Rich McDowell

List of Publications by Year
in descending order

252 papers	10,079 citations	38742 50 h-index	49909 87 g-index
256 all docs	256 docs citations	256 times ranked	7932 citing authors

#	Article	IF	Citations
1	Global change pressures on soils from land use and management. Global Change Biology, 2016, 22, 1008-1028.	9.5	605
2	Approximating Phosphorus Release from Soils to Surface Runoff and Subsurface Drainage. Journal of Environmental Quality, 2001, 30, 508-520.	2.0	408
3	Dissolved Organic Matter. Advances in Agronomy, 2011, 110, 1-75.	5.2	405
4	Phosphorus loss from land to water: integrating agricultural and environmental management. Plant and Soil, 2001, 237, 287-307.	3.7	327
5	Biogeochemical cycles and biodiversity as key drivers of ecosystem services provided by soils. Soil, 2015, 1, 665-685.	4.9	249
6	Managing agricultural phosphorus for water quality protection: principles for progress. Plant and Soil, 2011, 349, 169-182.	3.7	226
7	Amounts, Forms, and Solubility of Phosphorus in Soils Receiving Manure. Soil Science Society of America Journal, 2004, 68, 2048-2057.	2.2	223
8	Integrating legacy soil phosphorus into sustainable nutrient management strategies for future food, bioenergy and water security. Nutrient Cycling in Agroecosystems, 2016, 104, 393-412.	2.2	199
9	Title is missing!. Nutrient Cycling in Agroecosystems, 2001, 59, 269-284.	2.2	160
10	Soil controls of phosphorus in runoff: Management barriers and opportunities. Canadian Journal of Soil Science, 2011, 91, 329-338.	1.2	154
11	Assessing Site Vulnerability to Phosphorus Loss in an Agricultural Watershed. Journal of Environmental Quality, 2001, 30, 2026-2036.	2.0	148
12	Phosphorus Export from an Agricultural Watershed: Linking Source and Transport Mechanisms. Journal of Environmental Quality, 2001, 30, 1587-1595.	2.0	146
13	Connecting phosphorus loss from agricultural landscapes to surface water quality. Chemistry and Ecology, 2004, 20, 1-40.	1.6	138
14	Nutrient management in New Zealand pasturesâ€" recent developments and future issues. New Zealand Journal of Agricultural Research, 2007, 50, 181-201.	1.6	130
15	Phosphorus solubility and release kinetics as a function of soil test P concentration. Geoderma, 2003, 112, 143-154.	5.1	124
16	Phosphorus losses in subsurface flow before and after manure application to intensively farmed land. Science of the Total Environment, 2001, 278, 113-125.	8.0	123
17	RELATIONSHIP BETWEEN SOIL TEST PHOSPHORUS AND PHOSPHORUS RELEASE TO SOLUTION. Soil Science, 2001, 166, 137-149.	0.9	119
18	Using organic phosphorus to sustain pasture productivity: A perspective. Geoderma, 2014, 221-222, 11-19.	5.1	111

#	ARTICLE	IF	CITATIONS
19	Development of a model using matter element, AHP and GIS techniques to assess the suitability of land for agriculture. Geoderma, 2019, 352, 80-95.	5.1	110
20	Estimating phosphorus loss from New Zealand grassland soils. New Zealand Journal of Agricultural Research, 2004, 47, 137-145.	1.6	106
21	The phosphorus composition of contrasting soils in pastoral, native and forest management in Otago, New Zealand: Sequential extraction and 31P NMR. Geoderma, 2006, 130, 176-189.	5.1	102
22	An Examination of Spin-Lattice Relaxation Times for Analysis of Soil and Manure Extracts by Liquid State Phosphorus-31 Nuclear Magnetic Resonance Spectroscopy. Journal of Environmental Quality, 2006, 35, 293-302.	2.0	101
23	Phosphorus Movement and Speciation in a Sandy Soil Profile after Long-Term Animal Manure Applications. Journal of Environmental Quality, 2007, 36, 305-315.	2.0	101
24	Organic phosphorus speciation and pedogenesis: analysis by solution ³¹P nuclear magnetic resonance spectroscopy. European Journal of Soil Science, 2007, 58, 1348-1357.	3.9	84
25	SOLID-STATE FOURIER TRANSFORM INFRARED AND 31P NUCLEAR MAGNETIC RESONANCE SPECTRAL FEATURES OF PHOSPHATE COMPOUNDS. Soil Science, 2007, 172, 501-515.	0.9	82
26	When experts disagree: the need to rethink indicator selection for assessing sustainability of agriculture. Environment, Development and Sustainability, 2017, 19, 1327-1342.	5.0	82
27	Variation of phosphorus leached from Pennsylvanian soils amended with manures, composts or inorganic fertilizer. Agriculture, Ecosystems and Environment, 2004, 102, 17-27.	5.3	81
28	Managing Diffuse Phosphorus at the Source versus at the Sink. Environmental Science & Technology, 2018, 52, 11995-12009.	10.0	78
29	Water quality and the effects of different pastoral animals. New Zealand Veterinary Journal, 2008, 56, 289-296.	0.9	76
30	A Review of the Cost-Effectiveness and Suitability of Mitigation Strategies to Prevent Phosphorus Loss from Dairy Farms in New Zealand and Australia. Journal of Environmental Quality, 2012, 41, 680-693.	2.0	76
31	Phosphorus in Fresh and Dry Dung of Grazing Dairy Cattle, Deer, and Sheep. Journal of Environmental Quality, 2005, 34, 598-607.	2.0	74
32	Nitrogen and phosphorus in New Zealand streams and rivers: Control and impact of eutrophication and the influence of land management. New Zealand Journal of Marine and Freshwater Research, 2009, 43, 985-995.	2.0	74
33	A review of the policies and implementation of practices to decrease water quality impairment by phosphorus in New Zealand, the UK, and the US. Nutrient Cycling in Agroecosystems, 2016, 104, 289-305.	2.2	73
34	Effects of cattle, sheep and deer grazing on soil physical quality and losses of phosphorus and suspended sediment losses in surface runoff. Agriculture, Ecosystems and Environment, 2011, 140, 264-272.	5.3	69
35	Title is missing!. Aquatic Geochemistry, 2001, 7, 255-265.	1.3	68
36	Sources of Phosphorus Lost from a Grazed Pasture Receiving Simulated Rainfall. Journal of Environmental Quality, 2007, 36, 1281-1288.	2.0	66

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37	Municipal composts reduce the transfer of Cd from soil to vegetables. Environmental Pollution, 2016, 213, 8-15.	7.5	62
38	Phosphorus Transport in Overland Flow in Response to Position of Manure Application. Journal of Environmental Quality, 2002, 31, 217-227.	2.0	61
39	Treatment of Drainage Water with Industrial Byâ€Products to Prevent Phosphorus Loss from Tileâ€Drained Land. Journal of Environmental Quality, 2008, 37, 1575-1582.	2.0	61
40	Soil phosphorus fractions in solution: influence of fertiliser and manure, filtration and method of determination. Chemosphere, 2001, 45, 737-748.	8.2	60
41	Using Soil Phosphorus Profile Data to Assess Phosphorus Leaching Potential in Manured Soils. Soil Science Society of America Journal, 2003, 67, 215-224.	2.2	59
42	Predicting the changes in environmentally and agronomically significant phosphorus forms following the cessation of phosphorus fertilizer applications to grassland. Soil Use and Management, 2012, 28, 135-147.	4.9	58
43	The effect of antecedent moisture conditions on sediment and phosphorus loss during overland flow: Mahantango Creek catchment, Pennsylvania, USA. Hydrological Processes, 2002, 16, 3037-3050.	2.6	57
44	Influence of soil treading on sediment and phosphorus losses in overland flow. Soil Research, 2003, 41, 949.	1.1	57
45	Optimizing land use for the delivery of catchment ecosystem services. Frontiers in Ecology and the Environment, 2016, 14, 325-332.	4.0	57
46	Chemical nature and potential mobility of phosphorus in fertilized grassland soils. Nutrient Cycling in Agroecosystems, 2000, 57, 225-233.	2.2	56
47	Influence of soil constituents on soil phosphorus sorption and desorption. Communications in Soil Science and Plant Analysis, 2001, 32, 2531-2547.	1.4	56
48	Land use and flow regime effects on phosphorus chemical dynamics in the fluvial sediment of the Winooski River, Vermont. Ecological Engineering, 2002, 18, 477-487.	3.6	55
49	INNOVATIVE MANAGEMENT OF AGRICULTURAL PHOSPHORUS TO PROTECT SOIL AND WATER RESOURCES. Communications in Soil Science and Plant Analysis, 2001, 32, 1071-1100.	1.4	54
50	OVERSEERÂ® nutrient budgets - moving towards on-farm resource accounting. Proceedings of the New Zealand Grassland Association, 0, , 191-194.	0.0	54
51	Soil phosphorus quantityâ€"intensity relationships to predict increased soil phosphorus loss to overland and subsurface flow. Chemosphere, 2002, 48, 679-687.	8.2	53
52	Microbiome innovations for a sustainable future. Nature Microbiology, 2021, 6, 138-142.	13.3	53
53	Potential phosphorus losses in overland flow from pastoral soils receiving longâ€term applications of either superphosphate or reactive phosphate rock. New Zealand Journal of Agricultural Research, 2003, 46, 329-337.	1.6	52
54	Uptake and Release of Phosphorus from Overland Flow in a Stream Environment. Journal of Environmental Quality, 2003, 32, 937-948.	2.0	52

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55	Particulate Phosphorus Transport within Stream Flow of an Agricultural Catchment. Journal of Environmental Quality, 2004, 33, 2111-2121.	2.0	52
56	Cattle treading and phosphorus and sediment loss in overland flow from grazed cropland. Soil Research, 2003, 41, 1521.	1.1	52
57	Soil phosphorus concentrations to minimise potential P loss to surface waters in Southland. New Zealand Journal of Agricultural Research, 2003, 46, 239-253.	1.6	51
58	Modification of phosphorus export from an eastern USA catchment by fluvial sediment and phosphorus inputs. Agriculture, Ecosystems and Environment, 2003, 99, 187-199.	5.3	50
59	Nitrate and phosphorus leaching in New Zealand: a national perspective. New Zealand Journal of Agricultural Research, 2013, 56, 49-59.	1.6	50
60	Chemical Nature and Diversity of Phosphorus in New Zealand Pasture Soils Using 31P Nuclear Magnetic Resonance Spectroscopy and Sequential Fractionation. Nutrient Cycling in Agroecosystems, 2005, 72, 241-254.	2.2	49
61	Global mapping of freshwater nutrient enrichment and periphyton growth potential. Scientific Reports, 2020, 10, 3568.	3.3	49
62	The land use suitability concept: Introduction and an application of the concept to inform sustainable productivity within environmental constraints. Ecological Indicators, 2018, 91, 212-219.	6.3	48
63	Transforming soil phosphorus fertility management strategies to support the delivery of multiple ecosystem services from agricultural systems. Science of the Total Environment, 2019, 649, 90-98.	8.0	48
64	Mechanisms of phosphorus solubilisation in a limed soil as a function of pH. Chemosphere, 2003, 51, 685-692.	8.2	46
65	Peak assignments for phosphorus-31 nuclear magnetic resonance spectroscopy in pH range 5â€“13 and their application in environmental samples. Chemistry and Ecology, 2005, 21, 211-226.	1.6	46
66	Identifying critical source areas for water quality: 2. Validating the approach for phosphorus and sediment losses in grazed headwater catchments. Journal of Hydrology, 2009, 379, 68-80.	5.4	45
67	Natural background and anthropogenic contributions of cadmium to New Zealand soils. Agriculture, Ecosystems and Environment, 2013, 165, 80-87.	5.3	45
68	Establishment of reference or baseline conditions of chemical indicators in New Zealand streams and rivers relative to present conditions. Marine and Freshwater Research, 2013, 64, 387.	1.3	45
69	A National Assessment of the Potential Linkage between Soil, and Surface and Groundwater Concentrations of Phosphorus. Journal of the American Water Resources Association, 2015, 51, 992-1002.	2.4	45
70	A review of regulations and guidelines related to winter manure application. Ambio, 2018, 47, 657-670.	5.5	45
71	Indicator To Predict the Movement of Phosphorus from Soil to Subsurface Flow. Environmental Science & Technology, 2002, 36, 1505-1509.	10.0	43
72	Variation of phosphorus loss from a small Catchment in south Devon, UK. Agriculture, Ecosystems and Environment, 2000, 79, 143-157.	5.3	42

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73	Identifying critical source areas for water quality: 1. Mapping and validating transport areas in three headwater catchments in Otago, New Zealand. Journal of Hydrology, 2009, 379, 54-67.	5.4	42
74	Alternative fertilisers and management to decrease incidental phosphorus loss. Environmental Chemistry Letters, 2005, 2, 169-174.	16.2	41
75	A Comparison of Phosphorus Speciation and Potential Bioavailability in Feed and Feces of Different Dairy Herds Using ³¹P Nuclear Magnetic Resonance Spectroscopy. Journal of Environmental Quality, 2008, 37, 741-752.	2.0	41
76	Assessing the bioavailability of dissolved organic phosphorus in pasture and cultivated soils treated with different rates of nitrogen fertiliser. Soil Biology and Biochemistry, 2006, 38, 61-70.	8.8	40
77	Anthropogenic increases of catchment nitrogen and phosphorus loads in New Zealand. New Zealand Journal of Marine and Freshwater Research, 2018, 52, 336-361.	2.0	40
78	The effect of soil acidity on potentially mobile phosphorus in a grassland soil. Journal of Agricultural Science, 2002, 139, 27-36.	1.3	38
79	Sources of Sediment and Phosphorus in Stream Flow of a Highly Productive Dairy Farmed Catchment. Journal of Environmental Quality, 2007, 36, 540-548.	2.0	36
80	Is Cadmium Loss in Surface Runoff Significant for Soil and Surface Water Quality: A Study of Flood-Irrigated Pastures?. Water, Air, and Soil Pollution, 2010, 209, 133-142.	2.4	36
81	Phosphorus and the Winchmore trials: review and lessons learnt. New Zealand Journal of Agricultural Research, 2012, 55, 119-132.	1.6	36
82	Chemistry, Cycling, and Potential Movement of Inorganic Phosphorus in Soils. Agronomy, 0, , 51-86.	0.2	36
83	The Effects of Soil Carbon on Phosphorus and Sediment Loss from Soil Trays by Overland Flow. Journal of Environmental Quality, 2003, 32, 207-214.	2.0	35
84	Modelling phosphorus losses from pastoral farming systems in New Zealand. New Zealand Journal of Agricultural Research, 2005, 48, 131-141.	1.6	35
85	An improved technique for the determination of organic phosphorus in sediments and soils by31P nuclear magnetic resonance spectroscopy. Chemistry and Ecology, 2005, 21, 11-22.	1.6	35
86	Restricting the grazing time of cattle to decrease phosphorus, sediment and E. coli losses in overland flow from cropland. Soil Research, 2005, 43, 61.	1.1	34
87	Approaches for Quantifying and Managing Diffuse Phosphorus Exports at the Farm/Small Catchment Scale. Journal of Environmental Quality, 2009, 38, 1968-1980.	2.0	34
88	Relationship between Sediment Chemistry, Equilibrium Phosphorus Concentrations, and Phosphorus Concentrations at Baseflow in Rivers of the New Zealand National River Water Quality Network. Journal of Environmental Quality, 2015, 44, 921-929.	2.0	34
89	Integration of ANP and Fuzzy set techniques for land suitability assessment based on remote sensing and GIS for irrigated maize cultivation. Archives of Agronomy and Soil Science, 2019, 65, 1063-1079.	2.6	34
90	The Ability to Reduce Soil Legacy Phosphorus at a Country Scale. Frontiers in Environmental Science, 2020, 8, .	3.3	34

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91	Analysis of Potentially Mobile Phosphorus in Arable Soils Using Solid State Nuclear Magnetic Resonance. Journal of Environmental Quality, 2002, 31, 450-456.	2.0	33
92	Contaminant Losses in Overland Flow from Cattle, Deer and Sheep Dung. Water, Air, and Soil Pollution, 2006, 174, 211-222.	2.4	31
93	Nutrient, Sediment, and Bacterial Losses in Overland Flow from Pasture and Cropping Soils Following Cattle Dung Deposition. Communications in Soil Science and Plant Analysis, 2006, 37, 93-108.	1.4	30
94	Management options to decrease phosphorus and sediment losses from irrigated cropland grazed by cattle and sheep. Soil Use and Management, 2009, 25, 224-233.	4.9	30
95	Guiding phosphorus stewardship for multiple ecosystem services. Ecosystem Health and Sustainability, 2016, 2, .	3.1	30
96	Quantifying the Extent of Anthropogenic Eutrophication of Lakes at a National Scale in New Zealand. Environmental Science & Technology, 2019, 53, 9439-9452.	10.0	30
97	Dissipation of imazapyr, flumetsulam and thifensulfuron in soil. Weed Research, 1997, 37, 381-389.	1.7	29
98	THE USE OF ISOTOPIC EXCHANGE KINETICS TO ASSESS PHOSPHORUS AVAILABILITY IN OVERLAND FLOW AND SUBSURFACE DRAINAGE WATERS. Soil Science, 2001, 166, 365-373.	0.9	29
99	Variation in environmentally- and agronomically-significant soil phosphorus concentrations with time since stopping the application of phosphorus fertilisers. Geoderma, 2016, 280, 67-72.	5.1	29
100	An examination of potential extraction methods to assess plant-available organic phosphorus in soil. Biology and Fertility of Soils, 2008, 44, 707-715.	4.3	28
101	The rate of accumulation of cadmium and uranium in a long-term grazed pasture: implications for soil quality. New Zealand Journal of Agricultural Research, 2012, 55, 133-146.	1.6	27
102	Phosphorus and Sediment Loss in a Catchment with Winter Forage Grazing of Cropland by Dairy Cattle. Journal of Environmental Quality, 2006, 35, 575-583.	2.0	26
103	Phosphorus fertilizer form affects phosphorus loss to waterways: a paired catchment study. Soil Use and Management, 2010, 26, 365-373.	4.9	26
104	Minimising phosphorus losses from the soil matrix. Current Opinion in Biotechnology, 2012, 23, 860-865.	6.6	26
105	Role of Organic Anions and Phosphatase Enzymes in Phosphorus Acquisition in the Rhizospheres of Legumes and Grasses Grown in a Low Phosphorus Pasture Soil. Plants, 2020, 9, 1185.	3.5	26
106	Water Quality in Headwater Catchments with Deer Wallows. Journal of Environmental Quality, 2007, 36, 1377-1382.	2.0	25
107	Nutrient losses associated with irrigation, intensification and management of land use: A study of large scale irrigation in North Otago, New Zealand. Agricultural Water Management, 2011, 98, 877-885.	5.6	25
108	Manipulation of fertiliser regimes in phosphorus enriched soils can reduce phosphorus loss to leachate through an increase in pasture and microbial biomass production. Agriculture, Ecosystems and Environment, 2014, 185, 65-76.	5.3	25

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109	The potential for phosphorus loss in relation to nitrogen fertiliser application and cultivation. New Zealand Journal of Agricultural Research, 2002, 45, 245-253.	1.6	24
110	Extreme Phosphorus Losses in Drainage from Grazed Dairy Pastures on Marginal Land. Journal of Environmental Quality, 2015, 44, 545-551.	2.0	24
111	Sediment phosphorus buffering in streams at baseflow: A metaâ€analysis. Journal of Environmental Quality, 2021, 50, 287-311.	2.0	24
112	Fatal Hemorrhage Caused by Varicose Veins. American Journal of Forensic Medicine and Pathology, 1994, 15, 100-104.	0.8	23
113	Assessment of a technique to remove phosphorus from streamflow. New Zealand Journal of Agricultural Research, 2007, 50, 503-510.	1.6	23
114	Analysis of Potentially Mobile Phosphorus in Arable Soils Using Solid State Nuclear Magnetic Resonance. Journal of Environmental Quality, 2002, 31, 450.	2.0	22
115	INTEGRATING PHOSPHORUS AND NITROGEN DECISION MANAGEMENT AT WATERSHED SCALES. Journal of the American Water Resources Association, 2002, 38, 479-491.	2.4	22
116	Why are median phosphorus concentrations improving in New Zealand streams and rivers?. Journal of the Royal Society of New Zealand, 2019, 49, 143-170.	1.9	22
117	A Global Perspective on Phosphorus Management Decision Support in Agriculture: Lessons Learned and Future Directions. Journal of Environmental Quality, 2019, 48, 1218-1233.	2.0	22
118	Effects of Lime and Organic Amendments Derived from Varied Source Materials on Cadmium Uptake by Potato. Journal of Environmental Quality, 2017, 46, 836-844.	2.0	21
119	Impacts of long-term plant biomass management on soil phosphorus under temperate grassland. Plant and Soil, 2018, 427, 163-174.	3.7	21
120	Availability of residual phosphorus in high phosphorus soils. Communications in Soil Science and Plant Analysis, 2002, 33, 1235-1246.	1.4	20
121	Identification of Phosphorus Species in Extracts of Soils with Contrasting Management Histories. Communications in Soil Science and Plant Analysis, 2003, 34, 1083-1095.	1.4	20
122	Estimation of Catchment Nutrient Loads in New Zealand Using Monthly Water Quality Monitoring Data. Journal of the American Water Resources Association, 2017, 53, 158-178.	2.4	20
123	Quantifying contaminant losses to water from pastoral landuses in New Zealand II. The effects of some farm mitigation actions over the past two decades. New Zealand Journal of Agricultural Research, 2021, 64, 365-389.	1.6	20
124	Hydrological approaches to the delineation of criticalâ€source areas of runoff. New Zealand Journal of Agricultural Research, 2007, 50, 249-265.	1.6	19
125	Nutrients and eutrophication: introduction. Marine and Freshwater Research, 2013, 64, iii.	1.3	19
126	Is tillage an effective method to decrease phosphorus loss from phosphorus enriched pastoral soils?. Soil and Tillage Research, 2014, 135, 1-8.	5.6	19

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127	Estimating the mitigation of anthropogenic loss of phosphorus in New Zealand grassland catchments. Science of the Total Environment, 2014, 468-469, 1178-1186.	8.0	19
128	Does variable rate irrigation decrease nutrient leaching losses from grazed dairy farming?. Soil Use and Management, 2017, 33, 530-537.	4.9	19
129	The efficacy of good practice to prevent long-term leaching losses of phosphorus from an irrigated dairy farm. Agriculture, Ecosystems and Environment, 2019, 273, 86-94.	5.3	19
130	Evidence for the leaching of dissolved organic phosphorus to depth. Science of the Total Environment, 2021, 755, 142392.	8.0	19
131	Sediment Phosphorus Chemistry and Microbial Biomass along a Lowland New Zealand Stream. Aquatic Geochemistry, 2003, 9, 19-40.	1.3	18
132	Water quality of a stream recently fencedâ€off from deer. New Zealand Journal of Agricultural Research, 2008, 51, 291-298.	1.6	18
133	Changes in soil phosphorus availability and potential phosphorus loss following cessation of phosphorus fertiliser inputs. Soil Research, 2013, 51, 427.	1.1	18
134	Contrasting the spatial management of nitrogen and phosphorus for improved water quality: Modelling studies in New Zealand and France. European Journal of Agronomy, 2014, 57, 52-61.	4.1	18
135	Direct Exports of Phosphorus from Fertilizers Applied to Grazed Pastures. Journal of Environmental Quality, 2019, 48, 1380-1396.	2.0	18
136	The error in stream sediment phosphorus fractionation and sorption properties effected by drying pretreatments. Journal of Soils and Sediments, 2019, 19, 1587-1597.	3.0	18
137	Uptake and Release of Phosphorus from Overland Flow in a Stream Environment. Journal of Environmental Quality, 2003, 32, 937.	2.0	18
138	Using Soil Phosphorus Profile Data to Assess Phosphorus Leaching Potential in Manured Soils. Soil Science Society of America Journal, 2003, 67, 215.	2.2	18
139	Effect of plot scale and an upslope phosphorus source on phosphorus loss in overland flow. Soil Use and Management, 2002, 18, 112-119.	4.9	17
140	Irrigation and soil physical quality: An investigation at a longâ€term irrigation site. New Zealand Journal of Agricultural Research, 2009, 52, 113-121.	1.6	17
141	Phosphorus in pasture plants: potential implications for phosphorus loss in surface runoff. Plant and Soil, 2011, 345, 23-35.	3.7	17
142	Phosphorus dynamics in sediments of a eutrophic lake derived from 31P nuclear magnetic resonance spectroscopy. Marine and Freshwater Research, 2014, 65, 70.	1.3	17
143	Speciation and distribution of organic phosphorus in river sediments: a national survey. Journal of Soils and Sediments, 2015, 15, 2369-2379.	3.0	17
144	Cadmium accumulation by forage species used in New Zealand livestock grazing systems. Geoderma Regional, 2016, 7, 11-18.	2.1	17

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145	Assessing the Yield and Load of Contaminants with Stream Order: Would Policy Requiring Livestock to Be Fenced Out of Highâ€Order Streams Decrease Catchment Contaminant Loads?. Journal of Environmental Quality, 2017, 46, 1038-1047.	2.0	17
146	Influence of long-term irrigation on the distribution and availability of soil phosphorus under permanent pasture. Soil Research, 2006, 44, 127.	1.1	16
147	Potential phosphorus and sediment loads from sources within a dairy farmed catchment. Soil Use and Management, 2010, 26, 44-52.	4.9	16
148	State and potential management to improve water quality in an agricultural catchment relative to a natural baseline. Agriculture, Ecosystems and Environment, 2011, 144, 188-200.	5.3	16
149	A strategy for optimizing catchment management actions to stressorâ€“response relationships in freshwaters. Ecosphere, 2018, 9, e02482.	2.2	16
150	Balancing water-quality threats from nutrients and production in Australian and New Zealand dairy farms under low profit margins. Animal Production Science, 2017, 57, 1419.	1.3	16
151	Analysis of Phosphorus in Sequentially Extracted Grassland Soils Using Solid State NMR. Communications in Soil Science and Plant Analysis, 2003, 34, 1623-1636.	1.4	15
152	The effectiveness of coal fly-ash to decrease phosphorus loss from grassland soils. Soil Research, 2005, 43, 853.	1.1	15
153	The fate of phosphorus under contrasting border-check irrigation regimes. Soil Research, 2008, 46, 309.	1.1	15
154	Temperature and Nitrogen Effects on Phosphorus Uptake by Agricultural Streamâ€Bed Sediments. Journal of Environmental Quality, 2017, 46, 295-301.	2.0	15
155	The Effects of Soil Carbon on Phosphorus and Sediment Loss from Soil Trays by Overland Flow. Journal of Environmental Quality, 2003, 32, 207.	2.0	15
156	Influence of aggregate size on phosphorus changes in a soil cultivated intermittently: analysis by 31P nuclear magnetic resonance. Biology and Fertility of Soils, 2007, 43, 409-415.	4.3	14
157	The implications of lag times between nitrate leaching losses and riverine loads for water quality policy. Scientific Reports, 2021, 11, 16450.	3.3	14
158	Effects of deer grazing and fence-line pacing on water and soil quality. Soil Use and Management, 2004, 20, 302-307.	4.9	14
159	Phosphorus Transport in Overland Flow in Response to Position of Manure Application. Journal of Environmental Quality, 2002, 31, 217.	2.0	14
160	Monitoring the impact of farm practices on water quality in the Otago and Southland deer focus farms. Proceedings of the New Zealand Grassland Association, 0, , 183-188.	0.0	14
161	Identifying and linking source areas of flow and P transport in dairyâ€grazed headwater catchments, North Island, New Zealand. Hydrological Processes, 2010, 24, 3689-3705.	2.6	13
162	Potential phosphorus losses from organic and podzol soils: prediction and the influence of soil physico-chemical properties and management. New Zealand Journal of Agricultural Research, 2015, 58, 170-180.	1.6	13

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163	Using the Provenance of Sediment and Bioavailable Phosphorus to Help Mitigate Water Quality Impact in an Agricultural Catchment. Journal of Environmental Quality, 2016, 45, 1276-1285.	2.0	13
164	The effect of irrigation and urine application on phosphorus losses to subsurface flow from a stony soil. Agriculture, Ecosystems and Environment, 2016, 233, 425-431.	5.3	13
165	The effect of soil moisture extremes on the pathways and forms of phosphorus lost in runoff from two contrasting soil types. Soil Research, 2017, 55, 19.	1.1	13
166	Quantifying contaminant losses to water from pastoral land uses in New Zealand III. What could be achieved by 2035?. New Zealand Journal of Agricultural Research, 2021, 64, 390-410.	1.6	13
167	Do soil cadmium concentrations decline after phosphate fertiliser application is stopped: A comparison of long-term pasture trials in New Zealand?. Science of the Total Environment, 2022, 804, 150047.	8.0	13
168	Land Application of Manure Can Influence Earthworm Activity and Soil Phosphorus Distribution. Communications in Soil Science and Plant Analysis, 2011, 42, 194-207.	1.4	12
169	Managing pollutant inputs from pastoral dairy farming to maintain water quality of a lake in a high-rainfall catchment. Marine and Freshwater Research, 2013, 64, 447.	1.3	12
170	A Cost-Effective Management Practice to Decrease Phosphorus Loss from Dairy Farms. Journal of Environmental Quality, 2014, 43, 2044-2052.	2.0	12
171	Likely controls on dissolved reactive phosphorus concentrations in baseflow of an agricultural stream. Journal of Soils and Sediments, 2020, 20, 3254-3265.	3.0	12
172	Assessing the leaching of cadmium in an irrigated and grazed pasture soil. Environmental Pollution, 2022, 292, 118430.	7.5	12
173	The effectiveness of industrial by-products to stop phosphorous loss from a Pallic soil. Soil Research, 2004, 42, 755.	1.1	11
174	Do aggregation, treading, and dung deposition affect phosphorus and suspended sediment losses in surface runoff?. Soil Research, 2010, 48, 705.	1.1	11
175	Evaluation of two management options to improve the water quality of Lake Brunner, New Zealand. New Zealand Journal of Agricultural Research, 2010, 53, 59-69.	1.6	11
176	Phosphorus source areas in a dairy catchment in Otago, New Zealand. Soil Research, 2012, 50, 145.	1.1	11
177	The Use of Alum to Decrease Phosphorus Losses in Runoff from Grassland Soils. Journal of Environmental Quality, 2014, 43, 1635-1643.	2.0	11
178	Effect of land use and moisture on phosphorus forms in upland stream beds in South Otago, New Zealand. Marine and Freshwater Research, 2009, 60, 619.	1.3	11
179	Effects of deer grazing and fenceâ€line pacing on water and soil quality. Soil Use and Management, 2004, 20, 302-307.	4.9	10
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