Daniel E Giammar

List of Publications by Citations

119 papers	4,471 citations	40 h-index	62 g-index
130 ext. papers	5,200 ext. citations	8.3 avg, IF	5.91 L-index

#	Paper	IF	Citations
119	Forsterite dissolution and magnesite precipitation at conditions relevant for deep saline aquifer storage and sequestration of carbon dioxide. *Chemical Geology*, **2005**, 217, 257-276	4.2	284
118	Effects of water chemistry on arsenic removal from drinking water by electrocoagulation. *Water Research*, **2011**, 45, 384-92	12.5	164
117	Adsorption of uranium(VI) to manganese oxides: X-ray absorption spectroscopy and surface complexation modeling. *Environmental Science & Technology*, **2013**, 47, 850-8	10.3	160
116	Individual and competitive adsorption of arsenate and phosphate to a high-surface-area iron oxide-based sorbent. *Environmental Science & Technology*, **2008**, 42, 147-52	10.3	157
115	Effects of Particle Size and Crystalline Phase on Lead Adsorption to Titanium Dioxide Nanoparticles. *Environmental Engineering Science*, **2007**, 24, 85-95	2	133
114	Nanoscale size effects on uranium(VI) adsorption to hematite. *Environmental Science & Technology*, **2009**, 43, 1373-8	10.3	124
113	Time scales for sorption-desorption and surface precipitation of uranyl on goethite. *Environmental Science & Technology*, **2001**, 35, 3332-7	10.3	116
112	Impacts of geochemical reactions on geologic carbon sequestration. *Environmental Science & Technology*, **2013**, 47, 3-8	10.3	107
111	Uranium speciation and stability after reductive immobilization in aquifer sediments. *Geochimica Et Cosmochimica Acta*, **2011**, 75, 6497-6510	5.5	95
110	Comparative dissolution kinetics of biogenic and chemogenic uraninite under oxidizing conditions in the presence of carbonate. *Geochimica Et Cosmochimica Acta*, **2009**, 73, 6065-6083	5.5	86
109	Dissolution of biogenic and synthetic UO2 under varied reducing conditions. *Environmental Science & Technology*, **2008**, 42, 5600-6	10.3	83
108	Effects of flow and water chemistry on lead release rates from pipe scales. *Water Research*, **2011**, 45, 6525-34	12.5	78
107	Dynamics of Chromium(VI) Removal from Drinking Water by Iron Electrocoagulation. *Environmental Science & Technology*, **2016**, 50, 13502-13510	10.3	78
106	Impact of phosphate on U(VI) immobilization in the presence of goethite. *Geochimica Et Cosmochimica Acta*, **2010**, 74, 6324-6343	5.5	77
105	Uraninite oxidation and dissolution induced by manganese oxide: A redox reaction between two insoluble minerals. *Geochimica Et Cosmochimica Acta*, **2013**, 100, 24-40	5.5	76
104	Molecular-scale structure of uranium(VI) immobilized with goethite and phosphate. *Environmental Science & Technology*, **2012**, 46, 6594-603	10.3	75
103	Effects of pH, dissolved oxygen, and aqueous ferrous iron on the adsorption of arsenic to lepidocrocite. *Journal of Colloid and Interface Science*, **2015**, 448, 331-8	9.3	73

102	Oxidative UO2 dissolution induced by soluble Mn(III). *Environmental Science & Technology*, **2014**, 48, 289-98	10.3	69
101	Relative reactivity of biogenic and chemogenic uraninite and biogenic noncrystalline U(IV). *Environmental Science & Technology*, **2013**, 47, 9756-63	10.3	69
100	Mass action expressions for bidentate adsorption in surface complexation modeling: theory and practice. *Environmental Science & Technology*, **2013**, 47, 3982-96	10.3	68
99	Interaction of Fe(II) with phosphate and sulfate on iron oxide surfaces. *Geochimica Et Cosmochimica Acta*, **2015**, 158, 130-146	5.5	63
98	Oxidative Dissolution of Biogenic Uraninite in Groundwater at Old Rifle, CO. *Environmental Science & Technology*, **2011**, 45, 8748-54	10.3	63
97	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	10.3	58
96	Formation, Aggregation, and Deposition Dynamics of NOM-Iron Colloids at Anoxic-Oxic Interfaces. *Environmental Science & Technology*, **2017**, 51, 12235-12245	10.3	58
95	Effect of co-solutes on the products and solubility of uranium(VI) precipitated with phosphate. *Chemical Geology*, **2014**, 364, 66-75	4.2	57
94	Microbial reduction of Fe(III) in hematite nanoparticles by Geobacter sulfurreducens. *Environmental Science & Technology*, **2008**, 42, 6526-31	10.3	55
93	Synergistic effect of reductive and ligand-promoted dissolution of goethite. *Environmental Science & Technology*, **2015**, 49, 7236-44	10.3	54
92	Effects of water chemistry and flow rate on arsenate removal by adsorption to an iron oxide-based sorbent. *Water Research*, **2008**, 42, 4629-36	12.5	54
91	Impact of galvanic corrosion on lead release from aged lead service lines. *Water Research*, **2012**, 46, 5049-60	12.8	53
90	Effect of phosphate on U(VI) sorption to montmorillonite: Ternary complexation and precipitation barriers. *Geochimica Et Cosmochimica Acta*, **2016**, 175, 86-99	5.5	52
89	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	8	51
88	Speciation of Selenium, Arsenic, and Zinc in Class C Fly Ash. *Energy & Fuels*, **2011**, 25, 2980-2987	4.1	50
87	Equilibrium solubility and dissolution rate of the lead phosphate chloropyromorphite. *Environmental Science & Technology*, **2007**, 41, 8050-5	10.3	50
86	Rates of Cr(VI) Generation from CrFe(OH) Solids upon Reaction with Manganese Oxide. *Environmental Science & Technology*, **2017**, 51, 12416-12423	10.3	49
85	Formation of lead(IV) oxides from lead(II) compounds. *Environmental Science & Technology*, **2010**, 44, 8950-6	10.3	45

84	Forsterite dissolution in saline water at elevated temperature and high CO2 pressure. *Environmental Science & Technology*, **2013**, 47, 168-73	10.3	44
83	Speciation and reactivity of uranium products formed during in situ bioremediation in a shallow alluvial aquifer. *Environmental Science & Technology*, **2014**, 48, 12842-50	10.3	42
82	Effect of water chemistry on the dissolution rate of the lead corrosion product hydrocerussite. *Water Research*, **2014**, 54, 237-46	12.5	42
81	Indirect UO2 oxidation by Mn(II)-oxidizing spores of Bacillus sp. strain SG-1 and the effect of U and Mn concentrations. *Environmental Science & Technology*, **2008**, 42, 8709-14	10.3	42
80	Effects of pH and carbonate concentration on dissolution rates of the lead corrosion product PbO(2). *Environmental Science & Technology*, **2010**, 44, 1093-9	10.3	40
79	Formation and Aggregation of Lead Phosphate Particles: Implications for Lead Immobilization in Water Supply Systems. *Environmental Science & Technology*, **2018**, 52, 12612-12623	10.3	40
78	Cr(VI) Adsorption on Engineered Iron Oxide Nanoparticles: Exploring Complexation Processes and Water Chemistry. *Environmental Science & Technology*, **2019**, 53, 11913-11921	10.3	37
77	Impact of Water Chemistry on Element Mobilization from Eagle Ford Shale. *Environmental Engineering Science*, **2015**, 32, 310-320	2	37
76	Metal release and speciation changes during wet aging of coal fly ashes. *Environmental Science & Technology*, **2012**, 46, 11804-12	10.3	37
75	Measurement and Surface Complexation Modeling of U(VI) Adsorption to Engineered Iron Oxide Nanoparticles. *Environmental Science & Technology*, **2017**, 51, 9219-9226	10.3	36
74	Impact of chlorine disinfectants on dissolution of the lead corrosion product PbO2. *Environmental Science & Technology*, **2010**, 44, 7082-8	10.3	35
73	Influence of dissolved sodium and cesium on uranyl oxide hydrate solubility. *Environmental Science & Technology*, **2004**, 38, 171-9	10.3	35
72	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	10.3	33
71	Transport of U(VI) through sediments amended with phosphate to induce in situ uranium immobilization. *Water Research*, **2015**, 69, 307-317	12.5	33
70	Effect of Reaction Pathway on the Extent and Mechanism of Uranium(VI) Immobilization with Calcium and Phosphate. *Environmental Science & Technology*, **2016**, 50, 3128-36	10.3	33
69	Measurement and Modeling of U(IV) Adsorption to Metal Oxide Minerals. *Environmental Science and Technology Letters*, **2015**, 2, 227-232	11	31
68	Immobilization of Lead with Nanocrystalline Carbonated Apatite Present in Fish Bone. *Environmental Engineering Science*, **2008**, 25, 725-736	2	31
67	Effect of Mn(II) on the structure and reactivity of biogenic uraninite. *Environmental Science & Technology*, **2009**, 43, 6541-7	10.3	30

66	Element mobilization from Bakken shales as a function of water chemistry. *Chemosphere*, **2016**, 149, 286-93	8.4	29
65	Effects of Mn(II) on UO2 dissolution under anoxic and oxic conditions. *Environmental Science & Technology*, **2014**, 48, 5546-54	10.3	29
64	Effect of Ca2+ and Zn2+ on UO2 dissolution rates. *Environmental Science & Technology*, **2012**, 46, 2731-7	10.3	29
63	CO2 Mineral Sequestration in Naturally Porous Basalt. *Environmental Science and Technology Letters*, **2018**, 5, 142-147	11	28
62	Formation and Transport of Cr(III)-NOM-Fe Colloids upon Reaction of Cr(VI) with NOM-Fe(II) Colloids at Anoxic-Oxic Interfaces. *Environmental Science & Technology*, **2020**, 54, 4256-4266	10.3	27
61	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, 856-67	2.4	27
60	Kinetics of lead(IV) oxide (PbO2) reductive dissolution: role of lead(II) adsorption and surface speciation. *Journal of Colloid and Interface Science*, **2013**, 389, 236-43	9.3	26
59	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	2	26
58	Effect of connection methods on lead release from galvanic corrosion. *Journal - American Water Works Association*, **2013**, 105, E337-E351	0.5	25
57	Speciation-Dependent Kinetics of Uranium(VI) Bioreduction. *Geomicrobiology Journal*, **2011**, 28, 396-409	2.5	25
56	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	10.3	24
55	Equilibrium and kinetic aspects of soddyite dissolution and secondary phase precipitation in aqueous suspension. *Geochimica Et Cosmochimica Acta*, **2002**, 66, 3235-3245	5.5	24
54	CO2 mineral trapping in fractured basalt. *International Journal of Greenhouse Gas Control*, **2017**, 66, 204-217	4.2	23
53	Phosphate-Induced Immobilization of Uranium in Hanford Sediments. *Environmental Science & Technology*, **2016**, 50, 13486-13494	10.3	22
52	Long-term in situ oxidation of biogenic uraninite in an alluvial aquifer: impact of dissolved oxygen and calcium. *Environmental Science & Technology*, **2015**, 49, 7340-7	10.3	21
51	Enhanced Uranium Immobilization by Phosphate Amendment under Variable Geochemical and Flow Conditions: Insights from Reactive Transport Modeling. *Environmental Science & Technology*, **2018**, 52, 5841-5850	10.3	19
50	Engineered superparamagnetic nanomaterials for arsenic(V) and chromium(VI) sorption and separation: quantifying the role of organic surface coatings. *Environmental Science: Nano*, **2018**, 5, 556-563	7.1	19
49	Effect of transport limitations and fluid properties on reaction products in fractures of unaltered and serpentinized basalt exposed to high PCO2 fluids. *International Journal of Greenhouse Gas Control*, **2017**, 63, 310-320	4.2	19

48	Impacts of diffusive transport on carbonate mineral formation from magnesium silicate-CO2-water reactions. *Environmental Science & Technology*, **2014**, 48, 14344-51	10.3	19
47	U(VI) reduction by Fe(II) on hematite nanoparticles. *Journal of Nanoparticle Research*, **2011**, 13, 3741-3754	2.3	19
46	Synergistic Effects between Biogenic Ligands and a Reductant in Fe Acquisition from Calcareous Soil. *Environmental Science & Technology*, **2016**, 50, 6381-8	10.3	18
45	Forsterite Carbonation in Zones with Transport Limited by Diffusion. *Environmental Science and Technology Letters*, **2014**, 1, 333-338	11	18
44	Tackling Deficiencies in the Presentation and Interpretation of Adsorption Results for New Materials. *Environmental Science & Technology*, **2019**, 53, 5543-5544	10.3	17
43	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	10.3	17
42	MINFIT: A Spreadsheet-Based Tool for Parameter Estimation in an Equilibrium Speciation Software Program. *Environmental Science & Technology*, **2016**, 50, 11112-11120	10.3	17
41	Carbon Sequestration in Olivine and Basalt Powder Packed Beds. *Environmental Science & Technology*, **2017**, 51, 2105-2112	10.3	15
40	Metal Contaminant Oxidation Mediated by Manganese Redox Cycling in Subsurface Environment. *ACS Symposium Series*, **2015**, 29-50	0.4	15
39	Permanent CO Trapping through Localized and Chemical Gradient-Driven Basalt Carbonation. *Environmental Science & Technology*, **2018**, 52, 8954-8964	10.3	15
38	Roles of Transport Limitations and Mineral Heterogeneity in Carbonation of Fractured Basalts. *Environmental Science & Technology*, **2017**, 51, 9352-9362	10.3	15
37	Effect of diffusive transport limitations on UO2 dissolution. *Water Research*, **2012**, 46, 6023-32	12.5	14
36	Kinetics of the reductive dissolution of lead(IV) oxide by iodide. *Environmental Science & Technology*, **2012**, 46, 5859-66	10.3	14
35	Understanding the Roles of Dissolution and Diffusion in Cr(OH)3 Oxidation by MnO2. *ACS Earth and Space Chemistry*, **2019**, 3, 357-365	3.2	13
34	Impact of orthophosphate on lead release from pipe scale in high pH, low alkalinity water. *Water Research*, **2020**, 177, 115764	12.5	13
33	Evaluation of Nanostructured Sorbents in Differential Bed Reactors for Elemental Mercury Capture. *Environmental Engineering Science*, **2008**, 25, 1061-1070	2	13
32	Copper Complexation with the Mellitic Acid Series. *Journal of Solution Chemistry*, **1998**, 27, 89-105	1.8	12
31	Heterogeneous Lead Phosphate Nucleation at Organic Water Interfaces: Implications for Lead Immobilization. *ACS Earth and Space Chemistry*, **2018**, 2, 869-877	3.2	10

30	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	10.3	8
29	Evidence from 29Si Solid-State Nuclear Magnetic Resonance of Dissolution Reactions of Forsterite. *Environmental Engineering Science*, **2016**, 33, 799-805	2	8
28	Dissolution and surface roughening of Columbia River flood basalt at geologic carbon sequestration conditions. *Chemical Geology*, **2017**, 467, 100-109	4.2	8
27	Effect of sodium silicate on lead release from lead service lines. *Water Research*, **2021**, 188, 116485	12.5	8
26	Effect of Aluminum on Lead Release to Drinking Water from Scales of Corrosion Products. *Environmental Science & Technology*, **2020**, 54, 6142-6151	10.3	7
25	Lead Phosphate Particles in Tap Water: Challenges for Point-of-Use Filters. *Environmental Science and Technology Letters*, **2021**, 8, 244-249	11	7
24	Modeling performance of rhamnolipid-coated engineered magnetite nanoparticles for U(VI) sorption and separation. *Environmental Science: Nano*, **2020**, 7, 2010-2020	7.1	6
23	Cr(VI) Formation from CrxFe1⊠(OH)3 Induced by Mn(II) Oxidation on the Surface of CrxFe1⊠(OH)3. *ACS Earth and Space Chemistry*, **2020**, 4, 1558-1564	3.2	6
22	Spatially-variable carbonation reactions in polycrystalline olivine. *Geochimica Et Cosmochimica Acta*, **2017**, 204, 252-266	5.5	5
21	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	5.8	5
20	Determining pH at elevated pressure and temperature using in situ □□C NMR. *Environmental Science & Technology*, **2015**, 49, 1631-8	10.3	5
19	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	4.2	5
18	Water metal contaminants in a potentially mineral-deficient population of Haiti. *International Journal of Environmental Health Research*, **2018**, 28, 626-634	3.6	4
17	Fate of Metals in Fly Ash During Aging in Laboratory-Scale Ash Impoundments. *Environmental Engineering Science*, **2012**, 29, 1085-1091	2	4
16	Pilot-scale comparison of sodium silicates, orthophosphate and pH adjustment to reduce lead release from lead service lines. *Water Research*, **2021**, 195, 116955	12.5	4
15	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	10.3	3
14	Impact of Cu(II) and Zn(II) on the Reductive Dissolution of Pb(IV) Oxide. *Environmental Science and Technology Letters*, **2019**, 6, 745-751	11	3
13	Surface functionalized nanoscale metal oxides for arsenic(V), chromium(VI), and uranium(VI) sorption: considering single- and multi-sorbate dynamics. *Environmental Science: Nano*, **2020**, 7, 3805-3813	7.1	2

12	Impact of iron-rich scale in service lines on lead release to water. *AWWA Water Science*, **2020**, 2, e1188	1.6	2
11	National Alliance for Water Innovation (NAWI) Municipal Sector Technology Roadmap 2021 **2021**,		2
10	Worth a Closer Look: Raman Spectra of Lead-Pipe Scale. *Minerals (Basel, Switzerland)*, **2021**, 11, 1047	2.4	2
9	Evaluation of chemical indicators for tracking and apportionment of phosphorus sources to Table Rock Lake in Southwest Missouri, USA. *Water Research*, **2007**, 41, 1525-33	12.5	1
8	Impact of dissolved oxygen and pH on the removal of selenium from water by iron electrocoagulation.. *Water Research*, **2022**, 213, 118159	12.5	1
7	Consistent Controls on Trace Metal Micronutrient Speciation in Wetland Soils and Stream Sediments. *Geochimica Et Cosmochimica Acta*, **2021**,	5.5	1
6	Effects of Cu(II) and Zn(II) on PbO Reductive Dissolution under Drinking Water Conditions: Short-term Inhibition and Long-term Enhancement. *Environmental Science & Technology*, **2021**, 55, 14397-14406	10.3	1
5	Lead phosphate deposition in porous media and implications for lead remediation.. *Water Research*, **2022**, 214, 118200	12.5	1
4	Cost and Energy Metrics for Municipal Water Reuse. *ACS ES&T Engineering*, **2022**, 2, 489-507		1
3	Influence of point-of-use filters and stagnation on water quality at a preschool and under laboratory conditions.. *Water Research*, **2022**, 211, 118034	12.5	0
2	Ligand-Induced U Mobilization from Chemogenic Uraninite and Biogenic Noncrystalline U(IV) under Anoxic Conditions.. *Environmental Science & Technology*, **2022**, 56, 6369-6379	10.3	0
1	Copper availability governs nitrous oxide accumulation in wetland soils and stream sediments. *Geochimica Et Cosmochimica Acta*, **2022**, 327, 96-115	5.5	0