

# Hassan Hassanzadeh

## List of Publications by Year in descending order

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178  
papers

4,661  
citations

94269

37  
h-index

138251

58  
g-index

182  
all docs

182  
docs citations

182  
times ranked

2214  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cubic-plus-association equation of state parameterization of liquid-liquid equilibrium of propane- <i>n</i> -butane-bitumen and dimethyl ether-bitumen systems. <i>Fluid Phase Equilibria</i> , 2022, 554, 113341.	1.4	8
2	Subsurface Containment of Injected Chemicals during In-Situ Bitumen Recovery from Oil Sands. <i>ACS ES&amp;T Engineering</i> , 2022, 2, 681-688.	3.7	5
3	Sensitivity analysis of operating parameters affecting CO <sub>2</sub> wellbore transient flow at the CaMI Field Research Station, Alberta, Canada. <i>International Journal of Greenhouse Gas Control</i> , 2022, 114, 103594.	2.3	3
4	Optimization of the Operating Envelope of a Hot-Solvent Injection Process for Bitumen Recovery. <i>SPE Journal</i> , 2022, , 1-15.	1.7	1
5	Temperature Transient Analysis of Naturally Fractured Geothermal Reservoirs. <i>SPE Journal</i> , 2022, 27, 2723-2745.	1.7	24
6	New line-source solution and scaling relations for diffusive leakage of brine from an infinite aquifer-caprock composite domain during geological storage of CO <sub>2</sub> . <i>International Journal of Greenhouse Gas Control</i> , 2022, 118, 103664.	2.3	4
7	Analytical well-test model for hydraulically fractured wells with multiwell interference in double porosity gas reservoirs. <i>Journal of Natural Gas Science and Engineering</i> , 2022, 103, 104624.	2.1	18
8	Standardized High-Performance Liquid Chromatography to Replace Conventional Methods for Determination of Saturate, Aromatic, Resin, and Asphaltene (SARA) Fractions. <i>ACS Omega</i> , 2022, 7, 18897-18903.	1.6	12
9	Vapor-Liquid-Liquid Equilibrium Modeling of Water/Bitumen/Solvent ( $C_{12}$ , $C_{22}$ ), Tj ETQq1 1 0.784314 rgr State. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 8279-8292.	1.8	5
10	Bitumen Recovery Performance of SAGD and Butane- and Hexane-Aided SAGD in the Presence of Shale Barriers. <i>ACS Omega</i> , 2022, 7, 20280-20290.	1.6	3
11	Subsurface waste heat recovery from the abandoned steam assisted gravity drainage (SAGD) operations. <i>Energy</i> , 2022, 256, 124615.	4.5	4
12	Dispersion tensor in stratified porous media. <i>Physical Review E</i> , 2022, 105, .	0.8	8
13	Impact of shale barriers on performance of SAGD and ES-SAGD – A review. <i>Fuel</i> , 2021, 289, 119850.	3.4	29
14	Scalings of Rayleigh-Taylor Instability at Large Viscosity Contrasts in Porous Media. <i>Physical Review Letters</i> , 2021, 126, 094501.	2.9	22
15	Injection of hot urea solutions as a novel process for heavy oil recovery – A proof-of-concept experimental study. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 95, 244-251.	2.9	2
16	Subsurface Migration of Methane From Oil Sands Thermal Recovery Operations. <i>Water Resources Research</i> , 2021, 57, e2020WR028745.	1.7	2
17	Measurements and modeling of liquid-liquid equilibrium of Propane- <i>n</i> -Butane-bitumen system. <i>Fuel</i> , 2021, 293, 120353.	3.4	7
18	Measurements of the Molecular Diffusion Coefficient of Dimethyl Ether in Water at $T = (313.15 \text{--} 373.15 \text{ K})$ and $P = (0.69 \text{--} 2.76 \text{ MPa})$ . <i>Journal of Chemical &amp; Engineering Data</i> , 2021, 66, 2754-2763.	1.0	12

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19	A Semi-Analytical Solution to Evaluate the Spatiotemporal Behavior of Diffusive Pressure Plume and Leakage From Geological Storage Sites. <i>Water Resources Research</i> , 2021, 57, e2021WR030366.	1.7	6
20	A qualitative study of the impact of random shale barriers on SAGD performance using data analytics and machine learning. <i>Journal of Petroleum Science and Engineering</i> , 2021, 205, 108950.	2.1	15
21	Transient non-isothermal coupled wellbore-reservoir modeling of CO <sub>2</sub> injection – Application to CO <sub>2</sub> injection tests at the CaMI FRS site, Alberta, Canada. <i>International Journal of Greenhouse Gas Control</i> , 2021, 111, 103462.	2.3	6
22	The significance of operating parameters on electromagnetic-solvent bitumen recovery process. <i>Fuel</i> , 2021, 304, 121373.	3.4	4
23	Numerical simulation of asphaltene deposition in porous media induced by solvent injection. <i>International Journal of Heat and Mass Transfer</i> , 2021, 181, 121889.	2.5	6
24	Phase equilibria of water-hydrocarbon (pentane to heavy oils) systems in the near-critical and supercritical water regions - A literature review. <i>Journal of Supercritical Fluids</i> , 2021, 178, 105356.	1.6	13
25	Cost-effective and sensitive anthocyanin-based paper sensors for rapid ammonia detection in aqueous solutions. <i>RSC Advances</i> , 2021, 11, 24387-24397.	1.7	12
26	Automated High-Performance Liquid Chromatography for SARA Analysis (SARA-HPLC). <i>Energy &amp; Fuels</i> , 2021, 35, 17642-17650.	2.5	8
27	Dispersion tensor in a two-phase flow in a slit. <i>Physics of Fluids</i> , 2021, 33, 103612.	1.6	10
28	The role of a porous wall on the solute dispersion in a concentric annulus. <i>Physics of Fluids</i> , 2021, 33, 116602.	1.6	6
29	Ethyl acetate as a bio-based solvent to reduce energy intensity and CO <sub>2</sub> emissions of in situ bitumen recovery. <i>AIChE Journal</i> , 2020, 66, e16828.	1.8	18
30	Propane-Aided Leaching of Bitumen from Oilsands. <i>Energy &amp; Fuels</i> , 2020, 34, 5798-5803.	2.5	5
31	Experimental Evaluation on the Oil Saturation and Movability in the Organic and Inorganic Matter of Shale. <i>Energy &amp; Fuels</i> , 2020, 34, 8063-8073.	2.5	13
32	Evaluation of Shale-Gas-Phase Behavior under Nanoconfinement in Multimechanistic Flow. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 15048-15057.	1.8	9
33	A mesoscopic numerical study of shear flow effects on asphaltene self-assembly behavior in organic solvents. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 20758-20770.	1.3	0
34	Measurement of Concentration-Dependent Diffusion Coefficient of Gaseous Solvents in Bitumen. , 2020, , .		3
35	Concentration-dependent molecular diffusion coefficient of gaseous ethane in liquid toluene. <i>AIChE Journal</i> , 2020, 66, e16966.	1.8	16
36	Suitability of hot urea solutions for wettability alteration of bitumen reservoirs – Simulation of laboratory flooding experiments. <i>Fuel</i> , 2020, 272, 117713.	3.4	8

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37	Concentration-dependent molecular diffusion coefficient of dimethyl ether in bitumen. <i>Fuel</i> , 2020, 274, 117809.	3.4	15
38	Efficiency of Urea Solutions in Enhanced Oil Recovery. <i>ACS Omega</i> , 2020, 5, 6122-6129.	1.6	3
39	Measurements and NRTL modeling of liquid-liquid equilibrium of dimethyl ether/bitumen. <i>Fluid Phase Equilibria</i> , 2020, 512, 112549.	1.4	15
40	An Analytical Model for Estimation of the Self-Diffusion Coefficient and Adsorption Kinetics of Surfactants Using Dynamic Interfacial Tension Measurements. <i>Journal of Physical Chemistry B</i> , 2020, 124, 3206-3213.	1.2	7
41	Matrix-fracture transfer shape factor for modeling multimechanisitic multicomponent shale gas flow. <i>International Journal of Heat and Mass Transfer</i> , 2020, 158, 120022.	2.5	3
42	Interfacial Tension of n-Pentane/Bitumen and n-Heptane/Bitumen Mixtures at T = 298.15â€“413.15 K and P = 3.45 MPa. <i>Journal of Chemical &amp; Engineering Data</i> , 2020, 65, 1787-1794.	1.0	5
43	Adsorption Kinetics of Asphaltenes at the Heptolâ€“Water Interface. <i>Energy &amp; Fuels</i> , 2020, 34, 3144-3152.	2.5	22
44	Numerical modeling of electromagnetic-based thermal recovery techniques combined with solvent injection. <i>International Journal of Heat and Mass Transfer</i> , 2020, 151, 119393.	2.5	15
45	2-D physical model experimental study of ethyl acetate and steam co-injection for in-situ bitumen recovery. <i>Fuel</i> , 2020, 265, 116943.	3.4	17
46	Numerical modeling of viscous fingering during miscible displacement of oil by a paraffinic solvent in the presence of asphaltene precipitation and deposition. <i>International Journal of Heat and Mass Transfer</i> , 2020, 154, 119688.	2.5	11
47	Dynamics of Viscous Fingering in Porous Media in the Presence of In Situ Formed Precipitates and Their Subsequent Deposition. <i>Water Resources Research</i> , 2020, 56, e2019WR027042.	1.7	9
48	An experimental approach to investigating permeability reduction caused by solventâ€“induced asphaltene deposition in porous media. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 361-371.	0.9	11
49	Solubility and Liquid Density of Ammonia/Athabasca Bitumen Mixtures at Temperatures up to 463 K: Measurements and Modeling. <i>Journal of Chemical &amp; Engineering Data</i> , 2019, 64, 3592-3597.	1.0	12
50	CO2 sequestration coupled with enhanced gas recovery in shale gas reservoirs. <i>Journal of CO2 Utilization</i> , 2019, 34, 646-655.	3.3	68
51	Utilization of CO2 to reduce environmental impact of diluted bitumen transportation and improve economics of CCS operations. <i>International Journal of Greenhouse Gas Control</i> , 2019, 91, 102828.	2.3	2
52	Effect of Asphaltene Precipitation and Deposition on Miscible Viscous Fingering in Porous Media â€“ High-Resolution Nonlinear Numerical Simulations. , 2019, , .		0
53	Suitability of ionic solutions as a chemical substance for chemical enhanced oil recovery â€“ A simulation study. <i>Fuel</i> , 2019, 242, 368-373.	3.4	7
54	Estimation of diffusion coefficient of gases in liquids from swelling data â€“ An analytical model for including the effects of advection and density change. <i>Fuel</i> , 2019, 252, 68-76.	3.4	11

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55	On the Dynamics of Two-Component Convective Dissolution in Porous Media. <i>Water Resources Research</i> , 2019, 55, 4030-4042.	1.7	12
56	Development of Generalized Correlations for Thermophysical Properties of Light Hydrocarbon Solvents ( $C_1$ - $C_5$ )/Bitumen Systems Using Genetic Programming. <i>ACS Omega</i> , 2019, 4, 6955-6967.	1.6	17
57	Impact of boundary excitation on stability of a diffusive boundary layer in porous media. <i>Advances in Water Resources</i> , 2019, 126, 40-54.	1.7	2
58	Estimation of Shale Apparent Permeability for Multimechanistic, Multicomponent Gas Production Using Rate Transient Analysis. <i>Energy &amp; Fuels</i> , 2019, 33, 1990-1997.	2.5	5
59	Measurements of Molecular Diffusion Coefficient and Solubility of Dimethyl Ether in Bitumen at $T = (323.15 \text{--} 383.15 \text{ K})$ and $P = (0.69 \text{--} 2.76 \text{ MPa})$ . <i>Journal of Chemical &amp; Engineering Data</i> , 2019, 64, 5935-5945.	1.0	17
60	An analytical method of estimating diffusion coefficients of gases in liquids from pressure decay tests. <i>AIChE Journal</i> , 2019, 65, 434-445.	1.8	13
61	Mechanistic modelling of non-equilibrium interphase mass transfer during solvent-aided thermal recovery processes of bitumen and heavy oil. <i>Fuel</i> , 2019, 241, 813-825.	3.4	13
62	Particles aggregation and fragmentation – A Monte Carlo study. <i>Chemical Physics</i> , 2019, 517, 6-12.	0.9	9
63	Generalized Approach to Predict $k$ -Values of Hydrocarbon Solvent/Bitumen Mixtures. , 2018, , .		5
64	Onset of density-driven instabilities in fractured aquifers. <i>Physical Review E</i> , 2018, 97, 043109.	0.8	5
65	Phase behaviour of butane/bitumen fractions: Experimental and modeling studies. <i>Fuel</i> , 2018, 220, 47-59.	3.4	19
66	Diffusive leakage of brine from aquifers during CO <sub>2</sub> geological storage. <i>Advances in Water Resources</i> , 2018, 111, 36-57.	1.7	82
67	Shear Dispersion in a Rough-Walled Fracture. <i>SPE Journal</i> , 2018, 23, 1669-1688.	1.7	41
68	A thermodynamic model to predict propane solubility in bitumen and heavy oil based on experimental fractionation and characterization. <i>Journal of Petroleum Science and Engineering</i> , 2018, 168, 156-177.	2.1	25
69	Dimethylether-A Promising Solvent for ES-SAGD. , 2018, , .		16
70	Effect of the Surfactant on Asphaltene Deposition on Stainless-Steel and Glass Surfaces. <i>Energy &amp; Fuels</i> , 2018, 32, 5635-5642.	2.5	13
71	A reduced-order model for chemical species transport in a tube with a constant wall concentration. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 307-316.	0.9	27
72	Thermophysical properties of $n$ -pentane/bitumen and $n$ -hexane/bitumen mixture systems. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 339-351.	0.9	20

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73	Thermophysical properties of dimethyl ether/Athabasca bitumen system. Canadian Journal of Chemical Engineering, 2018, 96, 597-604.	0.9	47
74	A new insight into the stability of variable viscosity diffusive boundary layers in porous media under gravity field. AIChE Journal, 2018, 64, 1083-1094.	1.8	17
75	Analytical modelling of cyclic steam stimulation (CSS) process with a horizontal well configuration. Canadian Journal of Chemical Engineering, 2018, 96, 573-589.	0.9	8
76	Dynamics of Miscible Nanocatalytic Reactive Flows in Porous Media. Physical Review Applied, 2018, 10, .	1.5	14
77	The role of natural fractures of finite double-porosity aquifers on diffusive leakage of brine during geological storage of CO <sub>2</sub> . International Journal of Greenhouse Gas Control, 2018, 78, 177-197.	2.3	52
78	Modeling of Carbon Dioxide Leakage from Storage Aquifers. Fluids, 2018, 3, 80.	0.8	5
79	Effect of additives on liquid-liquid equilibrium properties of butane/bitumen systems with applications to solvent aided bitumen recovery processes. Chemical Engineering Research and Design, 2018, 137, 452-460.	2.7	14
80	A new analytical model for estimation of the molecular diffusion coefficient of gaseous solvents in bitumen – Effect of swelling. Fuel, 2018, 231, 342-351.	3.4	22
81	Characterization of heavy crude oils and residues using combined Gel Permeation Chromatography and simulated distillation. Fuel, 2018, 233, 885-893.	3.4	49
82	Comments on the paper “effect of impurities on the onset and the growth of gravitational instabilities in a geological CO <sub>2</sub> storage process: Linear and nonlinear analyses” M.C. Kim, K.H. Song (2017). Chemical Engineering Science, 2018, 192, 613-618.	1.9	4
83	New Solubility and Viscosity Measurements for Methane, Ethane, Propane, and Butane-Athabasca Bitumen Systems at High Temperatures up to 260 °C. Journal of Chemical & Engineering Data, 2018, 63, 3566-3571.	1.0	21
84	Semi-analytical solution for pressure transient analysis of a hydraulically fractured vertical well in a bounded dual-porosity reservoir. Journal of Hydrology, 2018, 565, 289-301.	2.3	117
85	Asphaltene Mesoscale Aggregation Behavior in Organic Solvents – A Brownian Dynamics Study. Journal of Physical Chemistry B, 2018, 122, 8477-8492.	1.2	14
86	Experimental and modeling studies of water, light n-alkanes and MacKay River bitumen ternary systems. Fuel, 2017, 196, 1-12.	3.4	25
87	Experimental and modeling studies of MacKay River bitumen and water. Journal of Petroleum Science and Engineering, 2017, 151, 305-310.	2.1	27
88	Modeling of desiccated zone development during electromagnetic heating of oil sands. Journal of Petroleum Science and Engineering, 2017, 154, 163-171.	2.1	24
89	Solubility and thermo-physical properties measurement of CO <sub>2</sub> - and N <sub>2</sub> -Athabasca bitumen systems. Journal of Petroleum Science and Engineering, 2017, 154, 277-283.	2.1	28
90	A comparative study of oil sands preheating using electromagnetic waves, electrical heaters and steam circulation. International Journal of Heat and Mass Transfer, 2017, 111, 908-916.	2.5	37

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91	Thermal analysis of high frequency electromagnetic heating of lossy porous media. Chemical Engineering Science, 2017, 172, 13-22.	1.9	27
92	Experimental and modelling studies of MacKay River bitumen and light <i>n</i> -alkane binaries. Canadian Journal of Chemical Engineering, 2017, 95, 1417-1427.	0.9	35
93	Selection of efficient solvent in solvent-aided thermal recovery of bitumen. Chemical Engineering Science, 2017, 161, 198-205.	1.9	33
94	Stability of gravitationally unstable double diffusive transient boundary layers with variable viscosity in porous media. AIChE Journal, 2017, 63, 2471-2482.	1.8	11
95	Effect of Asphaltene on Phase Behavior and Thermophysical Properties of Solvent/Bitumen Systems. Journal of Chemical & Engineering Data, 2017, 62, 547-557.	1.0	29
96	Mass Transfer of CO <sub>2</sub> in a Carbonated Water-Oil System at High Pressures. Industrial & Engineering Chemistry Research, 2017, 56, 404-416.	1.8	30
97	Pre-Darcy Flow in Porous Media. Water Resources Research, 2017, 53, 8187-8210.	1.7	91
98	Numerical simulation of solvent and water assisted electrical heating of oil sands including aquathermolysis and thermal cracking reactions. AIChE Journal, 2017, 63, 4243-4258.	1.8	20
99	Effects of Operational Parameters on Diffusion Coefficients of CO <sub>2</sub> in a Carbonated Water-Oil System. Industrial & Engineering Chemistry Research, 2017, 56, 12799-12810.	1.8	9
100	Prospect for storage of impure carbon dioxide streams in deep saline aquifers: A convective dissolution perspective. International Journal of Greenhouse Gas Control, 2017, 63, 350-355.	2.3	21
101	Water content of light <i>n</i> -alkanes: New measurements and cubic- $\epsilon$ -association equation of state modeling. AIChE Journal, 2017, 63, 1384-1389.	1.8	10
102	Control of viscous fingering by nanoparticles. Physical Review E, 2017, 96, 063114.	0.8	20
103	On the choice of analogue fluids in CO <sub>2</sub> convective dissolution experiments. Water Resources Research, 2016, 52, 4458-4468.	1.7	25
104	Does impure CO <sub>2</sub> impede or accelerate the onset of convective mixing in geological storage?. International Journal of Greenhouse Gas Control, 2016, 54, 250-257.	2.3	31
105	Numerical simulations of bitumen recovery using solvent and water assisted electrical heating. Fuel, 2016, 186, 68-81.	3.4	31
106	Gas Generation during Electrical Heating of Oil Sands. Energy & Fuels, 2016, 30, 7001-7013.	2.5	23
107	Experimental Measurements and Correlation of K-value, Viscosity, and Density Data for Mixtures of Light to Heavy Solvents and Athabasca Bitumen with Applications of ES-SAGD Process. , 2016, , .		5
108	Analysis of conductive heat transfer during in-situ electrical heating of oil sands. Fuel, 2016, 178, 290-299.	3.4	44

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109	Shear dispersion in a capillary tube with a porous wall. <i>Journal of Contaminant Hydrology</i> , 2016, 185-186, 87-104.	1.6	40
110	CO <sub>2</sub> dissolution in the presence of background flow of deep saline aquifers. <i>Water Resources Research</i> , 2015, 51, 2595-2615.	1.7	28
111	Onset of dissolution-driven instabilities in fluids with nonmonotonic density profile. <i>Physical Review E</i> , 2015, 92, 053023.	0.8	37
112	Shear dispersion in combined pressure-driven and electro-osmotic flows in a capillary tube with a porous wall. <i>AIChE Journal</i> , 2015, 61, 3981-3995.	1.8	49
113	A method for characterization of bitumen. <i>Fuel</i> , 2015, 153, 240-248.	3.4	12
114	Prediction of CO <sub>2</sub> solubility in bitumen using the cubic-plus-association equation of state (CPA-EoS). <i>Journal of Supercritical Fluids</i> , 2015, 98, 44-49.	1.6	21
115	Prediction of water solubility in petroleum fractions and heavy crudes using cubic-plus-association equation of state (CPA-EoS). <i>Fuel</i> , 2015, 159, 894-899.	3.4	37
116	Approximate analytical solutions for steady-state nonisothermal convection-diffusion-reaction in a slab. <i>Applied Mathematics and Computation</i> , 2015, 264, 141-159.	1.4	1
117	Shear dispersion in combined pressure-driven and electro-osmotic flows in a channel with porous walls. <i>Chemical Engineering Science</i> , 2015, 137, 205-215.	1.9	46
118	Stability Analysis of Coupled Heat and Mass Transfer Boundary Layers During Steam-Solvent Oil Recovery Process. <i>Transport in Porous Media</i> , 2015, 108, 595-615.	1.2	14
119	Measuring and Modeling the Solubility and Density for CO <sub>2</sub> -Toluene and C <sub>2</sub> H <sub>6</sub> -Toluene Systems. <i>Journal of Chemical &amp; Engineering Data</i> , 2015, 60, 1592-1599.	1.0	19
120	Characterization of Scale-Dependent Dispersivity in Fractured Formations Through a Divergent Flow Tracer Test. <i>Ground Water</i> , 2015, 53, 149-155.	0.7	15
121	Convective dissolution of CO <sub>2</sub> in saline aquifers: Progress in modeling and experiments. <i>International Journal of Greenhouse Gas Control</i> , 2015, 40, 238-266.	2.3	232
122	Two-phase convective mixing under a buoyant plume of CO <sub>2</sub> in deep saline aquifers. <i>Advances in Water Resources</i> , 2015, 76, 55-71.	1.7	49
123	Reinfiltration through liquid bridges formed between two matrix blocks in fractured rocks. <i>Journal of Hydrology</i> , 2014, 519, 3520-3530.	2.3	47
124	Prediction of solubility of CH <sub>4</sub> , C <sub>2</sub> H <sub>6</sub> , CO <sub>2</sub> , N <sub>2</sub> and CO in bitumen. <i>Canadian Journal of Chemical Engineering</i> , 2014, 92, 563-572.	0.9	23
125	Critical review of mutual diffusion coefficient measurements for liquid solvent-bitumen/heavy oil mixtures. <i>Canadian Journal of Chemical Engineering</i> , 2014, 92, 1455-1466.	0.9	10
126	Application of Taylor dispersion technique to measure mutual diffusion coefficient in hexane-bitumen system. <i>AIChE Journal</i> , 2014, 60, 2670-2682.	1.8	24

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127	Application of tracer injection tests to characterize rock matrix block size distribution and dispersivity in fractured aquifers. <i>Journal of Hydrology</i> , 2014, 510, 504-512.	2.3	15
128	Formation heating by steam circulation in a horizontal wellbore. <i>International Journal of Heat and Mass Transfer</i> , 2014, 78, 986-992.	2.5	14
129	Shear dispersion in a fracture with porous walls. <i>Advances in Water Resources</i> , 2014, 74, 14-25.	1.7	68
130	A New Method for the Characterization of Heavy Oil and Bitumen using Distillation Curve Data. , 2014, , .		1
131	Semi-Analytical Solutions for a Partially Penetrated Well with Wellbore Storage and Skin Effects in a Double-Porosity System with a Gas Cap. <i>Transport in Porous Media</i> , 2013, 100, 159-192.	1.2	40
132	Mixing induced by buoyancy-driven flows in porous media. <i>AIChE Journal</i> , 2013, 59, 1378-1389.	1.8	19
133	Modeling of CO <sub>2</sub> dissolution by static mixers using back flow mixing approach with application to geological storage. <i>Chemical Engineering Science</i> , 2013, 104, 10-16.	1.9	10
134	Lumped mass transfer coefficient for divergent radial solute transport in fractured aquifers. <i>Journal of Hydrology</i> , 2013, 495, 113-120.	2.3	8
135	The laboratory testing and scale-up of a downhole device for CO <sub>2</sub> dissolution acceleration. <i>International Journal of Greenhouse Gas Control</i> , 2013, 16, 41-49.	2.3	15
136	Semianalytical solutions for release of fluids from rock matrix blocks with different shapes, sizes, and depletion regimes. <i>Water Resources Research</i> , 2013, 49, 2174-2196.	1.7	21
137	Frontal stability of reactive nanoparticle transport during in situ catalytic upgrading of heavy oil. <i>Fuel</i> , 2013, 107, 525-538.	3.4	13
138	Stability analysis of two-phase buoyancy-driven flow in the presence of a capillary transition zone. <i>Physical Review E</i> , 2013, 87, .	0.8	31
139	Prediction of Bitumen and Solvent Mixture Viscosity Using Cubic-Plus-Association Equation of State. , 2012, , .		8
140	Onset of Convective Mixing at the Edge of Steam Chamber in Steam-Solvent Recovery of Heavy Oil and Bitumen. , 2012, , .		6
141	Impact of Adsorption on Mass Transfer in Fractured Reservoirs. , 2012, , .		1
142	One-Dimensional Matrix-Fracture Transfer in Dual Porosity Systems with Variable Block Size Distribution. <i>Transport in Porous Media</i> , 2012, 95, 185-212.	1.2	28
143	Equivalent Reaction Constant for Isothermal Reactive Flow with Power-Law Kinetics. <i>Petroleum Science and Technology</i> , 2012, 30, 1210-1220.	0.7	0
144	Effect of Fracture Intensity and Longitudinal Dispersivity on Mass Transfer in Fractured Reservoirs. , 2012, , .		0

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145	Reverse gas-lift technology for CO <sub>2</sub> storage into deep saline aquifers. <i>Energy</i> , 2012, 45, 840-849.	4.5	21
146	Mutual solubility of CH <sub>4</sub> , CO <sub>2</sub> , H <sub>2</sub> S, and their mixtures in brine under subsurface disposal conditions. <i>Fluid Phase Equilibria</i> , 2012, 324, 80-93.	1.4	59
147	Advective-diffusive mass transfer in fractured porous media with variable rock matrix block size. <i>Journal of Contaminant Hydrology</i> , 2012, 133, 94-107.	1.6	41
148	Hydrodynamic dispersion in steady buoyancy-driven geological flows. <i>Water Resources Research</i> , 2011, 47, .	1.7	14
149	Effect of fracture pressure depletion regimes on the dual-porosity shape factor for flow of compressible fluids in fractured porous media. <i>Advances in Water Resources</i> , 2011, 34, 1681-1693.	1.7	24
150	The impact of geochemistry on convective mixing in a gravitationally unstable diffusive boundary layer in porous media: CO <sub>2</sub> storage in saline aquifers. <i>Journal of Fluid Mechanics</i> , 2011, 673, 480-512.	1.4	93
151	Matrix-fracture transfer shape factor for modeling flow of a compressible fluid in dual-porosity media. <i>Advances in Water Resources</i> , 2011, 34, 627-639.	1.7	72
152	Formation of liquid bridges between porous matrix blocks. <i>AIChE Journal</i> , 2011, 57, 286-298.	1.8	49
153	The effect of anisotropic dispersion on the convective mixing in long-term CO <sub>2</sub> storage in saline aquifers. <i>AIChE Journal</i> , 2011, 57, 561-570.	1.8	50
154	Estimation of concentration-dependent diffusion coefficient in pressure-decay experiment of heavy oils and bitumen. <i>Fluid Phase Equilibria</i> , 2011, 305, 132-144.	1.4	51
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