Rich McDowell

List of Publications by Citations

243 papers	7,813 citations	46 h-index	77 g-index
256 ext. papers	8,826 ext. citations	3.7 avg, IF	6.35 L-index

#	Paper	IF	Citations
243	Global change pressures on soils from land use and management. *Global Change Biology*, **2016**, 22, 1008-28	8.4	403
242	Approximating phosphorus release from soils to surface runoff and subsurface drainage. *Journal of Environmental Quality*, **2001**, 30, 508-20	3.4	332
241	Dissolved Organic Matter: Biogeochemistry, Dynamics, and Environmental Significance in Soils. *Advances in Agronomy*, **2011**, 110, 1-75	7.7	274
240	Phosphorus loss from land to water: integrating agricultural and environmental management. *Plant and Soil*, **2001**, 237, 287-307	4.2	262
239	Biogeochemical cycles and biodiversity as key drivers of ecosystem services provided by soils. *Soil*, **2015**, 1, 665-685	5.8	188
238	Amounts, Forms, and Solubility of Phosphorus in Soils Receiving Manure. *Soil Science Society of America Journal*, **2004**, 68, 2048-2057	2.5	175
237	Managing agricultural phosphorus for water quality protection: principles for progress. *Plant and Soil*, **2011**, 349, 169-182	4.2	174
236	Integrating legacy soil phosphorus into sustainable nutrient management strategies for future food, bioenergy and water security. *Nutrient Cycling in Agroecosystems*, **2016**, 104, 393-412	3.3	140
235	Processes controlling soil phosphorus release to runoff and implications for agricultural management. *Nutrient Cycling in Agroecosystems*, **2001**, 59, 269-284	3.3	129
234	Soil controls of phosphorus in runoff: Management barriers and opportunities. *Canadian Journal of Soil Science*, **2011**, 91, 329-338	1.4	126
233	Assessing site vulnerability to phosphorus loss in an agricultural watershed. *Journal of Environmental Quality*, **2001**, 30, 2026-36	3.4	121
232	Phosphorus export from an agricultural watershed: linking source and transport mechanisms. *Journal of Environmental Quality*, **2001**, 30, 1587-95	3.4	117
231	Nutrient management in New Zealand pastures□recent developments and future issues. *New Zealand Journal of Agricultural Research*, **2007**, 50, 181-201	1.9	111
230	Connecting phosphorus loss from agricultural landscapes to surface water quality. *Chemistry and Ecology*, **2004**, 20, 1-40	2.3	108
229	Phosphorus solubility and release kinetics as a function of soil test P concentration. *Geoderma*, **2003**, 112, 143-154	6.7	108
228	Phosphorus losses in subsurface flow before and after manure application to intensively farmed land. *Science of the Total Environment*, **2001**, 278, 113-25	10.2	104
227	RELATIONSHIP BETWEEN SOIL TEST PHOSPHORUS AND PHOSPHORUS RELEASE TO SOLUTION. *Soil Science*, **2001**, 166, 137-149	0.9	101

226	Estimating phosphorus loss from New Zealand grassland soils. *New Zealand Journal of Agricultural Research*, **2004**, 47, 137-145	1.9	91
225	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	6.7	88
224	Using organic phosphorus to sustain pasture productivity: A perspective. *Geoderma*, **2014**, 221-222, 11-19	6.7	85
223	Phosphorus movement and speciation in a sandy soil profile after long-term animal manure applications. *Journal of Environmental Quality*, **2007**, 36, 305-15	3.4	84
222	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	3.4	84
221	Organic phosphorus speciation and pedogenesis: analysis by solution 31P nuclear magnetic resonance spectroscopy. *European Journal of Soil Science*, **2007**, 58, 1348-1357	3.4	73
220	SOLID-STATE FOURIER TRANSFORM INFRARED AND 31P NUCLEAR MAGNETIC RESONANCE SPECTRAL FEATURES OF PHOSPHATE COMPOUNDS. *Soil Science*, **2007**, 172, 501-515	0.9	70
219	Variation of phosphorus leached from Pennsylvanian soils amended with manures, composts or inorganic fertilizer. *Agriculture, Ecosystems and Environment*, **2004**, 102, 17-27	5.7	66
218	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, 680-93	3.4	65
217	Phosphorus in fresh and dry dung of grazing dairy cattle, deer, and sheep: sequential fraction and phosphorus-31 nuclear magnetic resonance analyses. *Journal of Environmental Quality*, **2005**, 34, 598-607	3.4	63
216	Water quality and the effects of different pastoral animals. *New Zealand Veterinary Journal*, **2008**, 56, 289-96	1.7	62
215	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	5.7	61
214	When experts disagree: the need to rethink indicator selection for assessing sustainability of agriculture. *Environment, Development and Sustainability*, **2017**, 19, 1327-1342	4.5	60
213	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	3.3	60
212	Managing Diffuse Phosphorus at the Source versus at the Sink. *Environmental Science & Technology*, **2018**, 52, 11995-12009	10.3	59
211	Sources of phosphorus lost from a grazed pasture receiving simulated rainfall. *Journal of Environmental Quality*, **2007**, 36, 1281-8	3.4	58
210	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	1.3	57
209	A Comparison of Fluvial Sediment Phosphorus (P) Chemistry in Relation to Location and Potential to Influence Stream P Concentrations. *Aquatic Geochemistry*, **2001**, 7, 255-265	1.7	57

208	Influence of soil treading on sediment and phosphorus losses in overland flow. *Soil Research*, **2003**, 41, 949	1.8	55
207	Development of a model using matter element, AHP and GIS techniques to assess the suitability of land for agriculture. *Geoderma*, **2019**, 352, 80-95	6.7	54
206	Treatment of drainage water with industrial by-products to prevent phosphorus loss from tile-drained land. *Journal of Environmental Quality*, **2008**, 37, 1575-82	3.4	51
205	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	3.3	51
204	Municipal composts reduce the transfer of Cd from soil to vegetables. *Environmental Pollution*, **2016**, 213, 8-15	9.3	50
203	Soil phosphorus concentrations to minimise potential P loss to surface waters in Southland. *New Zealand Journal of Agricultural Research*, **2003**, 46, 239-253	1.9	50
202	Soil phosphorus quantity-intensity relationships to predict increased soil phosphorus loss to overland and subsurface flow. *Chemosphere*, **2002**, 48, 679-87	8.4	48
201	Soil phosphorus fractions in solution: influence of fertiliser and manure, filtration and method of determination. *Chemosphere*, **2001**, 45, 737-48	8.4	48
200	Influence of soil constituents on soil phosphorus sorption and desorption. *Communications in Soil Science and Plant Analysis*, **2001**, 32, 2531-2547	1.5	47
199	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	3.1	46
198	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	3.9	46
197	Chemical nature and potential mobility of phosphorus in fertilized grassland soils. *Nutrient Cycling in Agroecosystems*, **2000**, 57, 225-233	3.3	46
196	OVERSEER nutrient budgets - moving towards on-farm resource accounting. *Proceedings of the New Zealand Grassland Association*,191-194		46
195	Potential phosphorus losses in overland flow from pastoral soils receiving long-term applications of either superphosphate or reactive phosphate rock. *New Zealand Journal of Agricultural Research*, **2003**, 46, 329-337	1.9	45
194	Optimizing land use for the delivery of catchment ecosystem services. *Frontiers in Ecology and the Environment*, **2016**, 14, 325-332	5.5	44
193	Phosphorus Transport in Overland Flow in Response to Position of Manure Application. *Journal of Environmental Quality*, **2002**, 31, 217-227	3.4	44
192	Modification of phosphorus export from an eastern USA catchment by fluvial sediment and phosphorus inputs. *Agriculture, Ecosystems and Environment*, **2003**, 99, 187-199	5.7	44
191	Cattle treading and phosphorus and sediment loss in overland flow from grazed cropland. *Soil Research*, **2003**, 41, 1521	1.8	44

190	Nitrate and phosphorus leaching in New Zealand: a national perspective. *New Zealand Journal of Agricultural Research*, **2013**, 56, 49-59	1.9	43
189	Using Soil Phosphorus Profile Data to Assess Phosphorus Leaching Potential in Manured Soils. *Soil Science Society of America Journal*, **2003**, 67, 215-224	2.5	43
188	Particulate phosphorus transport within stream flow of an agricultural catchment. *Journal of Environmental Quality*, **2004**, 33, 2111-21	3.4	43
187	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	3.3	43
186	INNOVATIVE MANAGEMENT OF AGRICULTURAL PHOSPHORUS TO PROTECT SOIL AND WATER RESOURCES. *Communications in Soil Science and Plant Analysis*, **2001**, 32, 1071-1100	1.5	43
185	Uptake and release of phosphorus from overland flow in a stream environment. *Journal of Environmental Quality*, **2003**, 32, 937-48	3.4	42
184	Peak assignments for phosphorus-31 nuclear magnetic resonance spectroscopy in pH range 5–13 and their application in environmental samples. *Chemistry and Ecology*, **2005**, 21, 211-226	2.3	41
183	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	6	40
182	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	5.8	38
181	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	2.1	38
180	Indicator to predict the movement of phosphorus from soil to subsurface flow. *Environmental Science & Technology*, **2002**, 36, 1505-9	10.3	38
179	Variation of phosphorus loss from a small Catchment in south Devon, UK. *Agriculture, Ecosystems and Environment*, **2000**, 79, 143-157	5.7	38
178	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	2.2	36
177	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	6	36
176	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, 741-52	3.4	36
175	Mechanisms of phosphorus solubilisation in a limed soil as a function of pH. *Chemosphere*, **2003**, 51, 685-92	3.4	36
174	Natural background and anthropogenic contributions of cadmium to New Zealand soils. *Agriculture, Ecosystems and Environment*, **2013**, 165, 80-87	5.7	35
173	Alternative fertilisers and management to decrease incidental phosphorus loss. *Environmental Chemistry Letters*, **2005**, 2, 169-174	13.3	34

172	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	10.2	34
171	Sources of sediment and phosphorus in stream flow of a highly productive dairy farmed catchment. *Journal of Environmental Quality*, **2007**, 36, 540-8	3.4	33
170	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	7.5	33
169	An improved technique for the determination of organic phosphorus in sediments and soils by 31P nuclear magnetic resonance spectroscopy. *Chemistry and Ecology*, **2005**, 21, 11-22	2.3	33
168	The effect of soil acidity on potentially mobile phosphorus in a grassland soil. *Journal of Agricultural Science*, **2002**, 139, 27-36	1	33
167	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	2.6	32
166	Modelling phosphorus losses from pastoral farming systems in New Zealand. *New Zealand Journal of Agricultural Research*, **2005**, 48, 131-141	1.9	32
165	A review of regulations and guidelines related to winter manure application. *Ambio*, **2018**, 47, 657-670	6.5	30
164	Phosphorus and the Winchmore trials: review and lessons learnt. *New Zealand Journal of Agricultural Research*, **2012**, 55, 119-132	1.9	30
163	Approaches for quantifying and managing diffuse phosphorus exports at the farm/small catchment scale. *Journal of Environmental Quality*, **2009**, 38, 1968-80	3.4	29
162	The effects of soil carbon on phosphorus and sediment loss from soil trays by overland flow. *Journal of Environmental Quality*, **2003**, 32, 207-14	3.4	29
161	Restricting the grazing time of cattle to decrease phosphorus, sediment and E. coli losses in overland flow from cropland. *Soil Research*, **2005**, 43, 61	1.8	29
160	Management options to decrease phosphorus and sediment losses from irrigated cropland grazed by cattle and sheep. *Soil Use and Management*, **2009**, 25, 224-233	3.1	27
159	Dissipation of imazapyr, flumetsulam and thifensulfuron in soil. *Weed Research*, **1997**, 37, 381-389	1.9	27
158	Contaminant Losses in Overland Flow from Cattle, Deer and Sheep Dung. *Water, Air, and Soil Pollution*, **2006**, 174, 211-222	2.6	27
157	Analysis of Potentially Mobile Phosphorus in Arable Soils Using Solid State Nuclear Magnetic Resonance. *Journal of Environmental Quality*, **2002**, 31, 450-456	3.4	27
156	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, 921-9	3.4	26
155	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	1.5	26

154	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	26
153	Global mapping of freshwater nutrient enrichment and periphyton growth potential. *Scientific Reports*, **2020**, 10, 3568	4.9	25
152	Anthropogenic increases of catchment nitrogen and phosphorus loads in New Zealand. *New Zealand Journal of Marine and Freshwater Research*, **2018**, 52, 336-361	1.3	25
151	An examination of potential extraction methods to assess plant-available organic phosphorus in soil. *Biology and Fertility of Soils*, **2008**, 44, 707-715	6.1	24
150	Phosphorus and sediment loss in a catchment with winter forage grazing of cropland by dairy cattle. *Journal of Environmental Quality*, **2006**, 35, 575-83	3.4	24
149	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	5.9	23
148	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	1.9	23
147	Guiding phosphorus stewardship for multiple ecosystem services. *Ecosystem Health and Sustainability*, **2016**, 2, e01251	3.7	23
146	Variation in environmentally- and agronomically-significant soil phosphorus concentrations with time since stopping the application of phosphorus fertilisers. *Geoderma*, **2016**, 280, 67-72	6.7	22
145	Minimising phosphorus losses from the soil matrix. *Current Opinion in Biotechnology*, **2012**, 23, 860-5	11.4	22
144	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	5.7	21
143	Extreme phosphorus losses in drainage from grazed dairy pastures on marginal land. *Journal of Environmental Quality*, **2015**, 44, 545-51	3.4	21
142	Phosphorus fertilizer form affects phosphorus loss to waterways: a paired catchment study. *Soil Use and Management*, **2010**, 26, 365-373	3.1	21
141	Analysis of Potentially Mobile Phosphorus in Arable Soils Using Solid State Nuclear Magnetic Resonance. *Journal of Environmental Quality*, **2002**, 31, 450	3.4	21
140	Fatal hemorrhage caused by varicose veins. *American Journal of Forensic Medicine and Pathology*, **1994**, 15, 100-4	1	21
139	Assessment of a technique to remove phosphorus from streamflow. *New Zealand Journal of Agricultural Research*, **2007**, 50, 503-510	1.9	20
138	INTEGRATING PHOSPHORUS AND NITROGEN DECISION MANAGEMENT AT WATERSHED SCALES1. *Journal of the American Water Resources Association*, **2002**, 38, 479-491	2.1	20
137	Chemistry, Cycling, and Potential Movement of Inorganic Phosphorus in Soils. *Agronomy*, **2015**, 51-86	0.8	19

136	Water quality in headwater catchments with deer wallows. *Journal of Environmental Quality*, **2007**, 36, 1377-82	3.4	19
135	Identification of Phosphorus Species in Extracts of Soils with Contrasting Management Histories. *Communications in Soil Science and Plant Analysis*, **2003**, 34, 1083-1095	1.5	18
134	The potential for phosphorus loss in relation to nitrogen fertiliser application and cultivation. *New Zealand Journal of Agricultural Research*, **2002**, 45, 245-253	1.9	18
133	Uptake and Release of Phosphorus from Overland Flow in a Stream Environment **2003**, 32, 937		18
132	Microbiome innovations for a sustainable future. *Nature Microbiology*, **2021**, 6, 138-142	26.6	18
131	Estimating the mitigation of anthropogenic loss of phosphorus in New Zealand grassland catchments. *Science of the Total Environment*, **2014**, 468-469, 1178-86	10.2	17
130	Nutrients and eutrophication: introduction. *Marine and Freshwater Research*, **2013**, 64, iii	2.2	17
129	Sediment Phosphorus Chemistry and Microbial Biomass along a Lowland New Zealand Stream. *Aquatic Geochemistry*, **2003**, 9, 19-40	1.7	17
128	The Ability to Reduce Soil Legacy Phosphorus at a Country Scale. *Frontiers in Environmental Science*, **2020**, 8,	4.8	17
127	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	2.1	16
126	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	5.7	16
125	Irrigation and soil physical quality: An investigation at a long-term irrigation site. *New Zealand Journal of Agricultural Research*, **2009**, 52, 113-121	1.9	16
124	Hydrological approaches to the delineation of critical-source areas of runoff. *New Zealand Journal of Agricultural Research*, **2007**, 50, 249-265	1.9	16
123	Using Soil Phosphorus Profile Data to Assess Phosphorus Leaching Potential in Manured Soils **2003**, 67, 215		16
122	Effects of Lime and Organic Amendments Derived from Varied Source Materials on Cadmium Uptake by Potato. *Journal of Environmental Quality*, **2017**, 46, 836-844	3.4	15
121	Quantifying the Extent of Anthropogenic Eutrophication of Lakes at a National Scale in New Zealand. *Environmental Science & Technology*, **2019**, 53, 9439-9452	10.3	15
120	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	5	15
119	Phosphorus in pasture plants: potential implications for phosphorus loss in surface runoff. *Plant and Soil*, **2011**, 345, 23-35	4.2	15

118	Water quality of a stream recently fenced-off from deer. *New Zealand Journal of Agricultural Research*, **2008**, 51, 291-298	1.9	15
117	The fate of phosphorus under contrasting border-check irrigation regimes. *Soil Research*, **2008**, 46, 309	1.8	15
116	Influence of long-term irrigation on the distribution and availability of soil phosphorus under permanent pasture. *Soil Research*, **2006**, 44, 127	1.8	15
115	Effect of plot scale and an upslope phosphorus source on phosphorus loss in overland flow. *Soil Use and Management*, **2006**, 18, 112-119	3.1	15
114	Availability of residual phosphorus in high phosphorus soils. *Communications in Soil Science and Plant Analysis*, **2002**, 33, 1235-1246	1.5	15
113	Why are median phosphorus concentrations improving in New Zealand streams and rivers?. *Journal of the Royal Society of New Zealand*, **2019**, 49, 143-170	2	14
112	Does variable rate irrigation decrease nutrient leaching losses from grazed dairy farming?. *Soil Use and Management*, **2017**, 33, 530-537	3.1	14
111	Potential phosphorus and sediment loads from sources within a dairy farmed catchment. *Soil Use and Management*, **2010**, 26, 44-52	3.1	14
110	Analysis of Phosphorus in Sequentially Extracted Grassland Soils Using Solid State NMR. *Communications in Soil Science and Plant Analysis*, **2003**, 34, 1623-1636	1.5	14
109	The effectiveness of coal fly-ash to decrease phosphorus loss from grassland soils. *Soil Research*, **2005**, 43, 853	1.8	14
108	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	1.4	14
107	Effects of deer grazing and fence-line pacing on water and soil quality. *Soil Use and Management*, **2004**, 20, 302-307	3.1	14
106	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	5.7	13
105	Assessing the Yield and Load of Contaminants with Stream Order: Would Policy Requiring Livestock to Be Fenced Out of High-Order Streams Decrease Catchment Contaminant Loads?. *Journal of Environmental Quality*, **2017**, 46, 1038-1047	3.4	13
104	Is tillage an effective method to decrease phosphorus loss from phosphorus enriched pastoral soils?. *Soil and Tillage Research*, **2014**, 135, 1-8	6.5	13
103	Changes in soil phosphorus availability and potential phosphorus loss following cessation of phosphorus fertiliser inputs. *Soil Research*, **2013**, 51, 427	1.8	13
102	Phosphorus Transport in Overland Flow in Response to Position of Manure Application **2002**, 31, 217		13
101	The Effects of Soil Carbon on Phosphorus and Sediment Loss from Soil Trays by Overland Flow **2003**, 32, 207		13

100	Cadmium accumulation by forage species used in New Zealand livestock grazing systems. *Geoderma Regional*, **2016**, 7, 11-18	2.7	12
99	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	6.1	12
98	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,	4.5	12
97	The error in stream sediment phosphorus fractionation and sorption properties effected by drying pretreatments. *Journal of Soils and Sediments*, **2019**, 19, 1587-1597	3.4	12
96	Speciation and distribution of organic phosphorus in river sediments: a national survey. *Journal of Soils and Sediments*, **2015**, 15, 2369-2379	3.4	11
95	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	1.9	11
94	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	2.2	11
93	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	1.9	11
92	Identifying and linking source areas of flow and P transport in dairy-grazed headwater catchments, North Island, New Zealand. *Hydrological Processes*, **2010**, 24, 3689-3705	3.3	11
91	Monitoring the impact of farm practices on water quality in the Otago and Southland deer focus farms. *Proceedings of the New Zealand Grassland Association*,183-188		11
90	Direct Exports of Phosphorus from Fertilizers Applied to Grazed Pastures. *Journal of Environmental Quality*, **2019**, 48, 1380-1396	3.4	11
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	11
88	A Global Perspective on Phosphorus Management Decision Support in Agriculture: Lessons Learned and Future Directions. *Journal of Environmental Quality*, **2019**, 48, 1218-1233	3.4	10
87	Temperature and Nitrogen Effects on Phosphorus Uptake by Agricultural Stream-Bed Sediments. *Journal of Environmental Quality*, **2017**, 46, 295-301	3.4	10
86	Impacts of long-term plant biomass management on soil phosphorus under temperate grassland. *Plant and Soil*, **2018**, 427, 163-174	4.2	10
85	Phosphorus dynamics in sediments of a eutrophic lake derived from 31P nuclear magnetic resonance spectroscopy. *Marine and Freshwater Research*, **2014**, 65, 70	2.2	10
84	A cost-effective management practice to decrease phosphorus loss from dairy farms. *Journal of Environmental Quality*, **2014**, 43, 2044-52	3.4	10
83	Effects of cattle treading and soil moisture on phosphorus and sediment losses in surface runoff from pasture. *New Zealand Journal of Agricultural Research*, **2010**, 53, 365-376	1.9	10

82	Land Application of Manure Can Influence Earthworm Activity and Soil Phosphorus Distribution. *Communications in Soil Science and Plant Analysis*, **2011**, 42, 194-207	1.5	10
81	Do aggregation, treading, and dung deposition affect phosphorus and suspended sediment losses in surface runoff?. *Soil Research*, **2010**, 48, 705	1.8	10
80	The effectiveness of industrial by-products to stop phosphorous loss from a Pallic soil. *Soil Research* , **2004**, 42, 755	1.8	10
79	A strategy for optimizing catchment management actions to stressor response relationships in freshwaters. *Ecosphere*, **2018**, 9, e02482	3.1	10
78	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	1.8	9
77	Effects of cultivation on soil and soil water under different fertiliser regimes. *Soil and Tillage Research*, **2015**, 145, 37-46	6.5	9
76	Phosphorus source areas in a dairy catchment in Otago, New Zealand. *Soil Research*, **2012**, 50, 145	1.8	9
75	The use of safe wallows to improve water quality in deer farmed catchments. *New Zealand Journal of Agricultural Research*, **2009**, 52, 81-90	1.9	9
74	Phosphorus in humped and hollowed soils of the Inchbonnie catchment, West Coast, New Zealand: II. Accounting for losses by different pathways. *New Zealand Journal of Agricultural Research*, **2008**, 51, 307-316	1.9	9
73	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	2.2	9
72	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	5.7	9
71	The use of alum to decrease phosphorus losses in runoff from grassland soils. *Journal of Environmental Quality*, **2014**, 43, 1635-43	3.4	8
70	Sediment phosphorus buffering in streams at baseflow: A meta-analysis. *Journal of Environmental Quality*, **2021**, 50, 287-311	3.4	8
69	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	1.9	8
68	Likely controls on dissolved reactive phosphorus concentrations in baseflow of an agricultural stream. *Journal of Soils and Sediments*, **2020**, 20, 3254-3265	3.4	7
67	The influence of a flood event on the potential sediment control of baseflow phosphorus concentrations in an intensive agricultural catchment. *Journal of Soils and Sediments*, **2019**, 19, 429-438	3.4	7
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