

# Scott G Johnston

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5184700/publications.pdf>

Version: 2024-02-01

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	Drought, megafires and flood - climate extreme impacts on catchment-scale river water quality on Australia's east coast. <i>Water Research</i> , 2022, 218, 118510.	11.3	10
2	Reductive transformation of birnessite and the mobility of co-associated antimony. <i>Journal of Hazardous Materials</i> , 2021, 404, 124227.	12.4	9
3	Bark-dwelling methanotrophic bacteria decrease methane emissions from trees. <i>Nature Communications</i> , 2021, 12, 2127.	12.8	51
4	Isotopic evidence for axial tree stem methane oxidation within subtropical lowland forests. <i>New Phytologist</i> , 2021, 230, 2200-2212.	7.3	27
5	Alkalinity Production Coupled to Pyrite Formation Represents an Unaccounted Blue Carbon Sink. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006785.	4.9	16
6	Arsenic-Imposed Effects on Schwertmannite and Jarosite Formation in Acid Mine Drainage and Coupled Impacts on Arsenic Mobility. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 1418-1435.	2.7	35
7	Antimonate Controls Manganese(II)-Induced Transformation of Birnessite at a Circumneutral pH. <i>Environmental Science &amp; Technology</i> , 2021, 55, 9854-9863.	10.0	10
8	Long-range spatial variability in sediment associations and solid-phase speciation of antimony and arsenic in a mining-impacted river system. <i>Applied Geochemistry</i> , 2021, 135, 105112.	3.0	13
9	Speciation and mobility of antimony and arsenic in a highly contaminated freshwater system and the influence of extreme drought conditions. <i>Environmental Chemistry</i> , 2021, 18, 321.	1.5	2
10	Antimony and arsenic speciation, redox-cycling and contrasting mobility in a mining-impacted river system. <i>Science of the Total Environment</i> , 2020, 710, 136354.	8.0	83
11	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. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2020JG005812.	3.0	21
12	Tree stem methane emissions from subtropical lowland forest ( <i>Melaleuca quinquenervia</i> ) regulated by local and seasonal hydrology. <i>Biogeochemistry</i> , 2020, 151, 273-290.	3.5	29
13	Seasonal Temperature Oscillations Drive Contrasting Arsenic and Antimony Mobilization in a Mining-impacted River System. <i>Water Resources Research</i> , 2020, 56, e2020WR028196.	4.2	12
14	Antimony mobility in sulfidic systems: Coupling with sulfide-induced iron oxide transformations. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 282, 276-296.	3.9	37
15	A Small Nimble In Situ Fine-Scale Flux Method for Measuring Tree Stem Greenhouse Gas Emissions and Processes (S.N.I.F.F). <i>Ecosystems</i> , 2020, 23, 1676-1689.	3.4	24
16	Reconstructing extreme climatic and geochemical conditions during the largest natural mangrove dieback on record. <i>Biogeosciences</i> , 2020, 17, 4707-4726.	3.3	14
17	Antimony speciation and mobility during Fe(II)-induced transformation of humic acid-antimony(V)-iron(III) coprecipitates. <i>Environmental Pollution</i> , 2019, 254, 113112.	7.5	38
18	A new pathway for hexavalent chromium formation in soil: Fire-induced alteration of iron oxides. <i>Environmental Pollution</i> , 2019, 247, 618-625.	7.5	24

#	ARTICLE	IF	CITATIONS
19	Chromium(VI) formation via heating of Cr(III)-Fe(III)-(oxy)hydroxides: A pathway for fire-induced soil pollution. <i>Chemosphere</i> , 2019, 222, 440-444.	8.2	21
20	Humic acid impacts antimony partitioning and speciation during iron(II)-induced ferrihydrite transformation. <i>Science of the Total Environment</i> , 2019, 683, 399-410.	8.0	50
21	Are methane emissions from mangrove stems a cryptic carbon loss pathway? Insights from a catastrophic forest mortality. <i>New Phytologist</i> , 2019, 224, 146-154.	7.3	66
22	Rhizosphere to the atmosphere: contrasting methane pathways, fluxes, and geochemical drivers across the terrestrial-aquatic wetland boundary. <i>Biogeosciences</i> , 2019, 16, 1799-1815.	3.3	22
23	Fire Promotes Arsenic Mobilization and Rapid Arsenic(III) Formation in Soil via Thermal Alteration of Arsenic-Bearing Iron Oxides. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	19
24	iAMES: An inexpensive, automated methane detection sensor. <i>Environmental Science &amp; Technology</i> , 2019, 53, 6420-6426.	10.0	16
25	Significant Organic Carbon Accumulation in Two Coastal Acid Sulfate Soil Wetlands. <i>Geophysical Research Letters</i> , 2019, 46, 3245-3251.	4.0	13
26	Wetland methane emissions dominated by plant-mediated fluxes: Contrasting emissions pathways and seasons within a shallow freshwater subtropical wetland. <i>Limnology and Oceanography</i> , 2019, 64, 1895-1912.	3.1	52
27	Phosphate loading alters schwertmannite transformation rates and pathways during microbial reduction. <i>Science of the Total Environment</i> , 2019, 657, 770-780.	8.0	22
28	Antimony mobility in reducing environments: The effect of microbial iron(III)-reduction and associated secondary mineralization. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 245, 278-289.	3.9	77
29	Contrasting effects of phosphate on the rapid transformation of schwertmannite to Fe(III) (oxy)hydroxides at near-neutral pH. <i>Geoderma</i> , 2019, 340, 115-123.	5.1	24
30	Rapid arsenic(V)-reduction by fire in schwertmannite-rich soil enhances arsenic mobilisation. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 227, 1-18.	3.9	19
31	Iron and sulfur cycling in acid sulfate soil wetlands under dynamic redox conditions: A review. <i>Chemosphere</i> , 2018, 197, 803-816.	8.2	150
32	Antimony and arsenic partitioning during Fe <sup>2+</sup> -induced transformation of jarosite under acidic conditions. <i>Chemosphere</i> , 2018, 195, 515-523.	8.2	53
33	Diffusive Gradients in Thin Films Reveals Differences in Antimony and Arsenic Mobility in a Contaminated Wetland Sediment during an Oxic-Anoxic Transition. <i>Environmental Science &amp; Technology</i> , 2018, 52, 1118-1127.	10.0	84
34	Divergent repartitioning of copper, antimony and phosphorus following thermal transformation of schwertmannite and ferrihydrite. <i>Chemical Geology</i> , 2018, 483, 530-543.	3.3	15
35	Synchrotron X-ray spectroscopy for investigating vanadium speciation in marine sediment: limitations and opportunities. <i>Journal of Analytical Atomic Spectrometry</i> , 2018, 33, 1689-1699.	3.0	18
36	Antimony and Arsenic Behavior during Fe(II)-Induced Transformation of Jarosite. <i>Environmental Science &amp; Technology</i> , 2017, 51, 4259-4268.	10.0	97

#	ARTICLE	IF	CITATIONS
37	Effect of cyclic redox oscillations on water quality in freshwater acid sulfate soil wetlands. <i>Science of the Total Environment</i> , 2017, 581-582, 314-327.	8.0	31
38	Phosphate-Imposed Constraints on Schwertmannite Stability under Reducing Conditions. <i>Environmental Science &amp; Technology</i> , 2017, 51, 9739-9746.	10.0	22
39	Acidity generation accompanying iron and sulfur transformations during drought simulation of freshwater re-flooded acid sulfate soils. <i>Geoderma</i> , 2017, 285, 117-131.	5.1	20
40	Synchrotron X-ray absorption spectroscopy reveals antimony sequestration by reduced sulfur in a freshwater wetland sediment. <i>Environmental Chemistry</i> , 2017, 14, 345.	1.5	31
41	Arsenic Mobilization Is Enhanced by Thermal Transformation of Schwertmannite. <i>Environmental Science &amp; Technology</i> , 2016, 50, 8010-8019.	10.0	47
42	Legacy impacts of acid sulfate soil runoff on mangrove sediments: Reactive iron accumulation, altered sulfur cycling and trace metal enrichment. <i>Chemical Geology</i> , 2016, 427, 43-53.	3.3	24
43	Acidic drainage drives anomalous rare earth element signatures in intertidal mangrove sediments. <i>Science of the Total Environment</i> , 2016, 573, 831-840.	8.0	14
44	Arsenic solid-phase speciation in an alluvial aquifer system adjacent to the Himalayan forehills, Nepal. <i>Chemical Geology</i> , 2015, 419, 55-66.	3.3	17
45	Seawater inundation of coastal floodplain sediments: Short-term changes in surface water and sediment geochemistry. <i>Chemical Geology</i> , 2015, 398, 32-45.	3.3	12
46	Arsenic mobilization in an alluvial aquifer of the Terai region, Nepal. <i>Journal of Hydrology: Regional Studies</i> , 2015, 4, 59-79.	2.4	39
47	A revised method for determining existing acidity in re-flooded acid sulfate soils. <i>Applied Geochemistry</i> , 2015, 52, 16-22.	3.0	5
48	Landslide-induced iron mobilisation shapes benthic accumulation of nutrients, trace metals and REE fractionation in an oligotrophic alpine stream. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 148, 1-22.	3.9	8
49	Digital soil mapping of a coastal acid sulfate soil landscape. <i>Soil Research</i> , 2014, 52, 327.	1.1	26
50	Arsenic Mobility during Flooding of Contaminated Soil: The Effect of Microbial Sulfate Reduction. <i>Environmental Science &amp; Technology</i> , 2014, 48, 13660-13667.	10.0	173
51	Sulfur, iron and carbon cycling following hydrological restoration of acidic freshwater wetlands. <i>Chemical Geology</i> , 2014, 371, 9-26.	3.3	89
52	Enrichment and heterogeneity of trace elements at the redox-interface of Fe-rich intertidal sediments. <i>Chemical Geology</i> , 2014, 383, 1-12.	3.3	13
53	Coupling of arsenic mobility to sulfur transformations during microbial sulfate reduction in the presence and absence of humic acid. <i>Chemical Geology</i> , 2013, 343, 12-24.	3.3	127
54	Seawater-induced mobilization of trace metals from mackinawite-rich estuarine sediments. <i>Water Research</i> , 2013, 47, 821-832.	11.3	27

#	ARTICLE	IF	CITATIONS
55	Sulfate Availability Drives Divergent Evolution of Arsenic Speciation during Microbially Mediated Reductive Transformation of Schwertmannite. <i>Environmental Science &amp; Technology</i> , 2013, 47, 2221-2229.	10.0	77
56	Arsenic mobilization and iron transformations during sulfidization of As(V)-bearing jarosite. <i>Chemical Geology</i> , 2012, 334, 9-24.	3.3	76
57	Quantifying alkalinity generating processes in a tidally remediating acidic wetland. <i>Chemical Geology</i> , 2012, 304-305, 106-116.	3.3	23
58	Impact of silica on the reductive transformation of schwertmannite and the mobilization of arsenic. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 96, 134-153.	3.9	51
59	Iron and Arsenic Cycling in Intertidal Surface Sediments during Wetland Remediation. <i>Environmental Science &amp; Technology</i> , 2011, 45, 2179-2185.	10.0	65
60	Iron geochemical zonation in a tidally inundated acid sulfate soil wetland. <i>Chemical Geology</i> , 2011, 280, 257-270.	3.3	96
61	Microbial sulfidogenesis in ferrihydrite-rich environments: Effects on iron mineralogy and arsenic mobility. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 3072-3087.	3.9	134
62	Sulfur biogeochemical cycling and novel Fe-S mineralization pathways in a tidally re-flooded wetland. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 3434-3451.	3.9	142
63	Tidally driven water column hydro-geochemistry in a remediating acidic wetland. <i>Journal of Hydrology</i> , 2011, 409, 128-139.	5.4	17
64	Anthropogenic forcing of estuarine hypoxic events in sub-tropical catchments: Landscape drivers and biogeochemical processes. <i>Science of the Total Environment</i> , 2011, 409, 5368-5375.	8.0	16
65	Partitioning of metals in a degraded acid sulfate soil landscape: Influence of tidal re-inundation. <i>Chemosphere</i> , 2011, 85, 1220-1226.	8.2	15
66	Effects of hyper-enriched reactive Fe on sulfidisation in a tidally inundated acid sulfate soil wetland. <i>Biogeochemistry</i> , 2011, 103, 263-279.	3.5	43
67	Reactive trace element enrichment in a highly modified, tidally inundated acid sulfate soil wetland: East Trinity, Australia. <i>Marine Pollution Bulletin</i> , 2010, 60, 620-626.	5.0	31
68	Spatial and temporal changes in estuarine water quality during a post-flood hypoxic event. <i>Estuarine, Coastal and Shelf Science</i> , 2010, 87, 73-82.	2.1	39
69	Arsenic Effects and Behavior in Association with the Fe(II)-Catalyzed Transformation of Schwertmannite. <i>Environmental Science &amp; Technology</i> , 2010, 44, 2016-2021.	10.0	92
70	Arsenic Mobilization in a Seawater Inundated Acid Sulfate Soil. <i>Environmental Science &amp; Technology</i> , 2010, 44, 1968-1973.	10.0	72
71	Seawater causes rapid trace metal mobilisation in coastal lowland acid sulfate soils: Implications of sea level rise for water quality. <i>Geoderma</i> , 2010, 160, 252-263.	5.1	34
72	Abundance and fractionation of Al, Fe and trace metals following tidal inundation of a tropical acid sulfate soil. <i>Applied Geochemistry</i> , 2010, 25, 323-335.	3.0	47

#	ARTICLE	IF	CITATIONS
73	Pore Water Sampling in Acid Sulfate Soils: A New Peeper Method. <i>Journal of Environmental Quality</i> , 2009, 38, 2474-2477.	2.0	18
74	Changes in water quality following tidal inundation of coastal lowland acid sulfate soil landscapes. <i>Estuarine, Coastal and Shelf Science</i> , 2009, 81, 257-266.	2.1	50
75	Iron-Monosulfide Oxidation in Natural Sediments: Resolving Microbially Mediated S Transformations Using XANES, Electron Microscopy, and Selective Extractions. <i>Environmental Science &amp; Technology</i> , 2009, 43, 3128-3134.	10.0	111
76	Contemporary pedogenesis of severely degraded tropical acid sulfate soils after introduction of regular tidal inundation. <i>Geoderma</i> , 2009, 149, 335-346.	5.1	54
77	Saturated hydraulic conductivity of sulfuric horizons in coastal floodplain acid sulfate soils: Variability and implications. <i>Geoderma</i> , 2009, 151, 387-394.	5.1	37
78	Iron(III) accumulations in inland saline waterways, Hunter Valley, Australia: Mineralogy, micromorphology and pore-water geochemistry. <i>Applied Geochemistry</i> , 2009, 24, 1825-1834.	3.0	11
79	Sorption of Arsenic(V) and Arsenic(III) to Schwertmannite. <i>Environmental Science &amp; Technology</i> , 2009, 43, 9202-9207.	10.0	221
80	A simple and inexpensive chromium-reducible sulfur method for acid-sulfate soils. <i>Applied Geochemistry</i> , 2008, 23, 2759-2766.	3.0	152
81	Mobility of arsenic and selected metals during re-flooding of iron- and organic-rich acid-sulfate soil. <i>Chemical Geology</i> , 2008, 253, 64-73.	3.3	157
82	The impact of controlled tidal exchange on drainage water quality in acid sulphate soil backswamps. <i>Agricultural Water Management</i> , 2005, 73, 87-111.	5.6	37
83	Opening floodgates in coastal floodplain drains: effects on tidal forcing and lateral transport of solutes in adjacent groundwater. <i>Agricultural Water Management</i> , 2005, 74, 23-46.	5.6	16
84	Changes in surface water quality after inundation of acid sulfate soils of different vegetation cover. <i>Soil Research</i> , 2005, 43, 1.	1.1	30
85	The acid flux dynamics of two artificial drains in acid sulfate soil backswamps on the Clarence River floodplain, Australia. <i>Soil Research</i> , 2004, 42, 623.	1.1	50
86	Redistribution of monosulfidic black oozes by floodwaters in a coastal acid sulfate soil floodplain. <i>Soil Research</i> , 2004, 42, 603.	1.1	20
87	The effects of a weir on reducing acid flux from a drained coastal acid sulphate soil backswamp. <i>Agricultural Water Management</i> , 2004, 69, 43-67.	5.6	16
88	Alteration of groundwater and sediment geochemistry in a sulfidic backswamp due to <i>Melaleuca quinquenervia</i> encroachment. <i>Soil Research</i> , 2003, 41, 1343.	1.1	38
89	Artificial drainage of floodwaters from sulfidic backswamps: effects on deoxygenation in an Australian estuary. <i>Marine and Freshwater Research</i> , 2003, 54, 781.	1.3	43