Juan H Vera

List of Publications by Year
in descending order

116 papers	3,126 citations	159585 30 h-index	206112 48 g-index
124 all docs	124 docs citations	124 times ranked	1569 citing authors

#	Article	IF	Citations
1	Removal of lead, cadmium and zinc from aqueous solutions by precipitation with sodium Diâ€(<i>n</i>â€octyl) phosphinate. Canadian Journal of Chemical Engineering, 2000, 78, 948-954.	1.7	168
2	Liquid-liquid equilibrium of aqueous mixtures of poly(propylene glycol) with sodium chloride. Journal of Chemical & Engineering Data, 1994, 39, 127-130.	1.9	114
3	Effect of NaCl and KCl on the Solubility of Amino Acids in Aqueous Solutions at 298.2 K:Â Measurements and Modeling. Industrial & Engineering Chemistry Research, 1997, 36, 2445-2451.	3.7	95
4	Measurement and correlation of ion activity in aqueous single electrolyte solutions. AICHE Journal, 1996, 42, 249-258.	3.6	88
5	On the activity of ions and the junction potential: Revised values for all data. AICHE Journal, 2004, 50, 445-462.	3.6	82
6	Swelling of ionic gels in electrolyte solutions. Industrial & Engineering Chemistry Research, 1990, 29, 554-560.	3.7	81
7	A novel method for the preparation of silver chloride nanoparticles starting from their solid powder using microemulsions. Journal of Colloid and Interface Science, 2005, 288, 457-467.	9.4	80
8	Measurement of Activity Coefficients of Amino Acids in Aqueous Electrolyte Solutions:Â Experimental Data for the Systems H2O + NaCl + Glycine and H2O + NaCl +dl-Alanine at 25 Â°C. Industrial & Engineering Chemistry Research, 1996, 35, 2735-2742.	3.7	78
9	Effect of acids and bases on the solubility of amino acids. Fluid Phase Equilibria, 1998, 152, 121-132.	2.5	73
10	A Simplified Perturbed Hard-Sphere Model for the Activity Coefficients of Amino Acids and Peptides in Aqueous Solutions. Industrial & Engineering Chemistry Research, 1996, 35, 4319-4327.	3.7	67
11	Effect of Anions on the Solubility of Zwitterionic Amino Acids. Journal of Chemical & Engineering Data, 2000, 45, 140-143.	1.9	67
12	Measurement and modeling of activities of amino acids in aqueous salt systems. AICHE Journal, 1996, 42, 2354-2364.	3.6	58
13	Mean activity coefficients in the ternary sodium chloride-sodium nitrate-water and sodium bromide-sodium nitrate-water systems at 298.15 K. Journal of Chemical & Engineering Data, 1991, 36, 332-340.	1.9	55
14	Formation of silver bromide precipitate of nanoparticles in aÂsingle microemulsion utilizing the surfactant counterion. Journal of Colloid and Interface Science, 2004, 273, 426-434.	9.4	55
15	Towards accurate values of individual ion activities. Fluid Phase Equilibria, 2006, 241, 59-69.	2.5	49
16	Effect of the cation and the anion of an electrolyte on the solubility of dl-aminobutyric acid in aqueous solutions: measurement and modelling. Biophysical Chemistry, 1998, 73, 77-83.	2.8	48
17	A Novel Approach for the Preparation of AgBr Nanoparticles from Their Bulk Solid Precursor Using CTAB Microemulsions. Langmuir, 2006, 22, 2264-2272.	3.5	47
18	On the measurement of individual ion activities. Fluid Phase Equilibria, 2005, 236, 96-110.	2.5	46

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19	Concentration of large biomolecules with hydrogels. Chemical Engineering Science, 1992, 47, 31-40.	3.8	45
20	Preparation of AgBr Nanoparticles in Microemulsions Via Reaction of AgNO3 with CTAB Counterion. Journal of Nanoparticle Research, 2007, 9, 787-796.	1.9	42
21	A new volume dependence for the equations of state of hard spheres. Fluid Phase Equilibria, 1996, 115, 25-38.	2.5	39
22	Activities of Individual Ions From Infinite Dilution to Saturated Solutions. Journal of Solution Chemistry, 1999, 28, 885-913.	1.2	39
23	Liquid-Liquid Equilibrium of Aqueous Mixtures of Poly(ethylene glycol) with Na2SO4 or NaCl. Journal of Chemical & Engineering Data, 1994, 39, 245-248.	1.9	37
24	Activity coefficients of sodium, potassium, and nitrate ions in aqueous solutions of NaNO3, KNO3, and NaNO3+KNO3 at 25ï¿½C. Journal of Solution Chemistry, 1996, 25, 983-1000.	1.2	37
25	Reverse Micellar Extraction and Precipitation of Lysozyme Using Sodium Di(2-ethylhexyl) Sulfosuccinate. Biotechnology Progress, 2003, 19, 928-935.	2.6	36
26	Removal of lead from aqueous solutions by precipitation with sodium di-(n-octyl) phosphinate. Separation and Purification Technology, 1999, 18, 25-36.	7.9	35
27	A Perturbed Hard-Sphere Model with Mean Spherical Approximation for the Activity Coefficients of Amino Acids in Aqueous Electrolyte Solutions. Industrial & Engineering Chemistry Research, 1996, 35, 4755-4766.	3.7	34
28	Comparison of the Titration and Contact Methods for the Water Solubilization Capacity of AOT Reverse Micelles in the Presence of a Cosurfactant. Journal of Colloid and Interface Science, 1997, 189, 208-215.	9.4	33
29	Individual anionic activity coefficients in aqueous electrolyte solutions of LiCl and LiBr. Fluid Phase Equilibria, 1999, 166, 67-77.	2.5	33
30	A Theoretically Improved Perturbation Model for Activity Coefficients of Amino Acids and Peptides in Aqueous Solutions. Industrial & Engineering Chemistry Research, 1998, 37, 3052-3057.	3.7	31
31	Measurement and correlation of the individual ionic activity coefficients of aqueous electrolyte solutions of KF, NaF and KBr. Canadian Journal of Chemical Engineering, 2000, 78, 175-181.	1.7	31
32	How much do we know about the activity of individual ions?. Journal of Chemical Thermodynamics, 2016, 99, 65-69.	2.0	30
33	Binary vapor-liquid equilibria of carbon dioxide with 2-methyl-1-pentene, 1-hexene, 1-heptene, and m-xylene at 303.15, 323.15, and 343.15 K. Journal of Chemical & Engineering Data, 1984, 29, 269-272.	1.9	29
34	A complete discussion of the rationale supporting the experimental determination of individual ionic activities. Fluid Phase Equilibria, 2006, 244, 33-45.	2.5	29
35	Understanding cubic equations of state: A search for the hidden clues of their success. AICHE Journal, 2015, 61, 2824-2831.	3.6	29
36	Prediction of heats of mixing of liquid mixtures containing alkane, chloroalkane and alcohol by an analytical group solution model. Canadian Journal of Chemical Engineering, 1978, 56, 358-363.	1.7	28

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37	Extraction of Zwitterionic Amino Acids with Reverse Micelles in the Presence of Different Ions. Industrial & Engineering Chemistry Research, 1996, 35, 3665-3672.	3.7	28
38	Interactions of DL-serine and L-serine with NaCl and KCl in aqueous solutions. Journal of Solution Chemistry, 1997, 26, 941-955.	1.2	28
39	A simplified hard-sphere equation of state meeting the high and low density limits. Fluid Phase Equilibria, 1997, 130, 189-194.	2.5	28
40	Removal and recovery of gallium from aqueous solutions by complexation with sodium di-(n-octyl) phosphinate. Hydrometallurgy, 2005, 76, 207-215.	4.3	28
41	Vapor-liquid equilibriums in binary aromatic-olefin systems. Journal of Chemical & Engineering Data, 1971, 16, 149-154.	1.9	27
42	Cubic Equation of State for Pure Compound Vapor Pressures from the Triple Point to the Critical Point. Industrial & Engineering Chemistry Research, 1996, 35, 829-836.	3.7	27
43	Reverse Micellar Extraction of Amino Acids Using Dioctyldimethylammonium Chloride. Industrial & Engineering Chemistry Research, 1995, 34, 599-606.	3.7	26
44	Interaction ofDL-threonine with NaCl and NaNO3in aqueous solutions: e.m.f. measurements with ion-selective electrodes. Journal of Chemical Thermodynamics, 1997, 29, 609-622.	2.0	26
45	Measurements and modelling of the solubility of a mixture of two amino acids in aqueous solutions. Fluid Phase Equilibria, 1999, 158-160, 893-901.	2.5	26
46	The activity of ions: analysis of the theory and data for aqueous solutions of MgBr2, CaBr2 and BaBr2 at 298.2 K. Fluid Phase Equilibria, 2003, 205, 115-132.	2.5	26
47	Reverse Micellar Extraction and Backextraction of l-Lysine with Three Dialkyl Sodium Phosphinates in Pentanol/Isooctane Mixtures. Separation Science and Technology, 1995, 30, 2301-2314.	2.5	25
48	Activity coefficients of the electrolyte and the amino acid in water + NaNO3 + glycine and water + NaCl + dl-methionine systems at 298.15 K. Biophysical Chemistry, 1997, 67, 97-105.	2.8	25
49	Effect of the anion and the cation of an electrolyte on the activity coefficient of dl-alanine in aqueous solutions. Fluid Phase Equilibria, 1998, 142, 193-204.	2.5	24
50	A generalized mixing rule for hard-sphere equations of state of Percusâ€“Yevick type. Fluid Phase Equilibria, 1998, 142, 131-147.	2.5	24
51	Effects of Surfactant Purity and Concentration, of Surfactant Counterion, and of Different Ions on the Water Uptake of Dioctyldimethyl Ammonium Salt-Decanol-Isooctane Reverse Micellar Systems. Journal of Colloid and Interface Science, 1995, 174, 1-9.	9.4	23
52	The activity coefficients of glycine, DLâ€Serine and DLâ€Valine in aqueous solutions containing nitrates at 298.15 K. Canadian Journal of Chemical Engineering, 2001, 79, 392-401.	1.7	23
53	Correlation of Activity Coefficients in Electrolyte Solutions Using a Kelvin Hard Sphereâˆ'Mean Spherical Approximation (K-MSA) Model. Industrial & Engineering Chemistry Research, 2000, 39, 759-766.	3.7	22
54	Selective Precipitation of Lysozyme from Egg White Using AOT. Journal of Food Science, 2003, 68, 595-598.	3.1	22

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55	Generalized water uptake modelling of water-in-oil microemulsions. New experimental results for Aerosol-ot-isooctane-water-salts systems. Fluid Phase Equilibria, 1996, 122, 169-186.	2.5	21
56	Nucleophilic Substitution Sulfonation in Microemulsions and Emulsions. Langmuir, 2000, 16, 9159-9167.	3.5	21
57	Determination of the activity of H+ ions within and beyond the pH meter range. AICHE Journal, 2001, 47, 2807-2818.	3.6	21
58	A Chemical Theory for Ion Distribution Equilibria in Reverse Micellar Systems. New Experimental Data for Aerosol-OT-Isooctane-Water-Salt Systems. Langmuir, 1995, 11, 1162-1169.	3.5	20
59	Activity coefficients of DL-valine in aqueous solutions of KCl at 25ï¿½C. Measurement with ion selective electrodes and modelling. Journal of Solution Chemistry, 1996, 25, 865-875.	1.2	20
60	Extension to mixtures of two robust hardâ€sphere equations of state satisfying the ordered closeâ€packed limit. Canadian Journal of Chemical Engineering, 2001, 79, 678-686.	1.7	20
61	Selective precipitation and recovery of xylanase using surfactant and organic solvent. Biotechnology and Bioengineering, 2004, 86, 698-705.	3.3	20
62	Activities of aqueous <mml:math altimg="si100.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.else. Chemical	3.8	20
63	Heats of mixing of binary chloroalkane-n-alkane and chloroalkane-n-alcohol systems at 25.degree.C. Journal of Chemical & Engineering Data, 1978, 23, 218-221.	1.9	19
64	The Pengâ^'Robinson Sequel. An Analysis of the Particulars of the Second and Third Generations. Industrial & Engineering Chemistry Research, 1998, 37, 1591-1597.	3.7	19
65	Nonrandom Distribution of Free Volume in Fluids and Their Mixtures:Â Hydrogen-Bonded Systems. Industrial & Engineering Chemistry Research, 2002, 41, 1057-1063.	3.7	17
66	On the Predictive Ability of the New Thermodynamics of Electrolyte Solutions. Industrial & Engineering Chemistry Research, 2009, 48, 6436-6440.	3.7	17
67	Counterion Binding to Ionic Reverse Micellar Aggregates and Its Effect on Water Uptake. Journal of Physical Chemistry B, 1997, 101, 10295-10302.	2.6	15
68	Reverse Micellar Extraction of Proteins Using Dioctyldimethyl Ammonium Chloride. Separation Science and Technology, 1998, 33, 241-257.	2.5	15
69	Measurement and correlation of the activity coefficients of individual ions in aqueous electrolyte solutions of Na₂So₄ and K₂So₄. Canadian Journal of Chemical Engineering, 2001, 79, 771-776.	1.7	15
70	Solubilization limit of lysozyme into DODMAC reverse micelles. Biotechnology and Bioengineering, 2002, 80, 537-543.	3.3	15
71	Surfactant precipitation and polar solvent recovery of Î±-chymotrypsin and ribonuclease-A. Biochemical Engineering Journal, 2004, 17, 91-97.	3.6	15
72	Measurement of Ion Activity Coefficients in Aqueous Solutions of Mixed Electrolyte with a Common Ion: NaNO₃ + KNO₃, NaCl + KCl, and NaBr + NaCl. Journal of Chemical & Engineering Data, 2009, 54, 345-350.	1.9	15

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73	The activity of individual ions. A conceptual discussion of the relation between the theory and the experimentally measured values. Fluid Phase Equilibria, 2011, 312, 79-84.	2.5	15
74	Short answer to the reply from D.P. Zarubin to our comment on â€œThe nature of single-ion activity coefficients calculated from potentiometric measurements on cell with liquid-junctionâ€• Journal of Chemical Thermodynamics, 2012, 47, 449-450.	2.0	15
75	Application of the MSA to the modeling of the activity coefficients of individual ions. Fluid Phase Equilibria, 2000, 167, 161-171.	2.5	14
76	Activity coefficients of the peptide and the electrolyte in ternary systems water+glycylglycine+NaCl, +NaBr, +KCl and +KBr at 298.2 K. Biophysical Chemistry, 2001, 92, 77-88.	2.8	14
77	Effect of salt and volume ratio on the reverse micellar extraction of lysozyme using DODMAC. Fluid Phase Equilibria, 2003, 207, 155-165.	2.5	14
78	Effect of the reference solution in the measurement of ion activity coefficients using cells with transference at T=298.15K. Journal of Chemical Thermodynamics, 2010, 42, 244-250.	2.0	14
79	Comment on â€œThe nature of single-ion activity coefficients calculated from potentiometric measurements on cells with liquid junctionsâ€•by Dmitri P. Zarubin, J. Chem. Thermodyn. 43 (2011) 1135â€“1152. Journal of Chemical Thermodynamics, 2012, 47, 442-444.	2.0	14
80	Activity of the electrolyte and the amino acid in the systems water + dl,Î±-aminobutyric acid + NaCl, +NaBr, +KCl, and +KBr at 298.2 K. Fluid Phase Equilibria, 2002, 203, 99-110.	2.5	13
81	On the Correlation of the Activity Coefficients in Aqueous Electrolyte Solutions Using the K-MSA Model. Industrial & Engineering Chemistry Research, 2003, 42, 1279-1284.	3.7	13
82	Comparison of Two Methods to Recover Lysozyme from Reverse Micellar Phases. Separation Science and Technology, 2003, 38, 1733-1748.	2.5	13
83	A Novel Equation of State for the Prediction of Thermodynamic Properties of Fluids. Journal of Physical Chemistry B, 2005, 109, 5977-5984.	2.6	13
84	Activity coefficients of antibiotics in aqueous NaCl solutions at 298.2 K. Biophysical Chemistry, 2002, 95, 97-108.	2.8	12
85	Removal of aluminum from aqueous solutions using sodium di-(n-octyl) phosphinate. Chemical Engineering Journal, 2004, 97, 225-232.	12.7	12
86	Answer to â€œComment on individual ion activities of Na+ and Clâˆ’ by Arce, Wilczek-Vera and Veraâ€•by F. Malatesta. Chemical Engineering Science, 2010, 65, 2263-2264.	3.8	12
87	Heats of mixing of amineâ€alcohol systems. An analytical group solution model approach. Canadian Journal of Chemical Engineering, 1979, 57, 355-362.	1.7	11
88	Phase behavior of Dieterici fluids. Physical Chemistry Chemical Physics, 2004, 6, 5189-5194.	2.8	10
89	Precipitation and Recovery of Cytochrome c and Hemoglobin Using AOT and Acetone. Separation Science and Technology, 2005, 39, 1005-1019.	2.5	10
90	Peculiarities of the Thermodynamics of Electrolyte Solutions: A Critical Discussion. Canadian Journal of Chemical Engineering, 2003, 81, 70-79.	1.7	10

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91	Cation exchange with reverse micelles. Industrial & Engineering Chemistry Research, 1993, 32, 125-132.	3.7	9
92	On the measurement of the real values of individual ionic activities: A chemical engineering perspective. Chemical Engineering Science, 2011, 66, 3782-3791.	3.8	9
93	On the two-fluid local composition expressions. Fluid Phase Equilibria, 1982, 8, 315-318.	2.5	8
94	A completely normalized quasi-chemical theory. Fluid Phase Equilibria, 1998, 145, 217-224.	2.5	8
95	Effects of Volume Ratio and of Surfactant, Salt, and Alcohol Concentrations on the Ion Distribution of Dioctyldimethylammonium Chloride Reverse Micelles in Isooctane. Langmuir, 1996, 12, 3580-3584.	3.5	7
96	Extension of EOS nonâ€iterative methods to density calculations: Correlation of saturated molar volumes and heats of vaporization. Canadian Journal of Chemical Engineering, 1997, 75, 214-228.	1.7	7
97	A Flexible Mixing Rule Satisfying the Ideal-Solution Limit for Equations of State. Industrial & Engineering Chemistry Research, 2002, 41, 922-930.	3.7	7
98	Heats of mixing of binary mixtures of pyridine base with n-alkane. Canadian Journal of Chemistry, 1988, 66, 1625-1627.	1.1	6
99	Counterion effect of amino acids in reverse micelles. Fluid Phase Equilibria, 1997, 135, 269-278.	2.5	6
100	A General Expression for the Ordered-Packed Volume Fraction of Hard Spheres of Different Diameters. Industrial & Engineering Chemistry Research, 2002, 41, 1122-1128.	3.7	6
101	Use of a hybrid optimization method to reduce vaporâ€“liquid equilibrium data of maverick systems: The case of carbon dioxide with 2-methoxyethanol and 2-ethoxyethanol using cubic equations of state. Fluid Phase Equilibria, 2013, 338, 46-53.	2.5	6
102	A simple method for estimation of thermodynamic properties of concentrated and supersaturated aqueous solutions of NaCl and KCl. Canadian Journal of Chemical Engineering, 1977, 55, 484-486.	1.7	5
103	Local composition in ternary Lennard-Jones liquid mixtures: molecular dynamics simulation and a simple correlation. Fluid Phase Equilibria, 1990, 58, 81-92.	2.5	5
104	Reverse Micelle Formation Using a Sodium Di(n-Octyl) Phosphinate Surfactant. Journal of Colloid and Interface Science, 1999, 218, 344-346.	9.4	5
105	Nucleophilic substitution sulfonation in emulsions: Formation of sodium benzyl sulfonate. Canadian Journal of Chemical Engineering, 2001, 79, 744-750.	1.7	5
106	A novel EOS that combines van der Waals and Dieterici potentials. AICHE Journal, 2005, 51, 2077-2088.	3.6	5
107	Azeotropic behavior of Dieterici binary fluids. Fluid Phase Equilibria, 2007, 257, 18-26.	2.5	5
108	Reply to Comments by F. Malatesta on<i>J. Chem. Eng. Data</i>2009,<i>54</i>, 345âˆ'350. Journal of Chemical & Engineering Data, 2009, 54, 2979-2979.	1.9	5

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109	On the compatibility between vapor pressure data and the critical constants: Use of the van der Waals family of cubic equations of state to study the cases of 2-methoxyethanol and 2-ethoxyethanol. Fluid Phase Equilibria, 2011, 303, 201-204.	2.5	4
110	On the local composition concept. Fluid Phase Equilibria, 1986, 26, 313-316.	2.5	3
111	The simplest cubic equation of state for low-pressure vaporâ€"liquid equilibrium calculations. Chemical Engineering Science, 1990, 45, 3319-3328.	3.8	3
112	Selective removal of gallium (III) from aqueous solutions containing zinc or aluminum using sodium di-(n-octyl) phosphinate. Water Research, 2004, 38, 1745-1752.	11.3	3
113	Reverse Micellar Extraction of Lysozyme Using Two Dialkyl Sodium Phosphinates. Canadian Journal of Chemical Engineering, 2004, 82, 349-357.	1.7	2
114	Pitzer Equations and a Model-Free Version of the Ion Interaction Approach for the Activity of Individual Ions. Chemical Engineering Science, 2021, 241, 116619.	3.8	1
115	General Aspects of Ionic Activities in Aqueous Solutions. , 2018, , .		0
116	Reply: Answer to comments on â€œUnderstanding cubic equations of state: A search for the hidden clues of their successâ€•by Ehsan Heidaryan. AIChE Journal, 2019, 65, 462-463.	3.6	0