Paul Kardol

List of Publications by Citations

132 papers	7,009 citations	41 h-index	82 g-index
175 ext. papers	9,216 ext. citations	6.9 avg, IF	6.11 L-index

#	Paper	IF	Citations
132	Plant–soil feedbacks: the past, the present and future challenges. *Journal of Ecology*, **2013**, 101, 265-276	6	841
131	Temporal variation in plant-soil feedback controls succession. *Ecology Letters*, **2006**, 9, 1080-8	10	426
130	MICROBE-MEDIATED PLANT–SOIL FEEDBACK CAUSES HISTORICAL CONTINGENCY EFFECTS IN PLANT COMMUNITY ASSEMBLY. *Ecological Monographs*, **2007**, 77, 147-162	9	330
129	Soil nematode abundance and functional group composition at a global scale. *Nature*, **2019**, 572, 194-198	40.4	305
128	How understanding aboveground-belowground linkages can assist restoration ecology. *Trends in Ecology and Evolution*, **2010**, 25, 670-9	10.9	297
127	Soil ecosystem functioning under climate change: plant species and community effects. *Ecology*, **2010**, 91, 767-81	4.6	249
126	Plant-soil feedback and the maintenance of diversity in Mediterranean-climate shrublands. *Science*, **2017**, 355, 173-176	33.3	190
125	Fungal biomass development in a chronosequence of land abandonment. *Soil Biology and Biochemistry*, **2006**, 38, 51-60	7.5	190
124	Climate change effects on plant biomass alter dominance patterns and community evenness in an experimental old-field ecosystem. *Global Change Biology*, **2010**, 16, 2676-2687	11.4	174
123	Nitrogen deposition weakens plant-microbe interactions in grassland ecosystems. *Global Change Biology*, **2013**, 19, 3688-97	11.4	157
122	Plant-Soil Feedback: Bridging Natural and Agricultural Sciences. *Trends in Ecology and Evolution*, **2018**, 33, 129-142	10.9	153
121	A meta-analysis of 1,119 manipulative experiments on terrestrial carbon-cycling responses to global change. *Nature Ecology and Evolution*, **2019**, 3, 1309-1320	12.3	150
120	Climate change effects on soil microarthropod abundance and community structure. *Applied Soil Ecology*, **2011**, 47, 37-44	5	135
119	Biotic plant–soil feedbacks across temporal scales. *Journal of Ecology*, **2013**, 101, 309-315	6	131
118	Resource availability mediates the importance of priority effects in plant community assembly and ecosystem function. *Oikos*, **2013**, 122, 84-94	4	128
117	Global patterns and substrate-based mechanisms of the terrestrial nitrogen cycle. *Ecology Letters*, **2016**, 19, 697-709	10	128
116	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	7.5	122

115	A test of the hierarchical model of litter decomposition. *Nature Ecology and Evolution*, **2017**, 1, 1836-1845	12.3	116
114	Soil food web structure during ecosystem development after land abandonment. *Applied Soil Ecology*, **2008**, 39, 23-34	5	102
113	Subordinate plant species enhance community resistance against drought in semi-natural grasslands. *Journal of Ecology*, **2013**, 101, 763-773	6	100
112	Getting Plant-Soil Feedbacks out of the Greenhouse: Experimental and Conceptual Approaches. *Progress in Botany Fortschritte Der Botanik*, **2008**, 449-472	0.6	85
111	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	9.8	81
110	Nonlinearity of root trait relationships and the root economics spectrum. *Nature Communications*, **2019**, 10, 2203	17.4	79
109	Emissions of ammonia and greenhouse gases during combined pre-composting and vermicomposting of duck manure. *Waste Management*, **2014**, 34, 1546-52	8.6	79
108	Successional trajectories of soil nematode and plant communities in a chronosequence of ex-arable lands. *Biological Conservation*, **2005**, 126, 317-327	6.2	77
107	Modelling C and N mineralisation in soil food webs during secondary succession on ex-arable land. *Soil Biology and Biochemistry*, **2011**, 43, 251-260	7.5	72
106	A meta-analysis of soil biodiversity impacts on the carbon cycle. *Soil*, **2015**, 1, 257-271	5.8	66
105	Consistent effects of biodiversity loss on multifunctionality across contrasting ecosystems. *Nature Ecology and Evolution*, **2018**, 2, 269-278	12.3	62
104	Multiple Climate Change Factors Interact to Alter Soil Microbial Community Structure in an Old-Field Ecosystem. *Soil Science Society of America Journal*, **2011**, 75, 2217-2226	2.5	62
103	Soil-mediated effects of invasive ungulates on native tree seedlings. *Journal of Ecology*, **2014**, 102, 622-631	6	59
102	Long-term effects of species loss on community properties across contrasting ecosystems. *Nature*, **2018**, 557, 710-713	50.4	56
101	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	7.5	55
100	Restoration of species-rich grasslands on ex-arable land: Seed addition outweighs soil fertility reduction. *Biological Conservation*, **2008**, 141, 2208-2217	6.2	55
99	Nitrogen addition regulates soil nematode community composition through ammonium suppression. *PLoS ONE*, **2012**, 7, e43384	3.7	55
98	Soil fertility shapes belowground food webs across a regional climate gradient. *Ecology Letters*, **2017**, 20, 1273-1284	10	54

97	The nutrient absorption-transportation hypothesis: optimizing structural traits in absorptive roots. *New Phytologist*, **2017**, 213, 1569-1572	9.8	54
96	Soil Organism and Plant Introductions in Restoration of Species-Rich Grassland Communities. *Restoration Ecology*, **2009**, 17, 258-269	3.1	47
95	Why are plant–soil feedbacks so unpredictable, and what to do about it?. *Functional Ecology*, **2019**, 33, 118-128	5.6	46
94	Stimulation of boreal tree seedling growth by wood-derived charcoal: effects of charcoal properties, seedling species and soil fertility. *Functional Ecology*, **2014**, 28, 766-775	5.6	44
93	The importance of priority effects for riparian plant community dynamics. *Journal of Vegetation Science*, **2016**, 27, 658-667	3.1	43
92	Effects of agricultural intensification on soil biodiversity and implications for ecosystem functioning: A meta-analysis. *Advances in Agronomy*, **2019**, 1-44	7.7	42
91	The Role of Plant Litter in Driving Plant-Soil Feedbacks. *Frontiers in Environmental Science*, **2019**, 7,	4.8	40
90	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	7.5	40
89	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	3.9	38
88	Peeking into the black box: a trait-based approach to predicting plant-soil feedback. *New Phytologist*, **2015**, 206, 1-4	9.8	35
87	Rhizosphere control of soil nitrogen cycling: a key component of plant economic strategies. *New Phytologist*, **2020**, 228, 1269-1282	9.8	35
86	Contrasting diversity patterns of soil mites and nematodes in secondary succession. *Acta Oecologica*, **2009**, 35, 603-609	1.7	35
85	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	7.7	35
84	Variability and Changes in Climate, Phenology, and Gross Primary Production of an Alpine Wetland Ecosystem. *Remote Sensing*, **2016**, 8, 391	5	35
83	Effects of plant functional group removal on structure and function of soil communities across contrasting ecosystems. *Ecology Letters*, **2019**, 22, 1095-1103	10	32
82	Differences in endophyte communities of introduced trees depend on the phylogenetic relatedness of the receiving forest. *Journal of Ecology*, **2016**, 104, 1219-1232	6	32
81	Comparison of plant-soil feedback experimental approaches for testing soil biotic interactions among ecosystems. *New Phytologist*, **2019**, 221, 577-587	9.8	32
80	Direct and Indirect Drivers of Moss Community Structure, Function, and Associated Microfauna Across a Successional Gradient. *Ecosystems*, **2015**, 18, 154-169	3.9	29

79	Economic strategies of plant absorptive roots vary with root diameter. *Biogeosciences*, **2016**, 13, 415-424	4.6	29
78	Plant species effects on soil carbon and nitrogen dynamics in a temperate steppe of northern China. *Plant and Soil*, **2011**, 346, 331-347	4.2	28
77	Trade-off between vegetation type, soil erosion control and surface water in global semi-arid regions: A meta-analysis. *Journal of Applied Ecology*, **2020**, 57, 875-885	5.8	27
76	Browsing by an invasive herbivore promotes development of plant and soil communities during primary succession. *Journal of Ecology*, **2016**, 104, 1505-1517	6	27
75	CO2 enrichment accelerates successional development of an understory plant community. *Journal of Plant Ecology*, **2010**, 3, 33-39	1.7	27
74	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	7.5	27
73	Long-term successional forest dynamics: species and community responses to climatic variability. *Journal of Vegetation Science*, **2010**, 21, 627	3.1	25
72	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	1.7	24
71	Soil handling methods should be selected based on research questions and goals. *New Phytologist*, **2017**, 216, 18-23	9.8	23
70	The role of plant□soil feedbacks and land-use legacies in restoration of a temperate steppe in northern China. *Ecological Research*, **2010**, 25, 1101-1111	1.9	23
69	Trophic cascades in the bryosphere: the impact of global change factors on top-down control of cyanobacterial N2 -fixation. *Ecology Letters*, **2016**, 19, 967-76	10	23
68	Coordinated responses of soil communities to elevation in three subarctic vegetation types. *Oikos*, **2017**, 126, 1586-1599	4	22
67	Plant-soil feedbacks in declining forests: implications for species coexistence. *Ecology*, **2017**, 98, 1908-1921	4.6	22
66	A global database of soil nematode abundance and functional group composition. *Scientific Data*, **2020**, 7, 103	8.2	22
65	Biotic and abiotic plant□soil feedback depends on nitrogen-acquisition strategy and shifts during long-term ecosystem development. *Journal of Ecology*, **2019**, 107, 142-153	6	22
64	Crossing the threshold: the power of multi-level experiments in identifying global change responses. *New Phytologist*, **2012**, 196, 323-326	9.8	22
63	Shifts in soil microbial community functional gene structure across a 61-year desert revegetation chronosequence. *Geoderma*, **2019**, 347, 126-134	6.7	21
62	Plant growth response to direct and indirect temperature effects varies by vegetation type and elevation in a subarctic tundra. *Oikos*, **2015**, 124, 772-783	4	21

61	Effects of flue gas desulfurization gypsum by-products on microbial biomass and community structure in alkaline–saline soils. *Journal of Soils and Sediments*, **2012**, 12, 1040-1053	3.4	21
60	Lichen physiological traits and growth forms affect communities of associated invertebrates. *Ecology*, **2015**, 96, 2394-407	4.6	19
59	Grazing modifies inorganic and organic nitrogen uptake by coexisting plant species in alpine grassland. *Biology and Fertility of Soils*, **2016**, 52, 211-221	6.1	18
58	Soil functional biodiversity and biological quality under threat: intensive land use outweighs climate change. *Soil Biology and Biochemistry*, **2020**, 147,	7.5	17
57	The impact of charcoal and soil mixtures on decomposition and soil microbial communities in boreal forest. *Applied Soil Ecology*, **2016**, 99, 40-50	5	16
56	Removal of secondary compounds increases invertebrate abundance in lichens. *Fungal Ecology*, **2015**, 18, 18-25	4.1	15
55	Effects of warming and grazing on dissolved organic nitrogen in a Tibetan alpine meadow ecosystem. *Soil and Tillage Research*, **2016**, 158, 156-164	6.5	15
54	Effects of grazing on CO2 balance in a semiarid steppe: field observations and modeling. *Journal of Soils and Sediments*, **2013**, 13, 1012-1023	3.4	15
53	Toward more robust plant-soil feedback research: Comment. *Ecology*, **2019**, 100, e02590	4.6	14
52	Coordination of aboveground and belowground responses to local-scale soil fertility differences between two contrasting Jamaican rain forest types. *Oikos*, **2015**, 124, 285-297	4	14
51	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	3.4	14
50	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	4.2	13
49	Plant-Soil Feedbacks and Temporal Dynamics of Plant Diversity-Productivity Relationships. *Trends in Ecology and Evolution*, **2021**, 36, 651-661	10.9	13
48	Net neutral carbon responses to warming and grazing in alpine grassland ecosystems. *Agricultural and Forest Meteorology*, **2020**, 280, 107792	5.8	13
47	Effects of reed straw, zeolite, and superphosphate amendments on ammonia and greenhouse gas emissions from stored duck manure. *Journal of Environmental Quality*, **2012**, 41, 1221-7	3.4	12
46	Extreme rainfall events can alter inter-annual biomass responses to water and N enrichment. *Biogeosciences*, **2013**, 10, 8129-8138	4.6	12
45	Land use modulates the effects of climate change on density but not community composition of Collembola. *Soil Biology and Biochemistry*, **2019**, 138, 107598	7.5	12
44	Effects of electron acceptors on soluble reactive phosphorus in the overlying water during algal decomposition. *Environmental Science and Pollution Research*, **2015**, 22, 19507-17	5.1	11

43	Local plant adaptation across a subarctic elevational gradient. *Royal Society Open Science*, **2014**, 1, 140143	3.3	11
42	How anthropogenic shifts in plant community composition alter soil food webs. *F1000Research*, **2018**, 7, 4	3.6	11
41	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	7.5	10
40	The role of plant–soil feedbacks in stabilizing a reindeer-induced vegetation shift in subarctic tundra. *Functional Ecology*, **2018**, 32, 1959-1971	5.6	10
39	Rewetting Decreases Carbon Emissions from the Zoige Alpine Peatland on the Tibetan Plateau. *Sustainability*, **2017**, 9, 948	3.6	9
38	A framework to assess the carbon supply-consumption balance in plant roots. *New Phytologist*, **2021**, 229, 659-664	9.8	9
37	Root trait-microbial relationships across tundra plant species. *New Phytologist*, **2021**, 229, 1508-1520	9.8	9
36	Plant organic N uptake maintains species dominance under long-term warming. *Plant and Soil*, **2018**, 433, 243-255	4.2	9
35	Bacterial diversity in the rhizosphere of two phylogenetically closely related plant species across environmental gradients. *Journal of Soils and Sediments*, **2017**, 17, 122-132	3.4	8
34	Nematode community resistant to deep soil frost in boreal forest soils. *Pedobiologia*, **2016**, 59, 243-251	1.7	8
33	The influence of tree-scale and ecosystem-scale factors on epiphytic lichen communities across a long-term retrogressive chronosequence. *Journal of Vegetation Science*, **2014**, 25, 1100-1111	3.1	7
32	Microtopography-induced ecohydrological effects alter plant community structure. *Geoderma*, **2020**, 362, 114119	6.7	6
31	Annual ecosystem respiration is resistant to changes in freeze-thaw periods in semi-arid permafrost. *Global Change Biology*, **2019**, 26, 2630	11.4	6
30	Influence of species identity and charring conditions on fire-derived charcoal traits. *Canadian Journal of Forest Research*, **2015**, 45, 1669-1675	1.9	5
29	What do scientists and managers know about soil biodiversity? Comparative knowledge mapping for sustainable forest management. *Forest Policy and Economics*, **2020**, 119, 102264	3.6	5
28	Effects of interspecific competition on plant-soil feedbacks generated by long-term grazing. *Soil Biology and Biochemistry*, **2018**, 126, 133-143	7.5	5
27	Nutrient optimization of tree growth alters structure and function of boreal soil food webs. *Forest Ecology and Management*, **2018**, 428, 46-56	3.9	5
26	The diversity of soil mesofauna declines after bamboo invasion in subtropical China. *Science of the Total Environment*, **2021**, 789, 147982	10.2	5

25	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	6.1	4
24	Short-term effects of snow cover manipulation on soil bacterial diversity and community composition. *Science of the Total Environment*, **2020**, 741, 140454	10.2	4
23	Contrasting responses of springtails and mites to elevation and vegetation type in the sub-Arctic. *Pedobiologia*, **2018**, 67, 57-64	1.7	4
22	Contribution of soil algae to the global carbon cycle.. *New Phytologist*, **2022**,	9.8	4
21	Effects of plant functional group removal on CO fluxes and belowground C stocks across contrasting ecosystems. *Ecology*, **2020**, 101, e03170	4.6	4
20	Globally, plant-soil feedbacks are weak predictors of plant abundance. *Ecology and Evolution*, **2021**, 11, 1756-1768	2.8	4
19	Multi-dimensionality as a path forward in plant-soil feedback research. *Journal of Ecology*, **2021**, 109, 3446	6	3
18	Soil biotic and abiotic effects on seedling growth exhibit context-dependent interactions: evidence from a multi-country experiment on Pinus contorta invasion. *New Phytologist*, **2021**, 232, 303-317	9.8	3
17	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	6	3
16	Carbon limitation overrides acidification in mediating soil microbial activity to nitrogen enrichment in a temperate grassland. *Global Change Biology*, **2021**, 27, 5976-5988	11.4	3
15	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	5	3
14	Organic fertilization promotes crop productivity through changes in soil aggregation. *Soil Biology and Biochemistry*, **2022**, 165, 108533	7.5	2
13	Contribution of microbial photosynthesis to peatland carbon uptake along a latitudinal gradient. *Journal of Ecology*, **2021**, 109, 3424-3441	6	2
12	Spatiotemporal patterns and drivers of methane uptake across a climate transect in Inner Mongolia Steppe. *Science of the Total Environment*, **2021**, 757, 143768	10.2	2
11	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	0.4	1
10	Nitrogen deposition stimulates decomposition via changes in the structure and function of litter food webs. *Soil Biology and Biochemistry*, **2022**, 166, 108522	7.5	1
9	Climatic conditions, not above- and belowground resource availability and uptake capacity, mediate tree diversity effects on productivity and stability.. *Science of the Total Environment*, **2021**, 812, 152560	10.2	1
8	Above- and below-ground complementarity rather than selection drive tree diversity–productivity relationships in European forests. *Functional Ecology*, **2021**, 35, 1756-1767	5.6	1

7	Precipitation regime controls bryosphere carbon cycling similarly across contrasting ecosystems. *Oikos*, **2021**, 130, 512-524	4	1
6	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	1.7	1
5	Soil Biota as Drivers of Plant Community Assembly. *Ecological Studies*, **2018**, 293-318	1.1	1
4	Nitrogen addition mediates the response of foliar stoichiometry to phosphorus addition: a meta-analysis. *Ecological Processes*, **2021**, 10,	3.6	1
3	Think globally, measure locally: The MIREN standardized protocol for monitoring plant species distributions along elevation gradients.. *Ecology and Evolution*, **2022**, 12, e8590	2.8	1
2	Bryosphere Loss Impairs Litter Decomposition Consistently Across Moss Species, Litter Types, and Micro-Arthropod Abundance. *Ecosystems*,1	3.9	0
1	Organic amendments increase the flow uniformity of energy across nematode food webs. *Soil Biology and Biochemistry*, **2022**, 170, 108695	7.5	0