

# Katherine Morris

## List of Publications by Year in descending order

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105  
papers

3,355  
citations

109321

35  
h-index

168389

53  
g-index

105  
all docs

105  
docs citations

105  
times ranked

2757  
citing authors

#	ARTICLE	IF	CITATIONS
1	Neptunium and Uranium Interactions with Environmentally and Industrially Relevant Iron Minerals. Minerals (Basel, Switzerland), 2022, 12, 165.	2.0	2
2	Hydroxalcalite Colloidal Stability and Interactions with Uranium(VI) at Neutral to Alkaline pH. Langmuir, 2022, 38, 2576-2589.	3.5	8
3	Sorption of Strontium to Uraninite and Uranium(IV)-Silicate Nanoparticles. Langmuir, 2022, 38, 3090-3097.	3.5	3
4	Retention of immobile Se(0) in flow-through aquifer column systems during bioreduction and oxic-remobilization. Science of the Total Environment, 2022, 834, 155332.	8.0	3
5	Impact and control of fouling in radioactive environments. Progress in Nuclear Energy, 2022, 148, 104215.	2.9	6
6	Microbial transformations of radionuclides in geodisposal systems. , 2021, , 245-265.		2
7	Biominalization of Uranium-Phosphates Fueled by Microbial Degradation of Isosaccharinic Acid (ISA). Environmental Science & Technology, 2021, 55, 4597-4606.	10.0	12
8	Microbial Degradation of Citric Acid in Low Level Radioactive Waste Disposal: Impact on Biominalization Reactions. Frontiers in Microbiology, 2021, 12, 565855.	3.5	12
9	Sulfidation of magnetite with incorporated uranium. Chemosphere, 2021, 276, 130117.	8.2	11
10	Synthesis and thermodynamics of uranium-incorporated $\hat{\pm}$ -Fe <sub>2</sub> O <sub>3</sub> nanoparticles. Journal of Nuclear Materials, 2021, 556, 153172.	2.7	6
11	Biogenic Sulfidation of U(VI) and Ferrihydrite Mediated by Sulfate-Reducing Bacteria at Elevated pH. ACS Earth and Space Chemistry, 2021, 5, 3075-3086.	2.7	4
12	Uranium (VI) Adsorbate Structures on Portlandite [Ca(OH) <sub>2</sub> ] Type Surfaces Determined by Computational Modelling and X-Ray Absorption Spectroscopy. Minerals (Basel, Switzerland), 2021, 11, 1241.	2.0	2
13	Biogeochemical Cycling of <sup>99</sup> Tc in Alkaline Sediments. Environmental Science & Technology, 2021, 55, 15862-15872.	10.0	0
14	Fe(II) Induced Reduction of Incorporated U(VI) to U(V) in Goethite. Environmental Science & Technology, 2021, 55, 16445-16454.	10.0	11
15	Formation of a U(VI)-Persulfide Complex during Environmentally Relevant Sulfidation of Iron (Oxyhydr)oxides. Environmental Science & Technology, 2020, 54, 129-136.	10.0	17
16	Controls on anthropogenic radionuclide distribution in the Sellafield-impacted Eastern Irish Sea. Science of the Total Environment, 2020, 743, 140765.	8.0	9
17	Identification of a Stable Hydrogen-Driven Microbiome in a Highly Radioactive Storage Facility on the Sellafield Site. Frontiers in Microbiology, 2020, 11, 587556.	3.5	11
18	Biominalization of Sr by the Cyanobacterium Pseudanabaena catenata Under Alkaline Conditions. Frontiers in Earth Science, 2020, 8, .	1.8	7

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19	Multiple Lines of Evidence Identify U(V) as a Key Intermediate during U(VI) Reduction by <i>Shewanella oneidensis</i> MR1. <i>Environmental Science &amp; Technology</i> , 2020, 54, 2268-2276.	10.0	44
20	Organic complexation of U(VI) in reducing soils at a natural analogue site: Implications for uranium transport. <i>Chemosphere</i> , 2020, 254, 126859.	8.2	36
21	Microbial bloom formation in a high pH spent nuclear fuel pond. <i>Science of the Total Environment</i> , 2020, 720, 137515.	8.0	24
22	Radiation Tolerance of <i>Pseudanabaena catenata</i> , a Cyanobacterium Relevant to the First Generation Magnox Storage Pond. <i>Frontiers in Microbiology</i> , 2020, 11, 515.	3.5	13
23	Silicate stabilisation of colloidal UO <sub>2</sub> produced by uranium metal corrosion. <i>Journal of Nuclear Materials</i> , 2019, 526, 151751.	2.7	10
24	Metaschoepite Dissolution in Sediment Column Systems—Implications for Uranium Speciation and Transport. <i>Environmental Science &amp; Technology</i> , 2019, 53, 9915-9925.	10.0	14
25	Plutonium(IV) Sorption during Ferrihydrite Nanoparticle Formation. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 2437-2442.	2.7	15
26	Bioremediation of strontium and technetium contaminated groundwater using glycerol phosphate. <i>Chemical Geology</i> , 2019, 509, 213-222.	3.3	22
27	Neptunium Reactivity During Co-Precipitation and Oxidation of Fe(II)/Fe(III) (Oxyhydr)oxides. <i>Geosciences (Switzerland)</i> , 2019, 9, 27.	2.2	10
28	Neptunium(V) and Uranium(VI) Reactions at the Magnetite (111) Surface. <i>Geosciences (Switzerland)</i> , 2019, 9, 81.	2.2	4
29	U(VI) sorption during ferrihydrite formation: Underpinning radioactive effluent treatment. <i>Journal of Hazardous Materials</i> , 2019, 366, 98-104.	12.4	26
30	Positron emission tomography to visualise in-situ microbial metabolism in natural sediments. <i>Applied Radiation and Isotopes</i> , 2019, 144, 104-110.	1.5	7
31	The impact of iron nanoparticles on technetium-contaminated groundwater and sediment microbial communities. <i>Journal of Hazardous Materials</i> , 2019, 364, 134-142.	12.4	21
32	Iron Vacancies Accommodate Uranyl Incorporation into Hematite. <i>Environmental Science &amp; Technology</i> , 2018, 52, 6282-6290.	10.0	44
33	Np(V) sorption and solubility in high pH calcite systems. <i>Chemical Geology</i> , 2018, 493, 396-404.	3.3	4
34	A Novel Adaptation Mechanism Underpinning Algal Colonization of a Nuclear Fuel Storage Pond. <i>MBio</i> , 2018, 9, .	4.1	25
35	Stability, Composition, and Core-Shell Particle Structure of Uranium(IV)-Silicate Colloids. <i>Environmental Science &amp; Technology</i> , 2018, 52, 9118-9127.	10.0	21
36	Long-Term Immobilization of Technetium via Bioremediation with Slow-Release Substrates. <i>Environmental Science &amp; Technology</i> , 2017, 51, 1595-1604.	10.0	16

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37	Quantifying Technetium and Strontium Bioremediation Potential in Flowing Sediment Columns. <i>Environmental Science &amp; Technology</i> , 2017, 51, 12104-12113.	10.0	8
38	Uranium(V) Incorporation Mechanisms and Stability in Fe(II)/Fe(III) (oxyhydr)Oxides. <i>Environmental Science and Technology Letters</i> , 2017, 4, 421-426.	8.7	81
39	Impacts of Repeated Redox Cycling on Technetium Mobility in the Environment. <i>Environmental Science &amp; Technology</i> , 2017, 51, 14301-14310.	10.0	21
40	Ferrihydrite Formation: The Role of Fe <sub>13</sub> Keggin Clusters. <i>Environmental Science &amp; Technology</i> , 2016, 50, 9333-9342.	10.0	92
41	Characterising legacy spent nuclear fuel pond materials using microfocus X-ray absorption spectroscopy. <i>Journal of Hazardous Materials</i> , 2016, 317, 97-107.	12.4	12
42	Influence of riboflavin on the reduction of radionuclides by <i>Shewanella oneidensis</i> MR-1. <i>Dalton Transactions</i> , 2016, 45, 5030-5037.	3.3	26
43	Retention of <sup>99m</sup> Tc at Ultra-trace Levels in Flowing Column Experiments – Insights into Bioreduction and Biomineralization for Remediation at Nuclear Facilities. <i>Geomicrobiology Journal</i> , 2016, 33, 199-205.	2.0	13
44	Controls on the Fate and Speciation of Np(V) During Iron (Oxyhydr)oxide Crystallization. <i>Environmental Science &amp; Technology</i> , 2016, 50, 3382-3390.	10.0	20
45	Bacterial Diversity in the Hyperalkaline Allas Springs (Cyprus), a Natural Analogue for Cementitious Radioactive Waste Repository. <i>Geomicrobiology Journal</i> , 2016, 33, 73-84.	2.0	29
46	Reversibility in radionuclide/bentonite bulk and colloidal ternary systems. <i>Mineralogical Magazine</i> , 2015, 79, 1307-1315.	1.4	5
47	Neptunium and manganese biocycling in nuclear legacy sediment systems. <i>Applied Geochemistry</i> , 2015, 63, 303-309.	3.0	8
48	The stability of microbially reduced U(IV); impact of residual electron donor and sediment ageing. <i>Chemical Geology</i> , 2015, 409, 125-135.	3.3	46
49	Microbially mediated reduction of Np(V) by a consortium of alkaline tolerant Fe(III)-reducing bacteria. <i>Mineralogical Magazine</i> , 2015, 79, 1287-1295.	1.4	13
50	Uranium fate during crystallization of magnetite from ferrihydrite in conditions relevant to the disposal of radioactive waste. <i>Mineralogical Magazine</i> , 2015, 79, 1265-1274.	1.4	34
51	Bioreduction of iodate in sediment microcosms. <i>Mineralogical Magazine</i> , 2015, 79, 1343-1351.	1.4	11
52	Herbert's Quarry, South Wales – an analogue for host-rock alteration at a cementitious radioactive waste repository?. <i>Mineralogical Magazine</i> , 2015, 79, 1407-1418.	1.4	2
53	The IGD-TP Geodisposal 2014: Introduction to the Conference Proceedings. <i>Mineralogical Magazine</i> , 2015, 79, 1245-1249.	1.4	1
54	U(VI) behaviour in hyperalkaline calcite systems. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 148, 343-359.	3.9	39

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55	Biostimulation by Glycerol Phosphate to Precipitate Recalcitrant Uranium(IV) Phosphate. <i>Environmental Science &amp; Technology</i> , 2015, 49, 11070-11078.	10.0	71
56	Redox Interactions of Tc(VII), U(VI), and Np(V) with Microbially Reduced Biotite and Chlorite. <i>Environmental Science &amp; Technology</i> , 2015, 49, 13139-13148.	10.0	46
57	Uranium Biominerals Precipitated by an Environmental Isolate of <i>Serratia</i> under Anaerobic Conditions. <i>PLoS ONE</i> , 2015, 10, e0132392.	2.5	36
58	Microbial reduction of uranium(VI) in sediments of different lithologies collected from Sellafield. <i>Applied Geochemistry</i> , 2014, 51, 55-64.	3.0	38
59	Rock alteration in alkaline cement waters over 15 years and its relevance to the geological disposal of nuclear waste. <i>Applied Geochemistry</i> , 2014, 50, 91-105.	3.0	43
60	Uranium and technetium interactions with wüstite [Fe <sub>1-x</sub> O] and portlandite [Ca(OH) <sub>2</sub> ] surfaces under geological disposal facility conditions. <i>Mineralogical Magazine</i> , 2014, 78, 1097-1113.	1.4	6
61	Adsorption of radium and barium on goethite and ferrihydrite: A kinetic and surface complexation modelling study. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 146, 150-163.	3.9	88
62	Formation of Stable Uranium(VI) Colloidal Nanoparticles in Conditions Relevant to Radioactive Waste Disposal. <i>Langmuir</i> , 2014, 30, 14396-14405.	3.5	47
63	Microbial Reduction of U(VI) under Alkaline Conditions: Implications for Radioactive Waste Geodisposal. <i>Environmental Science &amp; Technology</i> , 2014, 48, 13549-13556.	10.0	37
64	Incorporation and Retention of <sup>99</sup> Tc(IV) in Magnetite under High pH Conditions. <i>Environmental Science &amp; Technology</i> , 2014, 48, 11853-11862.	10.0	78
65	Incorporation of Uranium into Hematite during Crystallization from Ferrihydrite. <i>Environmental Science &amp; Technology</i> , 2014, 48, 3724-3731.	10.0	128
66	The biogeochemistry and bioremediation of uranium and other priority radionuclides. <i>Chemical Geology</i> , 2014, 363, 164-184.	3.3	378
67	The interactions of strontium and technetium with Fe(II) bearing biominerals: Implications for bioremediation of radioactively contaminated land. <i>Applied Geochemistry</i> , 2014, 40, 135-143.	3.0	29
68	Alteration of Sediments by Hyperalkaline K-Rich Cement Leachate: Implications for Strontium Adsorption and Incorporation. <i>Environmental Science &amp; Technology</i> , 2013, 47, 3694-3700.	10.0	28
69	Microbial Reduction of Fe(III) under Alkaline Conditions Relevant to Geological Disposal. <i>Applied and Environmental Microbiology</i> , 2013, 79, 3320-3326.	3.1	52
70	The potential impact of anaerobic microbial metabolism during the geological disposal of intermediate-level waste. <i>Mineralogical Magazine</i> , 2012, 76, 3261-3270.	1.4	55
71	Strontium sorption and precipitation behaviour during bioreduction in nitrate impacted sediments. <i>Chemical Geology</i> , 2012, 306-307, 114-122.	3.3	55
72	Effect of groundwater pH and ionic strength on strontium sorption in aquifer sediments: Implications for <sup>90</sup> Sr mobility at contaminated nuclear sites. <i>Applied Geochemistry</i> , 2012, 27, 1482-1491.	3.0	100

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73	The Synergistic Effects of High Nitrate Concentrations on Sediment Bioreduction. <i>Geomicrobiology Journal</i> , 2012, 29, 484-493.	2.0	24
74	Alkaline Fe(III) reduction by a novel alkali-tolerant <i>Serratia</i> sp. isolated from surface sediments close to Sellafield nuclear facility, UK. <i>FEMS Microbiology Letters</i> , 2012, 327, 87-92.	1.8	19
75	In search of experimental evidence for the biogeobattery. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	21
76	Redox interactions of technetium with iron-bearing minerals. <i>Mineralogical Magazine</i> , 2011, 75, 2419-2430.	1.4	41
77	Microbial Communities Associated with the Oxidation of Iron and Technetium in Bioreduced Sediments. <i>Geomicrobiology Journal</i> , 2011, 28, 507-518.	2.0	16
78	Uranium Redox Cycling in Sediment and Biomineral Systems. <i>Geomicrobiology Journal</i> , 2011, 28, 497-506.	2.0	41
79	Bioreduction Behavior of U(VI) Sorbed to Sediments. <i>Geomicrobiology Journal</i> , 2011, 28, 160-171.	2.0	27
80	Chapter 6. Geodisposal of Higher Activity Wastes. <i>Issues in Environmental Science and Technology</i> , 2011, , 129-151.	0.4	10
81	Geomicrobiological Redox Cycling of the Transuranic Element Neptunium. <i>Environmental Science &amp; Technology</i> , 2010, 44, 8924-8929.	10.0	80
82	Probing the Biogeochemical Behavior of Technetium Using a Novel Nuclear Imaging Approach. <i>Environmental Science &amp; Technology</i> , 2010, 44, 156-162.	10.0	48
83	Role of Nitrate in Conditioning Aquifer Sediments for Technetium Bioreduction. <i>Environmental Science &amp; Technology</i> , 2010, 44, 150-155.	10.0	46
84	The fate of technetium in reduced estuarine sediments: Combining direct and indirect analyses. <i>Applied Geochemistry</i> , 2010, 25, 233-241.	3.0	31
85	An X-ray absorption study of the fate of technetium in reduced and reoxidised sediments and mineral phases. <i>Applied Geochemistry</i> , 2008, 23, 603-617.	3.0	56
86	Anoxic nitrification: Evidence from Humber Estuary sediments (UK). <i>Chemical Geology</i> , 2008, 250, 29-39.	3.3	53
87	Technetium reduction and reoxidation behaviour in Dounreay soils. <i>Radiochimica Acta</i> , 2008, 96, 631-636.	1.2	23
88	Technetium Reduction and Reoxidation in Aquifer Sediments. <i>Geomicrobiology Journal</i> , 2007, 24, 189-197.	2.0	64
89	The biogeochemistry of a manganese-rich Scottish sea loch: Implications for the study of anoxic nitrification. <i>Continental Shelf Research</i> , 2007, 27, 1501-1509.	1.8	19
90	The behaviour of technetium during microbial reduction in amended soils from Dounreay, UK. <i>Science of the Total Environment</i> , 2007, 373, 297-304.	8.0	36

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91	The biogeochemical behaviour of U(VI) in the simulated near-field of a low-level radioactive waste repository. <i>Applied Geochemistry</i> , 2006, 21, 1539-1550.	3.0	12
92	Reoxidation Behavior of Technetium, Iron, and Sulfur in Estuarine Sediments. <i>Environmental Science &amp; Technology</i> , 2006, 40, 3529-3535.	10.0	95
93	Transport and accumulation of actinide elements in the near-shore environment: field and modelling studies. <i>Sedimentology</i> , 2006, 53, 237-248.	3.1	19
94	Performance of a functionalised polymer-coated silica at treating uranium contaminated groundwater from a Hungarian mine site. <i>Engineering Geology</i> , 2006, 85, 174-183.	6.3	9
95	New barrier materials: the use of tailored ligand systems for the removal of metals from groundwater. <i>Trace Metals and Other Contaminants in the Environment</i> , 2005, 7, 153-182.	0.1	0
96	Effects of Progressive Anoxia on the Solubility of Technetium in Sediments. <i>Environmental Science &amp; Technology</i> , 2005, 39, 4109-4116.	10.0	100
97	Performance of three resin-based materials for treating uranium-contaminated groundwater within a PRB. <i>Journal of Hazardous Materials</i> , 2004, 116, 191-204.	12.4	57
98	An investigation into technetium binding in sediments. <i>Marine Chemistry</i> , 2003, 81, 149-162.	2.3	39
99	Chapter 3 The role of microorganisms during sediment diagenesis: Implications for radionuclide mobility. <i>Radioactivity in the Environment</i> , 2002, , 61-100.	0.2	8
100	Chapter 4 Biogeochemical cycles and remobilisation of the actinide elements. <i>Radioactivity in the Environment</i> , 2002, 2, 101-141.	0.2	3
101	Geochemistry of artificial actinide isotopes in west Cumbrian sediments. <i>Journal of Nuclear Science and Technology</i> , 2002, 39, 939-942.	1.3	1
102	Plutonium solubility in sediment pore waters. <i>Journal of Environmental Radioactivity</i> , 2001, 56, 259-267.	1.7	11
103	Evidence for the Remobilization of Sellafield Waste Radionuclides in an Intertidal Salt Marsh, West Cumbria, U.K.. <i>Estuarine, Coastal and Shelf Science</i> , 2000, 51, 613-625.	2.1	66
104	The microbial ecology of land and water contaminated with radioactive waste: towards the development of bioremediation options for the nuclear industry. , 0, , 226-241.		20
105	Mineralogy in long-term nuclear waste management. , 0, , 383-404.		2