Daniel I Kaplan

List of Publications by Citations

69 papers	1,960 citations	27 h-index	42 g-index
72 ext. papers	2,187 ext. citations	7.3 avg, IF	4.38 L-index

#	Paper	IF	Citations
69	Pu(V)O2+ adsorption and reduction by synthetic magnetite (Fe3O4). *Environmental Science & Technology*, **2004**, 38, 6016-24	10.3	112
68	Iodide Sorption to Subsurface Sediments and Illitic Minerals. *Environmental Science & Technology*, **2000**, 34, 399-405	10.3	111
67	Pu(V)O2+ adsorption and reduction by synthetic hematite and goethite. *Environmental Science & Technology*, **2005**, 39, 2107-14	10.3	96
66	Radioiodine Biogeochemistry and Prevalence in Groundwater. *Critical Reviews in Environmental Science and Technology*, **2014**, 44, 2287-2335	11.1	80
65	Mineralogical and Physicochemical Differences between Mobile and Nonmobile Colloidal Phases in Reconstructed Pedons. *Soil Science Society of America Journal*, **1997**, 61, 641	2.5	69
64	Sorption coefficients and molecular mechanisms of Pu, U, Np, Am and Tc to Fe (hydr)oxides: a review. *Journal of Hazardous Materials*, **2012**, 243, 1-18	12.8	68
63	Influence of oxidation states on plutonium mobility during long-term transport through an unsaturated subsurface environment. *Environmental Science & Technology*, **2004**, 38, 5053-8	10.3	66
62	Iodine-129 and iodine-127 speciation in groundwater at the Hanford site, US: iodate incorporation into calcite. *Environmental Science & Technology*, **2013**, 47, 9635-42	10.3	65
61	Plutonium oxidation and subsequent reduction by Mn(IV) minerals in Yucca Mountain tuff. *Environmental Science & Technology*, **2006**, 40, 3508-14	10.3	64
60	Is soil natural organic matter a sink or source for mobile radioiodine (129I) at the Savannah River Site?. *Geochimica Et Cosmochimica Acta*, **2011**, 75, 5716-5735	5.5	63
59	Sequestration and remobilization of radioiodine (129I) by soil organic matter and possible consequences of the remedial action at Savannah River Site. *Environmental Science & Technology*, **2011**, 45, 9975-83	10.3	62
58	Factors controlling mobility of 127I and 129I species in an acidic groundwater plume at the Savannah River Site. *Science of the Total Environment*, **2011**, 409, 3857-65	10.2	55
57	Novel molecular-level evidence of iodine binding to natural organic matter from Fourier transform ion cyclotron resonance mass spectrometry. *Science of the Total Environment*, **2013**, 449, 244-52	10.2	50
56	Evaluation of a radioiodine plume increasing in concentration at the Savannah River Site. *Environmental Science & Technology*, **2011**, 45, 489-95	10.3	50
55	Influence of sources on plutonium mobility and oxidation state transformations in vadose zone sediments. *Environmental Science & Technology*, **2007**, 41, 7417-23	10.3	50
54	Molecular environment of stable iodine and radioiodine (129I) in natural organic matter: Evidence inferred from NMR and binding experiments at environmentally relevant concentrations. *Geochimica Et Cosmochimica Acta*, **2012**, 97, 166-182	5.5	49
53	Bacterial production of organic acids enhances H2O2-dependent iodide oxidation. *Environmental Science & Technology*, **2012**, 46, 4837-44	10.3	44

52	Enhanced contaminant desorption induced by phosphate mineral additions to sediment. *Environmental Science & Technology*, **2004**, 38, 3153-60	10.3	43
51	Radioiodine sorption/desorption and speciation transformation by subsurface sediments from the Hanford Site. *Journal of Environmental Radioactivity*, **2015**, 139, 43-55	2.4	36
50	Role of natural organic matter on iodine and (239)(,240)Pu distribution and mobility in environmental samples from the northwestern Fukushima Prefecture, Japan. *Journal of Environmental Radioactivity*, **2016**, 153, 156-166	2.4	34
49	Retention and chemical speciation of uranium in an oxidized wetland sediment from the Savannah River Site. *Journal of Environmental Radioactivity*, **2014**, 131, 40-6	2.4	34
48	Spectroscopic evidence of uranium immobilization in acidic wetlands by natural organic matter and plant roots. *Environmental Science & Technology*, **2015**, 49, 2823-32	10.3	33
47	Influence of pH on plutonium desorption/solubilization from sediment. *Environmental Science & Technology*, **2006**, 40, 5937-42	10.3	33
46	Uranium immobilization in an iron-rich rhizosphere of a native wetland plant from the Savannah River Site under reducing conditions. *Environmental Science & Technology*, **2014**, 48, 9270-8	10.3	31
45	Iodide accumulation by aerobic bacteria isolated from subsurface sediments of a 129I-contaminated aquifer at the Savannah River site, South Carolina. *Applied and Environmental Microbiology*, **2011**, 77, 2153-60	4.8	30
44	Superoxide production by a manganese-oxidizing bacterium facilitates iodide oxidation. *Applied and Environmental Microbiology*, **2014**, 80, 2693-9	4.8	29
43	Unique Organic Matter and Microbial Properties in the Rhizosphere of a Wetland Soil. *Environmental Science & Technology*, **2016**, 50, 4169-77	10.3	28
42	Evidence for Hydroxamate Siderophores and Other N-Containing Organic Compounds Controlling (239,240)Pu Immobilization and Remobilization in a Wetland Sediment. *Environmental Science & Technology*, **2015**, 49, 11458-67	10.3	27
41	Plutonium immobilization and remobilization by soil mineral and organic matter in the far-field of the Savannah River Site, U.S. *Environmental Science & Technology*, **2014**, 48, 3186-95	10.3	27
40	Influence of iron redox transformations on plutonium sorption to sediments. *Radiochimica Acta*, **2010**, 98, 685-692	1.9	27
39	Eleven-year field study of Pu migration from Pu III, IV, and VI sources. *Environmental Science & Technology*, **2006**, 40, 443-8	10.3	26
38	Radioiodine concentrated in a wetland. *Journal of Environmental Radioactivity*, **2014**, 131, 57-61	2.4	24
37	Molecular interactions of plutonium(VI) with synthetic manganese-substituted goethite. *Radiochimica Acta*, **2010**, 98, 655-663	1.9	24
36	Microbial Transformation of Iodine: From Radioisotopes to Iodine Deficiency. *Advances in Applied Microbiology*, **2017**, 101, 83-136	4.9	22
35	Geochemical controls of iodine uptake and transport in Savannah River Site subsurface sediments. *Applied Geochemistry*, **2014**, 45, 105-113	3.5	21

34	Use of illite clay for in situ remediation of 137Cs-contaminated water bodies: field demonstration of reduced biological uptake. *Environmental Science & Technology*, **2006**, 40, 4500-5	10.3	20
33	Pu(V) transport through Savannah River Site soils - an evaluation of a conceptual model of surface-mediated reduction to Pu (IV). *Journal of Environmental Radioactivity*, **2014**, 131, 47-56	2.4	19
32	Source-dependent and source-independent controls on plutonium oxidation state and colloid associations in groundwater. *Environmental Science & Technology*, **2009**, 43, 1322-8	10.3	18
31	Sulfur speciation in untreated and alkali treated ground-granulated blast furnace slag. *Science of the Total Environment*, **2017**, 589, 117-121	10.2	15
30	Iron mineralogy and uranium-binding environment in the rhizosphere of a wetland soil. *Science of the Total Environment*, **2016**, 569-570, 53-64	10.2	15
29	A review of the behavior of radioiodine in the subsurface at two DOE sites. *Science of the Total Environment*, **2019**, 691, 466-475	10.2	15
28	Modeling Long-Term Plutonium Transport in the Savannah River Site Vadose Zone. *Vadose Zone Journal*, **2007**, 6, 344-353	2.7	15
27	Temporal variation of iodine concentration and speciation (127I and 129I) in wetland groundwater from the Savannah River Site, USA. *Environmental Science & Technology*, **2014**, 48, 11218-26	10.3	14
26	Speciation of iodine isotopes inside and outside of a contaminant plume at the Savannah River Site. *Science of the Total Environment*, **2014**, 497-498, 671-678	10.2	11
25	Model of radioiodine speciation and partitioning in organic-rich and organic-poor soils from the Savannah River Site. *Journal of Environmental Chemical Engineering*, **2014**, 2, 1321-1330	6.8	11
24	Europium sorption to sediments in the presence of natural organic matter: A laboratory and modeling study. *Applied Geochemistry*, **2010**, 25, 224-232	3.5	11
23	Plutonium binding affinity to sediments increases with contact time. *Chemical Geology*, **2019**, 505, 100-107	4.2	11
22	Uranium Redistribution Due to Water Table Fluctuations in Sandy Wetland Mesocosms. *Environmental Science & Technology*, **2015**, 49, 12214-22	10.3	10
21	Iodine speciation in a silver-amended cementitious system. *Environment International*, **2019**, 126, 576-584	12.9	9
20	Iodine speciation in cementitious environments. *Applied Geochemistry*, **2019**, 103, 15-22	3.5	9
19	Plutonium Partitioning Behavior to Humic Acids from Widely Varying Soils Is Related to Carboxyl-Containing Organic Compounds. *Environmental Science & Technology*, **2017**, 51, 11742-11751	10.3	9
18	In situ porewater uranium concentrations in a contaminated wetland: Effect of seasons and sediment depth. *Applied Geochemistry*, **2017**, 85, 128-136	3.5	7
17	Uranium fate in wetland mesocosms: Effects of plants at two iron loadings with different pH values. *Chemosphere*, **2016**, 163, 116-124	8.4	7

16	Iodine immobilization by silver-impregnated granular activated carbon in cementitious systems. *Journal of Environmental Radioactivity*, **2019**, 208-209, 106017	2.4	7
15	Long-term radiostrontium interactions and transport through sediment. *Environmental Science & Technology*, **2014**, 48, 8919-25	10.3	7
14	Effects of matrix heterogeneity and aqueous humic acid on transport and deposition of mineral colloids in sandy sediments. *Journal of Environmental Chemical Engineering*, **2013**, 1, 875-883	6.8	6
13	Upward movement of plutonium to surface sediments during an 11-year field study. *Journal of Environmental Radioactivity*, **2010**, 101, 338-44	2.4	6
12	Reduced Plant Uptake of 137Cs Grown in Illite-amended Sediments. *Water, Air, and Soil Pollution*, **2007**, 185, 255-263	2.6	6
11	Molecular Interaction of Aqueous Iodine Species with Humic Acid Studied by I and C K-Edge X-ray Absorption Spectroscopy. *Environmental Science & Technology*, **2019**, 53, 12416-12424	10.3	5
10	Deriving probabilistic soil distribution coefficients (K). Part 1: General approach to decreasing and describing variability and example using uranium K values. *Journal of Environmental Radioactivity*, **2020**, 222, 106362	2.4	4
9	Uranium Attenuated by a Wetland 50 Years after Release into a Stream. *ACS Earth and Space Chemistry*, **2020**, 4, 1360-1366	3.2	4
8	Distributions of radionuclide sorption coefficients (Kd) in sub-surface sediments and the implications for transport calculations. *Journal of Environmental Radioactivity*, **2010**, 101, 847-53	2.4	2
7	Impact of Natural Organic Matter on Plutonium Vadose Zone Migration from an NHPu(V)OCO(s) Source. *Environmental Science & Technology*, **2020**, 54, 2688-2697	10.3	1
6	Consistent Controls on Trace Metal Micronutrient Speciation in Wetland Soils and Stream Sediments. *Geochimica Et Cosmochimica Acta*, **2021**,	5.5	1
5	From legacy contamination to watershed systems science: a review of scientific insights and technologies developed through DOE-supported research in water and energy security. *Environmental Research Letters*, **2022**, 17, 043004	6.2	1
4	Chemical species of iodine during sorption by activated carbon -Effects of original chemical species and fulvic acids. *Journal of Nuclear Science and Technology*,1-10	1	0
3	Large seasonal fluctuations of groundwater radioiodine speciation and concentrations in a riparian wetland in South Carolina. *Science of the Total Environment*, **2021**, 151548	10.2	0
2	Uranium partitioning from contaminated wetland soil to aqueous and suspended iron-floc phases: Implications of dynamic hydrologic conditions on contaminant release. *Geochimica Et Cosmochimica Acta*, **2022**, 318, 292-304	5.5	0
1	H-C heteronuclear single quantum coherence NMR evidence for iodination of natural organic matter influencing organo-iodine mobility in the environment.. *Science of the Total Environment*, **2021**, 152546	10.2	