Dan Fraenkel

List of Publications by Year
in descending order

23 papers	406 citations	758635 12 h-index	752256 20 g-index
25 all docs	25 docs citations	25 times ranked	202 citing authors

#	Article	IF	Citations
1	Simplified electrostatic model for the thermodynamic excess potentials of binary strong electrolyte solutions with size-dissimilar ions. Molecular Physics, 2010, 108, 1435-1466.	0.8	89
2	Monoprotic Mineral Acids Analyzed by the Smaller-Ion Shell Model of Strong Electrolyte Solutions. Journal of Physical Chemistry B, 2011, 115, 557-568.	1.2	46
3	Single-Ion Activity: Experiment versus Theory. Journal of Physical Chemistry B, 2012, 116, 3603-3612.	1.2	46
4	Effect of Solvent Permittivity on the Thermodynamic Behavior of HCl Solutions: Analysis Using the Smaller-Ion Shell Model of Strong Electrolytes. Journal of Physical Chemistry B, 2011, 115, 14634-14647.	1.2	23
5	Structure and ionization of sulfuric acid in water. New Journal of Chemistry, 2015, 39, 5124-5136.	1.4	22
6	Acid strength of solids probed by catalytic isobutane conversion. Journal of Catalysis, 2010, 274, 29-51.	3.1	21
7	Electrolytic Nature of Aqueous Sulfuric Acid. 1. Activity. Journal of Physical Chemistry B, 2012, 116, 11662-11677.	1.2	21
8	Electrolytic Nature of Aqueous Sulfuric Acid. 2. Acidity. Journal of Physical Chemistry B, 2012, 116, 11678-11686.	1.2	16
9	Computing Excess Functions of Ionic Solutions: The Smaller-Ion Shell Model <i>versus</i> the Primitive Model. 1. Activity Coefficients. Journal of Chemical Theory and Computation, 2015, 11, 178-192.	2.3	16
10	An improved theory of the electric conductance of ionic solutions based on the concept of the ion-atmosphere's smaller-ion shell. Physical Chemistry Chemical Physics, 2018, 20, 29896-29909.	1.3	15
11	Computing Excess Functions of Ionic Solutions: The Smaller-Ion Shell Model <i>versus</i> the Primitive Model. 2. Ion-Size Parameters. Journal of Chemical Theory and Computation, 2015, 11, 193-204.	2.3	13
12	Agreement of electrolyte models with activity coefficient data of sulfuric acid in water. Journal of Chemical Thermodynamics, 2014, 78, 215-224.	1.0	12
13	Theoretical analysis of aqueous solutions of mixed strong electrolytes by a smaller-ion shell electrostatic model. Journal of Chemical Physics, 2014, 140, 054513.	1.2	11
14	A new theoretical development of the limiting electric conductivity of ions in solution. Molecular Physics, 2018, 116, 2271-2293.	0.8	10
15	Negative Deviations from the Debyeâ€“HÃ¼ckel Limiting Law for High-Charge Polyvalent Electrolytes: Are They Real?. Journal of Chemical Theory and Computation, 2018, 14, 2609-2620.	2.3	9
16	Comment on â€œThe nonmonotonic concentration dependence of the mean activity coefficient of electrolytes is a result of a balance between solvation and ionâ€“ion correlationsâ€•[J. Chem. Phys. 133, 154507 (2010)]. Journal of Chemical Physics, 2011, 134, 157101.	1.2	7
17	Reply to â€œComment on 'Single-Ion Activity: Experiment versus Theory'â€• Journal of Physical Chemistry B, 2012, 116, 13292-13293.	1.2	7
18	Correlation between the specific conductivity and the equivalent conductivity of an individual ion in electrolyte solution. Chemical Physics Letters, 2021, 781, 138957.	1.2	6

#	Article	IF	Citations
19	Ion strength limit of computed excess functions based on the linearized <scp>P</scp>oissonâ€“<scp>B</scp>oltzmann equation. Journal of Computational Chemistry, 2015, 36, 2302-2316.	1.5	4
20	The electric conductance of dilute sulfuric acid in water: a new theoretical interpretation. Molecular Physics, 2021, 119, e1905898.	0.8	3
21	Recommended Activity Coefficients and Equivalent Conductivities of Aqueous Hydrochloric Acid in the Concentration Range 5 Ã— 10^{â€“6}â€“10^{â€“1} M and Temperature Range 5â€“55 Â°C Based on the DHâ€“SiS and DHOâ€“SiS Theoretical Treatments. Journal of Chemical & Engineering Data, 2021, 66, 2470-2479.	1.0	3
22	Theoretical interpretation of the limiting electric conductivity in ionic solution. Molecular Physics, 2017, 115, 2944-2950.	0.8	2
23	Interconversion of Specific and Equivalent Conductivity of Ions in Electrolyte Solution: Effects of High Ionic Valence and Temperature. Journal of Chemical Theory and Computation, 2021, , .	2.3	0