Luke M Mosley

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Drought impacts on the water quality of freshwater systems; review and integration. Earth-Science Reviews, 2015, 140, 203-214.	4.0	356
2	Forces between Colloid Particles in Natural Waters. Environmental Science & Technology, 2003, 37, 3303-3308.	4.6	130
3	The Impact of Extreme Low Flows on the Water Quality of the Lower Murray River and Lakes (South) Tj ETQq1 1 0.784314 rgBT /Overlo	1.9	99
4	Investigation of Interparticle Forces in Natural Waters:Â Effects of Adsorbed Humic Acids on Iron Oxide and Alumina Surface Properties. Environmental Science & Technology, 2004, 38, 4791-4796.	4.6	75
5	Spectrophotometric pH measurement in estuaries using thymol blue and m-cresol purple. Marine Chemistry, 2004, 91, 175-186.	0.9	69
6	Changes in acidity and metal geochemistry in soils, groundwater, drain and river water in the Lower Murray River after a severe drought. Science of the Total Environment, 2014, 485-486, 281-291.	3.9	61
7	Ensuring planetary survival: the centrality of organic carbon in balancing the multifunctional nature of soils. Critical Reviews in Environmental Science and Technology, 2022, 52, 4308-4324.	6.6	52
8	Global mapping of freshwater nutrient enrichment and periphyton growth potential. Scientific Reports, 2020, 10, 3568.	1.6	49
9	Schwertmannite formation and properties in acidic drain environments following exposure and oxidation of acid sulfate soils in irrigation areas during extreme drought. Geoderma, 2017, 308, 235-251.	2.3	44
10	Partitioning of metals (Fe, Pb, Cu, Zn) in urban runâ€off from the Kaikorai Valley, Dunedin, New Zealand. New Zealand Journal of Marine and Freshwater Research, 2001, 35, 615-624.	0.8	43
11	Acidification of lake water due to drought. Journal of Hydrology, 2014, 511, 484-493.	2.3	42
12	Climate-driven mobilisation of acid and metals from acid sulfate soils. Marine and Freshwater Research, 2010, 61, 129.	0.7	41
13	Metal speciation and potential bioavailability changes during discharge and neutralisation of acidic drainage water. Chemosphere, 2014, 103, 172-180.	4.2	40
14	Addition of organic matter influences pH changes in reduced and oxidised acid sulfate soils. Geoderma, 2016, 262, 125-132.	2.3	40
15	From Mountain Ranges to Sweeping Plains, in Droughts and Flooding Rains; River Murray Water Quality over the Last Four Decades. Water Resources Management, 2019, 33, 1087-1101.	1.9	40
16	Particle aggregation, pH changes and metal behaviour during estuarine mixing: review and integration. Marine and Freshwater Research, 2020, 71, 300.	0.7	40
17	Drought effects on wet soils in inland wetlands and peatlands. Earth-Science Reviews, 2020, 210, 103387.	4.0	38
18	Acidification of floodplains due to river level decline during drought. Journal of Contaminant Hydrology, 2014, 161, 10-23.	1.6	37

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19	Monitoring and assessment of surface water acidification following rewetting of oxidised acid sulfate soils. Environmental Monitoring and Assessment, 2014, 186, 1-18.	1.3	36
20	Nutrient levels in sea and river water along the â€˜Coral Coastâ€™ of Viti Levu, Fiji. South Pacific Journal of Natural and Applied Sciences, 2003, 21, 35.	0.2	35
21	Sulfate reduction in sulfuric material after re-flooding: Effectiveness of organic carbon addition and pH increase depends on soil properties. Journal of Hazardous Materials, 2015, 298, 138-145.	6.5	34
22	Trace metal levels in drinking water on Viti Levu, Fiji Islands. South Pacific Journal of Natural and Applied Sciences, 2003, 21, 31.	0.2	29
23	Amount of organic matter required to induce sulfate reduction in sulfuric material after re-flooding is affected by soil nitrate concentration. Journal of Environmental Management, 2015, 151, 437-442.	3.8	29
24	Prolonged recovery of acid sulfate soils with sulfuric materials following severe drought: causes and implications. Geoderma, 2017, 308, 312-320.	2.3	29
25	Calcium and strontium isotope systematics in the lagoon-estuarine environments of South Australia: Implications for water source mixing, carbonate fluxes and fish migration. Geochimica Et Cosmochimica Acta, 2018, 239, 90-108.	1.6	29
26	Acid sulfate soil evolution models and pedogenic pathways during drought and reflooding cycles in irrigated areas and adjacent natural wetlands. Geoderma, 2017, 308, 270-290.	2.3	28
27	The capacity of biochar made from common reeds to neutralise pH and remove dissolved metals in acid drainage. Environmental Science and Pollution Research, 2015, 22, 15113-15122.	2.7	27
28	Predictive modelling of pH and dissolved metal concentrations and speciation following mixing of acid drainage with river water. Applied Geochemistry, 2015, 59, 1-10.	1.4	27
29	Effects of a Tropical Cyclone on the Drinking-Water Quality of a Remote Pacific Island. Disasters, 2004, 28, 405-417.	1.1	26
30	An Australian blue carbon method to estimate climate change mitigation benefits of coastal wetland restoration. Restoration Ecology, 2023, 31, .	1.4	25
31	Modelling of pH and inorganic carbon speciation in estuaries using the composition of the river and seawater end members. Environmental Modelling and Software, 2010, 25, 1658-1663.	1.9	24
32	The geochemistry during management of lake acidification caused by the rewetting of sulfuric (pH<4) acid sulfate soils. Applied Geochemistry, 2014, 41, 49-61.	1.4	24
33	Options for Managing Hypoxic Blackwater in River Systems: Case Studies and Framework. Environmental Management, 2013, 52, 837-850.	1.2	21
34	Comparative contributions of solution geochemistry, microbial metabolism and aquatic photosynthesis to the development of high pH in ephemeral wetlands in South East Australia. Science of the Total Environment, 2016, 542, 334-343.	3.9	21
35	Does the high potassium content in recycled winery wastewater used for irrigation pose risks to soil structural stability?. Agricultural Water Management, 2021, 243, 106422.	2.4	21
36	Composition and dissolution kinetics of jarosite-rich segregations extracted from an acid sulfate soil with sulfuric material. Chemical Geology, 2020, 543, 119606.	1.4	20

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37	Type of organic carbon amendment influences pH changes in acid sulfate soils in flooded and dry conditions. Journal of Soils and Sediments, 2016, 16, 518-526.	1.5	19
38	Development of a Spectrophotometric Method for Determining pH of Soil Extracts and Comparison with Glass Electrode Measurements. Soil Science Society of America Journal, 2017, 81, 1350-1358.	1.2	19
39	A three-dimensional hydro-geochemical model to assess lake acidification risk. Environmental Modelling and Software, 2014, 61, 433-457.	1.9	18
40	Alteration of organic matter during remediation of acid sulfate soils. Geoderma, 2018, 332, 121-134.	2.3	17
41	Near shore groundwater acidification during and after a hydrological drought in the Lower Lakes, South Australia. Journal of Contaminant Hydrology, 2016, 189, 44-57.	1.6	16
42	Linking organic matter composition in acid sulfate soils to pH recovery after re-submerging. Geoderma, 2017, 308, 350-362.	2.3	16
43	Pollutant Loads Returned to the Lower Murray River from Flood-Irrigated Agriculture. Water, Air, and Soil Pollution, 2010, 211, 475-487.	1.1	15
44	Impact of salinity and carbonate saturation on stable Sr isotopes (Î´88/86Sr) in a lagoon-estuarine system. Geochimica Et Cosmochimica Acta, 2021, 293, 461-476.	1.6	15
45	Consumption and alteration of different organic matter sources during remediation of a sandy sulfuric soil. Geoderma, 2019, 347, 220-232.	2.3	14
46	Organic matter addition can prevent acidification during oxidation of sandy hypersulfidic and hyposulfidic material: Effect of application form, rate and C/N ratio. Geoderma, 2016, 276, 26-32.	2.3	13
47	Phosphorus pools in sulfuric acid sulfate soils: influence of water content, pH increase and P addition. Journal of Soils and Sediments, 2020, 20, 1446-1453.	1.5	13
48	Have droughts and increased water extraction from the Murray River (Australia) reduced coastal ocean productivity?. Marine and Freshwater Research, 2018, 69, 343.	0.7	12
49	The application of a spectrophotometric method to determine pH in acidic (pH<5) soils. Talanta, 2018, 186, 421-426.	2.9	12
50	Transformation of jarosite during simulated remediation of a sandy sulfuric soil. Science of the Total Environment, 2021, 773, 145546.	3.9	12
51	Long-term water quality response to increased hydraulic loadings in a field-scale free water surface constructed wetland treating domestic effluent. Journal of Environmental Management, 2022, 311, 114858.	3.8	12
52	Fate and dynamics of metal precipitates arising from acid drainage discharges to a river system. Chemosphere, 2018, 212, 811-820.	4.2	11
53	Phosphorus speciation and dynamics in river sediments, floodplain soils and leaf litter from the Lower Murray River region. Marine and Freshwater Research, 2019, 70, 1522.	0.7	11
54	Addition of organic material to sulfuric soil can reduce leaching of protons, iron and aluminium. Geoderma, 2016, 271, 63-70.	2.3	10

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55	An integrated model to predict and prevent hypoxia in floodplain-river systems. Journal of Environmental Management, 2021, 286, 112213.	3.8	10
56	A simple and rapid ICP-MS/MS determination of sulfur isotope ratios (34S/32S) in complex natural waters: A new tool for tracing seawater intrusion in coastal systems. Talanta, 2021, 235, 122708.	2.9	10
57	Loss of benthic macrofauna functional traits correlates with changes in sediment biogeochemistry along an extreme salinity gradient in the Coorong lagoon, Australia. Marine Pollution Bulletin, 2022, 174, 113202.	2.3	10
58	Photochemical consequences of prolonged hydrological drought: A model assessment of the Lower Lakes of the Murray-Darling Basin (Southern Australia). Chemosphere, 2019, 236, 124356.	4.2	9
59	Global database of diffuse riverine nitrogen and phosphorus loads and yields. Geoscience Data Journal, 2021, 8, 132-143.	1.8	9
60	Threshold for labile phosphate in a sandy acid sulfate soil. Geoderma, 2020, 371, 114359.	2.3	9
61	Holocene freshwater history of the Lower River Murray and its terminal lakes, Alexandrina and Albert, South Australia, and its relevance to contemporary environmental management. Australian Journal of Earth Sciences, 2022, 69, 605-629.	0.4	9
62	Reductions in water use following rehabilitation of a flood-irrigated area on the Murray River in South Australia. Agricultural Water Management, 2009, 96, 1679-1682.	2.4	8
63	Nitrogen and phosphorus removal from wastewater by sand with wheat straw. Environmental Science and Pollution Research, 2019, 26, 11212-11223.	2.7	8
64	Phosphorus pools in acid sulfate soil are influenced by soil water content and form in which P is added. Geoderma, 2021, 381, 114692.	2.3	8
65	Application of visible near-infrared absorbance spectroscopy for the determination of Soil pH and liming requirements for broad-acre agriculture. Precision Agriculture, 2022, 23, 194-218.	3.1	8
66	Porosity and organic matter distribution in jarositic phyto tubules of sulfuric soils assessed by combined ÂµCT and NanoSIMS analysis. Geoderma, 2021, 399, 115124.	2.3	8
67	Restoration of benthic macrofauna promotes biogeochemical remediation of hostile sediments; An in situ transplantation experiment in a eutrophic estuarine-hypersaline lagoon system. Science of the Total Environment, 2022, 833, 155201.	3.9	8
68	Organic Materials Differ in Ability to Remove Protons, Iron and Aluminium from Acid Sulfate Soil Drainage Water. Water, Air, and Soil Pollution, 2015, 226, 1.	1.1	7
69	Assessment of the Binding of Protons, Al and Fe to Biochar at Different pH Values and Soluble Metal Concentrations. Water (Switzerland), 2018, 10, 55.	1.2	7
70	Spectrophotometric measurement of the pH of soil extracts using a multiple indicator dye mixture. European Journal of Soil Science, 2019, 70, 411-420.	1.8	7
71	Hydrogen peroxide concentrations in relation to optical properties in a fiord (Doubtful Sound, New) Tj ETQq1 1 0.784314 rgBT /Overl	0.8	6
72	Assisted natural recovery of hypersaline sediments: salinity thresholds for the establishment of a community of bioturbating organisms. Environmental Sciences: Processes and Impacts, 2018, 20, 1244-1253.	1.7	6

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73	Phosphorus Pools in Acid Sulfate Soil Are Influenced by pH, Water Content, and Addition of Organic Matter. Journal of Soil Science and Plant Nutrition, 2021, 21, 1066-1075.	1.7	6
74	Field trial and modelling of different strategies for remediation of soil salinity and sodicity in the Lower Murray irrigation areas. Soil Research, 2017, 55, 670.	0.6	5
75	Arsenic sequestration in gold mine wastes under changing pH and experimental rewetting cycles. Applied Geochemistry, 2021, 124, 104789.	1.4	5
76	A large mid-Holocene estuary was not present in the lower River Murray, Australia. Scientific Reports, 2021, 11, 12082.	1.6	5
77	N and C Isotope Variations Along an Extreme Eutrophication and Salinity Gradient in the Coorong Lagoon, South Australia. Frontiers in Earth Science, 2022, 9, .	0.8	5
78	Constraining organic matter composition and dynamics as a dominant driver of hypoxic blackwater risk during river Murray floodplain inundation. Hydrological Processes, 2022, 36, .	1.1	5
79	The terminal lakes of the Murray River, Australia, were predominantly fresh before large-scale upstream water abstraction: Evidence from sedimentary diatoms and hydrodynamical modelling. Science of the Total Environment, 2022, 835, 155225.	3.9	5
80	Constraining the carbonate system in soils via testing the internal consistency of pH, pCO2 and alkalinity measurements. Geochemical Transactions, 2020, 21, 4.	1.8	4
81	Exploring passivation-based treatments for jarosite from an acid sulfate soil. Chemical Geology, 2021, 561, 120034.	1.4	4
82	Detection of agriculturally relevant lime concentrations in soil using mid-infrared spectroscopy. Geoderma, 2022, 409, 115639.	2.3	4
83	Short-term seawater inundation induces metal mobilisation in freshwater and acid sulfate soil environments. Chemosphere, 2022, 299, 134383.	4.2	4
84	Effect of Short-term Irrigation of Wastewater on Wheat Growth and Nitrogen and Phosphorus in Soil. Journal of Soil Science and Plant Nutrition, 2020, 20, 1589-1595.	1.7	3
85	Addition of wheat straw to acid sulfate soils with different clay contents reduces acidification in two consecutive submerged-moist cycles. Geoderma, 2021, 385, 114892.	2.3	3
86	Rapid remediation of sandy sulfuric subsoils using straw-derived dissolved organic matter. Geoderma, 2022, 420, 115875.	2.3	3
87	Organic materials retain high proportion of protons, iron and aluminium from acid sulphate soil drainage water with little subsequent release. Environmental Science and Pollution Research, 2016, 23, 23582-23592.	2.7	2
88	Addition of clayey soils with high net negative acidity to sulfuric sandy soil can minimise pH changes during wet and dry periods. Geoderma, 2016, 269, 153-159.	2.3	2
89	Sustained high CO2 concentrations and fluxes from Australiaâ€™s largest river system. Marine and Freshwater Research, 2022, , .	0.7	2
90	Mapping the longâ€‘term influence of river discharge on coastal ocean chlorophyllâ€‹<i>a</i>. Remote Sensing in Ecology and Conservation, 2022, 8, 629-643.	2.2	2

#	Article	IF	Citations
91	Water Quality of the Coorong, Lower Lakes and Murray Mouth. , 0, , .		1
92	Soils in the Coorong, Lower Lakes and Murray Mouth Region. , 0, , .		1
93	Phosphorus speciation and release from different plant litters on a River MurrayÂ(Australia) floodplain. Plant and Soil, 2022, 471, 141-156.	1.8	1
94	Comment on Finlayson et al. â€˜Continuing the discussion about ecological futures for the lower Murray river (Australia) in the Anthropoceneâ€™. Marine and Freshwater Research, 2022, , .	0.7	1
95	Assessing soil corrosivity along feral-proof fencing in the Australian Arid Zone and the development of a new soil corrosivity index. Geoderma Regional, 2022, 29, e00501.	0.9	1
96	Combined Effects of Hydrological Drought and Reduced Food Availability on the Decline of the Little Penguins in South Australia. Frontiers in Marine Science, 2022, 9, .	1.2	1
97	Wheat straw decomposition stage has little effect on the removal of inorganic N and P from wastewater leached through sand-straw mixes. Environmental Technology (United Kingdom), 2020, 41, 3483-3492.	1.2	0
98	Keith Hunterâ€™s legacy to Marine Science in New Zealand. Marine and Freshwater Research, 2020, 71, i.	0.7	0
99	Extreme biogeochemical effects following simulation of recurrent drought in acid sulfate soils. Applied Geochemistry, 2022, 136, 105146.	1.4	0