Scott G Johnston

List of Publications by Year
in descending order

89 papers	4,129 citations	101543 36 h-index	128289 60 g-index
90 all docs	90 docs citations	90 times ranked	2981 citing authors

#	Article	IF	Citations
1	Sorption of Arsenic(V) and Arsenic(III) to Schwertmannite. Environmental Science & Technology, 2009, 43, 9202-9207.	10.0	221
2	Arsenic Mobility during Flooding of Contaminated Soil: The Effect of Microbial Sulfate Reduction. Environmental Science & Technology, 2014, 48, 13660-13667.	10.0	173
3	Mobility of arsenic and selected metals during re-flooding of iron- and organic-rich acid-sulfate soil. Chemical Geology, 2008, 253, 64-73.	3.3	157
4	A simple and inexpensive chromium-reducible sulfur method for acid-sulfate soils. Applied Geochemistry, 2008, 23, 2759-2766.	3.0	152
5	Iron and sulfur cycling in acid sulfate soil wetlands under dynamic redox conditions: A review. Chemosphere, 2018, 197, 803-816.	8.2	150
6	Sulfur biogeochemical cycling and novel Feâ€“S mineralization pathways in a tidally re-flooded wetland. Geochimica Et Cosmochimica Acta, 2011, 75, 3434-3451.	3.9	142
7	Microbial sulfidogenesis in ferrihydrite-rich environments: Effects on iron mineralogy and arsenic mobility. Geochimica Et Cosmochimica Acta, 2011, 75, 3072-3087.	3.9	134
8	Coupling of arsenic mobility to sulfur transformations during microbial sulfate reduction in the presence and absence of humic acid. Chemical Geology, 2013, 343, 12-24.	3.3	127
9	Iron-Monosulfide Oxidation in Natural Sediments: Resolving Microbially Mediated S Transformations Using XANES, Electron Microscopy, and Selective Extractions. Environmental Science & Technology, 2009, 43, 3128-3134.	10.0	111
10	Antimony and Arsenic Behavior during Fe(II)-Induced Transformation of Jarosite. Environmental Science & Technology, 2017, 51, 4259-4268.	10.0	97
11	Iron geochemical zonation in a tidally inundated acid sulfate soil wetland. Chemical Geology, 2011, 280, 257-270.	3.3	96
12	Arsenic Effects and Behavior in Association with the Fe(II)-Catalyzed Transformation of Schwertmannite. Environmental Science & Technology, 2010, 44, 2016-2021.	10.0	92
13	Sulfur, iron and carbon cycling following hydrological restoration of acidic freshwater wetlands. Chemical Geology, 2014, 371, 9-26.	3.3	89
14	Diffusive Gradients in Thin Films Reveals Differences in Antimony and Arsenic Mobility in a Contaminated Wetland Sediment during an Oxic-Anoxic Transition. Environmental Science & Technology, 2018, 52, 1118-1127.	10.0	84
15	Antimony and arsenic speciation, redox-cycling and contrasting mobility in a mining-impacted river system. Science of the Total Environment, 2020, 710, 136354.	8.0	83
16	Sulfate Availability Drives Divergent Evolution of Arsenic Speciation during Microbially Mediated Reductive Transformation of Schwertmannite. Environmental Science & Technology, 2013, 47, 2221-2229.	10.0	77
17	Antimony mobility in reducing environments: The effect of microbial iron(III)-reduction and associated secondary mineralization. Geochimica Et Cosmochimica Acta, 2019, 245, 278-289.	3.9	77
18	Arsenic mobilization and iron transformations during sulfidization of As(V)-bearing jarosite. Chemical Geology, 2012, 334, 9-24.	3.3	76

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19	Arsenic Mobilization in a Seawater Inundated Acid Sulfate Soil. Environmental Science & Technology, 2010, 44, 1968-1973.	10.0	72
20	Are methane emissions from mangrove stems a cryptic carbon loss pathway? Insights from a catastrophic forest mortality. New Phytologist, 2019, 224, 146-154.	7.3	66
21	Iron and Arsenic Cycling in Intertidal Surface Sediments during Wetland Remediation. Environmental Science & Technology, 2011, 45, 2179-2185.	10.0	65
22	Contemporary pedogenesis of severely degraded tropical acid sulfate soils after introduction of regular tidal inundation. Geoderma, 2009, 149, 335-346.	5.1	54
23	Antimony and arsenic partitioning during Fe2+-induced transformation of jarosite under acidic conditions. Chemosphere, 2018, 195, 515-523.	8.2	53
24	Wetland methane emissions dominated by plantâ€mediated fluxes: Contrasting emissions pathways and seasons within a shallow freshwater subtropical wetland. Limnology and Oceanography, 2019, 64, 1895-1912.	3.1	52
25	Impact of silica on the reductive transformation of schwertmannite and the mobilization of arsenic. Geochimica Et Cosmochimica Acta, 2012, 96, 134-153.	3.9	51
26	Bark-dwelling methanotrophic bacteria decrease methane emissions from trees. Nature Communications, 2021, 12, 2127.	12.8	51
27	The acid flux dynamics of two artificial drains in acid sulfate soil backswamps on the Clarence River floodplain, Australia. Soil Research, 2004, 42, 623.	1.1	50
28	Changes in water quality following tidal inundation of coastal lowland acid sulfate soil landscapes. Estuarine, Coastal and Shelf Science, 2009, 81, 257-266.	2.1	50
29	Humic acid impacts antimony partitioning and speciation during iron(II)-induced ferrihydrite transformation. Science of the Total Environment, 2019, 683, 399-410.	8.0	50
30	Abundance and fractionation of Al, Fe and trace metals following tidal inundation of a tropical acid sulfate soil. Applied Geochemistry, 2010, 25, 323-335.	3.0	47
31	Arsenic Mobilization Is Enhanced by Thermal Transformation of Schwertmannite. Environmental Science & Technology, 2016, 50, 8010-8019.	10.0	47
32	Effects of hyper-enriched reactive Fe on sulfidisation in a tidally inundated acid sulfate soil wetland. Biogeochemistry, 2011, 103, 263-279.	3.5	43
33	Artificial drainage of floodwaters from sulfidic backswamps: effects on deoxygenation in an Australian estuary. Marine and Freshwater Research, 2003, 54, 781.	1.3	43
34	Spatial and temporal changes in estuarine water quality during a post-flood hypoxic event. Estuarine, Coastal and Shelf Science, 2010, 87, 73-82.	2.1	39
35	Arsenic mobilization in an alluvial aquifer of the Terai region, Nepal. Journal of Hydrology: Regional Studies, 2015, 4, 59-79.	2.4	39
36	Alteration of groundwater and sediment geochemistry in a sulfidic backswamp due to Melaleuca quinquenervia encroachment. Soil Research, 2003, 41, 1343.	1.1	38

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37	Antimony speciation and mobility during Fe(II)-induced transformation of humic acid-antimony(V)-iron(III) coprecipitates. Environmental Pollution, 2019, 254, 113112.	7.5	38
38	The impact of controlled tidal exchange on drainage water quality in acid sulphate soil backswamps. Agricultural Water Management, 2005, 73, 87-111.	5.6	37
39	Saturated hydraulic conductivity of sulfuric horizons in coastal floodplain acid sulfate soils: Variability and implications. Geoderma, 2009, 151, 387-394.	5.1	37
40	Antimony mobility in sulfidic systems: Coupling with sulfide-induced iron oxide transformations. Geochimica Et Cosmochimica Acta, 2020, 282, 276-296.	3.9	37
41	Arsenic-Imposed Effects on Schwertmannite and Jarosite Formation in Acid Mine Drainage and Coupled Impacts on Arsenic Mobility. ACS Earth and Space Chemistry, 2021, 5, 1418-1435.	2.7	35
42	Seawater causes rapid trace metal mobilisation in coastal lowland acid sulfate soils: Implications of sea level rise for water quality. Geoderma, 2010, 160, 252-263.	5.1	34
43	Reactive trace element enrichment in a highly modified, tidally inundated acid sulfate soil wetland: East Trinity, Australia. Marine Pollution Bulletin, 2010, 60, 620-626.	5.0	31
44	Effect of cyclic redox oscillations on water quality in freshwater acid sulfate soil wetlands. Science of the Total Environment, 2017, 581-582, 314-327.	8.0	31
45	Synchrotron X-ray absorption spectroscopy reveals antimony sequestration by reduced sulfur in a freshwater wetland sediment. Environmental Chemistry, 2017, 14, 345.	1.5	31
46	Changes in surface water quality after inundation of acid sulfate soils of different vegetation cover. Soil Research, 2005, 43, 1.	1.1	30
47	Tree stem methane emissions from subtropical lowland forest (Melaleuca quinquenervia) regulated by local and seasonal hydrology. Biogeochemistry, 2020, 151, 273-290.	3.5	29
48	Seawater-induced mobilization of trace metals from mackinawite-rich estuarine sediments. Water Research, 2013, 47, 821-832.	11.3	27
49	Isotopic evidence for axial tree stem methane oxidation within subtropical lowland forests. New Phytologist, 2021, 230, 2200-2212.	7.3	27
50	Digital soil mapping of a coastal acid sulfate soil landscape. Soil Research, 2014, 52, 327.	1.1	26
51	Legacy impacts of acid sulfate soil runoff on mangrove sediments: Reactive iron accumulation, altered sulfur cycling and trace metal enrichment. Chemical Geology, 2016, 427, 43-53.	3.3	24
52	A new pathway for hexavalent chromium formation in soil: Fire-induced alteration of iron oxides. Environmental Pollution, 2019, 247, 618-625.	7.5	24
53	Contrasting effects of phosphate on the rapid transformation of schwertmannite to Fe(III) (oxy)hydroxides at near-neutral pH. Geoderma, 2019, 340, 115-123.	5.1	24
54	A Small Nimble In Situ Fine-Scale Flux Method for Measuring Tree Stem Greenhouse Gas Emissions and Processes (S.N.I.F.F). Ecosystems, 2020, 23, 1676-1689.	3.4	24

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55	Quantifying alkalinity generating processes in a tidally remediating acidic wetland. Chemical Geology, 2012, 304-305, 106-116.	3.3	23
56	Phosphate-Imposed Constraints on Schwertmannite Stability under Reducing Conditions. Environmental Science & Technology, 2017, 51, 9739-9746.	10.0	22
57	Rhizosphere to the atmosphere: contrasting methane pathways, fluxes, and geochemical drivers across the terrestrialâ€"aquatic wetland boundary. Biogeosciences, 2019, 16, 1799-1815.	3.3	22
58	Phosphate loading alters schwertmannite transformation rates and pathways during microbial reduction. Science of the Total Environment, 2019, 657, 770-780.	8.0	22
59	Chromium(VI) formation via heating of Cr(III)-Fe(III)-(oxy)hydroxides: A pathway for fire-induced soil pollution. Chemosphere, 2019, 222, 440-444.	8.2	21
60	Mangroves as a Source of Greenhouse Gases to the Atmosphere and Alkalinity and Dissolved Carbon to the Coastal Ocean: A Case Study From the Everglades National Park, Florida. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2020JG005812.	3.0	21
61	Redistribution of monosulfidic black oozes by floodwaters in a coastal acid sulfate soil floodplain. Soil Research, 2004, 42, 603.	1.1	20
62	Acidity generation accompanying iron and sulfur transformations during drought simulation of freshwater re-flooded acid sulfate soils. Geoderma, 2017, 285, 117-131.	5.1	20
63	Rapid arsenic(V)-reduction by fire in schwertmannite-rich soil enhances arsenic mobilisation. Geochimica Et Cosmochimica Acta, 2018, 227, 1-18.	3.9	19
64	Fire Promotes Arsenic Mobilization and Rapid Arsenic(III) Formation in Soil via Thermal Alteration of Arsenic-Bearing Iron Oxides. Frontiers in Earth Science, 2019, 7, .	1.8	19
65	Pore Water Sampling in Acid Sulfate Soils: A New Peeper Method. Journal of Environmental Quality, 2009, 38, 2474-2477.	2.0	18
66	Synchrotron X-ray spectroscopy for investigating vanadium speciation in marine sediment: limitations and opportunities. Journal of Analytical Atomic Spectrometry, 2018, 33, 1689-1699.	3.0	18
67	Tidally driven water column hydro-geochemistry in a remediating acidic wetland. Journal of Hydrology, 2011, 409, 128-139.	5.4	17
68	Arsenic solid-phase speciation in an alluvial aquifer system adjacent to the Himalayan forehills, Nepal. Chemical Geology, 2015, 419, 55-66.	3.3	17
69	The effects of a weir on reducing acid flux from a drained coastal acid sulphate soil backswamp. Agricultural Water Management, 2004, 69, 43-67.	5.6	16
70	Opening floodgates in coastal floodplain drains: effects on tidal forcing and lateral transport of solutes in adjacent groundwater. Agricultural Water Management, 2005, 74, 23-46.	5.6	16
71	Anthropogenic forcing of estuarine hypoxic events in sub-tropical catchments: Landscape drivers and biogeochemical processes. Science of the Total Environment, 2011, 409, 5368-5375.	8.0	16
72	iAMES: An <u>i</u>nexpensive, <u>A</u>utomated <u>M</u>ethane <u>E</u>bullition <u>S</u>ensor. Environmental Science & Technology, 2019, 53, 6420-6426.	10.0	16

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73	Alkalinity Production Coupled to Pyrite Formation Represents an Unaccounted Blue Carbon Sink. Global Biogeochemical Cycles, 2021, 35, e2020GB006785.	4.9	16
74	Partitioning of metals in a degraded acid sulfate soil landscape: Influence of tidal re-inundation. Chemosphere, 2011, 85, 1220-1226.	8.2	15
75	Divergent repartitioning of copper, antimony and phosphorus following thermal transformation of schwertmannite and ferrihydrite. Chemical Geology, 2018, 483, 530-543.	3.3	15
76	Acidic drainage drives anomalous rare earth element signatures in intertidal mangrove sediments. Science of the Total Environment, 2016, 573, 831-840.	8.0	14
77	Reconstructing extreme climatic and geochemical conditions during the largest natural mangrove dieback on record. Biogeosciences, 2020, 17, 4707-4726.	3.3	14
78	Enrichment and heterogeneity of trace elements at the redox-interface of Fe-rich intertidal sediments. Chemical Geology, 2014, 383, 1-12.	3.3	13
79	Significant Organic Carbon Accumulation in Two Coastal Acid Sulfate Soil Wetlands. Geophysical Research Letters, 2019, 46, 3245-3251.	4.0	13
80	Long-range spatial variability in sediment associations and solid-phase speciation of antimony and arsenic in a mining-impacted river system. Applied Geochemistry, 2021, 135, 105112.	3.0	13
81	Seawater inundation of coastal floodplain sediments: Short-term changes in surface water and sediment geochemistry. Chemical Geology, 2015, 398, 32-45.	3.3	12
82	Seasonal Temperature Oscillations Drive Contrasting Arsenic and Antimony Mobilization in a Miningâ€Impacted River System. Water Resources Research, 2020, 56, e2020WR028196.	4.2	12
83	Iron(III) accumulations in inland saline waterways, Hunter Valley, Australia: Mineralogy, micromorphology and pore-water geochemistry. Applied Geochemistry, 2009, 24, 1825-1834.	3.0	11
84	Antimonate Controls Manganese(II)-Induced Transformation of Birnessite at a Circumneutral pH. Environmental Science & Technology, 2021, 55, 9854-9863.	10.0	10
85	Drought, megafires and flood - climate extreme impacts on catchment-scale river water quality on Australia's east coast. Water Research, 2022, 218, 118510.	11.3	10
86	Reductive transformation of birnessite and the mobility of co-associated antimony. Journal of Hazardous Materials, 2021, 404, 124227.	12.4	9
87	Landslide-induced iron mobilisation shapes benthic accumulation of nutrients, trace metals and REE fractionation in an oligotrophic alpine stream. Geochimica Et Cosmochimica Acta, 2015, 148, 1-22.	3.9	8
88	A revised method for determining existing acidity in re-flooded acid sulfate soils. Applied Geochemistry, 2015, 52, 16-22.	3.0	5
89	Speciation and mobility of antimony and arsenic in a highly contaminated freshwater system and the influence of extreme drought conditions. Environmental Chemistry, 2021, 18, 321.	1.5	2