Christophe Coquelet

List of Publications by Year in Descending Order

106 papers	1,552 citations	22 h-index	34 g-index
117 ext. papers	1,848 ext. citations	3.2 avg, IF	4.71 L-index

#	Paper	IF	Citations
106	Improvements for a Fully Consistent Description of the New Semi-Empirical Vapor Density Model for Pure Compounds. *Fluid Phase Equilibria*, **2022**, 113374	2.5	
105	Volumetric Properties of Binary Mixtures of 1,2-Dichloroethane with Ethers from 278.15 to 333.15 K and at Atmospheric Pressure. *Journal of Chemical & Engineering Data*, **2022**, 67, 554-567	2.8	
104	Isothermal P, x, y Data for the Nitrogen + Carbon Monoxide System at five Temperatures from 100 to 130 K and Pressures up to 3.4 MPa. *Fluid Phase Equilibria*, **2022**, 113476	2.5	
103	Chemoinformatics-Driven Design of New Physical Solvents for Selective CO Absorption. *Environmental Science & Technology*, **2021**, 55, 15542-15553	10.3	1
102	Volumetric Properties of Furan and 2-5-Dimethylfuran in Different Industrial Solvents at Temperatures from 278 to 343 K. *Journal of Chemical & Engineering Data*, **2021**, 66, 2666-2680	2.8	2
101	Measurements and Modeling of High-Pressure O2 and CO2 Solubility in Brine (H2O + NaCl) between 303 and 373 K and Pressures up to 36 MPa. *Journal of Chemical & Engineering Data*, **2021**, 66, 609-620	2.8	4
100	Hydrate Stability of Carbon Dioxide + Oxygen Binary Mixture (CO2 + O2) in Pure Water: Measurements and Modeling. *Journal of Chemical & Engineering Data*, **2021**, 66, 767-779	2.8	
99	Role of Computational Variables on the Performances of COSMO-SAC Model: A Combined Theoretical and Experimental Investigation. *Industrial & Engineering Chemistry Research*, **2021**, 60, 2314-2325	3.9	
98	New Features of the Open Source Monte Carlo Software Brick-CFCMC: Thermodynamic Integration and Hybrid Trial Moves. *Journal of Chemical Information and Modeling*, **2021**, 61, 3752-3757	6.1	2
97	Vapor pressures and vapor phase compositions of choline chloride urea and choline chloride ethylene glycol deep eutectic solvents from molecular simulation. *Journal of Chemical Physics*, **2021**, 155, 114504	3.9	1
96	Vapor Liquid Equilibrium Data for the Hydrogen Chloride + Chlorobenzene Binary System at 353.16, 403.16, and 453.25 K. *Journal of Chemical & Engineering Data*, **2020**, 65, 3652-3657	2.8	
95	Experimental Determination of Thermophysical Properties of Working Fluids for ORC Applications **2020**,		1
94	Vapor + Liquid Equilibria of the CH4 + CO2 + H2S Ternary System with Two Different Global Compositions: Experiments and Modeling. *Journal of Chemical & Engineering Data*, **2020**, 65, 1802-1813	2.8	4
93	Vapor-liquid equilibrium measurements for 5 binary mixtures involving HFO-1336mzz(E) at temperatures from 313 to 353 K and pressures up to 2.735 MPa. *International Journal of Refrigeration*, **2020**, 114, 210-220	3.8	9
92	Hydrogen sulfide solubility in 50 wt% and 70 wt% aqueous methyldiethanolamine at temperatures from 283 to 393 K and total pressures from 500 to 10000 kPa. *Fluid Phase Equilibria*, **2020**, 511, 112498	2.5	4
91	A New Semi-Empirical Model for Saturated Vapor Density of Pure Compounds. *Journal of Chemical & Engineering Data*, **2020**, 65, 577-590	2.8	4
90	Experimental Density Data of Three Carbon Dioxide and Oxygen Binary Mixtures at Temperatures from 276 to 416 K and at Pressures up to 20 MPa. *Journal of Chemical & Engineering Data*, **2020**, 65, 5313-5327	2.8	2

89	Vapour-liquid equilibria of n-butane and ethyl mercaptan: Experiments and modelling. *Fluid Phase Equilibria*, **2020**, 504, 112335	2.5	0
88	Measurement and modelling of solid apparition temperature for the CO2 H2S CH4 ternary system. *Fluid Phase Equilibria*, **2020**, 509, 112465	2.5	2
87	Measurements and predictive models of high-pressure H2 solubility in brine (H2O+NaCl) for underground hydrogen storage application. *International Journal of Hydrogen Energy*, **2020**, 45, 32206-32220	4.7	23
86	Experimental measurement and modelling of vapor-liquid equilibrium for 3,3,3- Trifluoropropene (R1243zf) and trans-1,3,3,3-Tetrafluoropropene (R1234ze(E)) binary system. *International Journal of Refrigeration*, **2020**, 120, 137-149	3.8	7
85	Density data for carbon dioxide (CO2) +trans-1,3,3,3-tetrafluoroprop-1-ene (R-1234ze(E)) mixture at temperatures from 283.32 to 353.02K and pressures up to 10MPa. *International Journal of Refrigeration*, **2020**, 120, 430-444	3.8	3
84	Density and Excess Volume for Four Systems Involving Eugenol and Furan. *Journal of Solution Chemistry*, **2019**, 48, 455-488	1.8	3
83	Thermodynamic study of the CO2 H2O NaCl system: Measurements of CO2 solubility and modeling of phase equilibria using Soreide and Whitson, electrolyte CPA and SIT models. *International Journal of Greenhouse Gas Control*, **2019**, 91, 102825	4.2	18
82	Densities and Excess Molar Volumes of the Ternary System (1,4-Dioxane + 2-Propanol + 1,1,2,2-Tetrachloroethane) at T = 288.15 318.15 K and at Atmospheric Pressure: Experimental Measurements and Prigogine Flory Patterson Modeling. *Journal of Chemical & Engineering*	2.8	3
81	Experimental measurements and modelling of vapour-liquid equilibrium of 2,3,3,3-tetrafluoropropene (R-1234yf) + 1,1,1,2,2-pentafluoropropane (R-245cb) system. *International Journal of Refrigeration*, **2019**, 107, 315-325	3.8	4
80	Vapour-Liquid Equilibria of Ethane and Ethanethiol: Experiments and Modelling **2019**, 3, 96-108		1
79	Vapor liquid equilibrium and molecular simulation data for carbon dioxide (CO2) + trans-1,3,3,3-tetrafluoroprop-1-ene (R-1234ze(E)) mixture at temperatures from 283.32 to 353.02 K and pressures up to 7.6 MPa. *International Journal of Refrigeration*, **2019**, 98, 362-371	3.8	11
78	Phase Equilibrium of Three Binary Mixtures Containing NO and Components Present in Ambient Air. *Journal of Chemical & Engineering Data*, **2018**, 63, 1021-1026	2.8	3
77	Phase Equilibrium Properties Aspects of CO2 and Acid Gases Transportation **2018**, 147-167		
76	Thermodynamic Aspects for Acid Gas Removal from Natural Gas **2018**, 169-180		
75	Improvement of the PR-CPA equation of state for modelling of acid gases solubilities in aqueous alkanolamine solutions. *Fluid Phase Equilibria*, **2018**, 471, 74-87	2.5	15
74	Liquid-liquid equilibria of water + solutes (acetic acid/ acetol/furfural/guaiacol/methanol/phenol/propanal) + solvents (isopropyl acetate/toluene) ternary systems for pyrolysis oil fractionation. *Fluid Phase Equilibria*, **2018**, 468, 49-57	2.5	20
73	Impact of impurities on CO 2 storage in saline aquifers: Modelling of gases solubility in water. *International Journal of Greenhouse Gas Control*, **2018**, 68, 247-255	4.2	12
72	Isothermal Vapor liquid Equilibrium Data for Binary Mixtures of Hexafluoroethane (R116) + n-Pentane or n-Hexane at Two Temperatures, 288 and 296 K. *Journal of Chemical & Engineering Data*, **2018**, 63, 1228-1233	2.8	2

71	Isothermal Vapor–liquid Equilibrium Measurements for the (R1234ze(E) + Ethane) System at Temperatures from 272.27 to 347.52 K. *Journal of Chemical & Engineering Data*, **2018**, 63, 4185-4192	2.8	7
70	Experimental determination of the critical loci for R-23 + (n-propane or n-hexane) and R-116 + n-propane binary mixtures. *Journal of Chemical Thermodynamics*, **2017**, 108, 84-96	2.9	7
69	Apparent Henry's law constants of furan in different n-alkanes and alcohols at temperatures from 293 to 323 K. *Journal of Environmental Chemical Engineering*, **2017**, 5, 1205-1209	6.8	2
68	Alkane solubilities in aqueous alkanolamine solutions with CPA EoS. *Fluid Phase Equilibria*, **2017**, 434, 93-101	2.5	5
67	New Amine Based Solvents for Acid Gas Removal **2017**, 127-145		1
66	Vapor Liquid Equilibrium Data for the Furan–toluene Binary System between 313.02 and 352.99 K. *Journal of Chemical & Engineering Data*, **2017**, 62, 1168-1172	2.8	3
65	Simulations of the Impact of Co-injected Gases on CO2 Storage, the SIGARRR Project: Processes and Geochemical Approaches for Gas-water-Salt Interactions Modeling. *Energy Procedia*, **2017**, 114, 3322-3334	2.3	3
64	Isothermal Vapor–liquid Equilibrium Data for the Hexafluoroethane (R116) +n-Butane System at Temperatures from 273 to 323 K. *Journal of Chemical & Engineering Data*, **2017**, 62, 3483-3487	2.8	3
63	Transport of CO2: Presentation of New Thermophysical Property Measurements and Phase Diagrams. *Energy Procedia*, **2017**, 114, 6844-6859	2.3	7
62	Fluid-phase-equilibrium prediction of fluorocompound-containing binary systems with the predictive E-PPR78 model. *International Journal of Refrigeration*, **2017**, 73, 65-90	3.8	22
61	Hydrate equilibrium data for the CO2 + N2 system with the use of tetra-n-butylammonium bromide (TBAB), cyclopentane (CP) and their mixture. *Fluid Phase Equilibria*, **2016**, 408, 240-247	2.5	22
60	Prediction of thermodynamic properties of refrigerant fluids with a new three-parameter cubic equation of state. *International Journal of Refrigeration*, **2016**, 69, 418-436	3.8	13
59	Phase Equilibrium Measurements and Modeling of 1-Propanethiol +1-Butanethiol + CH4 in Methane Ternary System at 303, 336, and 368 K and Pressure Up to 9 MPa. *Journal of Chemical & Engineering Data*, **2016**, 61, 41-44	2.8	1
58	Measurement of Henry's Law constant and infinite dilution activity coefficient of isopropyl mercaptan and isobutyl mercaptan in (methyldiethanolamine (1) + water (2)) with w1 = 0.25 and 0.50 at temperature of (298 to 348) K using inert gas stripping method. *Journal of Chemical Thermodynamics*, **2016**, 93, 403-409	2.9	2
57	Isothermal vapor–liquid equilibrium data for the trifluoromethane (R23) + 2,3,3,3-tetrafluoroprop-1-ene (R1234yf) system at temperatures from 254 to 348 K. *Fluid Phase Equilibria*, **2016**, 415, 158-165	2.5	19
56	An improved static–analytic apparatus for vapor–liquid equilibrium (PTxy) measurement using modified in-situ samplers. *Fluid Phase Equilibria*, **2016**, 409, 425-433	2.5	8
55	Water Content of CO2 -rich Mixtures: Measurements and Modeling using the Cubic-Plus-Association Equation of State **2016**, 1, 85-97		7
54	Densities and derived thermophysical properties of the 0.9505–CO2+ 0.0495–H2S mixture from 273–K to 353–K and pressures up to 41–MPa. *Fluid Phase Equilibria*, **2016**, 423, 156-171	2.5	19

53	Equilibrium data and GC-PC SAFT predictions for furanic extraction. *Fluid Phase Equilibria*, **2016**, 430, 57-66	2.5	7
52	Experimental and modelling study of the densities of the hydrogen sulphide + methane mixtures at 253, 273 and 293 K and pressures up to 30 MPa. *Fluid Phase Equilibria*, **2016**, 427, 371-383	2.5	10
51	A generalized Kiselev crossover approach applied to Soave-Redlich-Kwong equation of state. *Fluid Phase Equilibria*, **2015**, 401, 16-26	2.5	15
50	Isothermal Vapor-liquid Equilibrium (VLE) and Vapor-liquid-liquid Equilibrium (VLLE) Data for Two Binary Systems Containing Perfluorohexane with Carbon Monoxide or Hydrogen Sulfide at (293, 313, and 333) K. *Journal of Chemical & Engineering Data*, **2015**, 60, 2461-2468	2.8	3
49	Hydrocarbons -water phase equilibria using the CPA equation of state with a group contribution method. *Canadian Journal of Chemical Engineering*, **2015**, 93, 432-442	2.3	25
48	Prediction of methanol content in natural gas with the GC-PR-CPA model. *Journal of Natural Gas Science and Engineering*, **2015**, 27, 745-750	4.6	3
47	An equation of state for solid-liquid-vapor equilibrium applied to gas processing and natural gas liquefaction. *Fluid Phase Equilibria*, **2014**, 362, 258-267	2.5	16
46	Phase equilibrium data for the hydrogen sulphide + methane system at temperatures from 186 to 313 K and pressures up to about 14 MPa. *Fluid Phase Equilibria*, **2014**, 383, 94-99	2.5	13
45	Review of carbon dioxide capture and storage with relevance to the South African power sector. *South African Journal of Science*, **2014**, 110, 1-12	1.3	7
44	Experimental measurements and correlation of vapor-liquid equilibrium and critical data for the CO2 + R1234yf and CO2 + R1234ze(E) binary mixtures. *International Journal of Refrigeration*, **2014**, 47, 141-152	3.8	46
43	Vapour-liquid equilibrium data for the hydrogen sulphide (H2S)+carbon dioxide (CO2) system at temperatures from 258 to 313K. *Fluid Phase Equilibria*, **2013**, 356, 223-228	2.5	30
42	Isothermal vapor-liquid equilibrium data for the decafluorobutane (R3110)+1,1,1,3,3-pentafluorobutane (R365mfc) system at temperatures from 333K to 441K. *Fluid Phase Equilibria*, **2013**, 354, 109-113	2.5	5
41	Vapour-liquid equilibrium (VLE) for the systems furan+n-hexane and furan+toluene. Measurements, data treatment and modeling using molecular models. *Fluid Phase Equilibria*, **2013**, 337, 234-245	2.5	20
40	Effect of impurities on thermophysical properties and phase behaviour of a CO2-rich system in CCS. *International Journal of Greenhouse Gas Control*, **2013**, 19, 92-100	4.2	58
39	Vapor-liquid-liquid Equilibrium Measurements and Modeling of Ethanethiol + Methane + Water, 1-Propanethiol + Methane + Water and 1-Butanethiol + Methane + Water Ternary Systems at 303, 335, and 365 K and Pressure Up to 9 MPa. *Industrial & Engineering Chemistry Research*, **2013**, 52, 14698-14705	3.9	5
38	Isothermal Vapor-liquid Equilibrium Data and Modeling for the Ethane (R170) + Perfluoropropane (R218) System at Temperatures from (264 to 308) K. *Journal of Chemical & Engineering Data*, **2013**, 58, 1316-1320	2.8	7
37	Vapour-liquid equilibrium of binary systems containing pentafluorochemicals from 363 to 413 K: Measurement and modelling with Peng-Robinson and three SAFT-like equations of states. *International Journal of Refrigeration*, **2012**, 35, 2297-2310	3.8	13
36	Phase Equilibria of H2S-Hydrocarbons (Propane, n-Butane, and n-Pentane) Binary Systems at Low Temperatures. *Journal of Chemical & Engineering Data*, **2012**, 57, 1534-1543	2.8	8

35	Vapor–liquid Equilibrium Measurements and Modeling for the Ethane (R-170) + 1,1,2,3,3,3-Hexafluoro-1-propene (R-1216) Binary System. *Journal of Chemical & Engineering Data*, **2012**, 57, 2947-2955	2.8	15
34	Phase Equilibria of Three Binary Mixtures: Methanethiol + Methane, Methanethiol + Nitrogen, and Methanethiol + Carbon Dioxide. *Journal of Chemical & Engineering Data*, **2012**, 57, 896-901	2.8	8
33	Vapor–liquid Equilibrium (PTxy) Measurements and Modeling for the CO2–2H4 Binary System. *Journal of Chemical & Engineering Data*, **2012**, 57, 2744-2749	2.8	3
32	Vapor–liquid–liquid Equilibrium Measurements and Modeling of the Methanethiol + Methane + Water Ternary System at 304, 334, and 364 K. *Industrial & Engineering Chemistry Research*, **2012**, 51, 11561-11564	3.9	7
31	Investigation of a two stage Rankine cycle for electric power plants. *Applied Energy*, **2012**, 100, 285-294	10.7	56
30	Vapor–liquid equilibrium data for the dimethyl ether (RE170)+decafluorobutane (R3-1-10) system at temperatures from 313.28 to 392.83K and pressures up to 4.9MPa. *Fluid Phase Equilibria*, **2012**, 316, 141-146	2.5	4
29	Vapor–liquid equilibrium measurements and modeling for the cyclohexane+n-hexanoic acid binary system. *Fluid Phase Equilibria*, **2011**, 309, 15-19	2.5	1
28	Application of a new crossover treatment to a generalized cubic equation of state. *Fluid Phase Equilibria*, **2011**, 302, 241-248	2.5	15
27	Thermodynamic study of binary systems containing sulphur dioxide: Measurements and molecular modelling. *Fluid Phase Equilibria*, **2011**, 304, 21-34	2.5	22
26	Isothermal Vapor–liquid Equilibrium Data for the Perfluorobutane (R610) + Ethane System at Temperatures from (263 to 353) K. *Journal of Chemical & Engineering Data*, **2011**, 56, 1918-1924	2.8	29
25	Volumetric Properties of Binary Mixtures of 1,2-Dichloroethane with Polyethers from (283.15 to 333.15) K and at Atmospheric Pressure. *Journal of Chemical & Engineering Data*, **2011**, 56, 1629-1657	2.8	15
24	Experimental Measurement of Vapor Pressures and Densities at Saturation of Pure Hexafluoropropylene Oxide: Modeling Using a Crossover Equation of State. *Industrial & Engineering Chemistry Research*, **2011**, 50, 4761-4768	3.9	21
23	Isothermal vapor–liquid equilibrium data for the carbon dioxide (R744)+decafluorobutane (R610) system at temperatures from 263 to 353K. *Fluid Phase Equilibria*, **2011**, 304, 44-51	2.5	25
22	Equilibrium Data for the Oxygen + Propane Binary System at Temperatures of (110.22, 120.13, 130.58, and 139.95) K. *Journal of Chemical & Engineering Data*, **2010**, 55, 4412-4415	2.8	10
21	Vapor–liquid Equilibrium Measurements and Modeling for Cyclohexane + Cyclohexanone. *Journal of Chemical & Engineering Data*, **2010**, 55, 4521-4524	2.8	2
20	Experimental Measurement of Vapor Pressures and Densities of Pure Hexafluoropropylene. *Journal of Chemical & Engineering Data*, **2010**, 55, 2093-2099	2.8	41
19	Acid gases partial pressures above a 50wt% aqueous methyldiethanolamine solution: Experimental work and modeling. *Fluid Phase Equilibria*, **2010**, 289, 99-109	2.5	34
18	Vapor–liquid equilibrium measurements and modeling for the cyclohexane + cyclohexanol binary system. *Fluid Phase Equilibria*, **2010**, 298, 33-37	2.5	5

17	Determination of critical properties of pure and multi-component mixtures using a dynamic-synthetic apparatus. *Journal of Supercritical Fluids*, **2010**, 55, 545-553	4.2	41
16	Solubility of hydrocarbons in water: Experimental measurements and modeling using a group contribution with association equation of state (GCA-EoS). *Fluid Phase Equilibria*, **2009**, 275, 52-59	2.5	42
15	Experimental determination of phase diagram and modeling: Application to refrigerant mixtures. *International Journal of Refrigeration*, **2009**, 32, 1604-1614	3.8	7
14	Vapor-liquid equilibrium in the n-butane+methanol system, measurement and modeling from 323.2 to 443.2K. *Fluid Phase Equilibria*, **2009**, 277, 152-161	2.5	24
13	Isothermal Vapor-liquid Equilibrium Data for the Hexafluoroethane (R116) + Propane System at Temperatures from (263 to 323) K. *Journal of Chemical & Engineering Data*, **2009**, 54, 1292-1296	2.8	28
12	Measurement through a Gas Stripping Technique of Henry's Law Constants and Infinite Dilution Activity Coefficients of Propyl Mercaptan, Butyl Mercaptan, and Dimethyl Sulfide in Methyldiethanolamine (1) + Water (2) with w1 = 0.25 and 0.35. *Journal of Chemical & Engineering Data*, **2008**, 53, 2540-2543	2.8	8
11	Volumetric properties of (piperidine + water) binary system: Measurements and modeling. *Journal of Chemical Thermodynamics*, **2008**, 40, 47-53	2.9	20
10	Effect of acid gases on the solubility of n-propylmercaptan in 50 wt% methyl-diethanolamine aqueous solution. *Chemical Engineering Research and Design*, **2008**, 86, 600-605	5.5	6
9	Vapor-liquid equilibrium data for the (hexafluoroethane +1,1,1,2-tetrafluoroethane) system at temperatures from 263 to 353 K and pressures up to 4.16 MPa. *Fluid Phase Equilibria*, **2008**, 268, 68-73	2.5	18
8	High-Pressure Vapor-liquid Equilibria, Liquid Densities, and Excess Molar Volumes for the Carbon Dioxide + 2-Propanol System from (308.10 to 348.00) K. *Journal of Chemical & Engineering Data* , **2007**, 52, 2032-2040	2.8	13
7	Vapor-liquid equilibrium data for the hexafluoroethane+carbon dioxide system at temperatures from 253 to 297K and pressures up to 6.5MPa. *Fluid Phase Equilibria*, **2007**, 258, 179-185	2.5	22
6	New Solubility Data of Hydrocarbons in Water and Modeling Concerning Vapor-liquid-liquid Binary Systems. *Industrial & Engineering Chemistry Research*, **2007**, 46, 9257-9262	3.9	39
5	Vapour-liquid equilibrium data for the hydrogen sulphide+n-heptane system at temperatures from 293.25 to 373.22K and pressures up to about 6.9MPa. *Fluid Phase Equilibria*, **2006**, 249, 179-186	2.5	11
4	Measurement of Henry's Law Constants and Infinite Dilution Activity Coefficients of Propyl Mercaptan, Butyl Mercaptan, and Dimethyl Sulfide in Methyldiethanolamine (1) + Water (2) with w1 = 0.50 Using a Gas Stripping Technique. *Journal of Chemical & Engineering Data*, **2005**, 50, 2053-2057	2.8	16
3	Vapour-liquid equilibria in the carbon dioxide-water system, measurement and modelling from 278.2 to 318.2K. *Fluid Phase Equilibria*, **2004**, 226, 333-344	2.5	262
2	Measurement of the Water Solubility in the Gas Phase of the Ethane + Water Binary System near Hydrate Forming Conditions. *Journal of Chemical & Engineering Data*, **2003**, 48, 957-966	2.8	28
1	Vapor-liquid Equilibrium Data for the Azeotropic Difluoromethane + Propane System at Temperatures from 294.83 to 343.26 K and Pressures up to 5.4 MPa. *Journal of Chemical & Engineering Data*, **2003**, 48, 317-323	2.8	43