

Dhanpat Rai

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	A Thermodynamic Model for ZrO ₂ (am) Solubility at 25°C in the Ca ²⁺ -Na ⁺ -H ⁺ -Cl ⁻ -OH ⁻ -H ₂ O System: A Critical Review. <i>Journal of Solution Chemistry</i> , 2018, 47, 855-891.	1.2	11
2	Thermodynamic equilibrium constants for important isosaccharinate reactions: A review. <i>Journal of Chemical Thermodynamics</i> , 2017, 114, 135-143.	2.0	12
3	A thermodynamic model for the solubility of HfO ₂ (am) in the aqueous K ⁺ -HCO ₃ ⁻ -CO ₂ -H ₂ O system. <i>Radiochimica Acta</i> , 2017, 105, 637-647.		
4	Issues concerning the determination of solubility products of sparingly soluble crystalline solids: solubility of HfO ₂ (cr). <i>Radiochimica Acta</i> , 2016, 104, 583-592.	1.2	5
5	Evaluation of equilibrium constants for deprotonation and lactonisation of Î±-D-isosaccharinic acid. <i>Journal of Nuclear Science and Technology</i> , 2016, 53, 459-467.	1.3	8
6	Thermodynamic model for the solubility of BaSeO ₄ (cr) in the aqueous Ba ²⁺ -SeO ₄ ²⁻ -Na ⁺ -H ⁺ -OH ⁻ -H ₂ O system: Extending to high selenate concentrations. <i>Radiochimica Acta</i> , 2014, 102, 817-830.	1.2	2
7	Thermodynamic model for the solubility of Ba(SeO ₄) ₂ precipitates. <i>Radiochimica Acta</i> , 2014, 102, 711-721.	1.2	2
8	Thermodynamic Model for the Solubility of NdF ₃ (cr) in the Na ⁺ -NH ₄ ⁺ -Nd ³⁺ -F ⁻ -H ₂ O System at 25°C. <i>Journal of Solution Chemistry</i> , 2013, 42, 1500-1517.	1.2	4
9	Isosaccharinate Complexes of Fe(III). <i>Journal of Solution Chemistry</i> , 2012, 41, 1906-1921.	1.2	3
10	Thermodynamic Model for Amorphous Pd(OH) ₂ Solubility in the Aqueous Na ⁺ -K ⁺ -H ⁺ -OH ⁻ -Cl ⁻ -ClO ₄ ⁻ -H ₂ O System at 25°C: A Critical Review. <i>Journal of Solution Chemistry</i> , 2012, 41, 1965-1985.	1.2	3
11	Thermodynamic Model for SnO ₂ (cr) and SnO ₂ (am) Solubility in the Aqueous Na ⁺ -H ⁺ -OH ⁻ -Cl ⁻ -H ₂ O System. <i>Journal of Solution Chemistry</i> , 2011, 40, 1155-1172.	1.2	39
12	Thermodynamic Approach for Predicting Actinide and Rare Earth Concentrations in Leachates from Radioactive Waste Glasses. <i>Journal of Solution Chemistry</i> , 2011, 40, 1473-1504.	1.2	7
13	PuPO ₄ (cr, hyd.) Solubility Product and Pu ³⁺ Complexes with Phosphate and Ethylenediaminetetraacetic Acid. <i>Journal of Solution Chemistry</i> , 2010, 39, 778-807.	1.2	11
14	Thermodynamic Model for BiPO ₄ (cr) and Bi(OH) ₃ (am) Solubility in the Aqueous Na ⁺ -H ⁺ - H_2PO_4^- - HPO_4^{2-} - PO_4^{3-} -OH ⁻ -Cl ⁻ -H ₂ O System. <i>Journal of Solution Chemistry</i> , 2010, 39, 999-1019.	1.2	13
15	Thermodynamic Model for ThO ₂ (am) Solubility in Î±-Isosaccharinate Solutions. <i>Journal of Solution Chemistry</i> , 2009, 38, 1573-1587.	1.2	16
16	Environmental Mobility of Pu(IV) in the Presence of Î±-Ethylenediaminetetraacetic Acid: Myth or Reality?. <i>Journal of Solution Chemistry</i> , 2008, 37, 957-986.	1.2	19
17	Thermodynamic Model for ThO ₂ (am) Solubility in Î±-Alkaline-Silica Solutions. <i>Journal of Solution Chemistry</i> , 2008, 37, 1725-1746.	1.2	12
18	Chromium(III) Hydroxide Solubility in the Aqueous K ⁺ -H ⁺ -OH ⁻ -CO ₂ -HCO ₃ ⁻ -CO ₃ ²⁻ -H ₂ O System: A Thermodynamic Model. <i>Journal of Solution Chemistry</i> , 2007, 36, 1261-1285.	1.2	43

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19	Thorium reactions in borosilicate-glass/water systems. <i>Radiochimica Acta</i> , 2005, 93, .	1.2	3
20	Thermodynamics and solubility of (UxNp1-x)O ₂ (am) solid solution in the carbonate system. <i>Radiochimica Acta</i> , 2004, 92, .	1.2	6
21	Chromium(III) Hydroxide Solubility in The Aqueous Na ⁺ -OH ⁻ -H ₂ PO ₄ ⁻ -HPO ₄ ²⁻ -PO ₃ ³⁻ -H ₂ O System: A Thermodynamic Model. <i>Journal of Solution Chemistry</i> , 2004, 33, 1213-1242.	1.2	39
22	Protonation and complexation of isosaccharinic acid with U(VI) and Fe(III) in acidic solutions: potentiometric and calorimetric studies. <i>Radiochimica Acta</i> , 2004, 92, .	1.2	26
23	Comprehensive Thermodynamic Model Applicable to Highly Acidic to Basic Conditions for Isosaccharinate Reactions with Ca(II) and Np(IV). <i>Journal of Solution Chemistry</i> , 2003, 32, 665-689.	1.2	38
24	Acidity and Structure of Isosaccharinate in Aqueous Solution: A Nuclear Magnetic Resonance Study. <i>Journal of Solution Chemistry</i> , 2003, 32, 691-702.	1.2	25
25	Solubility and Solubility Product at 22Â°C of UO ₂ (c) Precipitated from Aqueous U(IV) Solutions. <i>Journal of Solution Chemistry</i> , 2003, 32, 1-17.	1.2	49
26	Title is missing!. <i>Journal of Solution Chemistry</i> , 2002, 31, 343-367.	1.2	28
27	Reductive Dissolution of PuO ₂ (am): The Effect of Fe(II) and Hydroquinone. <i>Journal of Solution Chemistry</i> , 2002, 31, 433-453.	1.2	42
28	Hydroxo and Chloro Complexes/Ion Interactions of Hf ⁴⁺ and the Solubility Product of HfO ₂ (am). <i>Journal of Solution Chemistry</i> , 2001, 30, 949-967.	1.2	19
29	Thermodynamic model for the solubility of PuO ₂ (am) in the aqueous Na ⁺ -H ⁺ -OH ⁻ -Cl ⁻ -H ₂ O-ethylenediaminetetraacetate system. <i>Radiochimica Acta</i> , 2001, 89, 67-74.	1.2	22
30	Thermodynamic model for the solubility of thorium dioxide in the Na ⁺ -Cl ⁻ -OH ⁻ -H ₂ O system at 23Â°C and 90Â°C. <i>Radiochimica Acta</i> , 2000, 88, 297-306.	1.2	58
31	A Thermodynamic Model for the Solubility of NpO ₂ (am) in the Aqueous K ⁺ -Na ⁺ -HCO ₃ ⁻ -CO ₂ ²⁻ -OH ⁻ -H ₂ O System. <i>Radiochimica Acta</i> , 1999, 84, 159-170.	1.2	33
32	A Thermodynamic Model for the Solubility of PuO ₂ (am) in the Aqueous K ⁺ -Na ⁺ -HCO ₃ ⁻ -CO ₂ ²⁻ -OH ⁻ -H ₂ O System. <i>Radiochimica Acta</i> , 1999, 86, 89-100.	1.2	45
33	Title is missing!. <i>Journal of Solution Chemistry</i> , 1999, 28, 533-553.	1.2	34
34	Solubility of Crystalline Calcium Isosaccharinate. <i>Journal of Solution Chemistry</i> , 1998, 27, 1109-1122.	1.2	18
35	A Thermodynamic Model for the Solubility of UO ₂ (am) in the Aqueous K ⁺ -Na ⁺ -HCO ₃ ⁻ -CO ₂ ²⁻ -OH ⁻ -H ₂ O System. <i>Radiochimica Acta</i> , 1998, 82, 17-26.	1.2	43
36	The Solubility of Th(IV) and U(IV) Hydrous Oxides in Concentrated NaCl and MgCl ₂ Solutions. <i>Radiochimica Acta</i> , 1997, 79, 239-248.	1.2	69

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37	Thermodynamic models for highly charged aqueous species: Solubility of Th(IV) hydrous oxide in concentrated NaHCO ₃ and Na ₂ CO ₃ solutions. <i>Journal of Solution Chemistry</i> , 1997, 26, 233-248.	1.2	35
38	Solubility of NaNd(CO ₃) ₂ · 6 H ₂ O(c) in Concentrated Na ₂ CO ₃ and NaHCO ₃ Solutions. <i>Radiochimica Acta</i> , 1996, 75, 141-148.	1.2	21
39	Solubility of Nd(OH) ₃ (c) in 0.1 M NaCl Aqueous Solution at 25°C and 90°C. <i>Radiochimica Acta</i> , 1996, 72, 151-156.	1.2	20
40	Nd ³⁺ and Am ³⁺ ion interactions with sulfate ion and their influence on NdPO ₄ (c) solubility. <i>Journal of Solution Chemistry</i> , 1995, 24, 879-895.	1.2	9
41	The Aqueous Complexation of Nd(III) with Molybdate: The Effects of Both Monomeric Molybdate and Polymolybdate Species. <i>Radiochimica Acta</i> , 1995, 69, 177-184.	1.2	9
42	The Solubility of Th(IV) and U(IV) Hydrous Oxides in Concentrated NaHCO ₃ and Na ₂ CO ₃ Solutions. <i>Materials Research Society Symposia Proceedings</i> , 1994, 353, 1143.	0.1	21
43	The solubility of (Ba,Sr)SO ₄ precipitates: Thermodynamic equilibrium and reaction path analysis. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 4345-4363.	3.9	41
44	Solubility and Ion Activity Product of AmPO ₄ · xH ₂ O(am). <i>Radiochimica Acta</i> , 1992, 56, 7-14.	1.2	38
45	Hydrolysis constants and ion-interaction parameters for Cd(II) in zero to high concentrations of NaOH/KOH, and the solubility product of crystalline Cd(OH) ₂ . <i>Journal of Solution Chemistry</i> , 1991, 20, 375-390.	1.2	20
46	The solubility of barite and celestite in sodium sulfate: Evaluation of thermodynamic data. <i>Journal of Solution Chemistry</i> , 1990, 19, 175-185.	1.2	43
47	Uranium(IV) hydrolysis constants and solubility product of UO ₂ · xH ₂ O(am). <i>Inorganic Chemistry</i> , 1990, 29, 260-264.	4.0	141
48	The Solubility of Plutonium Hydroxide in Dilute Solution and in High-Ionic-Strength Chloride Brines. <i>Radiochimica Acta</i> , 1989, 48, 29-36.	1.2	74
49	Determination of aqueous plutonium oxidation states by solvent extraction. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1989, 130, 333-346.	1.5	30
50	Chromate removal from aqueous wastes by reduction with ferrous ion. <i>Environmental Science & Technology</i> , 1988, 22, 972-977.	10.0	556
51	Thorium(IV) hydrous oxide solubility. <i>Inorganic Chemistry</i> , 1987, 26, 4140-4142.	4.0	64
52	Chromium(III) hydrolysis constants and solubility of chromium(III) hydroxide. <i>Inorganic Chemistry</i> , 1987, 26, 345-349.	4.0	603
53	Solubility of amorphous chromium(III)-iron(III) hydroxide solid solutions. <i>Inorganic Chemistry</i> , 1987, 26, 2228-2232.	4.0	331
54	Americium Concentrations in Solutions Contacting Americium-Doped Glass. <i>Nuclear Technology</i> , 1986, 75, 350-355.	1.2	7

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55	Solubility Product of Pu(IV) Hydrous Oxide and Equilibrium Constants of Pu(IV)/Pu(V), Pu(IV)/Pu(VI), and Pu(V)/Pu(VI) Couples. <i>Radiochimica Acta</i> , 1984, 35, 97-106.	1.2	93
56	Neptunium Concentrations in Solutions Contacting Actinide-Doped Glass. <i>Nuclear Technology</i> , 1982, 58, 69-76.	1.2	11
57	Properties of Plutonium(IV) Polymer of Environmental Importance. <i>Nuclear Technology</i> , 1981, 54, 107-112.	1.2	30
58	Alpha radiation induced production of HNO ₃ during dissolution of Pu compounds (1). <i>Inorganic and Nuclear Chemistry Letters</i> , 1980, 16, 551-555.	0.7	21
59	Solubility of Plutonium Compounds and Their Behavior in Soils. <i>Soil Science Society of America Journal</i> , 1980, 44, 490-495.	2.2	55