

# Juan H Vera

## List of Publications by Year in descending order

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116  
papers

3,126  
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124  
docs citations

124  
times ranked

1569  
citing authors

#	ARTICLE	IF	CITATIONS
1	Pitzer Equations and a Model-Free Version of the Ion Interaction Approach for the Activity of Individual Ions. <i>Chemical Engineering Science</i> , 2021, 241, 116619.	3.8	1
2	Reply: Answer to comments on "Understanding cubic equations of state: A search for the hidden clues of their success" by Ehsan Heidaryan. <i>AIChE Journal</i> , 2019, 65, 462-463.	3.6	0
3	General Aspects of Ionic Activities in Aqueous Solutions. , 2018, , .		0
4	How much do we know about the activity of individual ions?. <i>Journal of Chemical Thermodynamics</i> , 2016, 99, 65-69.	2.0	30
5	Understanding cubic equations of state: A search for the hidden clues of their success. <i>AIChE Journal</i> , 2015, 61, 2824-2831.	3.6	29
6	Use of a hybrid optimization method to reduce vapor-liquid equilibrium data of maverick systems: The case of carbon dioxide with 2-methoxyethanol and 2-ethoxyethanol using cubic equations of state. <i>Fluid Phase Equilibria</i> , 2013, 338, 46-53.	2.5	6
7	Short answer to the reply from D.P. Zarubin to our comment on "The nature of single-ion activity coefficients calculated from potentiometric measurements on cell with liquid-junction", <i>Journal of Chemical Thermodynamics</i> , 2012, 47, 449-450.	2.0	15
8	Comment on "The nature of single-ion activity coefficients calculated from potentiometric measurements on cells with liquid junctions" by Dmitri P. Zarubin, <i>J. Chem. Thermodyn.</i> 43 (2011) 1135-1152. <i>Journal of Chemical Thermodynamics</i> , 2012, 47, 442-444.	2.0	14
9	The activity of individual ions. A conceptual discussion of the relation between the theory and the experimentally measured values. <i>Fluid Phase Equilibria</i> , 2011, 312, 79-84.	2.5	15
10	On the measurement of the real values of individual ionic activities: A chemical engineering perspective. <i>Chemical Engineering Science</i> , 2011, 66, 3782-3791.	3.8	9
11	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. <i>Fluid Phase Equilibria</i> , 2011, 303, 201-204.	2.5	4
12	Effect of the reference solution in the measurement of ion activity coefficients using cells with transference at T=298.15K. <i>Journal of Chemical Thermodynamics</i> , 2010, 42, 244-250.	2.0	14
13	Answer to "Comment on individual ion activities of Na <sup>+</sup> and Cl <sup>-</sup> " by Arce, Wilczek-Vera and Vera" by F. Malatesta. <i>Chemical Engineering Science</i> , 2010, 65, 2263-2264.	3.8	12
14	On the Predictive Ability of the New Thermodynamics of Electrolyte Solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , 2009, 48, 6436-6440.	3.7	17
15	Reply to Comments by F. Malatesta on <i>J. Chem. Eng. Data</i> 2009, 54, 345-350. <i>Journal of Chemical &amp; Engineering Data</i> , 2009, 54, 2979-2979.	1.9	5
16	Measurement of Ion Activity Coefficients in Aqueous Solutions of Mixed Electrolyte with a Common Ion: NaNO <sub>3</sub> + KNO <sub>3</sub> , NaCl + KCl, and NaBr + NaCl. <i>Journal of Chemical &amp; Engineering Data</i> , 2009, 54, 345-350.	1.9	15
17	Azeotropic behavior of Dieterici binary fluids. <i>Fluid Phase Equilibria</i> , 2007, 257, 18-26.	2.5	5
18	Preparation of AgBr Nanoparticles in Microemulsions Via Reaction of AgNO <sub>3</sub> with CTAB Counterion. <i>Journal of Nanoparticle Research</i> , 2007, 9, 787-796.	1.9	42

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19	Activities of aqueous $\text{Ca}^{2+}$ and $\text{Mg}^{2+}$ ions. <i>Journal of Colloid and Interface Science</i> , 2005, 288, 457-467.	3.8	20
20	A Novel Approach for the Preparation of AgBr Nanoparticles from Their Bulk Solid Precursor Using CTAB Microemulsions. <i>Langmuir</i> , 2006, 22, 2264-2272.	3.5	47
21	Towards accurate values of individual ion activities. <i>Fluid Phase Equilibria</i> , 2006, 241, 59-69.	2.5	49
22	A complete discussion of the rationale supporting the experimental determination of individual ionic activities. <i>Fluid Phase Equilibria</i> , 2006, 244, 33-45.	2.5	29
23	Removal and recovery of gallium from aqueous solutions by complexation with sodium di-(n-octyl) phosphinate. <i>Hydrometallurgy</i> , 2005, 76, 207-215.	4.3	28
24	A novel EOS that combines van der Waals and Dieterici potentials. <i>AIChE Journal</i> , 2005, 51, 2077-2088.	3.6	5
25	On the measurement of individual ion activities. <i>Fluid Phase Equilibria</i> , 2005, 236, 96-110.	2.5	46
26	A novel method for the preparation of silver chloride nanoparticles starting from their solid powder using microemulsions. <i>Journal of Colloid and Interface Science</i> , 2005, 288, 457-467.	9.4	80
27	Precipitation and Recovery of Cytochrome c and Hemoglobin Using AOT and Acetone. <i>Separation Science and Technology</i> , 2005, 39, 1005-1019.	2.5	10
28	A Novel Equation of State for the Prediction of Thermodynamic Properties of Fluids. <i>Journal of Physical Chemistry B</i> , 2005, 109, 5977-5984.	2.6	13
29	Surfactant precipitation and polar solvent recovery of $\hat{I}\pm$ -chymotrypsin and ribonuclease-A. <i>Biochemical Engineering Journal</i> , 2004, 17, 91-97.	3.6	15
30	Removal of aluminum from aqueous solutions using sodium di-(n-octyl) phosphinate. <i>Chemical Engineering Journal</i> , 2004, 97, 225-232.	12.7	12
31	Selective precipitation and recovery of xylanase using surfactant and organic solvent. <i>Biotechnology and Bioengineering</i> , 2004, 86, 698-705.	3.3	20
32	On the activity of ions and the junction potential: Revised values for all data. <i>AIChE Journal</i> , 2004, 50, 445-462.	3.6	82
33	Formation of silver bromide precipitate of nanoparticles in a single microemulsion utilizing the surfactant counterion. <i>Journal of Colloid and Interface Science</i> , 2004, 273, 426-434.	9.4	55
34	Phase behavior of Dieterici fluids. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 5189-5194.	2.8	10
35	Selective removal of gallium (III) from aqueous solutions containing zinc or aluminum using sodium di-(n-octyl) phosphinate. <i>Water Research</i> , 2004, 38, 1745-1752.	11.3	3
36	Reverse Micellar Extraction of Lysozyme Using Two Dialkyl Sodium Phosphinates. <i>Canadian Journal of Chemical Engineering</i> , 2004, 82, 349-357.	1.7	2

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37	The activity of ions: analysis of the theory and data for aqueous solutions of MgBr <sub>2</sub> , CaBr <sub>2</sub> and BaBr <sub>2</sub> at 298.2 K. Fluid Phase Equilibria, 2003, 205, 115-132.	2.5	26
38	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
39	Selective Precipitation of Lysozyme from Egg White Using AOT. Journal of Food Science, 2003, 68, 595-598.	3.1	22
40	Reverse Micellar Extraction and Precipitation of Lysozyme Using Sodium Di(2-ethylhexyl) Sulfosuccinate. Biotechnology Progress, 2003, 19, 928-935.	2.6	36
41	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
42	Comparison of Two Methods to Recover Lysozyme from Reverse Micellar Phases. Separation Science and Technology, 2003, 38, 1733-1748.	2.5	13
43	Peculiarities of the Thermodynamics of Electrolyte Solutions: A Critical Discussion. Canadian Journal of Chemical Engineering, 2003, 81, 70-79.	1.7	10
44	Nonrandom Distribution of Free Volume in Fluids and Their Mixtures: A Hydrogen-Bonded Systems. Industrial & Engineering Chemistry Research, 2002, 41, 1057-1063.	3.7	17
45	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
46	A Flexible Mixing Rule Satisfying the Ideal-Solution Limit for Equations of State. Industrial & Engineering Chemistry Research, 2002, 41, 922-930.	3.7	7
47	Solubilization limit of lysozyme into DODMAC reverse micelles. Biotechnology and Bioengineering, 2002, 80, 537-543.	3.3	15
48	Activity of the electrolyte and the amino acid in the systems water + dl,±-aminobutyric acid + NaCl, +NaBr, +KCl, and +KBr at 298.2 K. Fluid Phase Equilibria, 2002, 203, 99-110.	2.5	13
49	Activity coefficients of antibiotics in aqueous NaCl solutions at 298.2 K. Biophysical Chemistry, 2002, 95, 97-108.	2.8	12
50	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
51	The activity coefficients of glycine, DL-Serine and DL-Valine in aqueous solutions containing nitrates at 298.15 K. Canadian Journal of Chemical Engineering, 2001, 79, 392-401.	1.7	23
52	Extension to mixtures of two robust hard-sphere equations of state satisfying the ordered close-packed limit. Canadian Journal of Chemical Engineering, 2001, 79, 678-686.	1.7	20
53	Nucleophilic substitution sulfonation in emulsions: Formation of sodium benzyl sulfonate. Canadian Journal of Chemical Engineering, 2001, 79, 744-750.	1.7	5
54	Measurement and correlation of the activity coefficients of individual ions in aqueous electrolyte solutions of Na <sub>2</sub> SO <sub>4</sub> and K <sub>2</sub> SO <sub>4</sub> . Canadian Journal of Chemical Engineering, 2001, 79, 771-776.	1.7	15

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55	Determination of the activity of H <sup>+</sup> ions within and beyond the pH meter range. <i>AIChE Journal</i> , 2001, 47, 2807-2818.	3.6	21
56	Measurement and correlation of the individual ionic activity coefficients of aqueous electrolyte solutions of KF, NaF and KBr. <i>Canadian Journal of Chemical Engineering</i> , 2000, 78, 175-181.	1.7	31
57	Removal of lead, cadmium and zinc from aqueous solutions by precipitation with sodium Di-(n-octyl) phosphinate. <i>Canadian Journal of Chemical Engineering</i> , 2000, 78, 948-954.	1.7	168
58	Application of the MSA to the modeling of the activity coefficients of individual ions. <i>Fluid Phase Equilibria</i> , 2000, 167, 161-171.	2.5	14
59	Nucleophilic Substitution Sulfonation in Microemulsions and Emulsions. <i>Langmuir</i> , 2000, 16, 9159-9167.	3.5	21
60	Effect of Anions on the Solubility of Zwitterionic Amino Acids. <i>Journal of Chemical &amp; Engineering Data</i> , 2000, 45, 140-143.	1.9	67
61	Correlation of Activity Coefficients in Electrolyte Solutions Using a Kelvin Hard Sphere~Mean Spherical Approximation (K-MSA) Model. <i>Industrial &amp; Engineering Chemistry Research</i> , 2000, 39, 759-766.	3.7	22
62	Measurements and modelling of the solubility of a mixture of two amino acids in aqueous solutions. <i>Fluid Phase Equilibria</i> , 1999, 158-160, 893-901.	2.5	26
63	Individual anionic activity coefficients in aqueous electrolyte solutions of LiCl and LiBr. <i>Fluid Phase Equilibria</i> , 1999, 166, 67-77.	2.5	33
64	Activities of Individual Ions From Infinite Dilution to Saturated Solutions. <i>Journal of Solution Chemistry</i> , 1999, 28, 885-913.	1.2	39
65	Removal of lead from aqueous solutions by precipitation with sodium di-(n-octyl) phosphinate. <i>Separation and Purification Technology</i> , 1999, 18, 25-36.	7.9	35
66	Reverse Micelle Formation Using a Sodium Di(n-Octyl) Phosphinate Surfactant. <i>Journal of Colloid and Interface Science</i> , 1999, 218, 344-346.	9.4	5
67	Effect of the cation and the anion of an electrolyte on the solubility of dl-aminobutyric acid in aqueous solutions: measurement and modelling. <i>Biophysical Chemistry</i> , 1998, 73, 77-83.	2.8	48
68	Effect of the anion and the cation of an electrolyte on the activity coefficient of dl-alanine in aqueous solutions. <i>Fluid Phase Equilibria</i> , 1998, 142, 193-204.	2.5	24
69	A generalized mixing rule for hard-sphere equations of state of Percus~Yevick type. <i>Fluid Phase Equilibria</i> , 1998, 142, 131-147.	2.5	24
70	A completely normalized quasi-chemical theory. <i>Fluid Phase Equilibria</i> , 1998, 145, 217-224.	2.5	8
71	Effect of acids and bases on the solubility of amino acids. <i>Fluid Phase Equilibria</i> , 1998, 152, 121-132.	2.5	73
72	The Peng~Robinson Sequel. An Analysis of the Particulars of the Second and Third Generations. <i>Industrial &amp; Engineering Chemistry Research</i> , 1998, 37, 1591-1597.	3.7	19

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73	A Theoretically Improved Perturbation Model for Activity Coefficients of Amino Acids and Peptides in Aqueous Solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , 1998, 37, 3052-3057.	3.7	31
74	Reverse Micellar Extraction of Proteins Using Dioctyldimethyl Ammonium Chloride. <i>Separation Science and Technology</i> , 1998, 33, 241-257.	2.5	15
75	Counterion Binding to Ionic Reverse Micellar Aggregates and Its Effect on Water Uptake. <i>Journal of Physical Chemistry B</i> , 1997, 101, 10295-10302.	2.6	15
76	Effect of NaCl and KCl on the Solubility of Amino Acids in Aqueous Solutions at 298.2 K: Measurements and Modeling. <i>Industrial &amp; Engineering Chemistry Research</i> , 1997, 36, 2445-2451.	3.7	95
77	Interactions of DL-serine and L-serine with NaCl and KCl in aqueous solutions. <i>Journal of Solution Chemistry</i> , 1997, 26, 941-955.	1.2	28
78	A simplified hard-sphere equation of state meeting the high and low density limits. <i>Fluid Phase Equilibria</i> , 1997, 130, 189-194.	2.5	28
79	Counterion effect of amino acids in reverse micelles. <i>Fluid Phase Equilibria</i> , 1997, 135, 269-278.	2.5	6
80	Activity coefficients of the electrolyte and the amino acid in water + NaNO <sub>3</sub> + glycine and water + NaCl + dl-methionine systems at 298.15 K. <i>Biophysical Chemistry</i> , 1997, 67, 97-105.	2.8	25
81	Extension of EOS non-iterative methods to density calculations: Correlation of saturated molar volumes and heats of vaporization. <i>Canadian Journal of Chemical Engineering</i> , 1997, 75, 214-228.	1.7	7
82	Interaction of DL-threonine with NaCl and NaNO <sub>3</sub> in aqueous solutions: e.m.f. measurements with ion-selective electrodes. <i>Journal of Chemical Thermodynamics</i> , 1997, 29, 609-622.	2.0	26
83	Comparison of the Titration and Contact Methods for the Water Solubilization Capacity of AOT Reverse Micelles in the Presence of a Cosurfactant. <i>Journal of Colloid and Interface Science</i> , 1997, 189, 208-215.	9.4	33
84	Measurement of Activity Coefficients of Amino Acids in Aqueous Electrolyte Solutions: Experimental Data for the Systems H <sub>2</sub> O + NaCl + Glycine and H <sub>2</sub> O + NaCl + dl-Alanine at 25 °C. <i>Industrial &amp; Engineering Chemistry Research</i> , 1996, 35, 2735-2742.	3.7	78
85	A Simplified Perturbed Hard-Sphere Model for the Activity Coefficients of Amino Acids and Peptides in Aqueous Solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , 1996, 35, 4319-4327.	3.7	67
86	Extraction of Zwitterionic Amino Acids with Reverse Micelles in the Presence of Different Ions. <i>Industrial &amp; Engineering Chemistry Research</i> , 1996, 35, 3665-3672.	3.7	28
87	Effects of Volume Ratio and of Surfactant, Salt, and Alcohol Concentrations on the Ion Distribution of Dioctyldimethylammonium Chloride Reverse Micelles in Isooctane. <i>Langmuir</i> , 1996, 12, 3580-3584.	3.5	7
88	A Perturbed Hard-Sphere Model with Mean Spherical Approximation for the Activity Coefficients of Amino Acids in Aqueous Electrolyte Solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , 1996, 35, 4755-4766.	3.7	34
89	Cubic Equation of State for Pure Compound Vapor Pressures from the Triple Point to the Critical Point. <i>Industrial &amp; Engineering Chemistry Research</i> , 1996, 35, 829-836.	3.7	27
90	Measurement and correlation of ion activity in aqueous single electrolyte solutions. <i>AIChE Journal</i> , 1996, 42, 249-258.	3.6	88

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91	Measurement and modeling of activities of amino acids in aqueous salt systems. <i>AIChE Journal</i> , 1996, 42, 2354-2364.	3.6	58
92	A new volume dependence for the equations of state of hard spheres. <i>Fluid Phase Equilibria</i> , 1996, 115, 25-38.	2.5	39
93	Generalized water uptake modelling of water-in-oil microemulsions. New experimental results for Aerosol-ot-isooctane-water-salts systems. <i>Fluid Phase Equilibria</i> , 1996, 122, 169-186.	2.5	21
94	Activity coefficients of DL-valine in aqueous solutions of KCl at 25 $\pm$ 1/2 $\circ$ C. Measurement with ion selective electrodes and modelling. <i>Journal of Solution Chemistry</i> , 1996, 25, 865-875.	1.2	20
95	Activity coefficients of sodium, potassium, and nitrate ions in aqueous solutions of NaNO <sub>3</sub> , KNO <sub>3</sub> , and NaNO <sub>3</sub> +KNO <sub>3</sub> at 25 $\pm$ 1/2 $\circ$ C. <i>Journal of Solution Chemistry</i> , 1996, 25, 983-1000.	1.2	37
96	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. <i>Journal of Colloid and Interface Science</i> , 1995, 174, 1-9.	9.4	23
97	Reverse Micellar Extraction and Backextraction of L-Lysine with Three Dialkyl Sodium Phosphinates in Pentanol/Isooctane Mixtures. <i>Separation Science and Technology</i> , 1995, 30, 2301-2314.	2.5	25
98	A Chemical Theory for Ion Distribution Equilibria in Reverse Micellar Systems. New Experimental Data for Aerosol-OT-Isooctane-Water-Salt Systems. <i>Langmuir</i> , 1995, 11, 1162-1169.	3.5	20
99	Reverse Micellar Extraction of Amino Acids Using Dioctyldimethylammonium Chloride. <i>Industrial &amp; Engineering Chemistry Research</i> , 1995, 34, 599-606.	3.7	26
100	Liquid-Liquid Equilibrium of Aqueous Mixtures of Poly(ethylene glycol) with Na <sub>2</sub> SO <sub>4</sub> or NaCl. <i>Journal of Chemical &amp; Engineering Data</i> , 1994, 39, 245-248.	1.9	37
101	Liquid-liquid equilibrium of aqueous mixtures of poly(propylene glycol) with sodium chloride. <i>Journal of Chemical &amp; Engineering Data</i> , 1994, 39, 127-130.	1.9	114
102	Cation exchange with reverse micelles. <i>Industrial &amp; Engineering Chemistry Research</i> , 1993, 32, 125-132.	3.7	9
103	Concentration of large biomolecules with hydrogels. <i>Chemical Engineering Science</i> , 1992, 47, 31-40.	3.8	45
104	Mean activity coefficients in the ternary sodium chloride-sodium nitrate-water and sodium bromide-sodium nitrate-water systems at 298.15 K. <i>Journal of Chemical &amp; Engineering Data</i> , 1991, 36, 332-340.	1.9	55
105	The simplest cubic equation of state for low-pressure vapor-liquid equilibrium calculations. <i>Chemical Engineering Science</i> , 1990, 45, 3319-3328.	3.8	3
106	Local composition in ternary Lennard-Jones liquid mixtures: molecular dynamics simulation and a simple correlation. <i>Fluid Phase Equilibria</i> , 1990, 58, 81-92.	2.5	5
107	Swelling of ionic gels in electrolyte solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , 1990, 29, 554-560.	3.7	81
108	Heats of mixing of binary mixtures of pyridine base with n-alkane. <i>Canadian Journal of Chemistry</i> , 1988, 66, 1625-1627.	1.1	6

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109	On the local composition concept. <i>Fluid Phase Equilibria</i> , 1986, 26, 313-316.	2.5	3
110	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. <i>Journal of Chemical &amp; Engineering Data</i> , 1984, 29, 269-272.	1.9	29
111	On the two-fluid local composition expressions. <i>Fluid Phase Equilibria</i> , 1982, 8, 315-318.	2.5	8
112	Heats of mixing of amine-alcohol systems. An analytical group solution model approach. <i>Canadian Journal of Chemical Engineering</i> , 1979, 57, 355-362.	1.7	11
113	Prediction of heats of mixing of liquid mixtures containing alkane, chloroalkane and alcohol by an analytical group solution model. <i>Canadian Journal of Chemical Engineering</i> , 1978, 56, 358-363.	1.7	28
114	Heats of mixing of binary chloroalkane-n-alkane and chloroalkane-n-alcohol systems at 25.degree.C. <i>Journal of Chemical &amp; Engineering Data</i> , 1978, 23, 218-221.	1.9	19
115	A simple method for estimation of thermodynamic properties of concentrated and supersaturated aqueous solutions of NaCl and KCl. <i>Canadian Journal of Chemical Engineering</i> , 1977, 55, 484-486.	1.7	5
116	Vapor-liquid equilibriums in binary aromatic-olefin systems. <i>Journal of Chemical &amp; Engineering Data</i> , 1971, 16, 149-154.	1.9	27