Paul Kardol

List of Publications by Year
in descending order

140	10,971	41344	34986
papers	citations	49 h-index	98 g-index

175	175	175	10352
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Plantâ€“soil feedbacks: the past, the present and future challenges. Journal of Ecology, 2013, 101, 265-276.	4.0	1,259
2	Soil nematode abundance and functional group composition at a global scale. Nature, 2019, 572, 194-198.	27.8	635
3	Temporal variation in plant-soil feedback controls succession. Ecology Letters, 2006, 9, 1080-1088.	6.4	550
4	MICROBE-MEDIATED PLANTâ€“SOIL FEEDBACK CAUSES HISTORICAL CONTINGENCY EFFECTS IN PLANT COMMUNITY ASSEMBLY. Ecological Monographs, 2007, 77, 147-162.	5.4	427
5	How understanding abovegroundâ€“belowground linkages can assist restoration ecology. Trends in Ecology and Evolution, 2010, 25, 670-679.	8.7	365
6	Soil ecosystem functioning under climate change: plant species and community effects. Ecology, 2010, 91, 767-781.	3.2	311
7	A meta-analysis of 1,119 manipulative experiments on terrestrial carbon-cycling responses to global change. Nature Ecology and Evolution, 2019, 3, 1309-1320.	7.8	304
8	Plant-soil feedback and the maintenance of diversity in Mediterranean-climate shrublands. Science, 2017, 355, 173-176.	12.6	299
9	Plantâ€“Soil Feedback: Bridging Natural and Agricultural Sciences. Trends in Ecology and Evolution, 2018, 33, 129-142.	8.7	249
10	The ratio of Gram-positive to Gram-negative bacterial PLFA markers as an indicator of carbon availability in organic soils. Soil Biology and Biochemistry, 2019, 128, 111-114.	8.8	244
11	Nitrogen deposition weakens plantâ€“microbe interactions in grassland ecosystems. Global Change Biology, 2013, 19, 3688-3697.	9.5	221
12	Fungal biomass development in a chronosequence of land abandonment. Soil Biology and Biochemistry, 2006, 38, 51-60.	8.8	216
13	Climate change effects on plant biomass alter dominance patterns and community evenness in an experimental oldâ€field ecosystem. Global Change Biology, 2010, 16, 2676-2687.	9.5	210
14	Global patterns and substrateâ€based mechanisms of theÂterrestrial nitrogen cycle. Ecology Letters, 2016, 19, 697-709.	6.4	192
15	Biotic plantâ€“soil feedbacks across temporal scales. Journal of Ecology, 2013, 101, 309-315.	4.0	184
16	Resource availability mediates the importance of priority effects in plant community assembly and ecosystem function. Oikos, 2013, 122, 84-94.	2.7	179
17	Climate change effects on soil microarthropod abundance and community structure. Applied Soil Ecology, 2011, 47, 37-44.	4.3	175
18	A test of the hierarchical model of litter decomposition. Nature Ecology and Evolution, 2017, 1, 1836-1845.	7.8	172

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19	Nonlinearity of root trait relationships and the root economics spectrum. Nature Communications, 2019, 10, 2203.	12.8	158
20	Rhizosphere control of soil nitrogen cycling: a key component of plant economic strategies. New Phytologist, 2020, 228, 1269-1282.	7.3	144
21	Consistent effects of biodiversity loss on multifunctionality across contrasting ecosystems. Nature Ecology and Evolution, 2018, 2, 269-278.	7.8	136
22	Subordinate plant species enhance community resistance against drought in semiâ€natural grasslands. Journal of Ecology, 2013, 101, 763-773.	4.0	131
23	Soil food web structure during ecosystem development after land abandonment. Applied Soil Ecology, 2008, 39, 23-34.	4.3	126
24	Getting Plantâ€"Soil Feedbacks out of the Greenhouse: Experimental and Conceptual Approaches. Progress in Botany Fortschritte Der Botanik, 2008, , 449-472.	0.3	115
25	The nutrient absorptionâ€“transportation hypothesis: optimizing structural traits in absorptive roots. New Phytologist, 2017, 213, 1569-1572.	7.3	107
26	Emissions of ammonia and greenhouse gases during combined pre-composting and vermicomposting of duck manure. Waste Management, 2014, 34, 1546-1552.	7.4	105
27	Effects of agricultural intensification on soil biodiversity and implications for ecosystem functioning: A meta-analysis. Advances in Agronomy, 2019, , 1-44.	5.2	99
28	Interactions with soil biota shift from negative to positive when a tree species is moved outside its native range. New Phytologist, 2014, 202, 415-421.	7.3	96
29	Modelling C and N mineralisation in soil food webs during secondary succession on ex-arable land. Soil Biology and Biochemistry, 2011, 43, 251-260.	8.8	94
30	Why are plantâ€“soil feedbacks so unpredictable, and what to do about it?. Functional Ecology, 2019, 33, 118-128.	3.6	91
31	Multiple Climate Change Factors Interact to Alter Soil Microbial Community Structure in an Oldâ€Field Ecosystem. Soil Science Society of America Journal, 2011, 75, 2217-2226.	2.2	88
32	Successional trajectories of soil nematode and plant communities in a chronosequence of ex-arable lands. Biological Conservation, 2005, 126, 317-327.	4.1	86
33	Tradeâ€off between vegetation type, soil erosion control and surface water in global semiâ€arid regions: A metaâ€analysis. Journal of Applied Ecology, 2020, 57, 875-885.	4.0	84
34	A meta-analysis of soil biodiversity impacts on the carbon cycle. Soil, 2015, 1, 257-271.	4.9	83
35	The Role of Plant Litter in Driving Plant-Soil Feedbacks. Frontiers in Environmental Science, 2019, 7, .	3.3	79
36	Soil fertility shapes belowground food webs across a regional climate gradient. Ecology Letters, 2017, 20, 1273-1284.	6.4	78

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37	Responses of communities of soil organisms and plants to soil aging at two contrasting long-term chronosequences. Soil Biology and Biochemistry, 2017, 106, 69-79.	8.8	77
38	Nitrogen Addition Regulates Soil Nematode Community Composition through Ammonium Suppression. PLoS ONE, 2012, 7, e43384.	2.5	77
39	Soilâ€mediated effects of invasive ungulates on native tree seedlings. Journal of Ecology, 2014, 102, 622-631.	4.0	76
40	Long-term effects of species loss on community properties across contrasting ecosystems. Nature, 2018, 557, 710-713.	27.8	75
41	Plantâ€“Soil Feedbacks and Temporal Dynamics of Plant Diversityâ€“Productivity Relationships. Trends in Ecology and Evolution, 2021, 36, 651-661.	8.7	74
42	The handbook for standardized field and laboratory measurements in terrestrial climate change experiments and observational studies (ClimEx). Methods in Ecology and Evolution, 2020, 11, 22-37.	5.2	68
43	Organic fertilization promotes crop productivity through changes in soil aggregation. Soil Biology and Biochemistry, 2022, 165, 108533.	8.8	68
44	Understory plant functional groups and litter species identity are stronger drivers of litter decomposition than warming along a boreal forest post-fire successional gradient. Soil Biology and Biochemistry, 2016, 98, 159-170.	8.8	65
45	Restoration of species-rich grasslands on ex-arable land: Seed addition outweighs soil fertility reduction. Biological Conservation, 2008, 141, 2208-2217.	4.1	61
46	Effects of plant functional group removal on structure and function of soil communities across contrasting ecosystems. Ecology Letters, 2019, 22, 1095-1103.	6.4	61
47	The importance of priority effects for riparian plant community dynamics. Journal of Vegetation Science, 2016, 27, 658-667.	2.2	59
48	Stimulation of boreal tree seedling growth by woodâ€derived charcoal: effects of charcoal properties, seedling species and soil fertility. Functional Ecology, 2014, 28, 766-775.	3.6	55
49	Carbon limitation overrides acidification in mediating soil microbial activity to nitrogen enrichment in a temperate grassland. Global Change Biology, 2021, 27, 5976-5988.	9.5	55
50	Soil Organism and Plant Introductions in Restoration of Speciesâ€Rich Grassland Communities. Restoration Ecology, 2009, 17, 258-269.	2.9	52
51	Contrasting Responses of Soil Microbial and Nematode Communities to Warming and Plant Functional Group Removal Across a Post-fire Boreal Forest Successional Gradient. Ecosystems, 2016, 19, 339-355.	3.4	52
52	Variability and Changes in Climate, Phenology, and Gross Primary Production of an Alpine Wetland Ecosystem. Remote Sensing, 2016, 8, 391.	4.0	51
53	Economic strategies of plant absorptive roots vary with root diameter. Biogeosciences, 2016, 13, 415-424.	3.3	47
54	Comparison of plantâ€“soil feedback experimental approaches for testing soil biotic interactions among ecosystems. New Phytologist, 2019, 221, 577-587.	7.3	46

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55	A global database of soil nematode abundance and functional group composition. Scientific Data, 2020, 7, 103.	5.3	46
56	Root traitâ€“microbial relationships across tundra plant species. New Phytologist, 2021, 229, 1508-1520.	7.3	46
57	Contrasting diversity patterns of soil mites and nematodes in secondary succession. Acta Oecologica, 2009, 35, 603-609.	1.1	44
58	Peeking into the black box: a traitâ€based approach to predicting plantâ€“soil feedback. New Phytologist, 2015, 206, 1-4.	7.3	44
59	Direct and Indirect Drivers of Moss Community Structure, Function, and Associated Microfauna Across a Successional Gradient. Ecosystems, 2015, 18, 154-169.	3.4	43
60	Shifts in soil microbial community functional gene structure across a 61-year desert revegetation chronosequence. Geoderma, 2019, 347, 126-134.	5.1	43
61	Biotic and abiotic plantâ€“soil feedback depends on nitrogenâ€acquisition strategy and shifts during longâ€term ecosystem development. Journal of Ecology, 2019, 107, 142-153.	4.0	41
62	Differences in endophyte communities of introduced trees depend on the phylogenetic relatedness of the receiving forest. Journal of Ecology, 2016, 104, 1219-1232.	4.0	40
63	Contribution of soil algae to the global carbon cycle. New Phytologist, 2022, 234, 64-76.	7.3	39
64	Soil functional biodiversity and biological quality under threat: Intensive land use outweighs climate change. Soil Biology and Biochemistry, 2020, 147, 107847.	8.8	38
65	Browsing by an invasive herbivore promotes development of plant and soil communities during primary succession. Journal of Ecology, 2016, 104, 1505-1517.	4.0	37
66	A hierarchical framework for studying the role of biodiversity in soil food web processes and ecosystem services. Soil Biology and Biochemistry, 2016, 102, 33-36.	8.8	36
67	Bacterial community dynamics in the rhizosphere of a long-lived, leguminous shrub across a 40-year age sequence. Journal of Soils and Sediments, 2018, 18, 76-84.	3.0	35
68	A framework to assess the carbon supplyâ€“consumption balance in plant roots. New Phytologist, 2021, 229, 659-664.	7.3	35
69	Plantâ€soil feedbacks in declining forests: implications for species coexistence. Ecology, 2017, 98, 1908-1921.	3.2	34
70	Multiâ€dimensionality as a path forward in plantâ€soil feedback research. Journal of Ecology, 2021, 109, 3446-3465.	4.0	34
71	Plant species effects on soil carbon and nitrogen dynamics in a temperate steppe of northern China. Plant and Soil, 2011, 346, 331-347.	3.7	32
72	Coordinated responses of soil communities to elevation in three subarctic vegetation types. Oikos, 2017, 126, 1586-1599.	2.7	32

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73	Soil handling methods should be selected based on research questions and goals. New Phytologist, 2017, 216, 18-23.	7.3	31
74	Modeling Carbon Fluxes Using Multi-Temporal MODIS Imagery and CO2 Eddy Flux Tower Data in Zoige Alpine Wetland, South-West China. Wetlands, 2014, 34, 603-618.	1.5	30
75	Grazing modifies inorganic and organic nitrogen uptake by coexisting plant species in alpine grassland. Biology and Fertility of Soils, 2016, 52, 211-221.	4.3	30
76	Long-term successional forest dynamics: species and community responses to climatic variability. Journal of Vegetation Science, 2010, 21, 627.	2.2	29
77	CO2 enrichment accelerates successional development of an understory plant community. Journal of Plant Ecology, 2010, 3, 33-39.	2.3	28
78	Crossing the threshold: the power of multiâ€level experiments in identifying global change responses. New Phytologist, 2012, 196, 323-326.	7.3	28
79	Plant growth response to direct and indirect temperature effects varies by vegetation type and elevation in a subarctic tundra. Oikos, 2015, 124, 772-783.	2.7	28
80	Trophic cascades in the bryosphere: the impact of global change factors on topâ€down control of cyanobacterial N₂â€fixation. Ecology Letters, 2016, 19, 967-976.	6.4	28
81	Removal of secondary compounds increases invertebrate abundance in lichens. Fungal Ecology, 2015, 18, 18-25.	1.6	26
82	How anthropogenic shifts in plant community composition alter soil food webs. F1000Research, 2018, 7, 4.	1.6	26
83	Effects of flue gas desulfurization gypsum by-products on microbial biomass and community structure in alkalineâ€“saline soils. Journal of Soils and Sediments, 2012, 12, 1040-1053.	3.0	25
84	Lichen physiological traits and growth forms affect communities of associated invertebrates. Ecology, 2015, 96, 2394-2407.	3.2	25
85	The role of plantâ€“soil feedbacks and landâ€use legacies in restoration of a temperate steppe in northern China. Ecological Research, 2010, 25, 1101-1111.	1.5	24
86	Microtopography-induced ecohydrological effects alter plant community structure. Geoderma, 2020, 362, 114119.	5.1	23
87	The impact of charcoal and soil mixtures on decomposition and soil microbial communities in boreal forest. Applied Soil Ecology, 2016, 99, 40-50.	4.3	22
88	Effects of warming and grazing on dissolved organic nitrogen in a Tibetan alpine meadow ecosystem. Soil and Tillage Research, 2016, 158, 156-164.	5.6	22
89	Land use modulates the effects of climate change on density but not community composition of Collembola. Soil Biology and Biochemistry, 2019, 138, 107598.	8.8	22
90	Immediate and carry-over effects of increased soil frost on soil respiration and microbial activity in a spruce forest. Soil Biology and Biochemistry, 2019, 135, 51-59.	8.8	21

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91	Nitrogen deposition stimulates decomposition via changes in the structure and function of litter food webs. Soil Biology and Biochemistry, 2022, 166, 108522.	8.8	21
92	Effects of grazing on CO2 balance in a semiarid steppe: field observations and modeling. Journal of Soils and Sediments, 2013, 13, 1012-1023.	3.0	19
93	Toward more robust plantâ€“soil feedback research: Comment. Ecology, 2019, 100, e02590.	3.2	19
94	Net neutral carbon responses to warming and grazing in alpine grassland ecosystems. Agricultural and Forest Meteorology, 2020, 280, 107792.	4.8	19
95	Globally, plantâ€soil feedbacks are weak predictors of plant abundance. Ecology and Evolution, 2021, 11, 1756-1768.	1.9	19
96	Effects of grazing on the acquisition of nitrogen by plants and microorganisms in an alpine grassland on the Tibetan plateau. Plant and Soil, 2017, 416, 297-308.	3.7	18
97	Annual ecosystem respiration is resistant to changes in freezeâ€“thaw periods in semiâ€arid permafrost. Global Change Biology, 2020, 26, 2630-2641.	9.5	18
98	Effects of interspecific competition on plant-soil feedbacks generated by long-term grazing. Soil Biology and Biochemistry, 2018, 126, 133-143.	8.8	17
99	Soil biotic and abiotic effects on seedling growth exhibit contextâ€dependent interactions: evidence from a multiâ€country experiment on Pinus contorta invasion. New Phytologist, 2021, 232, 303-317.	7.3	17
100	Lycium barbarum L. (goji berry) monocropping causes microbial diversity loss and induces Fusarium spp. enrichment at distinct soil layers. Applied Soil Ecology, 2021, 168, 104107.	4.3	17
101	Effects of Reed Straw, Zeolite, and Superphosphate Amendments on Ammonia and Greenhouse Gas Emissions from Stored Duck Manure. Journal of Environmental Quality, 2012, 41, 1221-1227.	2.0	16
102	Extreme rainfall events can alter inter-annual biomass responses to water and N enrichment. Biogeosciences, 2013, 10, 8129-8138.	3.3	16
103	Rewetting Decreases Carbon Emissions from the Zoige Alpine Peatland on the Tibetan Plateau. Sustainability, 2017, 9, 948.	3.2	16
104	Coordination of aboveground and belowground responses to localâ€scale soil fertility differences between two contrasting Jamaican rain forest types. Oikos, 2015, 124, 285-297.	2.7	15
105	The role of plantâ€“soil feedbacks in stabilizing a reindeerâ€induced vegetation shift in subarctic tundra. Functional Ecology, 2018, 32, 1959-1971.	3.6	15
106	Aboveâ€and belowâ€ground complementarity rather than selection drive tree diversityâ€“productivity relationships in European forests. Functional Ecology, 2021, 35, 1756-1767.	3.6	15
107	Lichen Physiological Traits and Growth Forms Affect Communities of Associated Invertebrates. Bulletin of the Ecological Society of America, 2015, 96, 627-628.	0.2	14
108	Effects of electron acceptors on soluble reactive phosphorus in the overlying water during algal decomposition. Environmental Science and Pollution Research, 2015, 22, 19507-19517.	5.3	14

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109	Contrasting responses of springtails and mites to elevation and vegetation type in the sub-Arctic. Pedobiologia, 2018, 67, 57-64.	1.2	14
110	The diversity of soil mesofauna declines after bamboo invasion in subtropical China. Science of the Total Environment, 2021, 789, 147982.	8.0	14
111	Bacterial diversity in the rhizosphere of two phylogenetically closely related plant species across environmental gradients. Journal of Soils and Sediments, 2017, 17, 122-132.	3.0	13
112	Plant organic N uptake maintains species dominance under long-term warming. Plant and Soil, 2018, 433, 243-255.	3.7	13
113	Effects of plant functional group removal on CO 2 fluxes and belowground C stocks across contrasting ecosystems. Ecology, 2020, 101, e03170.	3.2	13
114	Short-term effects of snow cover manipulation on soil bacterial diversity and community composition. Science of the Total Environment, 2020, 741, 140454.	8.0	13
115	Local plant adaptation across a subarctic elevational gradient. Royal Society Open Science, 2014, 1, 140141.	2.4	12
116	Nematode community resistant to deep soil frost in boreal forest soils. Pedobiologia, 2016, 59, 243-251.	1.2	12
117	Root trait variation along a subâ€arctic tundra elevational gradient. Oikos, 2023, 2023, .	2.7	12
118	Organic amendments increase the flow uniformity of energy across nematode food webs. Soil Biology and Biochemistry, 2022, 170, 108695.	8.8	12
119	Nutrient optimization of tree growth alters structure and function of boreal soil food webs. Forest Ecology and Management, 2018, 428, 46-56.	3.2	11
120	Combined addition of chemical and organic amendments enhances plant resistance to aboveground herbivores through increasing microbial abundance and diversity. Biology and Fertility of Soils, 2020, 56, 1007-1022.	4.3	11
121	Effects of nitrogen addition and mowing on nitrogen- and water-use efficiency of Artemisia frigida in a grassland restored from an abandoned cropland. Journal of Plant Ecology, 2021, 14, 515-526.	2.3	11
122	Think globally, measure locally: The MIREN standardized protocol for monitoring plant species distributions along elevation gradients. Ecology and Evolution, 2022, 12, e8590.	1.9	11
123	The influence of treeâ€scale and ecosystemâ€scale factors on epiphytic lichen communities across a longâ€term retrogressive chronosequence. Journal of Vegetation Science, 2014, 25, 1100-1111.	2.2	10
124	Contribution of microbial photosynthesis to peatland carbon uptake along a latitudinal gradient. Journal of Ecology, 2021, 109, 3424-3441.	4.0	10
125	What do scientists and managers know about soil biodiversity? Comparative knowledge mapping for sustainable forest management. Forest Policy and Economics, 2020, 119, 102264.	3.4	9
126	Direct and indirect effects of fire on microbial communities in a pyrodiverse dryâ€sclerophyll forest. Journal of Ecology, 2022, 110, 1687-1703.	4.0	9

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127	Impact of plant functional group and species removals on soil and plant nitrogen and phosphorus across a retrogressive chronosequence. Journal of Ecology, 2020, 108, 561-573.	4.0	8
128	Plantâ€“soil biota interactions explain shifts in plant community composition under global change. Functional Ecology, 2021, 35, 2778-2788.	3.6	8
129	Root traits and soil microâ€organisms as drivers of plantâ€“soil feedbacks within the subâ€arctic tundra meadow. Journal of Ecology, 2022, 110, 466-478.	4.0	8
130	Climatic conditions, not above- and belowground resource availability and uptake capacity, mediate tree diversity effects on productivity and stability. Science of the Total Environment, 2022, 812, 152560.	8.0	8
131	Influence of species identity and charring conditions on fire-derived charcoal traits. Canadian Journal of Forest Research, 2015, 45, 1669-1675.	1.7	7
132	Nitrogen addition mediates the response of foliar stoichiometry to phosphorus addition: a meta-analysis. Ecological Processes, 2021, 10, .	3.9	6
133	Longâ€term heavy grazing increases communityâ€level foliar fungal diseases by shifting plant composition. Journal of Applied Ecology, 2022, 59, 791-800.	4.0	6
134	Precipitation regime controls bryosphere carbon cycling similarly across contrasting ecosystems. Oikos, 2021, 130, 512-524.	2.7	5
135	Spatiotemporal patterns and drivers of methane uptake across a climate transect in Inner Mongolia Steppe. Science of the Total Environment, 2021, 757, 143768.	8.0	5
136	No evidence that conifer biochar impacts soil functioning by serving as microbial refugia in boreal soils. GCB Bioenergy, 2022, 14, 972-988.	5.6	5
137	Soil Biota as Drivers of Plant Community Assembly. Ecological Studies, 2018, , 293-318.	1.2	4
138	Trait coordination in boreal mosses reveals a bryophyte economics spectrum. Journal of Ecology, 2022, 110, 2493-2506.	4.0	4
139	Bryosphere Loss Impairs Litter Decomposition Consistently Across Moss Species, Litter Types, and Micro-Arthropod Abundance. Ecosystems, 2022, 25, 1542-1554.	3.4	2
140	Interactive Effects of Nitrogen and Water Addition on Competitive Hierarchies Between Early- and Late- Successional Plant Species. Polish Journal of Ecology, 2014, 62, 665-678.	0.2	1