Dirk Bosbach

List of Publications by Year
in descending order

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202 papers	6,360 citations	61984 43 h-index	91884 69 g-index
205 all docs	205 docs citations	205 times ranked	5012 citing authors

#	Article	IF	Citations
1	Arsenic(III) Oxidation by Birnessite and Precipitation of Manganese(II) Arsenate. Environmental Science & Technology, 2002, 36, 493-500.	10.0	294
2	Structure and reactivity of the calciteâ€“water interface. Journal of Colloid and Interface Science, 2011, 354, 843-857.	9.4	249
3	The dissolution of apatite in the presence of aqueous metal cations at pH 2â€“7. Chemical Geology, 1998, 151, 215-233.	3.3	243
4	Molecular-scale mechanisms of crystal growth in barite. Nature, 1998, 395, 483-486.	27.8	211
5	Chlorite dissolution in the acid ph-range: a combined microscopic and macroscopic approach. Geochimica Et Cosmochimica Acta, 2003, 67, 1451-1461.	3.9	188
6	Probing disorder in isometric pyrochlore and related complex oxides. Nature Materials, 2016, 15, 507-511.	27.5	164
7	Nanomorphology of montmorillonite particles: Estimation of the clay edge sorption site density by low-pressure gas adsorption and AFM observations. American Mineralogist, 2003, 88, 1989-1995.	1.9	150
8	In situ atomic force microscopy study of hectorite and nontronite dissolution: Implications for phyllosilicate edge surface structures and dissolution mechanisms. American Mineralogist, 2001, 86, 411-423.	1.9	136
9	In situ investigation of growth and dissolution on the (010) surface of gypsum by Scanning Force Microscopy. Geochimica Et Cosmochimica Acta, 1994, 58, 843-849.	3.9	113
10	Mineral precipitation and dissolution in aqueous solution: in-situ microscopic observations on barite (001) with atomic force microscopy. Chemical Geology, 1998, 151, 143-160.	3.3	111
11	Natural attenuation of TCE, As, Hg linked to the heterogeneous oxidation of Fe(II): an AFM study. Chemical Geology, 2002, 190, 303-319.	3.3	95
12	Do clay mineral dissolution rates reach steady state?. Geochimica Et Cosmochimica Acta, 2005, 69, 1997-2006.	3.9	90
13	Reactivity of the calciteâ€“water-interface, from molecular scale processes to geochemical engineering. Applied Geochemistry, 2014, 45, 158-190.	3.0	90
14	Barite scale formation and dissolution at high ionic strength studied with atomic force microscopy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 191, 201-214.	4.7	89
15	The dissolution of hectorite: In-situ, real-time observations using atomic force microscopy. American Mineralogist, 2000, 85, 1209-1216.	1.9	87
16	Laboratory-Scale Counter-Current Centrifugal Contactor Demonstration of an Innovative-SANEX Process Using a Water Soluble BTP. Solvent Extraction and Ion Exchange, 2015, 33, 91-108.	2.0	87
17	Gypsum growth in the presence of growth inhibitors: a scanning force microscopy study. Chemical Geology, 1996, 132, 227-236.	3.3	79
18	Towards the establishment of a reliable proxy for the reactive surface area of smectite. Geochimica Et Cosmochimica Acta, 2005, 69, 2581-2591.	3.9	78

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19	Defect formation energies in A 2 B 2 O 7 pyrochlores. Scripta Materialia, 2015, 107, 18-21.	5.2	77
20	Thermodynamics of formation of coffinite, USiO ₄. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6551-6555.	7.1	72
21	Structure of Barite (001)â^' and (210)â^'Water Interfaces. Journal of Physical Chemistry B, 2001, 105, 8112-8119.	2.6	71
22	Monazite as a suitable actinide waste form. Zeitschrift Fur Kristallographie - Crystalline Materials, 2013, 228, 113-123.	0.8	68
23	Energetics of metastudtite and implications for nuclear waste alteration. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17737-17742.	7.1	61
24	Replacement of barite by a (Ba,Ra)SO4 solid solution at close-to-equilibrium conditions: A combined experimental and theoretical study. Geochimica Et Cosmochimica Acta, 2015, 155, 1-15.	3.9	60
25	Raman and infrared spectroscopy of monazite-type ceramics used for nuclear waste conditioning. Progress in Nuclear Energy, 2014, 72, 149-155.	2.9	59
26	Microtopography of the barite (001) face during growth:. Journal of Crystal Growth, 1998, 187, 119-125.	1.5	57
27	Development and demonstration of innovative partitioning processes (i-SANEX and 1-cycle SANEX) for actinide partitioning. Progress in Nuclear Energy, 2014, 72, 107-114.	2.9	57
28	Neptunium(V) Coprecipitation with Calcite. Environmental Science & Technology, 2008, 42, 471-476.	10.0	56
29	Modified Diglycolamides for the An(III) + Ln(III) Co-separation: Evaluation by Solvent Extraction and Time-Resolved Laser Fluorescence Spectroscopy. Solvent Extraction and Ion Exchange, 2014, 32, 119-137.	2.0	56
30	Site-selective time-resolved laser fluorescence spectroscopy of Eu3+ in calcite. Journal of Colloid and Interface Science, 2008, 321, 323-331.	9.4	55
31	Gypsum growth in the presence of background electrolytes studied by Scanning Force Microscopy. Geochimica Et Cosmochimica Acta, 1996, 60, 3295-3304.	3.9	54
32	Methods for Performing Atomic Force Microscopy Imaging of Clay Minerals in Aqueous Solutions. Clays and Clay Minerals, 1999, 47, 573-581.	1.3	54
33	Kink Dynamics and Step Growth on Barium Sulfate (001):Â A Hydrothermal Scanning Probe Microscopy Study. Journal of Physical Chemistry B, 2000, 104, 6978-6982.	2.6	53
34	Performance of DFT+U method for prediction of structural and thermodynamic parameters of monaziteâ€type ceramics. Journal of Computational Chemistry, 2014, 35, 1339-1346.	3.3	53
35	Ab initio calculation of excess properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0020.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>La</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'<mml:mo stretchy="false">(</mml:mo><mml:mi mathvariant="italic">Ln</mml:mi><mml:mo>,</mml:mo><mml:mi> Tj ETQq1 1 0.784314 rgBT /Ov	2.3	51
36	New insights into phosphate based materials for the immobilisation of actinides. Radiochimica Acta, 2017, 105, 961-984.	1.2	51

#	Article	IF	Citations
37	An atomic force microscopy and molecular simulations study of the inhibition of barite growth by phosphonates. Surface Science, 2004, 553, 61-74.	1.9	48
38	Solidâ€“aqueous equilibrium in the BaSO4â€“RaSO4â€“H2O system: First-principles calculations and a thermodynamic assessment. Geochimica Et Cosmochimica Acta, 2013, 122, 398-417.	3.9	48
39	Direct Measurement of Surface Dissolution Rates in Potential Nuclear Waste Forms: The Example of Pyrochlore. ACS Applied Materials & Interfaces, 2015, 7, 17857-17865.	8.0	48
40	Determination of the Solubility of Rhabdophanes LnPO₄Â·0.667H₂O (Ln = La to) Tj ETQq0 0 0 rgBT /Overlock	2.0	47
41	Formation of secondary Fe-oxyhydroxide phases during the dissolution of chlorite â€“ effects on uranium sorption. Applied Geochemistry, 2004, 19, 1403-1412.	3.0	46
42	A thermodynamic adsorption/entrapment model for selenium(IV) coprecipitation with calcite. Geochimica Et Cosmochimica Acta, 2014, 134, 16-38.	3.9	46
43	Thermodynamics of the solid solution - Aqueous solution system (Ba,Sr,Ra)SO4 + H2O: I. The effect of strontium content on radium uptake by barite. Applied Geochemistry, 2018, 89, 59-74.	3.0	45
44	Conditioning of minor actinides in lanthanum monazite ceramics: AÂsurrogate study with Europium. Progress in Nuclear Energy, 2014, 72, 140-143.	2.9	43
45	Time-resolved monitoring of cement hydration: Influence of cellulose ethers on hydration kinetics. Nuclear Instruments & Methods in Physics Research B, 2005, 238, 102-106.	1.4	41
46	Uptake of Ra during the Recrystallization of Barite: A Microscopic and Time of Flight-Secondary Ion Mass Spectrometry Study. Environmental Science & Technology, 2014, 48, 6620-6627.	10.0	41
47	Solvent Extraction and Fluorescence Spectroscopic Investigation of the Selective Am(III) Complexation with TS-BTPhen. Solvent Extraction and Ion Exchange, 2016, 34, 126-140.	2.0	41
48	Crystal growth and dissolution kinetics of gypsum and fluorite: An in situ Scanning Force Microscope study. European Journal of Mineralogy, 1995, 7, 267-276.	1.3	40
49	Bassanite (CaSO4Â·0.5H2O) dissolution and gypsum (CaSO4Â·2H2O) precipitation in the presence of cellulose ethers. Journal of Crystal Growth, 2001, 233, 837-845.	1.5	39
50	Thermochemistry of La1â^'xLnxPO4-monazites (Ln= Gd, Eu). Journal of Chemical Thermodynamics, 2017, 105, 396-403.	2.0	39
51	Selective attachment of monovalent background electrolyte ions and growth inhibitors to polar steps on sulfates as studied by molecular simulations and AFM observations. Molecular Simulation, 2002, 28, 607-632.	2.0	37
52	Synthesis of Coffinite, USiO₄, and Structural Investigations of U_xTh_(1â€“x)SiO₄ Solid Solutions. Environmental Science & Technology, 2014, 48, 854-860.	10.0	36
53	Incorporation of trivalent actinides into calcite: A time resolved laser fluorescence spectroscopy (TRLFS) study. Geochimica Et Cosmochimica Acta, 2008, 72, 464-474.	3.9	34
54	Studies on thermal and mechanical properties of monazite-type ceramics for the conditioning of minor actinides. Progress in Nuclear Energy, 2014, 72, 144-148.	2.9	34

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55	Heat capacities of lanthanide and actinide monazite-type ceramics. Journal of Nuclear Materials, 2015, 464, 147-154.	2.7	34
56	Trivalent actinide coprecipitation with powellite (CaMoO4): Secondary solid solution formation during HLW borosilicate-glass dissolution. Radiochimica Acta, 2004, 92, 639-643.	1.2	33
57	Reactions of the feldspar surface with metal ions: Sorption of Pb(II), U(VI) and Np(V), and surface analytical studies of reaction with Pb(II) and U(VI). Geochimica Et Cosmochimica Acta, 2008, 72, 288-297.	3.9	33
58	Nano-structural features of barite crystals observed by electron microscopy and atom probe tomography. Chemical Geology, 2016, 424, 51-59.	3.3	33
59	Zr-containing layered double hydroxides: Synthesis, characterization, and evaluation of thermodynamic properties. Applied Clay Science, 2018, 151, 54-65.	5.2	33
60	High Structural Complexity of Potassium Uranyl Borates Derived from High-Temperature/High-Pressure Reactions. Inorganic Chemistry, 2013, 52, 5110-5118.	4.0	32
61	Composition dependent order-disorder transition in Nd Zr1â^'O2â^'0.5 pyrochlores: A combined structural, calorimetric and ab initio modeling study. Acta Materialia, 2017, 125, 166-176.	7.9	30
62	Sorption of Cm(III) onto different Feldspar surfaces: a TRLFS study. Radiochimica Acta, 2006, 94, 243-248.	1.2	29
63	Thermodynamics of the solid solution - Aqueous solution system (Ba,Sr,Ra)SO4 + H2O: II. Radium retention in barite-type minerals at elevated temperatures. Applied Geochemistry, 2018, 93, 190-208.	3.0	29
64	A microfluidic experiment and pore scale modelling diagnostics for assessing mineral precipitation and dissolution in confined spaces. Chemical Geology, 2019, 528, 119264.	3.3	29
65	Microfluidic flow-through reactor and 3D Raman imaging for in situ assessment of mineral reactivity in porous and fractured porous media. Lab on A Chip, 2020, 20, 2562-2571.	6.0	29
66	Neptunium(V) adsorption to calcite. Journal of Contaminant Hydrology, 2008, 102, 246-252.	3.3	28
67	Chemical and Structural Evolution in the Thâ€“SeO₃^{2â€“}/SeO₄^{2â€“} System: from Simple Selenites to Cluster-Based Selenate Compounds. Inorganic Chemistry, 2015, 54, 3022-3030.	4.0	27
68	Porous Uranyl Borophosphates with Unique Three-Dimensional Open-Framework Structures. Inorganic Chemistry, 2017, 56, 9311-9320.	4.0	27
69	Direct Selective Extraction of Trivalent Americium from PUREX Raffinate Using a Combination of CyMe₄BTPhen and TEDGAâ€”A Feasibility Study. Solvent Extraction and Ion Exchange, 2017, 35, 161-173.	2.0	27
70	Retention of 226Ra by barite: The role of internal porosity. Chemical Geology, 2017, 466, 722-732.	3.3	26
71	Effects of solution supersaturation on barite precipitation in porous media and consequences on permeability: Experiments and modelling. Geochimica Et Cosmochimica Acta, 2020, 270, 43-60.	3.9	26
72	Eu(III) coprecipitation with the trioctahedral clay mineral, hectorite. Clays and Clay Minerals, 2006, 54, 45-53.	1.3	25

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73	TRLFS of Eu3+ and Cm3+ doped La2Zr2O7: A comparison of defect fluorite to pyrochlore structures. Journal of Nuclear Materials, 2013, 433, 479-485.	2.7	25
74	Dissolution of ZrO2 based pyrochlores in the acid pH range: A macroscopic and electron microscopy study. Applied Geochemistry, 2014, 49, 31-41.	3.0	25
75	An Advanced TALSPEAK Concept for Separating Minor Actinides. Part 2. Flowsheet Test with Actinide-spiked Simulant. Solvent Extraction and Ion Exchange, 2017, 35, 396-407.	2.0	25
76	Effect of powder morphology on sintering kinetics, microstructure and mechanical properties of monazite ceramics. Journal of the European Ceramic Society, 2018, 38, 227-234.	5.7	25
77	Probing structural homogeneity of La 1-x Gd x PO 4 monazite-type solid solutions by combined spectroscopic and computational studies. Journal of Nuclear Materials, 2017, 486, 148-157.	2.7	24
78	Structural investigations of (La,Pu)PO4 monazite solid solutions: XRD and XAFS study. Journal of Nuclear Materials, 2017, 493, 404-411.	2.7	24
79	The solid solutionâ€“aqueous solution system (Sr,Ba,Ra)SO4â€¯+â€¯H2O: A combined experimental and theoretical study of phase equilibria at Sr-rich compositions. Chemical Geology, 2018, 497, 1-17.	3.3	23
80	Sites of Lu(III) Sorbed to and Coprecipitated with Hectorite. Environmental Science & Technology, 2009, 43, 8807-8812.	10.0	22
81	High-Temperature Phase Transitions, Spectroscopic Properties, and Dimensionality Reduction in Rubidium Thorium Molybdate Family. Inorganic Chemistry, 2014, 53, 3088-3098.	4.0	22
82	Nonstoichiometry in Strontium Uranium Oxide: Understanding the Rhombohedralâ€“Orthorhombic Transition in SrUO₄. Inorganic Chemistry, 2016, 55, 9329-9334.	4.0	22
83	Characterization of uranium neodymium oxide microspheres synthesized by internal gelation. Progress in Nuclear Energy, 2014, 72, 17-21.	2.9	21
84	From Two-Dimensional Layers to Three-Dimensional Frameworks: Expanding the Structural Diversity of Uranyl Compounds by Cationâ€“Cation Interactions. Crystal Growth and Design, 2015, 15, 3775-3784.	3.0	21
85	Structural incorporation of Cm(III) in trioctahedral smectite hectorite: A time-resolved laser fluorescence spectroscopy (TRLFS) study. Geochimica Et Cosmochimica Acta, 2007, 71, 145-154.	3.9	20
86	Durability of potential plutonium wasteforms under repository conditions. Mineralogical Magazine, 2012, 76, 2911-2918.	1.4	20
87	Influence of Synthetic Conditions on Chemistry and Structural Properties of Alkaline Earth Uranyl Borates. Crystal Growth and Design, 2016, 16, 5923-5931.	3.0	20
88	The rational design, synthesis and demonstration of the recognition and binding of a diaza-dioxa-12-crown-4 diphosphonate macrocycle to all crystal growth faces of barium sulfate. Perkin Transactions II RSC, 2002, , 1238-1245.	1.1	19
89	Subsolidus phase relations in Ca2Mo2O8â€“NaEuMo2O8-powellite solid solution predicted from static lattice energy calculations and Monte Carlo simulations. Physical Chemistry Chemical Physics, 2008, 10, 3509.	2.8	19
90	Uptake of 226Ra in cementitious systems: A complementary solution chemistry and atomistic simulation study. Applied Geochemistry, 2018, 96, 204-216.	3.0	19

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91	Magmatic and metamorphic evolution of metagabbros in the MÃ¼nchberg Massif, N.E. Bavaria. Contributions To Mineralogy and Petrology, 1991, 107, 112-123.	3.1	18
92	Selenide Retention by Mackinawite. Environmental Science & Technology, 2012, 46, 10004-10011.	10.0	18
93	Highly Distorted Uranyl Ion Coordination and One/Two-Dimensional Structural Relationship in the Ba2[UO2(TO4)2] (T = P, As) System: An Experimental and Computational Study. Inorganic Chemistry, 2014, 53, 7650-7660.	4.0	18
94	Simulation of ceramic materials relevant for nuclear waste management: Case of La1â^'Eu PO4 solid solution. Nuclear Instruments & Methods in Physics Research B, 2017, 393, 68-72.	1.4	18
95	Structural characterization of (Sm,Tb)PO4 solid solutions and pressure-induced phase transitions. Journal of the European Ceramic Society, 2018, 38, 4070-4081.	5.7	18
96	Influence of temperature on the dissolution kinetics of synthetic LaPO4-monazite in acidic media between 50 and 130â€Â°C. Journal of Nuclear Materials, 2018, 509, 488-495.	2.7	18
97	An AFM study on ferroelastic domains in lead phosphate,. Journal of Physics Condensed Matter, 1997, 9, 8397-8405.	1.8	17
98	Ferroelastic orientation states and domain walls in lead phosphate type crystals. Mineralogical Magazine, 2000, 64, 233-239.	1.4	17
99	Characterization of powellite-based solid solutions by site-selective time resolved laser fluorescence spectroscopy. Dalton Transactions, 2013, 42, 8387.	3.3	17
100	Morphotropy and Temperature-Driven Polymorphism in A2Th(AsO4)2 (A = Li, Na, K, Rb, Cs) Series. Inorganic Chemistry, 2014, 53, 11231-11241.	4.0	17
101	Unexpected Structural Complexity in Cesium Thorium Molybdates. Crystal Growth and Design, 2014, 14, 2677-2684.	3.0	17
102	The effect of the synthesis route of monazite precursors on the microstructure of sintered pellets. Progress in Nuclear Energy, 2016, 92, 298-305.	2.9	17
103	Hydrothermal Synthesis, Study, and Classification of Microporous Uranium Silicates and Germanates. Inorganic Chemistry, 2018, 57, 4745-4756.	4.0	17
104	Insights into the fabrication and structure of plutonium pyrochlores. Journal of Materials Chemistry A, 2020, 8, 2387-2403.	10.3	17
105	Microtopography of high-calcium fly ash particle surfaces. Advances in Cement Research, 1998, 10, 17-23.	1.6	16
106	High level nuclear waste glass corrosion in synthetic clay pore solution and retention of actinides in secondary phases. Journal of Nuclear Materials, 2009, 385, 456-460.	2.7	16
107	Preparation and Characterization of Fe-, Co-, and Ni-containing Mg-Al-Layered Double Hydroxides. Clays and Clay Minerals, 2013, 61, 424-439.	1.3	16
108	Retention and diffusion of radioactive and toxic species on cementitious systems: Main outcome of the CEBAMA project. Applied Geochemistry, 2020, 112, 104480.	3.0	16

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109	Combination of MRI and SEM to Assess Changes in the Chemical Properties and Permeability of Porous Media due to Barite Precipitation. Minerals (Basel, Switzerland), 2020, 10, 226.	2.0	16
110	Retention of technetium-99 by grout and backfill cements: Implications for the safe disposal of radioactive waste. Applied Geochemistry, 2020, 116, 104580.	3.0	16
111	Using in Vitro Iron Deposition on Asbestos To Model Asbestos Bodies Formed in Human Lung. Chemical Research in Toxicology, 2000, 13, 913-921.	3.3	15
112	Th(As^{III}₄As^V₄O₁₈): a Mixed-Valent Oxoarsenic(III)/arsenic(V) Actinide Compound Obtained under Extreme Conditions. Inorganic Chemistry, 2014, 53, 8194-8196.	4.0	15
113	Gamma Radiolysis of the Highly Selective Ligands CyMe4BTBP and CyMe4BTPhen: Qualitative and Quantitative Investigation of Radiolysis Products. Procedia Chemistry, 2016, 21, 32-37.	0.7	15
114	Continuum-based DFN-consistent numerical framework for the simulation of oxygen infiltration into fractured crystalline rocks. Journal of Contaminant Hydrology, 2017, 200, 60-69.	3.3	15
115	Divergent Structural Chemistry of Uranyl Borates Obtained from Solid State and Hydrothermal Conditions. Crystal Growth and Design, 2017, 17, 5898-5907.	3.0	15
116	Heat capacities of xenotime-type ceramics: An accurate ab initio prediction. Journal of Nuclear Materials, 2017, 494, 172-181.	2.7	15
117	Synthesis and Study of the First Zeolitic Uranium Borate. Crystal Growth and Design, 2018, 18, 498-505.	3.0	15
118	Chromium Doped UO2-Based Ceramics: Synthesis and Characterization of Model Materials for Modern Nuclear Fuels. Materials, 2021, 14, 6160.	2.9	15
119	Formation of a ternary neptunyl(V) biscarbonato inner-sphere sorption complex inhibits calcite growth rate. Journal of Contaminant Hydrology, 2011, 124, 50-56.	3.3	14
120	Site-selective time resolved laser fluorescence spectroscopy of Eu and Cm doped LaPO₄. Radiochimica Acta, 2012, 100, 189-195.	1.2	14
121	High-Pressure Phase Transition of Coffinite, USiO₄. Journal of Physical Chemistry C, 2014, 118, 25141-25149.	3.1	14
122	Implications of Grain-Scale Mineralogical Heterogeneity for Radionuclide Transport in Fractured Media. Transport in Porous Media, 2017, 116, 73-90.	2.6	14
123	Rare-Earth Orthophosphates From Atomistic Simulations. Frontiers in Chemistry, 2019, 7, 197.	3.6	14
124	Adsorption of barium and radium on montmorillonite: A comparative experimental and modelling study. Applied Geochemistry, 2021, 135, 105117.	3.0	14
125	Thermodynamic properties and crystal growth behavior of the hashemite (BaSO4â€“BaCrO4) solid solution. Chemical Geology, 2006, 225, 244-255.	3.3	13
126	Effects of Te(IV) Oxo-Anion Incorporation into Thorium Molybdates and Tungstates. Inorganic Chemistry, 2015, 54, 5981-5990.	4.0	13

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127	Microtomography-based Inter-Granular Network for the simulation of radionuclide diffusion and sorption in a granitic rock. Journal of Contaminant Hydrology, 2017, 207, 8-16.	3.3	13
128	Lowâ€temperature phase decomposition in ironâ€nickel metal of the Portales Valley meteorite. Meteoritics and Planetary Science, 2001, 36, 587-595.	1.6	12
129	Synthesis and dissolution kinetics of zirconia based ceramics. Progress in Nuclear Energy, 2014, 72, 130-133.	2.9	12
130	Dinuclear Faceâ€Sharing Biâ€octahedral Tungsten(VI) Core and Unusual Thermal Behavior in Complex Th Tungstates. Chemistry - A European Journal, 2015, 21, 7746-7754.	3.3	12
131	The Effect of Ionic Strength and Sraq upon the Uptake of Ra during the Recrystallization of Barite. Minerals (Basel, Switzerland), 2018, 8, 502.	2.0	12
132	Comparison of Uranium(VI) and Thorium(IV) Silicates Synthesized via Mixed Fluxes Techniques. Inorganic Chemistry, 2018, 57, 6734-6745.	4.0	12
133	Polarization Dependent Grazing Incidence GI XAFS Measurements of Uranyl Cation Sorption onto Mineral Surfaces. Physica Scripta, 2005, , 877.	2.5	11
134	Heterogeneous formation of ferric oxide nanoparticles on chlorite surfaces studied by x-ray absorption spectromicroscopy (STXM). Chemical Geology, 2012, 329, 42-52.	3.3	11
135	Fabrication of oxidic uranium-neodymium microspheres by internal gelation. Progress in Nuclear Energy, 2012, 57, 106-110.	2.9	11
136	Further Insight into Uranium and Thorium Metaphosphate Chemistry and the Effect of Nd³⁺ Incorporation into Uranium(IV) Metaphosphate. European Journal of Inorganic Chemistry, 2015, 2015, 1562-1568.	2.0	11
137	Rich Non-centrosymmetry in a Naâ€“Uâ€“Te Oxo-System Achieved under Extreme Conditions. Inorganic Chemistry, 2016, 55, 4626-4635.	4.0	11
138	Cation-Dependent Structural Evolution in A₂Th(T^VO₄)₂ (A = Li, Na, K, Rb, Cs; T = P and As) Series. Crystal Growth and Design, 2017, 17, 1339-1346.	3.0	11
139	Crystallization processes, compressibility, sinterability and mechanical properties of La-monazite-type ceramics. Journal of the European Ceramic Society, 2017, 37, 1681-1688.	5.7	11
140	A lab-on-a-chip approach integrating in-situ characterization and reactive transport modelling diagnostics to unravel (Ba,Sr)SO4 oscillatory zoning. Scientific Reports, 2021, 11, 23678.	3.3	11
141	Formation of secondary phases after long-term corrosion of simulated HLW glass in brine solutions at 190 Â°C. Radiochimica Acta, 2002, 90, 529-535.	1.2	10
142	TRLFS characterization of Eu(III)-doped synthetic organo-hectorite. Journal of Contaminant Hydrology, 2008, 102, 253-262.	3.3	10
143	Radionuclide release from research reactor spent fuel. Journal of Nuclear Materials, 2011, 416, 211-215.	2.7	10
144	Novel Fundamental Building Blocks and Site Dependent Isomorphism in the First Actinide Borophosphates. Inorganic Chemistry, 2013, 52, 7881-7888.	4.0	10

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145	Structural characterisation of metastable Tb- and Dy-monazites. Journal of Solid State Chemistry, 2019, 273, 45-52.	2.9	10
146	Chemical and structural investigations on uranium oxide-based microparticles as reference materials for analytical measurements. MRS Advances, 2021, 6, 125-130.	0.9	9
147	Dissolution Kinetics of International Simple Glass and Formation of Secondary Phases at Very High Surface Area to Solution Ratio in Young Cement Water. Materials, 2021, 14, 1254.	2.9	9
148	Ferroelastic domains in lead phosphate-arsenate: An afm, X-ray diffraction, tem and Raman study. Phase Transitions, 2000, 71, 243-270.	1.3	8
149	Giant Volume Change and Topological Gaps in Temperatureâ€•and Pressureâ€Induced Phase Transitions: Experimental and Computational Study of ThMo₂O₈. Chemistry - A European Journal, 2016, 22, 946-958.	3.3	8
150	Thorium Chemistry in Oxo-Tellurium System under Extreme Conditions. Inorganic Chemistry, 2017, 56, 2926-2935.	4.0	8
151	Monitoring the microstructural evolution of Nd 2 Zr 2 O 7 pyrochlore during dissolution at 90ÂÂ°C in 4ÂM HCl: Implications regarding the evaluation of the chemical durability. Journal of Nuclear Materials, 2017, 496, 97-108.	2.7	8
152	Microparticle production as reference materials for particle analysis methods in safeguards. MRS Advances, 2018, 3, 1005-1012.	0.9	8
153	Groundwater age dating in fractured rock using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si44.svg"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msup></mml:mrow></mml:math>He data. Journal of Hydrology X, 2019, 4, 100036.	1.6	8
154	Upscaling of radionuclide transport and retention in crystalline rocks exhibiting micro-scale heterogeneity of the rock matrix. Advances in Water Resources, 2020, 142, 103644.	3.8	8
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