

Marcus Altmaier

List of Publications by Year in descending order

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54
papers

1,267
citations

394421

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34
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docs citations

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times ranked

1029
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent Advances in Aqueous Actinide Chemistry and Thermodynamics. <i>Chemical Reviews</i> , 2013, 113, 901-943.	47.7	175
2	Oxidation State and Local Structure of Plutonium Reacted with Magnetite, Mackinawite, and Chukanovite. <i>Environmental Science & Technology</i> , 2011, 45, 7267-7274.	10.0	103
3	Solubility of plutonium hydroxides/hydrous oxides under reducing conditions and in the presence of oxygen. <i>Comptes Rendus Chimie</i> , 2007, 10, 959-977.	0.5	87
4	New insights in the formation processes of Pu(IV) colloids. <i>Radiochimica Acta</i> , 2009, 97, 199-207.	1.2	63
5	Thermodynamics of trivalent actinides and neodymium in NaCl, MgCl ₂ , and CaCl ₂ solutions: Solubility, hydrolysis, and ternary Ca-M(III)-OH complexes. <i>Pure and Applied Chemistry</i> , 2009, 81, 1555-1568.	1.9	60
6	Solubility of Zr(IV), Th(IV) and Pu(IV) hydrous oxides in CaCl ₂ solutions and the formation of ternary Ca-M(IV)-OH complexes. <i>Radiochimica Acta</i> , 2008, 96, .	1.2	57
7	Redox behavior of Tc(VII)/Tc(IV) under various reducing conditions in 0.1 M NaCl solutions. <i>Radiochimica Acta</i> , 2013, 101, 323-332.	1.2	46
8	Systematic XAS study on the reduction and uptake of Tc by magnetite and mackinawite. <i>Dalton Transactions</i> , 2016, 45, 17874-17885.	3.3	41
9	Solubility of U(VI) in chloride solutions. I. The stable oxides/hydroxides in NaCl systems, solubility products, hydrolysis constants and SIT coefficients. <i>Journal of Chemical Thermodynamics</i> , 2017, 114, 2-13.	2.0	40
10	Glaciation history of Queen Maud Land (Antarctica) reconstructed from in-situ produced cosmogenic ¹⁰ Be, ²⁶ Al and ²¹ Ne. <i>Polar Science</i> , 2010, 4, 42-61.	1.2	35
11	Near edge X-ray absorption fine structure (NEXAFS) of model compounds for the humic acid/actinide ion interaction. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2005, 148, 151-157.	1.7	34
12	Thermodynamic description of Tc(IV) solubility and hydrolysis in dilute to concentrated NaCl, MgCl ₂ and CaCl ₂ solutions. <i>Dalton Transactions</i> , 2016, 45, 8916-8936.	3.3	32
13	Formation, stability and structural characterization of ternary Mg ₂ UO ₃ (CO ₃) ₃ ·2H ₂ O and Mg ₂ UO ₃ (CO ₃) ₃ (aq) complexes. <i>Radiochimica Acta</i> , 2017, 105, 171-185.	1.2	28
14	Spectroscopic investigations of Np(V/VI) redox speciation in hyperalkaline TMA-(OH, Cl) solutions. <i>Radiochimica Acta</i> , 2012, 100, 759-770.	1.2	27
15	Np(V) solubility, speciation and solid phase formation in alkaline CaCl ₂ solutions. Part I: Experimental results. <i>Radiochimica Acta</i> , 2016, 104, 355-379.	1.2	26
16	Exploring the electronic structure and speciation of aqueous and colloidal Pu with high energy resolution XANES and computations. <i>Chemical Communications</i> , 2018, 54, 12824-12827.	4.1	26
17	Recent advances in the aqueous chemistry of the calcium(II)-gluconate system – Equilibria, structure and composition of the complexes forming in neutral and in alkaline solutions. <i>Coordination Chemistry Reviews</i> , 2020, 417, 213337.	18.8	24
18	Sorption of Eu(III) on quartz at high salt concentrations. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 578, 123610.	4.7	23

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19	Redox chemistry of Tc(VII)/Tc(IV) in dilute to concentrated NaCl and MgCl ₂ solutions. <i>Radiochimica Acta</i> , 2015, 103, 57-72.	1.2	21
20	Redox behavior and solubility of plutonium under alkaline, reducing conditions. <i>Radiochimica Acta</i> , 2018, 106, 259-279.	1.2	21
21	Thermodynamic description of Np(VI) solubility, hydrolysis, and redox behavior in dilute to concentrated alkaline NaCl solutions. <i>Pure and Applied Chemistry</i> , 2013, 85, 2027-2049.	1.9	19
22	Fifteen Years of Radionuclide Research at the KIT Synchrotron Source in the Context of the Nuclear Waste Disposal Safety Case. <i>Geosciences (Switzerland)</i> , 2019, 9, 91.	2.2	19
23	A TRLFS study of Cm(III) hydroxide complexes in alkaline CaCl ₂ solutions. <i>Radiochimica Acta</i> , 2008, 96, 551-560.	1.2	18
24	Solubility and hydrolysis of Np(V) in dilute to concentrated alkaline NaCl solutions: formation of Na ⁺ Np(V)OH solid phases at 22±0.1°C. <i>Radiochimica Acta</i> , 2017, 105, 1-20.	1.2	18
25	Solubility of tetravalent actinides in alkaline CaCl ₂ solutions and formation of Ca ₄ [An(OH) ₈] ⁴⁺ complexes: A study of Np(IV) and Pu(IV) under reducing conditions and the systematic trend in the An(IV) series. <i>Radiochimica Acta</i> , 2010, 98, 541-548.	1.2	16
26	Np(V) solubility, speciation and solid phase formation in alkaline CaCl ₂ solutions. Part II: Thermodynamics and implications for source term estimations of nuclear waste disposal. <i>Radiochimica Acta</i> , 2016, 104, 381-397.	1.2	16
27	Interaction of Nd(III) and Cm(III) with borate in dilute to concentrated alkaline NaCl, MgCl ₂ and CaCl ₂ solutions: solubility and TRLFS studies. <i>New Journal of Chemistry</i> , 2015, 39, 849-859.	2.8	15
28	Contribution of the results of the CEBAMA project to decrease uncertainties in the Safety Case and Performance Assessment of radioactive waste repositories. <i>Applied Geochemistry</i> , 2020, 112, 104479.	3.0	15
29	Thermodynamic model of Ni(II) solubility, hydrolysis and complex formation with ISA. <i>Radiochimica Acta</i> , 2018, 106, 31-45.	1.2	12
30	Redox chemistry of uranium in reducing, dilute to concentrated NaCl solutions. <i>Applied Geochemistry</i> , 2018, 98, 286-300.	3.0	12
31	Plutonium Retention Mechanisms by Magnetite under Anoxic Conditions: Entrapment versus Sorption. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 2197-2206.	2.7	12
32	Complexation of Nd(III)/Cm(III) with gluconate in alkaline NaCl and CaCl ₂ solutions: Solubility, TRLFS and DFT studies. <i>Applied Geochemistry</i> , 2021, 126, 104864.	3.0	12
33	Solubility of plutonium in MgCl ₂ and CaCl ₂ solutions in contact with metallic iron. <i>Radiochimica Acta</i> , 2009, 97, 187-192.	1.2	11
34	Solubility and hydrolysis of U(VI) in 0.5 mol/kg NaCl solutions at T=22 and 80°C. <i>Journal of Chemical Thermodynamics</i> , 2018, 120, 45-53.	2.0	11
35	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
36	Uptake of niobium by cement systems relevant for nuclear waste disposal: Impact of ISA and chloride. <i>Cement and Concrete Research</i> , 2022, 153, 106690.	11.0	10

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37	Solubility of U(VI) in chloride solutions. II. The stable oxides/hydroxides in alkaline KCl solutions: Thermodynamic description and relevance in cementitious systems. <i>Applied Geochemistry</i> , 2018, 98, 237-246.	3.0	9
38	Thermodynamic description of Be(II) solubility and hydrolysis in acidic to hyperalkaline NaCl and KCl solutions. <i>Applied Geochemistry</i> , 2020, 117, 104601.	3.0	9
39	A Combined Study of Tc Redox Speciation in Complex Aqueous Systems: Wet-Chemistry, Tc K-L ₃ -Edge X-ray Absorption Fine Structure, and Ab Initio Calculations. <i>Inorganic Chemistry</i> , 2021, 60, 12285-12298.	4.0	6
40	Uptake of chloride and iso-saccharinic acid by cement: Sorption and molecular dynamics studies on HCP (CEM I) and C-S-H phases. <i>Cement and Concrete Research</i> , 2022, 157, 106831.	11.0	6
41	Solubility and spectroscopic study of An ^{III} /Ln ^{III} in dilute to concentrated Na ⁺ Mg ²⁺ Ca ²⁺ Cl ⁻ NO ₃ ⁻ solutions. <i>Pure and Applied Chemistry</i> , 2015, 87, 487-502.	1.9	5
42	Solubility of U(VI) in chloride solutions. III. The stable oxides/hydroxides in MgCl ₂ systems: Pitzer activity model for the system UO ₂ +Na ⁺ K ⁺ Mg ²⁺ H ⁺ OH ⁻ Cl ⁻ H ₂ O(l). <i>Journal of Chemical Thermodynamics</i> , 2019, 131, 375-386.		5
43	Uptake of Be(II) by Cement in Degradation Stage I: Wet-Chemistry and Molecular Dynamics Studies. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 1149.	2.0	5
44	Thermodynamic description of U(VI) solubility and hydrolysis in dilute to concentrated NaCl solutions at $T = 25, 55$ and 80 °C. <i>Radiochimica Acta</i> , 2019, 107, 663-678.	1.2	4
45	Impact of selected cement additives and model compounds on the solubility of Nd(III), Th(IV) and U(VI): screening experiments in alkaline NaCl, MgCl ₂ and CaCl ₂ solutions at elevated ionic strength. <i>Radiochimica Acta</i> , 2021, 109, 431-443.	1.2	4
46	Impact of Ca(II) on the aqueous speciation, redox behavior, and environmental mobility of Pu(IV) in the presence of EDTA. <i>Science of the Total Environment</i> , 2021, 783, 146993.	8.0	4
47	Neptunium(VI) solubility in alkaline CaCl ₂ solutions: evidence for the formation of calcium neptunates Ca _x NpO _{3+x} (s,hyd). <i>Monatshefte für Chemie</i> , 2018, 149, 237-252.	1.8	3
48	Solubility of Ca(II), Ni(II), Nd(III) and Pu(IV) in the presence of proxy ligands for the degradation of polyacrylonitrile in cementitious systems. <i>Dalton Transactions</i> , 2022, 51, 9432-9444.	3.3	3
49	Thorium(IV) and neptunium(V) uptake from carbonate containing aqueous solutions by HDTMA-modified natural zeolites. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017, 311, 1665-1671.	1.5	2
50	Preface / Special Issue "Geochemistry Research for Cement-based Materials in Nuclear Waste Disposal Applications". <i>Applied Geochemistry</i> , 2020, 123, 104701.	3.0	2
51	Pu(III) and Cm(III) in the presence of EDTA: aqueous speciation, redox behavior, and the impact of Ca(II). <i>RSC Advances</i> , 2022, 12, 9478-9493.	3.6	2
52	Impact of sulfate on the solubility of Tc(IV) in acidic to hyperalkaline aqueous reducing systems. <i>Radiochimica Acta</i> , 2021, 109, 681-697.	1.2	1
53	Crystal Structure and Stability in Aqueous Solutions of Na _{0.5} [NpO ₂ (OH) _{1.5} ·0.5H ₂ O] and Na[NpO ₂ (OH) ₂]. <i>Journal of the American Chemical Society</i> , 2022, 144, 9217-9221.	13.7	1
54	16th International Symposium on Solubility Phenomena and Related Equilibrium Processes (ISSP-16). <i>Pure and Applied Chemistry</i> , 2015, 87, 443-443.	1.9	0