Jasper van Ruijven

List of Publications by Year
in descending order

89 papers	11,129 citations	44069 48 h-index	49909 87 g-index
92 all docs	92 docs citations	92 times ranked	12167 citing authors

#	Article	IF	Citations
1	High plant diversity is needed to maintain ecosystem services. Nature, 2011, 477, 199-202.	27.8	1,195
2	Biodiversity increases the resistance of ecosystem productivity to climate extremes. Nature, 2015, 526, 574-577.	27.8	1,032
3	Consequences of biodiversity loss for litter decomposition across biomes. Nature, 2014, 509, 218-221.	27.8	600
4	Towards a multidimensional root trait framework: a tree root review. New Phytologist, 2016, 211, 1159-1169.	7.3	432
5	The fungal collaboration gradient dominates the root economics space in plants. Science Advances, 2020, 6, .	10.3	377
6	Plant species identity and diversity effects on different trophic levels of nematodes in the soil food web. Oikos, 2004, 106, 576-586.	2.7	356
7	Highly consistent effects of plant litter identity and functional traits on decomposition across a latitudinal gradient. Ecology Letters, 2012, 15, 1033-1041.	6.4	356
8	Diversity-productivity relationships: Initial effects, long-term patterns, and underlying mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 695-700.	7.1	335
9	Species Richness and the Temporal Stability of Biomass Production: A New Analysis of Recent Biodiversity Experiments. American Naturalist, 2014, 183, 1-12.	2.1	309
10	Multiple facets of biodiversity drive the diversityâ€"stability relationship. Nature Ecology and Evolution, 2018, 2, 1579-1587.	7.8	296
11	Predicting ecosystem stability from community composition and biodiversity. Ecology Letters, 2013, 16, 617-625.	6.4	251
12	The Future of Complementarity: Disentangling Causes from Consequences. Trends in Ecology and Evolution, 2019, 34, 167-180.	8.7	246
13	Diversity enhances community recovery, but not resistance, after drought. Journal of Ecology, 2010, 98, 81-86.	4.0	227
14	Loss of Plant Species Diversity Reduces Soil Erosion Resistance. Ecosystems, 2015, 18, 881-888.	3.4	222
15	Plant species richness promotes soil carbon and nitrogen stocks in grasslands without legumes. Journal of Ecology, 2014, 102, 1163-1170.	4.0	220
16	Unveiling belowâ€ground species abundance in a biodiversity experiment: a test of vertical niche differentiation among grassland species. Journal of Ecology, 2010, 98, 1117-1127.	4.0	219
17	Root responses to nutrients and soil biota: drivers of species coexistence and ecosystem productivity. Journal of Ecology, 2012, 100, 6-15.	4.0	182
18	Diversity reduces invasibility in experimental plant communities: the role of plant species. Ecology Letters, 2003, 6, 910-918.	6.4	180

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19	Plant diversity effects on grassland productivity are robust to both nutrient enrichment and drought. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150277.	4.0	169
20	Positive effects of plant species diversity on productivity in the absence of legumes. Ecology Letters, 2003, 6, 170-175.	6.4	168
21	Lost in diversity: the interactions between soilâ€borne fungi, biodiversity and plant productivity. New Phytologist, 2018, 218, 542-553.	7.3	160
22	An integrated framework of plant form and function: the belowground perspective. New Phytologist, 2021, 232, 42-59.	7.3	153
23	Artificial light at night causes diapause inhibition and sexâ€specific life history changes in a moth. Ecology and Evolution, 2014, 4, 2082-2089.	1.9	151
24	Rootâ€"Root Interactions: Towards A Rhizosphere Framework. Trends in Plant Science, 2016, 21, 209-217.	8.8	149
25	Biodiversity simultaneously enhances the production and stability of community biomass, but the effects are independent. Ecology, 2013, 94, 1697-1707.	3.2	146
26	Environmental changes drive the temporal stability of semiâ€arid natural grasslands through altering species asynchrony. Journal of Ecology, 2015, 103, 1308-1316.	4.0	143
27	Interactive effects of nutrient heterogeneity and competition: implications for root foraging theory?. Functional Ecology, 2012, 26, 66-73.	3.6	124
28	Species richness, but not phylogenetic diversity, influences community biomass production and temporal stability in a reâ€examination of 16 grassland biodiversity studies. Functional Ecology, 2015, 29, 615-626.	3.6	124
29	The Cooling Capacity of Mosses: Controls on Water and Energy Fluxes in a Siberian Tundra Site. Ecosystems, 2011, 14, 1055-1065.	3.4	116
30	Contrasting root behaviour in two grass species: a test of functionality in dynamic heterogeneous conditions. Plant and Soil, 2011, 344, 347-360.	3.7	107
31	Foliar fungal pathogens and grassland biodiversity. Ecology, 2010, 91, 2572-2582.	3.2	105
32	Diversity-dependent temporal divergence of ecosystem functioning in experimental ecosystems. Nature Ecology and Evolution, 2017, 1, 1639-1642.	7.8	95
33	Leaf litter quality drives litter mixing effects through complementary resource use among detritivores. Oecologia, 2013, 173, 269-280.	2.0	90
34	Global root traits (GRooT) database. Global Ecology and Biogeography, 2021, 30, 25-37.	5.8	90
35	Linking root traits and competitive success in grassland species. Plant and Soil, 2016, 407, 39-53.	3.7	87
36	Longâ€term persistence of a positive plant diversityâ€"productivity relationship in the absence of legumes. Oikos, 2009, 118, 101-106.	2.7	82

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37	Contrasting effects of diversity on the temporal stability of plant populations. Oikos, 2007, 116, 1323-1330.	2.7	77
38	Macroâ€detritivore identity drives leaf litter diversity effects. Oikos, 2011, 120, 1092-1098.	2.7	77
39	Belowâ€ground complementarity effects in a grassland biodiversity experiment are related to deepâ€rooting species. Journal of Ecology, 2018, 106, 265-277.	4.0	76
40	The effects of long-term fertilization on the temporal stability of alpine meadow communities. Plant and Soil, 2011, 345, 315-324.	3.7	75
41	Biotic homogenization destabilizes ecosystem functioning by decreasing spatial asynchrony. Ecology, 2021, 102, e03332.	3.2	74
42	Plantâ€"Soil Feedbacks and Temporal Dynamics of Plant Diversityâ€"Productivity Relationships. Trends in Ecology and Evolution, 2021, 36, 651-661.	8.7	74
43	Taxonomic and functional turnover are decoupled in European peat bogs. Nature Communications, 2017, 8, 1161.	12.8	73
44	Plant species richness regulates soil respiration through changes in productivity. Oecologia, 2010, 163, 805-813.	2.0	67
45	Root traits explain plant species distributions along climatic gradients yet challenge the nature of ecological trade-offs. Nature Ecology and Evolution, 2021, 5, 1123-1134.	7.8	62
46	BUGS in the Analysis of Biodiversity Experiments: Species Richness and Composition Are of Similar Importance for Grassland Productivity. PLoS ONE, 2011, 6, e17434.	2.5	62
47	The role of fineâ€root mass, specific root length and life span in tree performance: A wholeâ€tree exploration. Functional Ecology, 2020, 34, 575-585.	3.6	61
48	Decomposition of leaf litter mixtures across biomes: The role of litter identity, diversity and soil fauna. Journal of Ecology, 2020, 108, 2283-2297.	4.0	59
49	Recovery of plant species richness during long-term fertilization of a species-rich grassland. Ecology, 2011, 92, 1393-1398.	3.2	53
50	Plant functional group drives the community structure of saprophytic fungi in a grassland biodiversity experiment. Plant and Soil, 2021, 461, 91-105.	3.7	50
51	Seasonal changes and vertical distribution of root standing biomass of graminoids and shrubs at a Siberian tundra site. Plant and Soil, 2016, 407, 55-65.	3.7	49
52	Aboveâ€and belowâ€ground responses of four tundra plant functional types to deep soil heating and surface soil fertilization. Journal of Ecology, 2017, 105, 947-957.	4.0	49
53	Do soilâ€borne fungal pathogens mediate plant diversityâ€"productivity relationships? Evidence and future opportunities. Journal of Ecology, 2020, 108, 1810-1821.	4.0	49
54	Assess ecosystem resilience: Linking response and effect traits to environmental variability. Ecological Indicators, 2013, 30, 21-27.	6.3	47

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55	Interactions between spatially separated herbivores indirectly alter plant diversity. Ecology Letters, 2004, 8, 30-37.	6.4	46
56	Belowground plant biomass allocation in tundra ecosystems and its relationship with temperature. Environmental Research Letters, 2016, 11, 055003.	5.2	45
57	Plant species richness leaves a legacy of enhanced root litter-induced decomposition in soil. Soil Biology and Biochemistry, 2015, 80, 341-348.	8.8	42
58	Linking ecology and plant pathology to unravel the importance of soil-borne fungal pathogens in species-rich grasslands. European Journal of Plant Pathology, 2019, 154, 141-156.	1.7	42
59	Plant species richness negatively affects root decomposition in grasslands. Journal of Ecology, 2017, 105, 209-218.	4.0	41
60	Limited evidence for spatial resource partitioning across temperate grassland biodiversity experiments. Ecology, 2020, 101, e02905.	3.2	40
61	The role of complementarity and selection effects in P acquisition of intercropping systems. Plant and Soil, 2018, 422, 479-493.	3.7	38
62	Aboveâ€•and belowground insect herbivores differentially affect soil nematode communities in speciesâ€rich plant communities. Oikos, 2007, 116, 923-930.	2.7	37
63	Diversity effects on root length production and loss in an experimental grassland community. Functional Ecology, 2015, 29, 1560-1568.	3.6	31
64	Sphagnum re-introduction in degraded peatlands: The effects of aggregation, species identity and water table. Basic and Applied Ecology, 2009, 10, 697-706.	2.7	30
65	Field margins as foraging habitat for skylarks (Alauda arvensis) in the breeding season. Agriculture, Ecosystems and Environment, 2013, 170, 10-15.	5.3	25
66	The effectiveness of ditch banks as dispersal corridor for plants in agricultural landscapes depends on speciesâ€™ dispersal traits. Biological Conservation, 2014, 171, 91-98.	4.1	24
67	Drivers of total and pathogenic soil-borne fungal communities in grassland plant species. Fungal Ecology, 2020, 48, 100987.	1.6	24
68	Insect pollination is the weakest link in the production of a hybrid seed crop. Agriculture, Ecosystems and Environment, 2020, 290, 106743.	5.3	20
69	Precipitation determines the persistence of hollow Sphagnum species on hummocks. Wetlands, 2007, 27, 979-986.	1.5	17
70	Mycorrhizal associations change root functionality: a 3D modelling study on competitive interactions between plants for light and nutrients. New Phytologist, 2021, 231, 1171-1182.	7.3	17
71	Microbial catabolic diversity in and beyond the rhizosphere of plant species and plant genotypes. Pedobiologia, 2017, 61, 43-49.	1.2	16
72	Using root traits to understand temporal changes in biodiversity effects in grassland mixtures. Oikos, 2019, 128, 208-220.	2.7	16

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73	Further reâ€analyses looking for effects of phylogenetic diversity on community biomass and stability. Functional Ecology, 2015, 29, 1607-1610.	3.6	13
74	Root chemistry and soil fauna, but not soil abiotic conditions explain the effects of plant diversity on root decomposition. Oecologia, 2017, 185, 499-511.	2.0	13
75	Longâ€term changes in plant diversity of grasslands under agricultural and conservation management. Applied Vegetation Science, 2012, 15, 299-306.	1.9	12
76	Above- and belowground overyielding are related at the community and species level in a grassland biodiversity experiment. Advances in Ecological Research, 2019, 61, 55-89.	2.7	12
77	Plant neighbours can make or break the disease transmission chain of a fungal root pathogen. New Phytologist, 2022, 233, 1303-1316.	7.3	11
78	Short-term root and leaf decomposition of two dominant plant species in a Siberian tundra. Pedobiologia, 2017, 65, 68-76.	1.2	10
79	Do Field Margins Enrich the Diet of the Eurasian Skylark<i>Alauda arvensis</i>on Intensive Farmland?. Ardea, 2014, 102, 161-174.	0.6	9
80	Can root trait diversity explain complementarity effects in a grassland biodiversity experiment?. Journal of Plant Ecology, 2016, , rtw111.	2.3	9
81	Sod cutting and soil biota effects on seedling performance. Acta Oecologica, 2009, 35, 651-656.	1.1	8
82	Quantifying establishment limitations during the ecological restoration of speciesâ€rich <i>Nardus</i> grassland. Applied Vegetation Science, 2017, 20, 594-607.	1.9	8
83	An evolutionary game theoretical model shows the limitations of the additive partitioning method for interpreting biodiversity experiments. Journal of Ecology, 2017, 105, 345-353.	4.0	8
84	Effects of grass field margin management on food availability for Black-tailed Godwit chicks. Journal for Nature Conservation, 2016, 29, 45-50.	1.8	7
85	Focusing on individual plants to understand community scale biodiversity effects: the case of root distribution in grasslands. Oikos, 0, , .	2.7	6
86	Food Availability for Meadow Bird Families in Grass Field Margins. Ardea, 2015, 103, 17-26.	0.6	5
87	Travelling to a former sea floor: colonization of forests by understorey plant species on land recently reclaimed from the sea. Journal of Vegetation Science, 2010, 21, 167-176.	2.2	2
88	Focus on a locus. Nature Ecology and Evolution, 2018, 2, 1838-1839.	7.8	1
89	Contrasting effects of diversity on the temporal stability of plant populations. Oikos, 2007, 116, 1323-1330.	2.7	1