Guillaume Galliero

List of Publications by Year
in descending order

101 papers	2,606 citations	147801 31 h-index	214800 47 g-index
102 all docs	102 docs citations	102 times ranked	1488 citing authors

#	Article	IF	Citations
1	Transport of Multicomponent Hydrocarbon Mixtures in Shale Organic Matter by Molecular Simulations. Journal of Physical Chemistry C, 2015, 119, 22587-22595.	3.1	166
2	Molecular Simulation of Bulk Organic Matter in Type II Shales in the Middle of the Oil Formation Window. Energy & Fuels, 2014, 28, 7457-7466.	5.1	161
3	Molecular simulation and modelisation of methane/ethane mixtures adsorption onto a microporous molecular model of kerogen under typical reservoir conditions. Microporous and Mesoporous Materials, 2014, 197, 194-203.	4.4	135
4	Molecular Dynamics Study of the Lennardâˆ’Jones Fluid Viscosity:â€‰ Application to Real Fluids. Industrial & Engineering Chemistry Research, 2005, 44, 6963-6972.	3.7	126
5	Scaling of the viscosity of the Lennard-Jones chain fluid model, argon, and some normal alkanes. Journal of Chemical Physics, 2011, 134, 064505.	3.0	87
6	Initial state of petroleum reservoirs: A comprehensive approach. Journal of Petroleum Science and Engineering, 2007, 58, 391-402.	4.2	81
7	Interfacial properties of the Mie nâˆ’6 fluid: Molecular simulations and gradient theory results. Journal of Chemical Physics, 2009, 130, 104704.	3.0	71
8	Thermal diffusion sensitivity to the molecular parameters of a binary equimolar mixture, a non-equilibrium molecular dynamics approach. Fluid Phase Equilibria, 2003, 208, 171-188.	2.5	70
9	Local viscosity of a fluid confined in a narrow pore. Physical Review E, 2012, 86, 021202.	2.1	62
10	A New Model for Thermal Diffusion: Kinetic Approach. Journal of the American Chemical Society, 2008, 130, 10963-10969.	13.7	60
11	Molecular dynamics comparative study of Lennard-JonesÎ±-6 and exponentialÎ±-6 potentials: Application to real simple fluids (viscosity and pressure). Physical Review E, 2006, 73, 061201.	2.1	59
12	Viscosity measurements for squalane at high pressures to 350MPa from T=(293.15 to 363.15)K. Journal of Chemical Thermodynamics, 2014, 69, 201-208.	2.0	48
13	Thermal conductivity of the Lennard-Jones fluid: An empirical correlation. Chemical Physics, 2008, 352, 249-257.	1.9	46
14	Liquid density of 1-butanol at pressures up to 140MPa and from 293.15K to 403.15K. Fluid Phase Equilibria, 2011, 301, 131-136.	2.5	46
15	Thermal conductivity of the Lennard-Jones chain fluid model. Physical Review E, 2009, 80, 061202.	2.1	42
16	Impact of Thermodiffusion on the Initial Vertical Distribution of Species in Hydrocarbon Reservoirs. Microgravity Science and Technology, 2016, 28, 79-86.	1.4	42
17	Comparative experimental and modeling studies of the viscosity behavior of ethanol+C7 hydrocarbon mixtures versus pressure and temperature. Fluid Phase Equilibria, 2006, 245, 6-19.	2.5	41
18	Shear viscosity of the Lennard-Jones chain fluid in its gaseous, supercritical, and liquid states. Physical Review E, 2009, 79, 021201.	2.1	40

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19	Thermodiffusion: From microgravity experiments to the initial state of petroleum reservoirs. Comptes Rendus - Mecanique, 2011, 339, 318-323.	2.1	40
20	Viscosities of Fatty Acid Methyl and Ethyl Esters under High Pressure: Methyl Caprate and Ethyl Caprate. Journal of Chemical & Engineering Data, 2015, 60, 902-908.	1.9	38
21	Simultaneous Description of Equilibrium, Interfacial, and Transport Properties of Fluids Using a Mie Chain Coarse-Grained Force Field. Industrial & Engineering Chemistry Research, 2017, 56, 9213-9226.	3.7	38
22	Stereoisomeric effects on volumetric properties under pressure for the system cis-+trans-decalin. Fluid Phase Equilibria, 2007, 252, 79-87.	2.5	37
23	Reference Correlations for the Density and Viscosity of Squalane from 273 to 473 K at Pressures to 200 MPa. Journal of Physical and Chemical Reference Data, 2014, 43, .	4.2	37
24	Mass Effect on Thermodiffusion using Molecular Dynamics. Journal of Non-Equilibrium Thermodynamics, 2007, 32, .	4.2	36
25	Molecular Dynamics Simulation of Acid Gas Mixtures:â€‰ A Comparison between Several Approximations. Industrial & Engineering Chemistry Research, 2007, 46, 5238-5244.	3.7	36
26	Surface tension of short flexible Lennard-Jones chains: Corresponding states behavior. Journal of Chemical Physics, 2010, 133, 074705.	3.0	35
27	Shear viscosity of inhomogeneous fluids. Journal of Chemical Physics, 2012, 136, 124902.	3.0	34
28	Viscosities of Fatty Acid Methyl and Ethyl Esters under High Pressure: Methyl Myristate and Ethyl Myristate. Journal of Chemical & Engineering Data, 2016, 61, 398-403.	1.9	33
29	Thermodiffusion in multicomponent n-alkane mixtures. Npj Microgravity, 2017, 3, 20.	3.7	32
30	Molecular dynamics study of the repulsive form influence of the interaction potential on structural, thermodynamic, interfacial, and transport properties. Journal of Chemical Physics, 2008, 129, 074506.	3.0	31
31	Lennard-Jones fluid-fluid interfaces under shear. Physical Review E, 2010, 81, 056306.	2.1	31
32	Nonisothermal gravitational segregation by molecular dynamics simulations. Physical Review E, 2008, 78, 041203.	2.1	30
33	A molecular dynamics study of thermal diffusion in a porous medium. Physical Chemistry Chemical Physics, 2002, 4, 313-321.	2.8	28
34	Thermal diffusion in micropores by molecular dynamics computer simulations. Physica A: Statistical Mechanics and Its Applications, 2006, 361, 494-510.	2.6	28
35	Influence of the chain length on the dynamic viscosity at high pressure of some 2-alkylamines: Measurements and comparative study of some models. Chemical Physics, 2010, 369, 126-137.	1.9	28
36	An entropy scaling demarcation of gas- and liquid-like fluid behaviors. Journal of Chemical Physics, 2020, 152, 191102.	3.0	27

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37	Revisiting the Entropy-Scaling Concept for Shear-Viscosity Estimation from Cubic and SAFT Equations of State: Application to Pure Fluids in Gas, Liquid and Supercritical States. Industrial & Engineering Chemistry Research, 2021, 60, 12719-12739.	3.7	26
38	Thermodynamic properties of the Mie n-6 fluid: A comparison between statistical associating fluid theory of variable range approach and molecular dynamics results. Journal of Chemical Physics, 2007, 127, 184506.	3.0	24
39	Dynamic Crossover in Fluids: From Hard Spheres to Molecules. Journal of Physical Chemistry Letters, 2021, 12, 6411-6417.	4.6	24
40	Influence of the mass ratio on viscosity in Lennardâ€“Jones mixtures: The one-fluid model revisited using nonequilibrium molecular dynamics. Fluid Phase Equilibria, 2005, 234, 56-63.	2.5	23
41	Grand canonical-like molecular dynamics simulations: Application to anisotropic mass diffusion in a nanoporous medium. Journal of Chemical Physics, 2012, 136, 184702.	3.0	22
42	Thermal diffusion in Lennardâ€“Jones fluids in the frame of the law of the corresponding states. Fluid Phase Equilibria, 2004, 224, 13-22.	2.5	20
43	Equilibrium, interfacial and transport properties of n-alkanes: Towards the simplest coarse grained molecular model. Chemical Engineering Research and Design, 2014, 92, 3031-3037.	5.6	20
44	Excess volume, isothermal compressibility, isentropic compressibility and speed of sound of carbon dioxide + n-heptane binary mixture under pressure up to 70 MPa. I Experimental Measurements. Journal of Supercritical Fluids, 2018, 140, 218-232.	3.2	20
45	Influence of the chain length on the dynamic viscosity at high pressure of some amines: Measurements and comparative study of some models. Journal of Chemical Thermodynamics, 2009, 41, 291-300.	2.0	19
46	Thermodynamic scaling of the shear viscosity of Mie n-6 fluids and their binary mixtures. Journal of Chemical Physics, 2015, 142, 174501.	3.0	19
47	Viscosity of {xCO2+(1â^'x)CH4} with x=0.5174 for temperatures between (229 and 348)K and pressures between (1 and 32)MPa. Journal of Chemical Thermodynamics, 2015, 87, 162-167.	2.0	17
48	Influence of confinement on thermodiffusion. Journal of Chemical Physics, 2013, 139, 114704.	3.0	16
49	Dynamic viscosity estimation of hydrogen sulfide using a predictive scheme based on molecular dynamics. Fluid Phase Equilibria, 2008, 269, 19-24.	2.5	15
50	Molecular dynamics study of thermal diffusion in a binary mixture of alkanes trapped in a slit pore. Philosophical Magazine, 2003, 83, 2087-2095.	1.6	14
51	Note: Temperature derivative of the refractive index of binary mixtures measured by using a new thermodiffusion cell. Review of Scientific Instruments, 2011, 82, 126105.	1.3	14
52	Predicting thermodiffusion in simple binary fluid mixtures. European Physical Journal E, 2022, 45, 42.	1.6	14
53	Thermophysical properties of simple molecular liquid mixtures: On the limitations of some force fields. Journal of Molecular Liquids, 2020, 303, 112663.	4.9	13
54	The van der Waals one-fluid model for viscosity in Lennardâ€“Jones fluids: Influence of size and energy parameters. Fluid Phase Equilibria, 2006, 245, 20-25.	2.5	12

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55	Slippage of binary fluid mixtures in a nanopore. Microfluidics and Nanofluidics, 2013, 15, 183-189.	2.2	12
56	Local shear viscosity of strongly inhomogeneous dense fluids: from the hard-sphere to the Lennard-Jones fluids. Journal of Physics Condensed Matter, 2013, 25, 485001.	1.8	12
57	Influence of the repulsive coefficient Î± and approximate corresponding states in Mie Î±-6 and exponential Î±-6 fluids. Chemical Physics, 2007, 333, 219-228.	1.9	11
58	Density, Speed of Sound, Compressibility, and Excess Properties of Carbon Dioxide + n-Dodecane Binary Mixtures from 10 to 70 MPa. Journal of Chemical & Engineering Data, 2019, 64, 3187-3204.	1.9	11
59	Molecular dynamics simulations of heat and mass transport properties of a simple binary mixture in micro/meso-pores. Chemical Physics, 2011, 389, 53-57.	1.9	10
60	Thermodiffusion of the tetrahydronaphthalene and dodecane mixture under high pressure and in porous medium. Comptes Rendus - Mecanique, 2013, 341, 340-347.	2.1	10
61	Shear behavior of a confined thin film: Influence of the molecular dynamics scheme employed. Journal of Chemical Physics, 2013, 138, 054707.	3.0	10
62	Speed of sound and derivative properties of hydrofluoroether fluid HFE-7500 under high pressure. Journal of Chemical Thermodynamics, 2017, 112, 52-58.	2.0	10
63	On the use of a friction model in a Volume of Fluid solver for the simulation of dynamic contact lines. Journal of Computational Physics, 2019, 393, 29-45.	3.8	10
64	Density, Viscosity, and Derivative Properties of Diethylene Glycol Monoethyl Ether Under High Pressure and Temperature. Journal of Chemical & Engineering Data, 2021, 66, 1457-1465.	1.9	10
65	Understanding Compositional Grading in Petroleum Reservoirs Thanks to Molecular Simulations. , 2009, , .		9
66	Low density shear viscosity of Lennard-Jones chains of variable rigidities. Journal of Chemical Physics, 2012, 137, 204306.	3.0	9
67	Predictive Tait equation for non-polar and weakly polar fluids: Applications to liquids and liquid mixtures. Fluid Phase Equilibria, 2016, 425, 143-151.	2.5	9
68	Speed of sound, density and derivative properties of diisopropyl ether under high pressure. Fluid Phase Equilibria, 2017, 449, 148-155.	2.5	9
69	Elemental and isotopic fractionation of noble gases in gas and oil under reservoir conditions: Impact of thermodiffusionâ‹†. European Physical Journal E, 2019, 42, 61.	1.6	9
70	Macroscopic model of multicomponent fluids in porous media. Philosophical Magazine, 2003, 83, 2209-2219.	1.6	8
71	Hybrid atomisticâ€“continuum simulations of fluid flows involving interfaces. Microfluidics and Nanofluidics, 2011, 10, 637-647.	2.2	8
72	Determination of the thermodynamic correction factor of fluids confined in nano-metric slit pores from molecular simulation. Journal of Chemical Physics, 2014, 140, 194702.	3.0	8

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73	Stereoisomeric effects on dynamic viscosity versus pressure and temperature for the system cis-+trans-decalin. Chemical Physics, 2007, 336, 171-182.	1.9	7
74	High-Pressure Acid-Gas Viscosity Correlation. SPE Journal, 2010, 15, 682-688.	3.1	7
75	Tait equation in the extended corresponding states framework: Application to liquids and liquid mixtures. Fluid Phase Equilibria, 2015, 387, 5-11.	2.5	7
76	Diffusion of Supercritical Fluids through Single-Layer Nanoporous Solids: Theory and Molecular Simulations. Langmuir, 2018, 34, 561-571.	3.5	7
77	Linking up pressure, chemical potential and thermal gradients. European Physical Journal E, 2019, 42, 65.	1.6	7
78	Excess volume, isothermal compressibility, isentropic compressibility and speed of sound of carbon dioxide+n-heptane binary mixture under pressure up to 70 MPa. II. Molecular simulations. Journal of Supercritical Fluids, 2020, 164, 104890.	3.2	6
79	A new approach to thermal segregation in petroleum reservoirs: Algorithm and case studies. Journal of Petroleum Science and Engineering, 2021, 201, 108367.	4.2	6
80	Density, Speed of Sound, Compressibility, and Excess Properties of the Carbon Dioxide + n-Heptadecane Binary Mixture from 10 to 70 MPa. Journal of Chemical & Engineering Data, 2021, 66, 3245-3257.	1.9	6
81	Molecular dynamics simulations of the penetration lengths: application within the fluctuation theory for diffusion coefficients. Physica A: Statistical Mechanics and Its Applications, 2005, 350, 315-337.	2.6	5
82	Contribution to the modeling of the shear viscosity of sulfur hexafluoride (SF6): Comparative study of some representative models. Chemical Physics, 2013, 423, 105-118.	1.9	5
83	Molecular dynamics simulation of thermodiffusion and mass diffusion in structureless and atomistic micropores. Comptes Rendus - Mecanique, 2013, 341, 469-476.	2.1	5
84	Communication: A method to compute the transport coefficient of pure fluids diffusing through planar interfaces from equilibrium molecular dynamics simulations. Journal of Chemical Physics, 2017, 147, 101102.	3.0	5
85	Speed of sound, density and derivative properties of binary mixtures HFE-7500â€¯+â€¯Diisopropyl ether under high pressure. Journal of Chemical Thermodynamics, 2019, 128, 19-33.	2.0	5
86	Density, Speed of Sound, Compressibility and Related Excess Properties of Methaneâ€‰+â€‰n-Heptane at Tâ€‰=â€‰303.15ÂK and pâ€‰=â€‰10 to 70ÂMPa. International Journal of Thermophysics, 2020, 41, 1.	2.1	5
87	On elemental and isotopic fractionation of noble gases in geological fluids by molecular diffusion. Geochimica Et Cosmochimica Acta, 2021, 315, 172-184.	3.9	5
88	Couplings between swelling and shear in saturated slit nanopores: A molecular simulation study. Physical Review E, 2015, 91, 012401.	2.1	4
89	Entropy Scaling for Viscosity of Pure Lennard-Jones Fluids and Their Binary Mixtures. Communications in Physics, 2022, 32, 187.	0.0	4
90	Mass effect on viscosity of mixtures in entropy scaling framework: Application to Lennard-Jones mixtures. Fluid Phase Equilibria, 2022, 558, 113459.	2.5	4

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91	Theoretically Based Model for Competitive Adsorption of Subcritical Mixtures. Journal of Physical Chemistry C, 2014, 118, 26162-26171.	3.1	3
92	High Pressure Acid Gas Viscosity Correlation. , 2009, , .		2
93	Accurate determination of bubble-point of oils from PV data using a combination of Y-function and Tait equation. Journal of Petroleum Science and Engineering, 2017, 149, 801-810.	4.2	2
94	SCCO: Thermodiffusion for the Oil and Gas Industry. Research for Development, 2019, , 171-190.	0.4	2
95	Diffusive transport of gases in saturated nanopores: Caprock leakage from a molecular simulation perspective. Journal of Natural Gas Science and Engineering, 2022, 98, 104383.	4.4	2
96	CHAPTER 11. Computer Simulations. , 0, , 362-386.		1
97	High-Pressure Viscosity Measurements for the Binary Mixture HFE-7500 + Diisopropyl Ether. Journal of Chemical & Engineering Data, 2019, 64, 5332-5337.	1.9	1
98	Thermodynamic Scaling of the Shear Viscosity of Lennard-Jones Chains of Variable Rigidity. Liquids, 2021, 1, 96-108.	2.5	1
99	How molecular effects affect solutal Marangoni flows. Physical Review Fluids, 2022, 7, .	2.5	1
100	Shear Viscosity of Inhomogeneous Hard-Sphere Fluids. Applied Mechanics and Materials, 2013, 330, 27-31.	0.2	0
101	Molecular simulation of the viscosity of asymmetric dense mixtures. Journal of Molecular Liquids, 2021, 346, 117052.	4.9	0