry Research, 2001, 40, 3317-3324.	3.7	54
155	Molar Kinetics and Selectivity in Cracking of Athabasca Asphaltenes. Energy & Fuels, 2001, 15, 751-755.	5.1	45
156	Selective Biocatalysis in Bacteria Controlled by Active Membrane Transport. Industrial & Engineering Chemistry Research, 2001, 40, 5126-5131.	3.7	4
157	On water-in-oil emulsions stabilized by fine solids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 193, 97-107.	4.7	201
158	Solid-liquid mass transfer in a rotary drum. Canadian Journal of Chemical Engineering, 2001, 79, 726-731.	1.7	2
159	Role of hydrotreating products in deposition of fine particles in reactors. Fuel, 2001, 80, 1079-1085.	6.4	27
160	Measurement of Contact Angles for Fumed Silica Nanospheres Using Enthalpy of Immersion Data. Journal of Colloid and Interface Science, 2000, 228, 1-6.	9.4	58
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