Joerg Rothe

List of Publications by Year
in descending order

42	1,160	471509 17	395702 33
papers	citations	h-index	g-index

42	42	42	1124
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The role of the 5f valence orbitals of early actinides in chemical bonding. Nature Communications, 2017, 8, 16053.	12.8	146
2	Uranium Redox Transformations after U(VI) Coprecipitation with Magnetite Nanoparticles. Environmental Science & Technology, 2017, 51, 2217-2225.	10.0	112
3	XAFS and LIBD Investigation of the Formation and Structure of Colloidal Pu(IV) Hydrolysis Products. Inorganic Chemistry, 2004, 43, 4708-4718.	4.0	110
4	The INE-Beamline for actinide science at ANKA. Review of Scientific Instruments, 2012, 83, 043105.	1.3	100
5	CAT-ACTâ€"A new highly versatile x-ray spectroscopy beamline for catalysis and radionuclide science at the KIT synchrotron light facility ANKA. Review of Scientific Instruments, 2017, 88, 113113.	1.3	87
6	New insights in the formation processes of Pu(IV) colloids. Radiochimica Acta, 2009, 97, 199-207.	1.2	63
7	X-ray absorption spectroscopic study of trivalent and tetravalent actinides in solution at varying pH values. Radiochimica Acta, 2009, 97, 701-708.	1.2	58
8	Neptunium redox speciation at the illite surface. Geochimica Et Cosmochimica Acta, 2015, 152, 39-51.	3.9	35
9	Actinide and lanthanide speciation with high-energy resolution X-ray techniques. Journal of Physics: Conference Series, 2013, 430, 012117.	0.4	32
10	Extreme multi-valence states in mixed actinide oxides. Communications Chemistry, 2019, 2, .	4.5	32
11	Spectroscopic investigations of Np(V/VI) redox speciation in hyperalkaline TMA-(OH, Cl) solutions. Radiochimica Acta, 2012, 100, 759-770.	1.2	27
12	Unprecedented Inversion of Selectivity and Extraordinary Difference in the Complexation of Trivalent fâ€...Elements by Diastereomers of a Methylated Diglycolamide. Chemistry - A European Journal, 2019, 25, 5507-5513.	3.3	27
13	Np(V) solubility, speciation and solid phase formation in alkaline CaCl₂ solutions. Part I: Experimental results. Radiochimica Acta, 2016, 104, 355-379.	1.2	26
14	Exploring the electronic structure and speciation of aqueous and colloidal Pu with high energy resolution XANES and computations. Chemical Communications, 2018, 54, 12824-12827.	4.1	26
15	Redox behavior and solubility of plutonium under alkaline, reducing conditions. Radiochimica Acta, 2018, 106, 259-279.	1.2	21
16	Scanning transmission X-ray and laser scanning luminescence microscopy of the carboxyl group and Eu(III) distribution in humic acid aggregates. Journal of Electron Spectroscopy and Related Phenomena, 2006, 153, 71-74.	1.7	20
17	The INE-Beamline for actinide research at ANKA. Radiochimica Acta, 2006, 94, .	1.2	19
18	Fifteen Years of Radionuclide Research at the KIT Synchrotron Source in the Context of the Nuclear Waste Disposal Safety Case. Geosciences (Switzerland), 2019, 9, 91.	2.2	19

#	Article	IF	Citations
19	Thermodynamic description of the plutonium â€“ Î±-d-isosaccharinic acid system I: Solubility, complexation and redox behavior. Applied Geochemistry, 2018, 98, 247-264.	3.0	18
20	Competitive Reaction of Neptunium(V) and Uranium(VI) in Potassiumâ€“Sodium Carbonate-Rich Aqueous Media: Speciation Study with a Focus on High-Resolution X-ray Spectroscopy. Inorganic Chemistry, 2020, 59, 8-22.	4.0	17
21	Pu Coexists in Three Oxidation States in a Borosilicate Glass: Implications for Pu Solubility. Inorganic Chemistry, 2017, 56, 13982-13990.	4.0	16
22	Thermodynamic description of the plutonium â€“ Î±â€“dâ€“isosaccharinic acid system ii: Formation of quaternary Ca(II)â€“Pu(IV)â€“OHâ€“ISA complexes. Applied Geochemistry, 2018, 98, 351-366.	3.0	16
23	Plutonium retention in the isosaccharinate â€“ cement system. Applied Geochemistry, 2021, 126, 104862.	3.0	15
24	Thermodynamic description of Tc(<scp>iv</scp>) solubility and carbonate complexation in alkaline NaHCO₃â€“Na₂CO₃â€“NaCl systems. Dalton Transactions, 2018, 47, 4377-4392.	3.3	12
25	Sorption of Eu(III) on Eibenstock granite studied by ÂµTRLFS: A novel spatially-resolved luminescence-spectroscopic technique. Scientific Reports, 2019, 9, 6287.	3.3	12
26	Relativistic MulticonfigurationalAb InitioCalculation of Uranyl 3d4f Resonant Inelastic X-ray Scattering. Inorganic Chemistry, 2021, 60, 18764-18776.	4.0	11
27	Fe(II) Induced Reduction of Incorporated U(VI) to U(V) in Goethite. Environmental Science & Technology, 2021, 55, 16445-16454.	10.0	11
28	Np(v) complexation with propionate in 0.5â€“4 M NaCl solutions at 20â€“85 Â°C. Dalton Transactions, 2015, 44, 3837-3844.	3.3	8
29	Aqueous U(VI) interaction with magnetite nanoparticles in a mixed flow reactor system: HR-XANES study. Journal of Physics: Conference Series, 2016, 712, 012086.	0.4	8
30	Neptunium sorption and redox speciation at the illite surface under highly saline conditions. Geochimica Et Cosmochimica Acta, 2017, 215, 421-431.	3.9	8
31	Signatures of technetium oxidation states: a new approach. Chemical Communications, 2020, 56, 9608-9611.	4.1	8
32	Thermodynamics and Structure of Neptunium(V) Complexes with Formate. Spectroscopic and Theoretical Study. Inorganic Chemistry, 2020, 59, 6067-6077.	4.0	6
33	A Combined Study of Tc Redox Speciation in Complex Aqueous Systems: Wet-Chemistry, Tc K-/L₃-Edge X-ray Absorption Fine Structure, and Ab Initio Calculations. Inorganic Chemistry, 2021, 60, 12285-12298.	4.0	6
34	Interdisciplinary Round-Robin Test on Molecular Spectroscopy of the U(VI) Acetate System. ACS Omega, 2019, 4, 8167-8177.	3.5	5
35	Implementation of cryogenic tender X-ray HR-XANES spectroscopy at the ACT station of the CAT-ACT beamline at the KIT Light Source. Journal of Synchrotron Radiation, 2022, 29, 80-88.	2.4	5
36	Speciation, thermodynamics and structure of Np(<scp>v</scp>) oxalate complexes in aqueous solution. Dalton Transactions, 2020, 49, 13359-13371.	3.3	4

#	Article	IF	Citations
37	Impact of Ca(II) on the aqueous speciation, redox behavior, and environmental mobility of Pu(IV) in the presence of EDTA. Science of the Total Environment, 2021, 783, 146993.	8.0	4
38	Paving the way for examination of coupled redox/solid-liquid interface reactions: 1Âppm Np adsorbed on clay studied by Np M5-edge HR-XANES spectroscopy. Analytica Chimica Acta, 2022, 1202, 339636.	5.4	3
39	Two-dimensional Wide-Angle X-ray Scattering on a Cm-doped borosilicate glass in a beryllium container. Journal of Synchrotron Radiation, 2021, 28, 214-223.	2.4	2
40	Effect of manganese on the speciation of neptunium(V) on manganese doped magnetites. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 635, 128105.	4.7	2
41	Pu(<scp>iii</scp>) and Cm(<scp>iii</scp>) in the presence of EDTA: aqueous speciation, redox behavior, and the impact of Ca(<scp>ii</scp>). RSC Advances, 2022, 12, 9478-9493.	3.6	2
42	Complexation of Np(V) with the Dicarboxylates, Malonate, and Succinate: Complex Stoichiometry, Thermodynamic Data, and Structural Information. Inorganic Chemistry, 2021, , .	4.0	1