Daniel E Giammar

List of Publications by Year
in descending order

126 papers	5,951 citations	61687 45 h-index	97045 71 g-index
130 all docs	130 docs citations	130 times ranked	6128 citing authors

#	Article	IF	Citations
1	Forsterite dissolution and magnesite precipitation at conditions relevant for deep saline aquifer storage and sequestration of carbon dioxide. Chemical Geology, 2005, 217, 257-276.	1.4	322
2	Effects of water chemistry on arsenic removal from drinking water by electrocoagulation. Water Research, 2011, 45, 384-392.	5.3	208
3	Adsorption of Uranium(VI) to Manganese Oxides: X-ray Absorption Spectroscopy and Surface Complexation Modeling. Environmental Science & Technology, 2013, 47, 850-858.	4.6	187
4	Individual and Competitive Adsorption of Arsenate and Phosphate To a High-Surface-Area Iron Oxide-Based Sorbent. Environmental Science & Technology, 2008, 42, 147-152.	4.6	177
5	Effects of Particle Size and Crystalline Phase on Lead Adsorption to Titanium Dioxide Nanoparticles. Environmental Engineering Science, 2007, 24, 85-95.	0.8	147
6	Nanoscale Size Effects on Uranium(VI) Adsorption to Hematite. Environmental Science & Technology, 2009, 43, 1373-1378.	4.6	133
7	Impacts of Geochemical Reactions on Geologic Carbon Sequestration. Environmental Science & Technology, 2013, 47, 3-8.	4.6	133
8	Time Scales for Sorptionâˆ’Desorption and Surface Precipitation of Uranyl on Goethite. Environmental Science & Technology, 2001, 35, 3332-3337.	4.6	125
9	Uranium speciation and stability after reductive immobilization in aquifer sediments. Geochimica Et Cosmochimica Acta, 2011, 75, 6497-6510.	1.6	112
10	Dynamics of Chromium(VI) Removal from Drinking Water by Iron Electrocoagulation. Environmental Science & Technology, 2016, 50, 13502-13510.	4.6	107
11	Formation, Aggregation, and Deposition Dynamics of NOM-Iron Colloids at Anoxicâ€"Oxic Interfaces. Environmental Science & Technology, 2017, 51, 12235-12245.	4.6	105
12	Comparative dissolution kinetics of biogenic and chemogenic uraninite under oxidizing conditions in the presence of carbonate. Geochimica Et Cosmochimica Acta, 2009, 73, 6065-6083.	1.6	98
13	Effect of Humic Acid on the Removal of Chromium(VI) and the Production of Solids in Iron Electrocoagulation. Environmental Science & Technology, 2017, 51, 6308-6318.	4.6	95
14	Mass Action Expressions for Bidentate Adsorption in Surface Complexation Modeling: Theory and Practice. Environmental Science & Technology, 2013, 47, 3982-3996.	4.6	94
15	Impact of phosphate on U(VI) immobilization in the presence of goethite. Geochimica Et Cosmochimica Acta, 2010, 74, 6324-6343.	1.6	93
16	Molecular-Scale Structure of Uranium(VI) Immobilized with Goethite and Phosphate. Environmental Science & Technology, 2012, 46, 6594-6603.	4.6	93
17	Effects of pH, dissolved oxygen, and aqueous ferrous iron on the adsorption of arsenic to lepidocrocite. Journal of Colloid and Interface Science, 2015, 448, 331-338.	5.0	93
18	Oxidative UO₂ Dissolution Induced by Soluble Mn(III). Environmental Science & Technology, 2014, 48, 289-298.	4.6	92

#	Article	IF	Citations
19	Dissolution of Biogenic and Synthetic UO2under Varied Reducing Conditions. Environmental Science & Technology, 2008, 42, 5600-5606.	4.6	91
20	Uraninite oxidation and dissolution induced by manganese oxide: A redox reaction between two insoluble minerals. Geochimica Et Cosmochimica Acta, 2013, 100, 24-40.	1.6	91
21	Effects of flow and water chemistry on lead release rates from pipe scales. Water Research, 2011, 45, 6525-6534.	5.3	90
22	Interaction of Fe(II) with phosphate and sulfate on iron oxide surfaces. Geochimica Et Cosmochimica Acta, 2015, 158, 130-146.	1.6	84
23	Relative Reactivity of Biogenic and Chemogenic Uraninite and Biogenic Noncrystalline U(IV). Environmental Science & Technology, 2013, 47, 9756-9763.	4.6	81
24	Rates of Cr(VI) Generation from Cr_{<i>x</i>}Fe_{1â€"<i>x</i>}(OH)₃ Solids upon Reaction with Manganese Oxide. Environmental Science & Technology, 2017, 51, 12416-12423.	4.6	78
25	Effect of co-solutes on the products and solubility of uranium(VI) precipitated with phosphate. Chemical Geology, 2014, 364, 66-75.	1.4	75
26	Formation and Transport of Cr(III)-NOM-Fe Colloids upon Reaction of Cr(VI) with NOM-Fe(II) Colloids at Anoxicâ€"Oxic Interfaces. Environmental Science & Technology, 2020, 54, 4256-4266.	4.6	73
27	Cr(VI) Adsorption on Engineered Iron Oxide Nanoparticles: Exploring Complexation Processes and Water Chemistry. Environmental Science & Technology, 2019, 53, 11913-11921.	4.6	70
28	Synergistic Effect of Reductive and Ligand-Promoted Dissolution of Goethite. Environmental Science & Technology, 2015, 49, 7236-7244.	4.6	69
29	Effect of phosphate on U(VI) sorption to montmorillonite: Ternary complexation and precipitation barriers. Geochimica Et Cosmochimica Acta, 2016, 175, 86-99.	1.6	68
30	Formation and Aggregation of Lead Phosphate Particles: Implications for Lead Immobilization in Water Supply Systems. Environmental Science & Technology, 2018, 52, 12612-12623.	4.6	67
31	Oxidative Dissolution of Biogenic Uraninite in Groundwater at Old Rifle, CO. Environmental Science & Technology, 2011, 45, 8748-8754.	4.6	66
32	Effect of water chemistry on the dissolution rate ofÂthe lead corrosion product hydrocerussite. Water Research, 2014, 54, 237-246.	5.3	66
33	Microbial Reduction of Fe(III) in Hematite Nanoparticles by <i>Geobacter sulfurreducens</i>. Environmental Science & Technology, 2008, 42, 6526-6531.	4.6	65
34	Speciation of Selenium, Arsenic, and Zinc in Class C Fly Ash. Energy & Fuels, 2011, 25, 2980-2987.	2.5	63
35	Impact of galvanic corrosion on lead release from aged lead service lines. Water Research, 2012, 46, 5049-5060.	5.3	62
36	Equilibrium Solubility and Dissolution Rate of the Lead Phosphate Chloropyromorphite. Environmental Science & Technology, 2007, 41, 8050-8055.	4.6	61

#	Article	IF	Citations
37	Effects of water chemistry and flow rate on arsenate removal by adsorption to an iron oxide-based sorbent. Water Research, 2008, 42, 4629-4636.	5.3	61
38	Forsterite Dissolution in Saline Water at Elevated Temperature and High CO₂ Pressure. Environmental Science & Technology, 2013, 47, 168-173.	4.6	59
39	Report from the third workshop on future directions of solid-state chemistry: The status of solid-state chemistry and its impact in the physical sciences. Progress in Solid State Chemistry, 2008, 36, 1-133.	3.9	58
40	Geochemical Stability of Dissolved Mn(III) in the Presence of Pyrophosphate as a Model Ligand: Complexation and Disproportionation. Environmental Science & Technology, 2019, 53, 5768-5777.	4.6	57
41	Speciation and Reactivity of Uranium Products Formed during <i>in Situ</i> Bioremediation in a Shallow Alluvial Aquifer. Environmental Science & Technology, 2014, 48, 12842-12850.	4.6	56
42	Formation of Lead(IV) Oxides from Lead(II) Compounds. Environmental Science & Technology, 2010, 44, 8950-8956.	4.6	54
43	Effects of pH and Carbonate Concentration on Dissolution Rates of the Lead Corrosion Product PbO₂. Environmental Science & Technology, 2010, 44, 1093-1099.	4.6	53
44	Effect of Reaction Pathway on the Extent and Mechanism of Uranium(VI) Immobilization with Calcium and Phosphate. Environmental Science & Technology, 2016, 50, 3128-3136.	4.6	52
45	CO₂ Mineral Sequestration in Naturally Porous Basalt. Environmental Science and Technology Letters, 2018, 5, 142-147.	3.9	48
46	Metal Release and Speciation Changes during Wet Aging of Coal Fly Ashes. Environmental Science & Technology, 2012, 46, 11804-11812.	4.6	46
47	Impact of Water Chemistry on Element Mobilization from Eagle Ford Shale. Environmental Engineering Science, 2015, 32, 310-320.	0.8	46
48	Indirect UO₂ Oxidation by Mn(II)-oxidizing Spores of <i>Bacillus</i> sp. Strain SG-1 and the Effect of U and Mn Concentrations. Environmental Science & Technology, 2008, 42, 8709-8714.	4.6	45
49	CO2 mineral trapping in fractured basalt. International Journal of Greenhouse Gas Control, 2017, 66, 204-217.	2.3	45
50	Transport of U(VI) through sediments amended with phosphate to induce in situ uranium immobilization. Water Research, 2015, 69, 307-317.	5.3	43
51	Influence of Dissolved Sodium and Cesium on Uranyl Oxide Hydrate Solubility. Environmental Science & Technology, 2004, 38, 171-179.	4.6	41
52	Impact of Chlorine Disinfectants on Dissolution of the Lead Corrosion Product PbO₂. Environmental Science & Technology, 2010, 44, 7082-7088.	4.6	41
53	Measurement and Surface Complexation Modeling of U(VI) Adsorption to Engineered Iron Oxide Nanoparticles. Environmental Science & Technology, 2017, 51, 9219-9226.	4.6	41
54	Element mobilization from Bakken shales as a function of water chemistry. Chemosphere, 2016, 149, 286-293.	4.2	39

#	Article	IF	Citations
55	Measurement and Modeling of U(IV) Adsorption to Metal Oxide Minerals. Environmental Science and Technology Letters, 2015, 2, 227-232.	3.9	37
56	Phosphate-Induced Immobilization of Uranium in Hanford Sediments. Environmental Science & Technology, 2016, 50, 13486-13494.	4.6	37
57	Immobilization of Lead with Nanocrystalline Carbonated Apatite Present in Fish Bone. Environmental Engineering Science, 2008, 25, 725-736.	0.8	36
58	Effects of Mn(II) on UO₂ Dissolution under Anoxic and Oxic Conditions. Environmental Science & Technology, 2014, 48, 5546-5554.	4.6	36
59	The Ability of Phosphate To Prevent Lead Release from Pipe Scale When Switching from Free Chlorine to Monochloramine. Environmental Science & Technology, 2020, 54, 879-888.	4.6	36
60	Effect of transport limitations and fluid properties on reaction products in fractures of unaltered and serpentinized basalt exposed to high PCO fluids. International Journal of Greenhouse Gas Control, 2017, 63, 310-320.	2.3	35
61	Precipitation of Magnesium Carbonates as a Function of Temperature, Solution Composition, and Presence of a Silicate Mineral Substrate. Environmental Engineering Science, 2011, 28, 881-889.	0.8	34
62	Role of Manganese in Accelerating the Oxidation of Pb(II) Carbonate Solids to Pb(IV) Oxide at Drinking Water Conditions. Environmental Science & Technology, 2019, 53, 6699-6707.	4.6	34
63	Understanding the Roles of Dissolution and Diffusion in Cr(OH)₃ Oxidation by Î´-MnO₂. ACS Earth and Space Chemistry, 2019, 3, 357-365.	1.2	33
64	Effect of Mn(II) on the Structure and Reactivity of Biogenic Uraninite. Environmental Science & Technology, 2009, 43, 6541-6547.	4.6	32
65	Kinetics of lead(IV) oxide (PbO2) reductive dissolution: Role of lead(II) adsorption and surface speciation. Journal of Colloid and Interface Science, 2013, 389, 236-243.	5.0	32
66	Speciation-Dependent Kinetics of Uranium(VI) Bioreduction. Geomicrobiology Journal, 2011, 28, 396-409.	1.0	31
67	Effect of Ca2+ and Zn2+ on UO2 Dissolution Rates. Environmental Science & Technology, 2012, 46, 2731-2737.	4.6	31
68	Evaluation of a Sequential Extraction Process Used for Determining Mercury Binding Mechanisms to Coal Combustion Byproducts. Journal of the Air and Waste Management Association, 2007, 57, 856-867.	0.9	29
69	Effect of connection methods on lead release from galvanic corrosion. Journal - American Water Works Association, 2013, 105, E337.	0.2	29
70	Enhanced Uranium Immobilization by Phosphate Amendment under Variable Geochemical and Flow Conditions: Insights from Reactive Transport Modeling. Environmental Science & Technology, 2018, 52, 5841-5850.	4.6	29
71	Permanent CO₂ Trapping through Localized and Chemical Gradient-Driven Basalt Carbonation. Environmental Science & Technology, 2018, 52, 8954-8964.	4.6	29
72	Synergistic Effects between Biogenic Ligands and a Reductant in Fe Acquisition from Calcareous Soil. Environmental Science & Technology, 2016, 50, 6381-6388.	4.6	27

#	Article	IF	Citations
73	Roles of Transport Limitations and Mineral Heterogeneity in Carbonation of Fractured Basalts. Environmental Science & Technology, 2017, 51, 9352-9362.	4.6	27
74	Impact of orthophosphate on lead release from pipe scale in high pH, low alkalinity water. Water Research, 2020, 177, 115764.	5.3	27
75	Equilibrium and kinetic aspects of soddyite dissolution and secondary phase precipitation in aqueous suspension. Geochimica Et Cosmochimica Acta, 2002, 66, 3235-3245.	1.6	25
76	Tackling Deficiencies in the Presentation and Interpretation of Adsorption Results for New Materials. Environmental Science & Technology, 2019, 53, 5543-5544.	4.6	24
77	Effect of Cu(II) on Mn(II) Oxidation by Free Chlorine To Form Mn Oxides at Drinking Water Conditions. Environmental Science & Technology, 2020, 54, 1963-1972.	4.6	24
78	Cost and Energy Metrics for Municipal Water Reuse. ACS ES&T Engineering, 2022, 2, 489-507.	3.7	24
79	Long-Term in Situ Oxidation of Biogenic Uraninite in an Alluvial Aquifer: Impact of Dissolved Oxygen and Calcium. Environmental Science & Technology, 2015, 49, 7340-7347.	4.6	23
80	MINFIT: A Spreadsheet-Based Tool for Parameter Estimation in an Equilibrium Speciation Software Program. Environmental Science & Technology, 2016, 50, 11112-11120.	4.6	23
81	U(VI) reduction by Fe(II) on hematite nanoparticles. Journal of Nanoparticle Research, 2011, 13, 3741-3754.	0.8	22
82	Metal Contaminant Oxidation Mediated by Manganese Redox Cycling in Subsurface Environment. ACS Symposium Series, 2015, , 29-50.	0.5	22
83	Engineered superparamagnetic nanomaterials for arsenic(<scp>v</scp>) and chromium(<scp>vi</scp>) sorption and separation: quantifying the role of organic surface coatings. Environmental Science: Nano, 2018, 5, 556-563.	2.2	22
84	Forsterite Carbonation in Zones with Transport Limited by Diffusion. Environmental Science and Technology Letters, 2014, 1, 333-338.	3.9	21
85	Impacts of Diffusive Transport on Carbonate Mineral Formation from Magnesium Silicate-CO₂-Water Reactions. Environmental Science & Technology, 2014, 48, 14344-14351.	4.6	20
86	Carbon Sequestration in Olivine and Basalt Powder Packed Beds. Environmental Science & Technology, 2017, 51, 2105-2112.	4.6	20
87	Effect of Aluminum on Lead Release to Drinking Water from Scales of Corrosion Products. Environmental Science & Technology, 2020, 54, 6142-6151.	4.6	20
88	Kinetics of the Reductive Dissolution of Lead(IV) Oxide by Iodide. Environmental Science & Technology, 2012, 46, 5859-5866.	4.6	19
89	Cr(VI) Formation from Cr_{<i>x</i>}Fe_{1â€“<i>x</i>}(OH)₃ Induced by Mn(II) Oxidation on the Surface of Cr_{<i>x</i>}Fe_{1â€“<i>x</i>}(OH)₃. ACS Earth and Space Chemistry, 2020, 4, 1558-1564.	1.2	19
90	Effect of sodium silicate on lead release from lead service lines. Water Research, 2021, 188, 116485.	5.3	19

#	Article	IF	Citations
91	Reduction of U(VI) on Chemically Reduced Montmorillonite and Surface Complexation Modeling of Adsorbed U(IV). Environmental Science & Technology, 2022, 56, 4111-4120.	4.6	19
92	Lead Phosphate Particles in Tap Water: Challenges for Point-of-Use Filters. Environmental Science and Technology Letters, 2021, 8, 244-249.	3.9	18
93	Pilot-scale comparison of sodium silicates, orthophosphate and pH adjustment to reduce lead release from lead service lines. Water Research, 2021, 195, 116955.	5.3	17
94	Impact of dissolved oxygen and pH on the removal of selenium from water by iron electrocoagulation. Water Research, 2022, 213, 118159.	5.3	17
95	Effect of diffusive transport limitations on UO2 dissolution. Water Research, 2012, 46, 6023-6032.	5.3	16
96	Heterogeneous Lead Phosphate Nucleation at Organicâ€"Water Interfaces: Implications for Lead Immobilization. ACS Earth and Space Chemistry, 2018, 2, 869-877.	1.2	16
97	Evaluation of Nanostructured Sorbents in Differential Bed Reactors for Elemental Mercury Capture. Environmental Engineering Science, 2008, 25, 1061-1070.	0.8	14
98	Copper Complexation with the Mellitic Acid Series. Journal of Solution Chemistry, 1998, 27, 89-105.	0.6	13
99	Modeling performance of rhamnolipid-coated engineered magnetite nanoparticles for U(<scp>vi</scp>) sorption and separation. Environmental Science: Nano, 2020, 7, 2010-2020.	2.2	13
100	Dissolution and surface roughening of Columbia River flood basalt at geologic carbon sequestration conditions. Chemical Geology, 2017, 467, 100-109.	1.4	12
101	Intercomparison and Refinement of Surface Complexation Models for U(VI) Adsorption onto Goethite Based on a Metadata Analysis. Environmental Science & Technology, 2021, 55, 9352-9361.	4.6	11
102	Why Was My Paper Rejected without Review?. Environmental Science & Technology, 2020, 54, 11641-11644.	4.6	10
103	Influence of point-of-use filters and stagnation on water quality at a preschool and under laboratory conditions. Water Research, 2022, 211, 118034.	5.3	10
104	Evidence from ²⁹Si Solid-State Nuclear Magnetic Resonance of Dissolution Reactions of Forsterite. Environmental Engineering Science, 2016, 33, 799-805.	0.8	9
105	Accumulation on and extraction of lead from point-of-use filters for evaluating lead exposure from drinking water. Environmental Science: Water Research and Technology, 2020, 6, 2734-2741.	1.2	9
106	Surface functionalized nanoscale metal oxides for arsenic(<scp>v</scp>), chromium(<scp>vi</scp>), and uranium(<scp>vi</scp>) sorption: considering single- and multi-sorbate dynamics. Environmental Science: Nano, 2020, 7, 3805-3813.	2.2	9
107	Spatially-variable carbonation reactions in polycrystalline olivine. Geochimica Et Cosmochimica Acta, 2017, 204, 252-266.	1.6	8
108	Estimating Lead Concentrations in Drinking Water after Stagnation in Lead Service Lines Using Water Quality Data from across the United States. Environmental Science and Technology Letters, 2021, 8, 878-883.	3.9	8

#	Article	IF	Citations
109	Effects of Cu(II) and Zn(II) on PbO₂ Reductive Dissolution under Drinking Water Conditions: Short-term Inhibition and Long-term Enhancement. Environmental Science & Technology, 2021, 55, 14397-14406.	4.6	8
110	Consistent controls on trace metal micronutrient speciation in wetland soils and stream sediments. Geochimica Et Cosmochimica Acta, 2022, 317, 234-254.	1.6	8
111	Lead phosphate deposition in porous media and implications for lead remediation. Water Research, 2022, 214, 118200.	5.3	8
112	Ligand-Induced U Mobilization from Chemogenic Uraninite and Biogenic Noncrystalline U(IV) under Anoxic Conditions. Environmental Science & Technology, 2022, 56, 6369-6379.	4.6	8
113	Dynamic Responses of Trace Metal Bioaccessibility to Fluctuating Redox Conditions in Wetland Soils and Stream Sediments. ACS Earth and Space Chemistry, 2022, 6, 1331-1344.	1.2	7
114	Determining pH at Elevated Pressure and Temperature Using <i>in Situ</i> ¹³C NMR. Environmental Science & Technology, 2015, 49, 1631-1638.	4.6	6
115	Impact of Cu(II) and Zn(II) on the Reductive Dissolution of Pb(IV) Oxide. Environmental Science and Technology Letters, 2019, 6, 745-751.	3.9	6
116	Impact of ironâ€rich scale in service lines on lead release to water. AWWA Water Science, 2020, 2, e1188.	1.0	6
117	Interplay of transport processes and interfacial chemistry affecting chromium reduction and reoxidation with iron and manganese. Frontiers of Environmental Science and Engineering, 2020, 14, 1.	3.3	6
118	Water metal contaminants in a potentially mineral-deficient population of Haiti. International Journal of Environmental Health Research, 2018, 28, 626-634.	1.3	5
119	Metal-Catalyzed Hydrolysis of RNA in Aqueous Environments. Environmental Science & Technology, 2022, 56, 3564-3574.	4.6	5
120	Point-of-Use Filters for Lead Removal from Tap Water: Opportunities and Challenges. Environmental Science & Technology, 2022, 56, 4718-4720.	4.6	5
121	Copper availability governs nitrous oxide accumulation in wetland soils and stream sediments. Geochimica Et Cosmochimica Acta, 2022, 327, 96-115.	1.6	5
122	Fate of Metals in Fly Ash During Aging in Laboratory-Scale Ash Impoundments. Environmental Engineering Science, 2012, 29, 1085-1091.	0.8	4
123	Worth a Closer Look: Raman Spectra of Lead-Pipe Scale. Minerals (Basel, Switzerland), 2021, 11, 1047.	0.8	4
124	Redox-Driven Recrystallization of PbO₂. Environmental Science & Technology, 2022, 56, 7864-7872.	4.6	4
125	Role of natural organic matter and hardness on lead release from galvanic corrosion. Environmental Science: Water Research and Technology, 2022, 8, 1687-1699.	1.2	3
126	Evaluation of chemical indicators for tracking and apportionment of phosphorus sources to Table Rock Lake in Southwest Missouri, USA. Water Research, 2007, 41, 1525-1533.	5.3	2