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	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
2	Entropy Scaling for Viscosity of Pure Lennard-Jones Fluids and Their Binary Mixtures. Communications in Physics, 2022, 32, 187.	0.0	4
3	Mass effect on viscosity of mixtures in entropy scaling framework: Application to Lennard-Jones mixtures. Fluid Phase Equilibria, 2022, 558, 113459.	2.5	4
4	Predicting thermodiffusion in simple binary fluid mixtures. European Physical Journal E, 2022, 45, 42.	1.6	14
5	How molecular effects affect solutal Marangoni flows. Physical Review Fluids, 2022, 7, .	2.5	1
6	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
7	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
8	Molecular simulation of the viscosity of asymmetric dense mixtures. Journal of Molecular Liquids, 2021, 346, 117052.	4.9	0
9	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
10	Dynamic Crossover in Fluids: From Hard Spheres to Molecules. Journal of Physical Chemistry Letters, 2021, 12, 6411-6417.	4.6	24
11	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
12	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
13	Thermodynamic Scaling of the Shear Viscosity of Lennard-Jones Chains of Variable Rigidity. Liquids, 2021, 1, 96-108.	2.5	1
14	An entropy scaling demarcation of gas- and liquid-like fluid behaviors. Journal of Chemical Physics, 2020, 152, 191102.	3.0	27
15	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
16	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
17	Thermophysical properties of simple molecular liquid mixtures: On the limitations of some force fields. Journal of Molecular Liquids, 2020, 303, 112663.	4.9	13
18	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

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19	High-Pressure Viscosity Measurements for the Binary Mixture HFE-7500 + Diisopropyl Ether. Journal of Chemical & Engineering Data, 2019, 64, 5332-5337.	1.9	1
20	Linking up pressure, chemical potential and thermal gradients. European Physical Journal E, 2019, 42, 65.	1.6	7
21	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
22	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
23	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
24	SCCO: Thermodiffusion for the Oil and Gas Industry. Research for Development, 2019, , 171-190.	0.4	2
25	Diffusion of Supercritical Fluids through Single-Layer Nanoporous Solids: Theory and Molecular Simulations. Langmuir, 2018, 34, 561-571.	3.5	7
26	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
27	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
28	Thermodiffusion in multicomponent n-alkane mixtures. Npj Microgravity, 2017, 3, 20.	3.7	32
29	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
30	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
31	Speed of sound, density and derivative properties of diisopropyl ether under high pressure. Fluid Phase Equilibria, 2017, 449, 148-155.	2.5	9
32	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
33	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
34	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
35	Impact of Thermodiffusion on the Initial Vertical Distribution of Species in Hydrocarbon Reservoirs. Microgravity Science and Technology, 2016, 28, 79-86.	1.4	42
36	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

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37	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
38	Couplings between swelling and shear in saturated slit nanopores: A molecular simulation study. Physical Review E, 2015, 91, 012401.	2.1	4
39	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
40	Transport of Multicomponent Hydrocarbon Mixtures in Shale Organic Matter by Molecular Simulations. Journal of Physical Chemistry C, 2015, 119, 22587-22595.	3.1	166
41	Tait equation in the extended corresponding states framework: Application to liquids and liquid mixtures. Fluid Phase Equilibria, 2015, 387, 5-11.	2.5	7
42	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
43	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
44	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
45	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
46	Theoretically Based Model for Competitive Adsorption of Subcritical Mixtures. Journal of Physical Chemistry C, 2014, 118, 26162-26171.	3.1	3
47	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
48	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
49	Slippage of binary fluid mixtures in a nanopore. Microfluidics and Nanofluidics, 2013, 15, 183-189.	2.2	12
50	Thermodiffusion of the tetrahydronaphthalene and dodecane mixture under high pressure and in porous medium. Comptes Rendus - Mecanique, 2013, 341, 340-347.	2.1	10
51	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
52	Influence of confinement on thermodiffusion. Journal of Chemical Physics, 2013, 139, 114704.	3.0	16
53	Molecular dynamics simulation of thermodiffusion and mass diffusion in structureless and atomistic micropores. Comptes Rendus - Mecanique, 2013, 341, 469-476.	2.1	5
54	Shear behavior of a confined thin film: Influence of the molecular dynamics scheme employed. Journal of Chemical Physics, 2013, 138, 054707.	3.0	10

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55	Shear Viscosity of Inhomogeneous Hard-Sphere Fluids. Applied Mechanics and Materials, 2013, 330, 27-31.	0.2	0
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	Low density shear viscosity of Lennard-Jones chains of variable rigidities. Journal of Chemical Physics, 2012, 137, 204306.	3.0	9
58	Local viscosity of a fluid confined in a narrow pore. Physical Review E, 2012, 86, 021202.	2.1	62
59	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
60	Shear viscosity of inhomogeneous fluids. Journal of Chemical Physics, 2012, 136, 124902.	3.0	34
61	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
62	Hybrid atomisticâ€“continuum simulations of fluid flows involving interfaces. Microfluidics and Nanofluidics, 2011, 10, 637-647.	2.2	8
63	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
64	Thermodiffusion: From microgravity experiments to the initial state of petroleum reservoirs. Comptes Rendus - Mecanique, 2011, 339, 318-323.	2.1	40
65	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
66	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
67	High-Pressure Acid-Gas Viscosity Correlation. SPE Journal, 2010, 15, 682-688.	3.1	7
68	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
69	Lennard-Jones fluid-fluid interfaces under shear. Physical Review E, 2010, 81, 056306.	2.1	31
70	Surface tension of short flexible Lennard-Jones chains: Corresponding states behavior. Journal of Chemical Physics, 2010, 133, 074705.	3.0	35
71	Shear viscosity of the Lennard-Jones chain fluid in its gaseous, supercritical, and liquid states. Physical Review E, 2009, 79, 021201.	2.1	40
72	Thermal conductivity of the Lennard-Jones chain fluid model. Physical Review E, 2009, 80, 061202.	2.1	42

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73	Understanding Compositional Grading in Petroleum Reservoirs Thanks to Molecular Simulations. , 2009, , .		9
74	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
75	Interfacial properties of the Mie nâ˜6 fluid: Molecular simulations and gradient theory results. Journal of Chemical Physics, 2009, 130, 104704.	3.0	71
76	High Pressure Acid Gas Viscosity Correlation. , 2009, , .		2
77	Dynamic viscosity estimation of hydrogen sulfide using a predictive scheme based on molecular dynamics. Fluid Phase Equilibria, 2008, 269, 19-24.	2.5	15
78	Thermal conductivity of the Lennard-Jones fluid: An empirical correlation. Chemical Physics, 2008, 352, 249-257.	1.9	46
79	A New Model for Thermal Diffusion: Kinetic Approach. Journal of the American Chemical Society, 2008, 130, 10963-10969.	13.7	60
80	Nonisothermal gravitational segregation by molecular dynamics simulations. Physical Review E, 2008, 78, 041203.	2.1	30
81	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
82	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
83	Mass Effect on Thermodiffusion using Molecular Dynamics. Journal of Non-Equilibrium Thermodynamics, 2007, 32, .	4.2	36
84	Molecular Dynamics Simulation of Acid Gas Mixtures:â€‰ A Comparison between Several Approximations. Industrial & Engineering Chemistry Research, 2007, 46, 5238-5244.	3.7	36
85	Stereoisomeric effects on volumetric properties under pressure for the system cis-+trans-decalin. Fluid Phase Equilibria, 2007, 252, 79-87.	2.5	37
86	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
87	Initial state of petroleum reservoirs: A comprehensive approach. Journal of Petroleum Science and Engineering, 2007, 58, 391-402.	4.2	81
88	Stereoisomeric effects on dynamic viscosity versus pressure and temperature for the system cis-+trans-decalin. Chemical Physics, 2007, 336, 171-182.	1.9	7
89	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
90	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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91	Thermal diffusion in micropores by molecular dynamics computer simulations. Physica A: Statistical Mechanics and Its Applications, 2006, 361, 494-510.	2.6	28
92	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
93	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
94	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
95	Molecular Dynamics Study of the Lennardâ^Jones Fluid Viscosity:â€‰ Application to Real Fluids. Industrial & Engineering Chemistry Research, 2005, 44, 6963-6972.	3.7	126
96	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
97	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
98	Macroscopic model of multicomponent fluids in porous media. Philosophical Magazine, 2003, 83, 2209-2219.	1.6	8
99	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
100	A molecular dynamics study of thermal diffusion in a porous medium. Physical Chemistry Chemical Physics, 2002, 4, 313-321.	2.8	28
101	CHAPTER 11. Computer Simulations. , 0, , 362-386.		1