Peggy A O'day

List of Publications by Year
in descending order

81 papers	4,984 citations	126907 33 h-index	88630 70 g-index
83 all docs	83 docs citations	83 times ranked	4771 citing authors

#	Article	IF	Citations
1	The influence of sulfur and iron on dissolved arsenic concentrations in the shallow subsurface under changing redox conditions. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13703-13708.	7.1	406
2	Arsenic speciation in pyrite and secondary weathering phases, Mother Lode Gold District, Tuolumne County, California. Applied Geochemistry, 2000, 15, 1219-1244.	3.0	377
3	Extended X-ray Absorption Fine Structure (EXAFS) Analysis of Disorder and Multiple-Scattering in Complex Crystalline Solids. Journal of the American Chemical Society, 1994, 116, 2938-2949.	13.7	283
4	Electrochemical and Spectroscopic Study of Arsenate Removal from Water Using Zero-Valent Iron Media. Environmental Science & Technology, 2001, 35, 2026-2032.	10.0	219
5	X-ray absorption spectroscopic study of Fe reference compounds for the analysis of natural sediments. American Mineralogist, 2004, 89, 572-585.	1.9	210
6	Chemistry and Mineralogy of Arsenic. Elements, 2006, 2, 77-83.	0.5	200
7	Evidence for multinuclear metal-ion complexes at solid/water interfaces from X-ray absorption spectroscopy. Nature, 1990, 348, 528-531.	27.8	160
8	X-Ray Absorption Spectroscopy of Cobalt(II) Multinuclear Surface Complexes and Surface Precipitates on Kaolinite. Journal of Colloid and Interface Science, 1994, 165, 269-289.	9.4	155
9	Arsenic sequestration by sorption processes in high-iron sediments. Geochimica Et Cosmochimica Acta, 2007, 71, 5782-5803.	3.9	146
10	X-Ray Absorption Spectroscopy of Strontium(II) Coordination. Journal of Colloid and Interface Science, 2000, 222, 198-212.	9.4	141
11	Arsenic speciation in synthetic jarosite. Chemical Geology, 2005, 215, 473-498.	3.3	140
12	Rockâ^'Water Interactions Controlling Zinc, Cadmium, and Lead Concentrations in Surface Waters and Sediments, U.S. Tri-State Mining District. 1. Molecular Identification Using X-ray Absorption Spectroscopy. Environmental Science & Technology, 1998, 32, 943-955.	10.0	124
13	Deposition and Fate of Arsenic in Iron- and Arsenic-Enriched Reservoir Sediments. Environmental Science & Technology, 2002, 36, 381-386.	10.0	120
14	Processes of Nickel and Cobalt Uptake by a Manganese Oxide Forming Sediment in Pinal Creek, Globe Mining District, Arizona. Environmental Science & Technology, 2001, 35, 4719-4725.	10.0	117
15	Molecular Structure and Binding Sites of Cobalt(II) Surface Complexes on Kaolinite from X-ray Absorption Spectroscopy. Clays and Clay Minerals, 1994, 42, 337-355.	1.3	113
16	Understanding Soluble Arsenate Removal Kinetics by Zerovalent Iron Media. Environmental Science & Technology, 2002, 36, 2074-2081.	10.0	112
17	The Archean-Proterozoic transition: Evidence from the geochemistry of metasedimentary rocks of Guyana and Montana. Geochimica Et Cosmochimica Acta, 1986, 50, 2125-2141.	3.9	109
18	X-ray absorption spectroscopy of Co(II) sorption complexes on quartz (Î±-SiO2) and rutile (TiO2). Geochimica Et Cosmochimica Acta, 1996, 60, 2515-2532.	3.9	103

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19	A surface complexation and ion exchange model of Pb and Cd competitive sorption on natural soils. Geochimica Et Cosmochimica Acta, 2009, 73, 543-558.	3.9	99
20	Rockâ^'Water Interactions Controlling Zinc, Cadmium, and Lead Concentrations in Surface Waters and Sediments, U.S. Tri-State Mining District. 2. Geochemical Interpretation. Environmental Science & Technology, 1998, 32, 956-965.	10.0	93
21	X-Ray Absorption Spectroscopy of Strontium(II) Coordination. Journal of Colloid and Interface Science, 2000, 222, 184-197.	9.4	84
22	Metal Speciation and Bioavailability in Contaminated Estuary Sediments, Alameda Naval Air Station, California. Environmental Science & Technology, 2000, 34, 3665-3673.	10.0	82
23	Colonization of nascent, deep-sea hydrothermal vents by a novel Archaeal and Nanoarchaeal assemblage. Environmental Microbiology, 2006, 8, 114-125.	3.8	81
24	Speciation and natural attenuation of arsenic and iron in a tidally influenced shallow aquifer. Geochimica Et Cosmochimica Acta, 2009, 73, 5528-5553.	3.9	80
25	Molecular environmental geochemistry. Reviews of Geophysics, 1999, 37, 249-274.	23.0	63
26	Mineral-Based Amendments for Remediation. Elements, 2010, 6, 375-381.	0.5	60
27	Influence of Phosphate and Silica on U(VI) Precipitation from Acidic and Neutralized Wastewaters. Environmental Science & Technology, 2014, 48, 6097-6106.	10.0	59
28	In Situ Spectroscopic and Solution Analyses of the Reductive Dissolution of MnO2 by Fe(II). Environmental Science & Technology, 2001, 35, 1157-1163.	10.0	56
29	Silicon control of strontium and cesium partitioning in hydroxide-weathered sediments. Geochimica Et Cosmochimica Acta, 2008, 72, 2024-2047.	3.9	54
30	" Genome-enabled studies of anaerobic, nitrate-dependent iron oxidation in the chemolithoautotrophic bacterium Thiobacillus denitrificans". Frontiers in Microbiology, 2013, 4, 249.	3.5	54
31	Geochemical Weathering Increases Lead Bioaccessibility in Semi-Arid Mine Tailings. Environmental Science & Technology, 2012, 46, 5834-5841.	10.0	48
32	Speciation and fate of trace metals in estuarine sediments under reduced and oxidized conditions, Seaplane Lagoon, Alameda Naval Air Station (USA). Geochemical Transactions, 2002, 3, 1.	0.7	47
33	Surface complexation model for strontium sorption to amorphous silica and goethite. Geochemical Transactions, 2008, 9, 2.	0.7	45
34	Pyroclastic deposits within the East Greenland Tertiary flood basalts. Journal of the Geological Society, 2001, 158, 269-284.	2.1	35
35	Production of CO2 and H2 by Diking-Eruptive Events at Mid-Ocean Ridges: Implications for Abiotic Organic Synthesis and Global Geochemical Cycling. International Geology Review, 2000, 42, 673-683.	2.1	33
36	Strontium Speciation during Reaction of Kaolinite with Simulated Tank-Waste Leachate:Â Bulk and Microfocused EXAFS Analysis. Environmental Science & Technology, 2006, 40, 2608-2614.	10.0	32

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37	Delayed Nrf2-regulated antioxidant gene induction in response to silica nanoparticles. Free Radical Biology and Medicine, 2017, 108, 311-319.	2.9	31
38	Geochemical processes controlling arsenic mobility in groundwater: A case study of arsenic mobilization and natural attenuation. Applied Geochemistry, 2010, 25, 69-80.	3.0	30
39	Image optimization and analysis of synchrotron X-ray computed microtomography (CÎ¼T) data. Computers and Geosciences, 2003, 29, 823-836.	4.2	29
40	Arsenic speciation in the dispersible colloidal fraction of soils from a mine-impacted creek. Journal of Hazardous Materials, 2015, 286, 30-40.	12.4	27
41	Experimental abiotic synthesis of methanol in seafloor hydrothermal systems during diking events. Chemical Geology, 2001, 180, 129-139.	3.3	25
42	A Gel Probe Equilibrium Sampler for Measuring Arsenic Porewater Profiles and Sorption Gradients in Sediments: II. Field Application to Haiwee Reservoir Sediment. Environmental Science & Technology, 2008, 42, 504-510.	10.0	25
43	Reactive Transport Modeling of Subaqueous Sediment Caps and Implications for the Long-Term Fate of Arsenic, Mercury, and Methylmercury. Aquatic Geochemistry, 2012, 18, 297-326.	1.3	25
44	Natural Attenuation of Arsenic by Sediment Sorption and Oxidation. Environmental Science & Technology, 2009, 43, 4253-4259.	10.0	24
45	Geochemical and hydrologic controls on the mobilization of arsenic derived from herbicide application. Applied Geochemistry, 2009, 24, 2152-2162.	3.0	22
46	Determination of trace and platinum-group elements in high ionic-strength volcanic fluids by sector-field inductively coupled plasma mass spectrometry (ICP-MS). Fresenius' Journal of Analytical Chemistry, 1998, 362, 457-464.	1.5	21
47	A web-based library of XAFS data on model compounds. Journal of Synchrotron Radiation, 1999, 6, 276-277.	2.4	21
48	Trace contaminant concentration affects mineral transformation and pollutant fate in hydroxide-weathered Hanford sediments. Journal of Hazardous Materials, 2011, 197, 119-127.	12.4	21
49	Solid-State NMR Identification and Quantification of Newly Formed Aluminosilicate Phases in Weathered Kaolinite Systems. Journal of Physical Chemistry B, 2006, 110, 723-732.	2.6	19
50	Changes in Zinc Speciation with Mine Tailings Acidification in a Semiarid Weathering Environment. Environmental Science & Technology, 2011, 45, 7166-7172.	10.0	19
51	MNA as a Remedy for Arsenic Mobilized by Anthropogenic Inputs of Organic Carbon. Ground Water Monitoring and Remediation, 2009, 29, 84-92.	0.8	18
52	Uranium speciation in acid waste-weathered sediments: The role of aging and phosphate amendments. Applied Geochemistry, 2018, 89, 109-120.	3.0	17
53	Manganese(<scp>iv</scp>) oxide amendments reduce methylmercury concentrations in sediment porewater. Environmental Sciences: Processes and Impacts, 2018, 20, 1746-1760.	3.5	17
54	A Gel Probe Equilibrium Sampler for Measuring Arsenic Porewater Profiles and Sorption Gradients in Sediments: I. Laboratory Development. Environmental Science & Technology, 2008, 42, 497-503.	10.0	16

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55	Arsenic, Copper, and Zinc Leaching through Preferential Flow in Miningâ€Impacted Soils. Soil Science Society of America Journal, 2012, 76, 449-462.	2.2	16
56	Combining single-particle inductively coupled plasma mass spectrometry and X-ray absorption spectroscopy to evaluate the release of colloidal arsenic from environmental samples. Analytical and Bioanalytical Chemistry, 2016, 408, 5125-5135.	3.7	16
57	Iron speciation in particulate matter (PM2.5) from urban Los Angeles using spectro-microscopy methods. Atmospheric Environment, 2021, 245, 117988.	4.1	16
58	Critical review of mercury methylation and methylmercury demethylation rate constants in aquatic sediments for biogeochemical modeling. Critical Reviews in Environmental Science and Technology, 2022, 52, 4353-4378.	12.8	16
59	Immobilization of Hg(II) by Coprecipitation in Sulfate-Cement Systems. Environmental Science & Technology, 2012, 46, 6767-6775.	10.0	15
60	Uranium Release from Acidic Weathered Hanford Sediments: Single-Pass Flow-Through and Column Experiments. Environmental Science & Technology, 2017, 51, 11011-11019.	10.0	15
61	Effects of mercury, organic carbon, and microbial inhibition on methylmercury cycling at the profundal sediment-water interface of a sulfate-rich hypereutrophic reservoir. Environmental Pollution, 2021, 268, 115853.	7.5	13
62	Rates and mechanisms of uranyl oxyhydroxide mineral dissolution. Geochimica Et Cosmochimica Acta, 2017, 207, 298-321.	3.9	12
63	Cesium and strontium incorporation into zeolite-type phases during homogeneous nucleation from caustic solutions. American Mineralogist, 2011, 96, 1809-1820.	1.9	11
64	Dissolved Carbonate and pH Control the Dissolution of Uranyl Phosphate Minerals in Flow-Through Porous Media. Environmental Science & Technology, 2020, 54, 6031-6042.	10.0	11
65	Crustal evolution revisited: Reply to Comments by S.M. Mclennan and S.R. Taylor, and J. Veizer, on â€œThe Archean-Proterozoic transition: Evidence from the geochemistry of metasedimentary rocks of Guyana and Montanaâ€. Geochimica Et Cosmochimica Acta, 1988, 52, 793-795.	3.9	9
66	Characterization of manganese oxide amendments for <i>in situ</i> remediation of mercury-contaminated sediments. Environmental Sciences: Processes and Impacts, 2018, 20, 1761-1773.	3.5	9
67	Gibbsite (100) and Kaolinite (100) Sorption of Cadmium(II): A Density Functional Theory and XANES Study of Structures and Energies. Journal of Physical Chemistry A, 2019, 123, 6319-6333.	2.5	9
68	Phosphate controls uranium release from acidic waste-weathered Hanford sediments. Journal of Hazardous Materials, 2021, 416, 126240.	12.4	9
69	Iron Speciation in Respirable Particulate Matter and Implications for Human Health. Environmental Science & Technology, 2022, 56, 7006-7016.	10.0	9
70	Phosphorus Speciation in Atmospherically Deposited Particulate Matter and Implications for Terrestrial Ecosystem Productivity. Environmental Science & Technology, 2020, 54, 4984-4994.	10.0	8
71	Role of Coupled Redox Transformations in the Mobilization and Sequestration of Arsenic. ACS Symposium Series, 2011, , 463-476.	0.5	7
72	Mineral transformation controls speciation and pore-fluid transmission of contaminants in waste-weathered Hanford sediments. Geochimica Et Cosmochimica Acta, 2014, 141, 487-507.	3.9	7

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73	Anaerobic Dissolution Rates of U(IV)-Oxide by Abiotic and Nitrate-Dependent Bacterial Pathways. Environmental Science & Technology, 2020, 54, 8010-8021.	10.0	6
74	A Combined Siteâ€Specific Metals Sorption and Transport Model for Intact Soil Columns. Vadose Zone Journal, 2013, 12, 1-11.	2.2	5
75	Arsenic Removal by Zero-Valent Iron: A Field Study of Rates, Mechanisms, and Long-Term Performance. ACS Symposium Series, 2005, , 344-360.	0.5	4
76	Mechanism of Hg(II) immobilization in sediments by sulfate-cement amendment. Applied Geochemistry, 2016, 67, 68-80.	3.0	4
77	Surface characterization and chemical speciation of adsorbed iron(<scp>iii</scp>) on oxidized carbon nanoparticles. Environmental Sciences: Processes and Impacts, 2019, 21, 548-563.	3.5	4
78	Ambient carbon nanoparticles activated Nrf2 signaling through adsorbed iron or quinones. Free Radical Biology and Medicine, 2018, 128, S122.	2.9	3
79	Evaluation of Manganese Oxide Amendments for Mercury Remediation in Contaminated Aquatic Sediments. ACS ES&T Engineering, 2021, 1, 1688-1697.	7.6	2
80	Advances in Arsenic Research: Introductory Remarks. ACS Symposium Series, 2005, , 1-5.	0.5	1
81	Effects of flow on uranium speciation in soils impacted by acidic waste fluids. Journal of Environmental Radioactivity, 2022, 251-252, 106955.	1.7	0