Liesje Mommer

List of Publications by Year
in descending order

94	11,636	52	91
papers	citations	h-index	g-index

34105 43889

99	99	99	11963
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Plant neighbours can make or break the disease transmission chain of a fungal root pathogen. New Phytologist, 2022, 233, 1303-1316.	7.3	11
2	Deciphering the role of specialist and generalist plantâ€“microbial interactions as drivers of plantâ€“soil feedback. New Phytologist, 2022, 234, 1929-1944.	7.3	63
3	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
4	Root traits as drivers of plant and ecosystem functioning: current understanding, pitfalls and future research needs. New Phytologist, 2021, 232, 1123-1158.	7.3	277
5	msGBS: A new highâ€throughput approach to quantify the relative species abundance in root samples of multispecies plant communities. Molecular Ecology Resources, 2021, 21, 1021-1036.	4.8	12
6	Soil Biodiversity: Stateâ€ofâ€theâ€Art and Possible Implementation in Chemical Risk Assessment. Integrated Environmental Assessment and Management, 2021, 17, 541-551.	2.9	10
7	Plant diversity enhances production and downward transport of biodegradable dissolved organic matter. Journal of Ecology, 2021, 109, 1284-1297.	4.0	17
8	Snow roots: Where are they and what are they for?. Ecology, 2021, 102, e03255.	3.2	0
9	Global root traits (GRooT) database. Global Ecology and Biogeography, 2021, 30, 25-37.	5.8	90
10	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
11	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
12	An integrated framework of plant form and function: the belowground perspective. New Phytologist, 2021, 232, 42-59.	7.3	153
13	A starting guide to root ecology: strengthening ecological concepts and standardising root classification, sampling, processing and trait measurements. New Phytologist, 2021, 232, 973-1122.	7.3	216
14	Breeding Beyond Monoculture: Putting the â€œIntercropâ€• Into Crops. Frontiers in Plant Science, 2021, 12, 734167.	3.6	32
15	Limited evidence for spatial resource partitioning across temperate grassland biodiversity experiments. Ecology, 2020, 101, e02905.	3.2	40
16	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
17	Plant traits alone are poor predictors of ecosystem properties and long-term ecosystem functioning. Nature Ecology and Evolution, 2020, 4, 1602-1611.	7.8	114
18	Drivers of total and pathogenic soil-borne fungal communities in grassland plant species. Fungal Ecology, 2020, 48, 100987.	1.6	24

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19	The results of biodiversityâ€"ecosystem functioning experiments are realistic. Nature Ecology and Evolution, 2020, 4, 1485-1494.	7.8	93
20	Do soilâ€borne fungal pathogens mediate plant diversityâ€"productivity relationships? Evidence and future opportunities. Journal of Ecology, 2020, 108, 1810-1821.	4.0	49
21	The fungal collaboration gradient dominates the root economics space in plants. Science Advances, 2020, 6, .	10.3	377
22	Biodiversity increases multitrophic energy use efficiency, flow and storage in grasslands. Nature Ecology and Evolution, 2020, 4, 393-405.	7.8	45
23	Using root traits to understand temporal changes in biodiversity effects in grassland mixtures. Oikos, 2019, 128, 208-220.	2.7	16
24	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
25	Plant species richness and functional groups have different effects on soil water content in a decadeâ€long grassland experiment. Journal of Ecology, 2019, 107, 127-141.	4.0	69
26	Effects of extreme rainfall events are independent of plant species richness in an experimental grassland community. Oecologia, 2019, 191, 177-190.	2.0	18
27	Persistence of dissolved organic matter explained by molecular changes during its passage through soil. Nature Geoscience, 2019, 12, 755-761.	12.9	230
28	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
29	Maize varieties can strengthen positive plant-soil feedback through beneficial arbuscular mycorrhizal fungal mutualists. Mycorrhiza, 2019, 29, 251-261.	2.8	11
30	The Future of Complementarity: Disentangling Causes from Consequences. Trends in Ecology and Evolution, 2019, 34, 167-180.	8.7	246
31	Lost in diversity: the interactions between soilâ€borne fungi, biodiversity and plant productivity. New Phytologist, 2018, 218, 542-553.	7.3	160
32	Belowâ€ground resource partitioning alone cannot explain the biodiversityâ€"ecosystem function relationship: A field test using multiple tracers. Journal of Ecology, 2018, 106, 2002-2018.	4.0	53
33	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
34	Depthâ€based differentiation in nitrogen uptake between graminoids and shrubs in an Arctic tundra plant community. Journal of Vegetation Science, 2018, 29, 34-41.	2.2	17
35	Focus on a locus. Nature Ecology and Evolution, 2018, 2, 1838-1839.	7.8	1
36	Fine-root trait plasticity of beech (Fagus sylvatica) and spruce (Picea abies) forests on two contrasting soils. Plant and Soil, 2017, 415, 175-188.	3.7	71

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37	Microbial catabolic diversity in and beyond the rhizosphere of plant species and plant genotypes. Pedobiologia, 2017, 61, 43-49.	1.2	16
38	Initial biochar effects on plant productivity derive from N fertilization. Plant and Soil, 2017, 415, 435-448.	3.7	22
39	Root biomass and exudates link plant diversity with soil bacterial and fungal biomass. Scientific Reports, 2017, 7, 44641.	3.3	309
40	Short-term root and leaf decomposition of two dominant plant species in a Siberian tundra. Pedobiologia, 2017, 65, 68-76.	1.2	10
41	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
42	Biodiversity effects on ecosystem functioning in a 15-year grassland experiment: Patterns, mechanisms, and open questions. Basic and Applied Ecology, 2017, 23, 1-73.	2.7	307
43	Plant species richness negatively affects root decomposition in grasslands. Journal of Ecology, 2017, 105, 209-218.	4.0	41
44	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
45	Plants are less negatively affected by flooding when growing in speciesâ€rich plant communities. New Phytologist, 2017, 213, 645-656.	7.3	79
46	Plant Phenotypic and Transcriptional Changes Induced by Volatiles from the Fungal Root Pathogen Rhizoctonia solani. Frontiers in Plant Science, 2017, 8, 1262.	3.6	78
47	Functional trait dissimilarity drives both species complementarity and competitive disparity. Functional Ecology, 2017, 31, 2320-2329.	3.6	48
48	Towards a multidimensional root trait framework: a tree root review. New Phytologist, 2016, 211, 1159-1169.	7.3	432
49	Belowground plant biomass allocation in tundra ecosystems and its relationship with temperature. Environmental Research Letters, 2016, 11, 055003.	5.2	45
50	Effects of biodiversity strengthen over time as ecosystem functioning declines at low and increases at high biodiversity. Ecosphere, 2016, 7, e01619.	2.2	87
51	Advances in the rhizosphere: stretching the interface of life. Plant and Soil, 2016, 407, 1-8.	3.7	78
52	Can root trait diversity explain complementarity effects in a grassland biodiversity experiment?. Journal of Plant Ecology, 2016, , rtw111.	2.3	9
53	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
54	From pots to plots: hierarchical traitâ€based prediction of plant performance in a mesic grassland. Journal of Ecology, 2016, 104, 206-218.	4.0	51

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55	Rootâ€"Root Interactions: Towards A Rhizosphere Framework. Trends in Plant Science, 2016, 21, 209-217.	8.8	149
56	Linking root traits and competitive success in grassland species. Plant and Soil, 2016, 407, 39-53.	3.7	87
57	Plant diversity shapes microbeâ€rhizosphere effects on P mobilisation from organic matter in soil. Ecology Letters, 2015, 18, 1356-1365.	6.4	57
58	Diversity effects on root length production and loss in an experimental grassland community. Functional Ecology, 2015, 29, 1560-1568.	3.6	31
59	Biochar application does not improve the soil hydrological function of a sandy soil. Geoderma, 2015, 251-252, 47-54.	5.1	240
60	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
61	Plant species diversity affects infiltration capacity in an experimental grassland through changes in soil properties. Plant and Soil, 2015, 397, 1-16.	3.7	105
62	Flooding disturbances increase resource availability and productivity but reduce stability in diverse plant communities. Nature Communications, 2015, 6, 6092.	12.8	116
63	Root responses of grassland species to spatial heterogeneity of plantâ€"soil feedback. Functional Ecology, 2015, 29, 177-186.	3.6	38
64	Spatial heterogeneity of plantâ€"soil feedback affects root interactions and interspecific competition. New Phytologist, 2015, 207, 830-840.	7.3	62
65	The way forward in biochar research: targeting tradeâ€offs between the potential wins. GCB Bioenergy, 2015, 7, 1-13.	5.6	228
66	Going underground: root traits as drivers of ecosystem processes. Trends in Ecology and Evolution, 2014, 29, 692-699.	8.7	881
67	Soil biochar amendment in a nature restoration area: effects on plant productivity and community composition. Ecological Applications, 2014, 24, 1167-1177.	3.8	50
68	Plant species richness promotes soil carbon and nitrogen stocks in grasslands without legumes. Journal of Ecology, 2014, 102, 1163-1170.	4.0	220
69	Biochars produced from individual grassland species differ in their effect on plant growth. Basic and Applied Ecology, 2014, 15, 18-25.	2.7	8
70	Soil amendment with biochar increases the competitive ability of legumes via increased potassium availability. Agriculture, Ecosystems and Environment, 2014, 191, 92-98.	5.3	114
71	Longâ€term study of root biomass in a biodiversity experiment reveals shifts in diversity effects over time. Oikos, 2014, 123, 1528-1536.	2.7	165
72	Competing neighbors: light perception and root function. Oecologia, 2014, 176, 1-10.	2.0	91

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73	Root plasticity maintains growth of temperate grassland species under pulsed water supply. Plant and Soil, 2013, 369, 377-386.	3.7	55
74	Molecular mechanisms of plant competition: neighbour detection and response strategies. Functional Ecology, 2013, 27, 841-853.	3.6	162
75	Independent variations of plant and soil mixtures reveal soil feedback effects on plant community overyielding. Journal of Ecology, 2013, 101, 287-297.	4.0	111
76	Early Root Overproduction Not Triggered by Nutrients Decisive for Competitive Success Belowground. PLoS ONE, 2013, 8, e55805.	2.5	67
77	The role of roots in the resource economics spectrum. New Phytologist, 2012, 195, 725-727.	7.3	98
78	Biomass allocation to leaves, stems and roots: metaâ€analyses of interspecific variation and environmental control. New Phytologist, 2012, 193, 30-50.	7.3	2,012
79	Root responses to nutrients and soil biota: drivers of species coexistence and ecosystem productivity. Journal of Ecology, 2012, 100, 6-15.	4.0	182
80	Interactive effects of nutrient heterogeneity and competition: implications for root foraging theory?. Functional Ecology, 2012, 26, 66-73.	3.6	124
81	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
82	Belowground DNA-based techniques: untangling the network of plant root interactions. Plant and Soil, 2011, 348, 115-121.	3.7	43
83	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
84	A modular concept of plant foraging behaviour: the interplay between local responses and systemic control. Plant, Cell and Environment, 2009, 32, 704-712.	5.7	164
85	Improving the Scale and Precision of Hypotheses to Explain Root Foraging Ability. Annals of Botany, 2008, 101, 1295-1301.	2.9	111
86	Submergenceâ€induced leaf acclimation in terrestrial species varying in flooding tolerance. New Phytologist, 2007, 176, 337-345.	7.3	64
87	Root foraging theory put to the test. Trends in Ecology and Evolution, 2006, 21, 113-116.	8.7	88
88	Ecophysiological determinants of plant performance under flooding: a comparative study of seven plant families. Journal of Ecology, 2006, 94, 1117-1129.	4.0	126
89	Photosynthetic consequences of phenotypic plasticity in response to submergence: Rumex palustris as a case study. Journal of Experimental Botany, 2006, 57, 283-290.	4.8	62
90	A functional comparison of acclimation to shade and submergence in two terrestrial plant species. New Phytologist, 2005, 167, 197-206.	7.3	64

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91	Submergence-Induced Morphological, Anatomical, and Biochemical Responses in a Terrestrial Species Affect Gas Diffusion Resistance and Photosynthetic Performance. Plant Physiology, 2005, 139, 497-508.	4.8	124
92	Underwater Photosynthesis in Flooded Terrestrial Plants: A Matter of Leaf Plasticity. Annals of Botany, 2005, 96, 581-589.	2.9	231
93	A physiological production model for cocoa (Theobroma cacao): model presentation, validation and application. Agricultural Systems, 2005, 84, 195-225.	6.1	155
94	Focusing on individual plants to understand community scale biodiversity effects: the case of root distribution in grasslands. Oikos, 0, , .	2.7	6