John M Shaw

List of Publications by Year in descending order

69 papers	1,382 citations	331670 21 h-index	361022 35 g-index
69 all docs	69 docs citations	69 times ranked	964 citing authors

#	Article	IF	Citations
1	Enhanced Displacement of Phase Separating Liquid Mixtures in 2D Confined Spaces. Energy & Fuels, 2021, 35, 5194-5205.	5.1	14
2	Composition and Formation of Liquid Crystal Domains in Hydrocarbon Resources. Energy & Fuels, 2021, 35, 9369-9381.	5.1	2
3	How Fast do Microdroplets Generated During Liquidâ€“Liquid Phase Separation Move in a Confined 2D Space?. Energy & Fuels, 2021, 35, 11257-11270.	5.1	3
4	Reference materials for phase equilibrium studies. 1. Liquidâ€“liquid equilibria (IUPAC Technical Report). Pure and Applied Chemistry, 2021, 93, 811-827.	1.9	3
5	Propelling microdroplets generated and sustained by liquidâ€“liquid phase separation in confined spaces. Soft Matter, 2021, 17, 5362-5374.	2.7	10
6	Oneâ€Step Nanoextraction and Ultrafast Microanalysis Based on Nanodroplet Formation in an Evaporating Ternary Liquid Microfilm. Advanced Materials Technologies, 2020, 5, 1900740.	5.8	10
7	Shared Depletion and Restabilization Colloidal Interactions in Phase Diagrams for Silica Nanoparticle and Asphaltene + Polystyrene + Solvent Mixtures. Energy & Fuels, 2020, 34, 15234-15245.	5.1	7
8	Discontinuous Displacement at Solventâ€“Immobile Hydrocarbon Interfaces. Energy & Fuels, 2020, 34, 9392-9400.	5.1	4
9	Preface to the PetroPhase 2019 Special Issue. Energy & Fuels, 2020, 34, 5109-5109.	5.1	2
10	Teaching engineering for a changing landscape. Canadian Journal of Chemical Engineering, 2019, 97, 2870-2875.	1.7	9
11	Bubble Pressure Measurement and Prediction for n-Hexadecane and n-Eicosane + Cyclohexane, Methylcyclohexane, and Ethylcyclohexane Binary Mixtures from 303.15 to 393.15 K. Journal of Chemical & Engineering Data, 2018, 63, 1797-1809.	1.9	0
12	Interface Renewal and Concentration Shock Through Sloughing: Accounting for the Dissonance Between Production Models and Measured Outcomes for Solventâ€“Assisted Bitumenâ€“Production Processes. SPE Reservoir Evaluation and Engineering, 2018, 21, 174-186.	1.8	4
13	On Vibration-Induced Fluid and Particle Motion in Unconsolidated Porous Media: Observations and Dimensional Scaling Analysis. Transport in Porous Media, 2017, 116, 1031-1055.	2.6	3
14	Fate of Organic Liquid-Crystal Domains during Steam-Assisted Gravity Drainage/Cyclic Steam Stimulation Production of Heavy Oils and Bitumen. Energy & Fuels, 2017, 31, 4966-4972.	5.1	4
15	Thermodynamics of the Antiviral and Antiparkinsonian Drug Amantadine Hydrochloride: Condensed State Properties and Decomposition. Journal of Chemical & Engineering Data, 2017, 62, 2666-2675.	1.9	2
16	Discerning Inter- and Intramolecular Vibrations of Sulfur Polyaromatic Compounds. Journal of Physical Chemistry A, 2017, 121, 7205-7218.	2.5	3
17	Probing the Impact of Asphaltene Contamination on Kaolinite and Illite Clay Behaviors in Water and Organic Solvents: A Calorimetric Study. Energy & Fuels, 2016, 30, 6561-6569.	5.1	20
18	Phase Behavior and Thermophysical Properties of Peace River Bitumen + Propane Mixtures from 303 K to 393 K. Journal of Chemical & Engineering Data, 2016, 61, 2659-2668.	1.9	35

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19	Quantitative comparison between predicted and experimental binary n-alkaneÂ+ benzene phase behaviors using cubic and PC-SAFT EOS. Fluid Phase Equilibria, 2016, 428, 4-17.	2.5	5
20	Gold Core Nanoparticle Mimics for Asphaltene Behaviors in Solution and at Interfaces. Energy & Fuels, 2016, 30, 10148-10160.	5.1	3
21	A dynamic pressure view cell for acoustic stimulation of fluidsâ€"Micro-bubble generation and fluid movement in porous media. Review of Scientific Instruments, 2015, 86, 095101.	1.3	8
22	Fickian and Non-Fickian Diffusion in Heavy Oil + Light Hydrocarbon Mixtures. Energy & Fuels, 2015, 29, 2177-2189.	5.1	13
23	Non-intrusive, high-resolution, real-time, two-dimensional imaging of multiphase materials using acoustic array sensors. Review of Scientific Instruments, 2015, 86, 044902.	1.3	1
24	On the Phase Behavior of Athabasca Asphaltene + Polystyrene + Toluene Mixtures at 298 K. Energy & Fuels, 2015, 29, 4855-4863.	5.1	8
25	Probing Contaminant Transport to and from Clay Surfaces in Organic Solvents and Water Using Solution Calorimetry. Environmental Science & Technology, 2015, 49, 10841-10849.	10.0	12
26	Systematic Misprediction of n-Alkane + Aromatic and Naphthenic Hydrocarbon Phase Behavior Using Common Equations of State. Journal of Chemical & Engineering Data, 2015, 60, 3300-3318.	1.9	3
27	On Discerning Intermolecular and Intramolecular Vibrations in Experimental Acene Spectra. Energy & Fuels, 2014, 28, 2933-2947.	5.1	7
28	Phase Order Inversion During Heavy Oil and Bitumen Production with Solvent Addition. Energy & Fuels, 2014, 28, 4835-4848.	5.1	5
29	Thixotropic Rheological Behavior of Maya Crude Oil. Energy & Fuels, 2014, 28, 972-979.	5.1	56
30	Phase behavior of Safaniya vacuum residue. Fluid Phase Equilibria, 2014, 380, 28-38.	2.5	5
31	On the Size Distribution of Self-Associated Asphaltenes. Energy & Fuels, 2013, 27, 5083-5106.	5.1	98
32	Phase behavior of Athabasca bitumen+water mixtures at high temperature and pressure. Journal of Supercritical Fluids, 2013, 77, 142-152.	3.2	69
33	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
34	Impact of Liquidâ€"Vapor to Liquidâ€"Liquidâ€"Vapor Phase Transitions on Asphaltene-Rich Nanoaggregate Behavior in Athabasca Vacuum Residue + Pentane Mixtures. Energy & Fuels, 2013, 27, 1779-1790.	5.1	16
35	In Situ Observation of Mesophase Formation and Coalescence in Catalytic Hydroconversion of Vacuum Residue Using a Stirred Hot-Stage Reactor. Energy & Fuels, 2012, 26, 3167-3178.	5.1	26
36	Liquidâ€"Liquid Phase Equilibria in Asphaltene + Polystyrene + Toluene Mixtures at 293 K. Energy & Fuels, 2012, 26, 1075-1088.	5.1	13

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37	Physical Properties of Liquid Crystals in Athabasca Bitumen Fractions. Energy & Fuels, 2012, 26, 4978-4987.	5.1	14
38	Interactions Between Athabasca Pentane Asphaltenes and n-Alkanes at Low Concentrations. Energy & Fuels, 2012, 26, 1756-1766.	5.1	24
39	Mesoscale Organization in a Physically Separated Vacuum Residue: Comparison to Asphaltenes in a Simple Solvent. Energy & Fuels, 2012, 26, 2680-2687.	5.1	59
40	Phase Behavior of Athabasca Bitumen. Journal of Chemical & Engineering Data, 2011, 56, 3242-3253.	1.9	39
41	Characterization of Physically and Chemically Separated Athabasca Asphaltenes Using Small-Angle X-ray Scattering. Energy & Fuels, 2011, 25, 5100-5112.	5.1	28
42	Forced and Diffusive Mass Transfer between Pentane and Athabasca Bitumen Fractions. Energy & Fuels, 2011, 25, 782-790.	5.1	12
43	Observation of Liquid-Crystal Formation during Melting of <scp>d</scp>-(+)-Glucose. Journal of Agricultural and Food Chemistry, 2011, 59, 12605-12609.	5.2	7
44	Phase behaviour and phase separation kinetics measurement using acoustic arrays. Review of Scientific Instruments, 2011, 82, 104902.	1.3	12
45	Bitumen and Heavy Oil Rheological Properties: Reconciliation with Viscosity Measurements. Journal of Chemical & Engineering Data, 2010, 55, 1389-1397.	1.9	97
46	Observation of Liquid Crystals in Heavy Petroleum Fractions. Energy & Fuels, 2010, 24, 4327-4332.	5.1	49
47	Petrophase 2009 Panel Discussion on Standardization of Petroleum Fractions. Energy & Fuels, 2010, 24, 2175-2177.	5.1	22
48	On Asphaltene and Resin Association in Athabasca Bitumen and Maya Crude Oil. Energy & Fuels, 2009, 23, 4431-4437.	5.1	38
49	Heat Capacities of Tetracene and Pentacene. Journal of Chemical & Engineering Data, 2008, 53, 2175-2181.	1.9	50
50	Liquid-phase Mutual Diffusion Coefficients for Heavy Oil + Light Hydrocarbon Mixtures. Petroleum Science and Technology, 2007, 25, 773-790.	1.5	36
51	Liquid-Phase Mutual Diffusion Coefficients for Athabasca Bitumen + Pentane Mixtures. Journal of Chemical & Engineering Data, 2007, 52, 691-694.	1.9	25
52	Composition and Size Distribution of Coherent Nanostructures in Athabasca Bitumen and Maya Crude Oil. Energy & Fuels, 2007, 21, 2795-2804.	5.1	125
53	Predictive Correlation for Cp of Organic Solids Based on Elemental Composition. Journal of Chemical & Engineering Data, 2007, 52, 1160-1164.	1.9	16
54	Impact of Multiphase Behavior on Coke Deposition in Heavy Oils Hydroprocessing Catalysts. Energy & Fuels, 2006, 20, 473-480.	5.1	17

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55	Asphaltene phase behavior: prediction at a crossroads. Fluid Phase Equilibria, 2005, 228-229, 21-26.	2.5	6
56	Impact of Multiphase Behavior on Coke Deposition in a Commercial Hydrotreating Catalyst under Sedimentation Conditionsâ€. Energy & Fuels, 2005, 19, 1405-1411.	5.1	13
57	Dispersed Phases and Dispersed Phase Deposition Issues Arising in Asphaltene Rich Hydrocarbon Fluids. Petroleum Science and Technology, 2004, 22, 759-771.	1.5	9
58	Dynamic Interfacial Zone and Local Phase Concentration Measurements in Emulsions, Dispersions, and Slurries. Journal of Dispersion Science and Technology, 2004, 25, 277-285.	2.4	6
59	Challenges Inherent in the Development of Predictive Deposition Tools for Asphaltene Containing Hydrocarbon Fluids. Petroleum Science and Technology, 2004, 22, 773-786.	1.5	3
60	A Microscopic View of Oil Slick Break-up and Emulsion Formation in Breaking Waves. Spill Science and Technology Bulletin, 2003, 8, 491-501.	0.4	37
61	UNUSUAL RETROGRADE CONDENSATION AND ASPHALTENE PRECIPITATION IN A MODEL HEAVY OIL SYSTEM. Petroleum Science and Technology, 1998, 16, 209-226.	1.5	20
62	An explanation for solid-liquid-liquid-vapour phase behaviour in reservoir fluids. Petroleum Science and Technology, 1997, 15, 503-521.	1.5	10
63	PRELIMINARY PHASE DIAGRAMS FOR BITUMEN/ HEAVY OILS AND RELATED MIXTURES. Petroleum Science and Technology, 1996, 14, 163-178.	0.2	6
64	The behaviour of large gas bubbles at a liquidâ€liquid interface. Part 2: Liquid entrainment. Canadian Journal of Chemical Engineering, 1992, 70, 381-384.	1.7	7
65	The role of hydrogen in coal particle disintegration at elevated temperatures. Canadian Journal of Chemical Engineering, 1990, 68, 340-345.	1.7	1
66	Hydrodynamics of gas-agitated liquid-liquid dispersions. AICHE Journal, 1990, 36, 677-684.	3.6	21
67	A correlation for hydrogen solubility in alicyclic and aromatic solvents. Canadian Journal of Chemical Engineering, 1987, 65, 293-298.	1.7	33
68	Modeling the Phase Behavior of Asphaltene + Toluene + Polystyrene Mixturesâ€”A Depletion Flocculation Approach. Energy & Fuels, 0, , .	5.1	9
69	On Transferring New Constant Pressure Heat Capacity Computation Methods to Engineering Practice. , 0, , 65-71.		0