

# John M Shaw

## List of Publications by Year in descending order

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69  
papers

1,382  
citations

331642

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361001

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69  
docs citations

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times ranked

964  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced Displacement of Phase Separating Liquid Mixtures in 2D Confined Spaces. <i>Energy &amp; Fuels</i> , 2021, 35, 5194-5205.	5.1	14
2	Composition and Formation of Liquid Crystal Domains in Hydrocarbon Resources. <i>Energy &amp; Fuels</i> , 2021, 35, 9369-9381.	5.1	2
3	How Fast do Microdroplets Generated During Liquid-Liquid Phase Separation Move in a Confined 2D Space?. <i>Energy &amp; Fuels</i> , 2021, 35, 11257-11270.	5.1	3
4	Reference materials for phase equilibrium studies. 1. Liquid-liquid equilibria (IUPAC Technical Report). <i>Pure and Applied Chemistry</i> , 2021, 93, 811-827.	1.9	3
5	Propelling microdroplets generated and sustained by liquid-liquid phase separation in confined spaces. <i>Soft Matter</i> , 2021, 17, 5362-5374.	2.7	10
6	One-Step Nanoextraction and Ultrafast Microanalysis Based on Nanodroplet Formation in an Evaporating Ternary Liquid Microfilm. <i>Advanced Materials Technologies</i> , 2020, 5, 1900740.	5.8	10
7	Shared Depletion and Restabilization Colloidal Interactions in Phase Diagrams for Silica Nanoparticle and Asphaltene + Polystyrene + Solvent Mixtures. <i>Energy &amp; Fuels</i> , 2020, 34, 15234-15245.	5.1	7
8	Discontinuous Displacement at Solvent-Immobile Hydrocarbon Interfaces. <i>Energy &amp; Fuels</i> , 2020, 34, 9392-9400.	5.1	4
9	Preface to the PetroPhase 2019 Special Issue. <i>Energy &amp; Fuels</i> , 2020, 34, 5109-5109.	5.1	2
10	Teaching engineering for a changing landscape. <i>Canadian Journal of Chemical Engineering</i> , 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. <i>Journal of Chemical &amp; Engineering Data</i> , 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 Solvent-Assisted Bitumen Production Processes. <i>SPE Reservoir Evaluation and Engineering</i> , 2018, 21, 174-186.	1.8	4
13	On Vibration-Induced Fluid and Particle Motion in Unconsolidated Porous Media: Observations and Dimensional Scaling Analysis. <i>Transport in Porous Media</i> , 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. <i>Energy &amp; Fuels</i> , 2017, 31, 4966-4972.	5.1	4
15	Thermodynamics of the Antiviral and Antiparkinsonian Drug Amantadine Hydrochloride: Condensed State Properties and Decomposition. <i>Journal of Chemical &amp; Engineering Data</i> , 2017, 62, 2666-2675.	1.9	2
16	Discerning Inter- and Intramolecular Vibrations of Sulfur Polyaromatic Compounds. <i>Journal of Physical Chemistry A</i> , 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. <i>Energy &amp; Fuels</i> , 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. <i>Journal of Chemical &amp; Engineering Data</i> , 2016, 61, 2659-2668.	1.9	35

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19	Quantitative comparison between predicted and experimental binary n-alkane + benzene phase behaviors using cubic and PC-SAFT EOS. <i>Fluid Phase Equilibria</i> , 2016, 428, 4-17.	2.5	5
20	Gold Core Nanoparticle Mimics for Asphaltene Behaviors in Solution and at Interfaces. <i>Energy &amp; Fuels</i> , 2016, 30, 10148-10160.	5.1	3
21	A dynamic pressure view cell for acoustic stimulation of fluids – Micro-bubble generation and fluid movement in porous media. <i>Review of Scientific Instruments</i> , 2015, 86, 095101.	1.3	8
22	Fickian and Non-Fickian Diffusion in Heavy Oil + Light Hydrocarbon Mixtures. <i>Energy &amp; Fuels</i> , 2015, 29, 2177-2189.	5.1	13
23	Non-intrusive, high-resolution, real-time, two-dimensional imaging of multiphase materials using acoustic array sensors. <i>Review of Scientific Instruments</i> , 2015, 86, 044902.	1.3	1
24	On the Phase Behavior of Athabasca Asphaltene + Polystyrene + Toluene Mixtures at 298 K. <i>Energy &amp; Fuels</i> , 2015, 29, 4855-4863.	5.1	8
25	Probing Contaminant Transport to and from Clay Surfaces in Organic Solvents and Water Using Solution Calorimetry. <i>Environmental Science &amp; Technology</i> , 2015, 49, 10841-10849.	10.0	12
26	Systematic Misprediction of <i>n</i> -Alkane + Aromatic and Naphthenic Hydrocarbon Phase Behavior Using Common Equations of State. <i>Journal of Chemical &amp; Engineering Data</i> , 2015, 60, 3300-3318.	1.9	3
27	On Discerning Intermolecular and Intramolecular Vibrations in Experimental Acene Spectra. <i>Energy &amp; Fuels</i> , 2014, 28, 2933-2947.	5.1	7
28	Phase Order Inversion During Heavy Oil and Bitumen Production with Solvent Addition. <i>Energy &amp; Fuels</i> , 2014, 28, 4835-4848.	5.1	5
29	Thixotropic Rheological Behavior of Maya Crude Oil. <i>Energy &amp; Fuels</i> , 2014, 28, 972-979.	5.1	56
30	Phase behavior of Safaniya vacuum residue. <i>Fluid Phase Equilibria</i> , 2014, 380, 28-38.	2.5	5
31	On the Size Distribution of Self-Associated Asphaltenes. <i>Energy &amp; Fuels</i> , 2013, 27, 5083-5106.	5.1	98
32	Phase behavior of Athabasca bitumen+water mixtures at high temperature and pressure. <i>Journal of Supercritical Fluids</i> , 2013, 77, 142-152.	3.2	69
33	Volume of mixing and solubility of water in Athabasca bitumen at high temperature and pressure. <i>Fluid Phase Equilibria</i> , 2013, 358, 203-211.	2.5	48
34	Impact of Liquid – Vapor to Liquid – Vapor Phase Transitions on Asphaltene-Rich Nanoaggregate Behavior in Athabasca Vacuum Residue + Pentane Mixtures. <i>Energy &amp; Fuels</i> , 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. <i>Energy &amp; Fuels</i> , 2012, 26, 3167-3178.	5.1	26
36	Liquid – Liquid Phase Equilibria in Asphaltene + Polystyrene + Toluene Mixtures at 293 K. <i>Energy &amp; Fuels</i> , 2012, 26, 1075-1088.	5.1	13

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

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