

Arthur Gessler

List of Publications by Year in descending order

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Version: 2024-02-01

253
papers

16,148
citations

12328
69
h-index

23530
111
g-index

264
all docs

264
docs citations

264
times ranked

13695
citing authors

#	ARTICLE	IF	CITATIONS
1	A high-temperature water vapor equilibration method to determine non-exchangeable hydrogen isotope ratios of sugar, starch and cellulose. <i>Plant, Cell and Environment</i> , 2022, 45, 12-22.	5.7	21
2	Recovery of silver fir (<i>Abies alba</i> Mill.) seedlings from ungulate browsing mirrors soil nitrogen availability. <i>Tree Physiology</i> , 2022, 42, 273-288.	3.1	1
3	Drought reduces water uptake in beech from the drying topsoil, but no compensatory uptake occurs from deeper soil layers. <i>New Phytologist</i> , 2022, 233, 194-206.	7.3	51
4	Tree allocation dynamics beyond heat and hot drought stress reveal changes in carbon storage, belowground translocation and growth. <i>New Phytologist</i> , 2022, 233, 687-704.	7.3	17
5	Photosynthetic acclimation and sensitivity to short- and long-term environmental changes in a drought-prone forest. <i>Journal of Experimental Botany</i> , 2022, 73, 2576-2588.	4.8	12
6	Forest tree growth is linked to mycorrhizal fungal composition and function across Europe. <i>ISME Journal</i> , 2022, 16, 1327-1336.	9.8	62
7	Divergent roles of iron and aluminum in sediment organic matter association at the terrestrial-aquatic interface. <i>Biogeochemistry</i> , 2022, 157, 355-378.	3.5	6
8	Lessons learned from a long-term irrigation experiment in a dry Scots pine forest: Impacts on traits and functioning. <i>Ecological Monographs</i> , 2022, 92, e1507.	5.4	15
9	Kettle holes reflect the biogeochemical characteristics of their catchment area and the intensity of the element-specific input. <i>Journal of Soils and Sediments</i> , 2022, 22, 994.	3.0	1
10	Number of growth days and not length of the growth period determines radial stem growth of temperate trees. <i>Ecology Letters</i> , 2022, 25, 427-439.	6.4	58
11	Do $\delta^2\text{H}$ and $\delta^{18}\text{O}$ in leaf water reflect environmental drivers differently?. <i>New Phytologist</i> , 2022, 235, 41-51.	7.3	29
12	Mutually inclusive mechanisms of drought-induced tree mortality. <i>Global Change Biology</i> , 2022, 28, 3365-3378.	9.5	37
13	In situ $^{13}\text{CO}_2$ labeling reveals that alpine treeline trees allocate less photoassimilates to roots compared with low-elevation trees. <i>Tree Physiology</i> , 2022, , .	3.1	3
14	There Is No Carbon Transfer Between Scots Pine and Pine Mistletoe but the Assimilation Capacity of the Hemiparasite Is Constrained by Host Water Use Under Dry Conditions. <i>Frontiers in Plant Science</i> , 2022, 13, .	3.6	2
15	Root Carbon Resources Determine Survival and Growth of Young Trees Under Long Drought in Combination With Fertilization. <i>Frontiers in Plant Science</i> , 2022, 13, .	3.6	4
16	Postphotosynthetic Fractionation in Leaves, Phloem and Stem. <i>Tree Physiology</i> , 2022, , 381-396.	2.5	8
17	Investment of needle nitrogen to photosynthesis controls the nonlinear productivity response of young Chinese fir trees to nitrogen deposition. <i>Science of the Total Environment</i> , 2022, 840, 156537.	8.0	10
18	Impact of warmer and drier conditions on tree photosynthetic properties and the role of species interactions. <i>New Phytologist</i> , 2022, 236, 547-560.	7.3	12

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19	Sucrose synthase – an enzyme with a central role in the source–sink coordination and carbon flow in trees. <i>New Phytologist</i> , 2021, 229, 8-10.	7.3	4
20	Tree vitality indicators revealed a rapid response of beech forests to the 2018 drought. <i>Ecological Indicators</i> , 2021, 120, 106903.	6.3	52
21	Effects of drought on nitrogen uptake and carbon dynamics in trees. <i>Tree Physiology</i> , 2021, 41, 927-943.	3.1	18
22	Root traits as drivers of plant and ecosystem functioning: current understanding, pitfalls and future research needs. <i>New Phytologist</i> , 2021, 232, 1123-1158.	7.3	277
23	Mortality predispositions of conifers across western USA. <i>New Phytologist</i> , 2021, 229, 831-844.	7.3	11
24	Soil nutrient availability alters tree carbon allocation dynamics during drought. <i>Tree Physiology</i> , 2021, 41, 697-707.	3.1	28
25	Effects of soil moisture, needle age and leaf morphology on carbon and oxygen uptake, incorporation and allocation: a dual labeling approach with ¹³ CO ₂ and H ₂ ¹⁸ O in foliage of a coniferous forest. <i>Tree Physiology</i> , 2021, 41, 50-62.	3.1	7
26	Root carbon and nutrient homeostasis determines downy oak sapling survival and recovery from drought. <i>Tree Physiology</i> , 2021, 41, 1400-1412.	3.1	19
27	Chilled to be forced: the best dose to wake up buds from winter dormancy. <i>New Phytologist</i> , 2021, 230, 1366-1377.	7.3	47
28	Sink and source co-limitation in the response of stored non-structural carbohydrates to an intense but short drought. <i>Trees - Structure and Function</i> , 2021, 35, 1751-1754.	1.9	11
29	Drought alters the carbon footprint of trees in soils – tracking the spatio-temporal fate of ¹³ C-labelled assimilates in the soil of an old-growth pine forest. <i>Global Change Biology</i> , 2021, 27, 2491-2506.	9.5	32
30	Drought effects on carbon allocation to resin defences and on resin dynamics in old-grown Scots pine. <i>Environmental and Experimental Botany</i> , 2021, 185, 104410.	4.2	22
31	Tree growth in Switzerland is increasingly constrained by rising evaporative demand. <i>Journal of Ecology</i> , 2021, 109, 2981-2990.	4.0	22
32	Growth resistance and resilience of mixed silver fir and Norway spruce forests in central Europe: Contrasting responses to mild and severe droughts. <i>Global Change Biology</i> , 2021, 27, 4403-4419.	9.5	64
33	Grow slowly, persist, dominate – Explaining beech dominance in a primeval forest. <i>Ecology and Evolution</i> , 2021, 11, 10077-10089.	1.9	12
34	Why trees grow at night. <i>New Phytologist</i> , 2021, 231, 2174-2185.	7.3	98
35	Contrasting Resource Dynamics in Mast Years for European Beech and Oak – A Continental Scale Analysis. <i>Frontiers in Forests and Global Change</i> , 2021, 4, .	2.3	16
36	Climate sensitivity and drought seasonality determine post-drought growth recovery of <i>Quercus petraea</i> and <i>Quercus robur</i> in Europe. <i>Science of the Total Environment</i> , 2021, 784, 147222.	8.0	61

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37	Interactive effects of tree species mixture and climate on foliar and woody trait variation in a widely distributed deciduous tree. <i>Functional Ecology</i> , 2021, 35, 2397-2408.	3.6	10
38	Both diversity and functional composition affect productivity and water use efficiency in experimental temperate grasslands. <i>Journal of Ecology</i> , 2021, 109, 3877-3891.	4.0	12
39	Drone-based physiological index reveals long-term acclimation and drought stress responses in trees. <i>Plant, Cell and Environment</i> , 2021, 44, 3552-3570.	5.7	25
40	A starting guide to root ecology: strengthening ecological concepts and standardising root classification, sampling, processing and trait measurements. <i>New Phytologist</i> , 2021, 232, 973-1122.	7.3	216
41	Water transport in trees—the importance of radial and circumferential transport. <i>Tree Physiology</i> , 2021, 41, 2245-2247.	3.1	6
42	Drought effects on volatile organic compound emissions from Scots pine stems. <i>Plant, Cell and Environment</i> , 2021, , .	5.7	4
43	TreeNet—The Biological Drought and Growth Indicator Network. <i>Frontiers in Forests and Global Change</i> , 2021, 4, .	2.3	13
44	Soil nutrients and lowered source:sink ratio mitigate effects of mild but not of extreme drought in trees. <i>Environmental and Experimental Botany</i> , 2020, 169, 103905.	4.2	28
45	Day length regulates seasonal patterns of stomatal conductance in <i>Quercus</i> species. <i>Plant, Cell and Environment</i> , 2020, 43, 28-39.	5.7	10
46	Nitrogen deposition is the most important environmental driver of growth of pure, even-aged and managed European forests. <i>Forest Ecology and Management</i> , 2020, 458, 117762.	3.2	102
47	The ¹⁸ O—signal transfer from water vapour to leaf water and assimilates varies among plant species and growth forms. <i>Plant, Cell and Environment</i> , 2020, 43, 510-523.	5.7	27
48	Rhizosphere activity in an old-growth forest reacts rapidly to changes in soil moisture and shapes whole-tree carbon allocation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 24885-24892.	7.1	50
49	Circadian Regulation Does Not Optimize Stomatal Behaviour. <i>Plants</i> , 2020, 9, 1091.	3.5	8
50	Clear Language for Ecosystem Management in the Anthropocene: A Reply to Bridgewater and Hemming. <i>BioScience</i> , 2020, 70, 374-376.	4.9	2
51	Growth and resilience responses of Scots pine to extreme droughts across Europe depend on predrought growth conditions. <i>Global Change Biology</i> , 2020, 26, 4521-4537.	9.5	105
52	The way back: recovery of trees from drought and its implication for acclimation. <i>New Phytologist</i> , 2020, 228, 1704-1709.	7.3	79
53	Microhabitat and ectomycorrhizal effects on the establishment, growth and survival of <i>Quercus ilex</i> L. seedlings under drought. <i>PLoS ONE</i> , 2020, 15, e0229807.	2.5	21
54	Leaf transition from heterotrophy to autotrophy is recorded in the intraleaf C, H and O isotope patterns of leaf organic matter. <i>Rapid Communications in Mass Spectrometry</i> , 2020, 34, e8840.	1.5	11

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55	Xylem sap phosphorus sampling using microdialysis—a non-destructive high sampling frequency method tested under laboratory and field conditions. <i>Tree Physiology</i> , 2020, 40, 1623-1638.	3.1	5
56	Assessing the response of forest productivity to climate extremes in Switzerland using model–data fusion. <i>Global Change Biology</i> , 2020, 26, 2463-2476.	9.5	54
57	Memory of environmental conditions across generations affects the acclimation potential of scots pine. <i>Plant, Cell and Environment</i> , 2020, 43, 1288-1299.	5.7	28
58	Determinants of legacy effects in pine trees – implications from an irrigation–stop experiment. <i>New Phytologist</i> , 2020, 227, 1081-1096.	7.3	52
59	Fr�her Laubfall der Buche w�hrend der Sommertrockenheit 2018: Resistenz oder Schw�chesymptom?. <i>Schweizerische Zeitschrift Fur Forstwesen</i> , 2020, 171, 257-269.	0.1	16
60	Contrasting resistance and resilience to extreme drought and late spring frost in five major European tree species. <i>Global Change Biology</i> , 2019, 25, 3781-3792.	9.5	152
61	Above- and belowground overyielding are related at the community and species level in a grassland biodiversity experiment. <i>Advances in Ecological Research</i> , 2019, 61, 55-89.	2.7	12
62	Differences in isoprenoid-mediated energy dissipation pathways between coastal and interior Douglas-fir seedlings in response to drought. <i>Tree Physiology</i> , 2019, 39, 1750-1766.	3.1	5
63	The biogeochemical niche shifts of <i>Pinus sylvestris</i> var. <i>mongolica</i> along an environmental gradient. <i>Environmental and Experimental Botany</i> , 2019, 167, 103825.	4.2	14
64	Towards an Integrative, Eco-Evolutionary Understanding of Ecological Novelty: Studying and Communicating Interlinked Effects of Global Change. <i>BioScience</i> , 2019, 69, 888-899.	4.9	55
65	Effects of elevated growth temperature and enhanced atmospheric vapour pressure deficit on needle and root terpenoid contents of two Douglas fir provenances. <i>Environmental and Experimental Botany</i> , 2019, 166, 103819.	4.2	13
66	Defoliation estimation of forest trees from ground-level images. <i>Remote Sensing of Environment</i> , 2019, 223, 143-153.	11.0	23
67	Integrating Aquatic and Terrestrial Perspectives to Improve Insights Into Organic Matter Cycling at the Landscape Scale. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	22
68	Plasticity of Fine-Root Traits Under Long-Term Irrigation of a Water-Limited Scots Pine Forest. <i>Frontiers in Plant Science</i> , 2019, 10, 701.	3.6	32
69	No Ontogenetic Shifts in C-, N- and P-Allocation for Two Distinct Tree Species along Elevational Gradients in the Swiss Alps. <i>Forests</i> , 2019, 10, 394.	2.1	2
70	Coordinating supply and demand: plant carbon allocation strategy ensuring survival in the long run. <i>New Phytologist</i> , 2019, 222, 5-7.	7.3	25
71	Functional composition has stronger impact than species richness on carbon gain and allocation in experimental grasslands. <i>PLoS ONE</i> , 2019, 14, e0204715.	2.5	8
72	Influence of starch deficiency on photosynthetic and post-photosynthetic carbon isotope fractionations. <i>Journal of Experimental Botany</i> , 2019, 70, 1829-1841.	4.8	17

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73	Application of a laser-based spectrometer for continuous in situ measurements of stable isotopes of soil CO ₂ and δ ¹³ C in calcareous and acidic soils. <i>Soil</i> , 2019, 5, 49-62.	4.9	8
74	Ecosystem functioning in urban grasslands: The role of biodiversity, plant invasions and urbanization. <i>PLoS ONE</i> , 2019, 14, e0225438.	2.5	22
75	Pervasive decreases in living vegetation carbon turnover time across forest climate zones. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 24662-24667.	7.1	52
76	High carbon storage in carbon-limited trees. <i>New Phytologist</i> , 2019, 222, 171-182.	7.3	54
77	Identifying the tree species compositions that maximize ecosystem functioning in European forests. <i>Journal of Applied Ecology</i> , 2019, 56, 733-744.	4.0	58
78	Depth matters: effects of precipitation regime on soil microbial activity upon rewetting of a plant-soil system. <i>ISME Journal</i> , 2018, 12, 1061-1071.	9.8	94
79	Research frontiers for improving our understanding of drought-induced tree and forest mortality. <i>New Phytologist</i> , 2018, 218, 15-28.	7.3	334
80	Degradability of raw and post-processed chars in a two-year field experiment. <i>Science of the Total Environment</i> , 2018, 628-629, 1600-1608.	8.0	8
81	Intramolecular ¹³ C analysis of tree rings provides multiple plant ecophysiology signals covering decades. <i>Scientific Reports</i> , 2018, 8, 5048.	3.3	26
82	Drought induced tree mortality – a tree-ring isotope based conceptual model to assess mechanisms and predispositions. <i>New Phytologist</i> , 2018, 219, 485-490.	7.3	82
83	Ozone effects on European forest growth – Towards an integrative approach. <i>Journal of Ecology</i> , 2018, 106, 1377-1389.	4.0	48
84	Below-ground resource partitioning alone cannot explain the biodiversity-ecosystem function relationship: A field test using multiple tracers. <i>Journal of Ecology</i> , 2018, 106, 2002-2018.	4.0	53
85	Responses of the structure and function of the understory plant communities to precipitation reduction across forest ecosystems in Germany. <i>Annals of Forest Science</i> , 2018, 75, 1.	2.0	13
86	Genotypic variability enhances the reproducibility of an ecological study. <i>Nature Ecology and Evolution</i> , 2018, 2, 279-287.	7.8	41
87	Ephemeral kettle hole water and sediment temporal and spatial dynamics within an agricultural catchment. <i>Ecohydrology</i> , 2018, 11, e1929.	2.4	13
88	Meteorological data series from Swiss long-term forest ecosystem research plots since 1997. <i>Annals of Forest Science</i> , 2018, 75, 1.	2.0	7
89	Editor's highlight for TSAF D-17-00396: carbon and oxygen isotopes in tree rings – climate signals and microsite effects. <i>Trees - Structure and Function</i> , 2018, 32, 881-882.	1.9	1
90	Circadian regulation of photosynthesis and transpiration from genes to ecosystems. <i>Environmental and Experimental Botany</i> , 2018, 152, 37-48.	4.2	42

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91	Below-ground complementarity effects in a grassland biodiversity experiment are related to deep-rooting species. <i>Journal of Ecology</i> , 2018, 106, 265-277.	4.0	76
92	The effect of ^{18}O -labelled water vapour on the oxygen isotope ratio of water and assimilates in plants at high humidity. <i>New Phytologist</i> , 2018, 217, 105-116.	7.3	45
93	On the contributions of photorespiration and compartmentation to the contrasting intramolecular ^2H profiles of C_3 and C_4 plant sugars. <i>Phytochemistry</i> , 2018, 145, 197-206.	2.9	16
94	Continental mapping of forest ecosystem functions reveals a high but unrealised potential for forest multifunctionality. <i>Ecology Letters</i> , 2018, 21, 31-42.	6.4	74
95	Dynamic niche partitioning in root water uptake facilitates efficient water use in more diverse grassland plant communities. <i>Functional Ecology</i> , 2018, 32, 214-227.	3.6	51
96	Scale dependent responses of pine reproductive traits to experimental and natural precipitation gradients. <i>Environmental and Experimental Botany</i> , 2018, 156, 62-73.	4.2	8
97	Homeostatic levels of nonstructural carbohydrates after 13 Åyr of drought and irrigation in <i>Pinus sylvestris</i> . <i>New Phytologist</i> , 2018, 219, 1314-1324.	7.3	65
98	Reductions in tree performance during hotter droughts are mitigated by shifts in nitrogen cycling. <i>Plant, Cell and Environment</i> , 2018, 41, 2627-2637.	5.7	15
99	Impact of weather cues and resource dynamics on mast occurrence in the main forest tree species in Europe. <i>Forest Ecology and Management</i> , 2018, 429, 336-350.	3.2	50
100	Structural and anatomical responses of <i>Pinus sylvestris</i> and <i>Tilia platyphyllos</i> seedlings exposed to water shortage. <i>Trees - Structure and Function</i> , 2018, 32, 1211-1218.	1.9	20
101	Foliar nitrogen metabolism of adult Douglas-fir trees is affected by soil water availability and varies little among provenances. <i>PLoS ONE</i> , 2018, 13, e0194684.	2.5	9
102	Endogenous circadian rhythms in pigment composition induce changes in photochemical efficiency in plant canopies. <i>Plant, Cell and Environment</i> , 2017, 40, 1153-1162.	5.7	26
103	Night and day “ Circadian regulation of night-time dark respiration and light-enhanced dark respiration in plant leaves and canopies. <i>Environmental and Experimental Botany</i> , 2017, 137, 14-25.	4.2	23
104	Variation in short-term and long-term responses of photosynthesis and isoprenoid-mediated photoprotection to soil water availability in four Douglas-fir provenances. <i>Scientific Reports</i> , 2017, 7, 40145.	3.3	14
105	Effects of drought on leaf carbon source and growth of European beech are modulated by soil type. <i>Scientific Reports</i> , 2017, 7, 42462.	3.3	34
106	Responses of sapwood ray parenchyma and non-structural carbohydrates of <i>Pinus sylvestris</i> to drought and long-term irrigation. <i>Functional Ecology</i> , 2017, 31, 1371-1382.	3.6	70
107	The fate of recently fixed carbon after drought release: towards unravelling C storage regulation in <i>Tilia platyphyllos</i> and <i>Pinus sylvestris</i> . <i>Plant, Cell and Environment</i> , 2017, 40, 1711-1724.	5.7	96
108	Tree diversity affects chlorophyll <i>a</i> fluorescence and other leaf traits of tree species in a boreal forest. <i>Tree Physiology</i> , 2017, 37, 199-208.	3.1	19

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109	Plasticity in gas exchange physiology of mature Scots pine and European larch drive short- and long-term adjustments to changes in water availability. <i>Plant, Cell and Environment</i> , 2017, 40, 1972-1983.	5.7	12
110	Nitrogen nutrition of beech forests in a changing climate: importance of plant-soil-microbe water, carbon, and nitrogen interactions. <i>Plant and Soil</i> , 2017, 418, 89-114.	3.7	58
111	Circadian rhythms regulate the environmental responses of net CO ₂ exchange in bean and cotton canopies. <i>Agricultural and Forest Meteorology</i> , 2017, 239, 185-191.	4.8	6
112	Experimental evidence of two mechanisms coupling leaf-level C assimilation to rhizosphere CO ₂ release. <i>Environmental and Experimental Botany</i> , 2017, 135, 21-26.	4.2	9
113	Thinning effect on photosynthesis depends on needle ages in a Chinese fir (<i>Cunninghamia lanceolata</i>) plantation. <i>Science of the Total Environment</i> , 2017, 580, 900-906.	8.0	27
114	Winter respiratory C losses provide explanatory power for net ecosystem productivity. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 243-260.	3.0	7
115	Organic matter distribution and retention along transects from hilltop to kettle hole within an agricultural landscape. <i>Biogeochemistry</i> , 2017, 136, 47-70.	3.5	24
116	Drought effects on root and needle terpenoid content of a coastal and an interior Douglas fir provenance. <i>Tree Physiology</i> , 2017, 37, 1648-1658.	3.1	49
117	Biodiversity and ecosystem functioning relations in European forests depend on environmental context. <i>Ecology Letters</i> , 2017, 20, 1414-1426.	6.4	244
118	Top canopy nitrogen allocation linked to increased grassland carbon uptake in stands of varying species richness. <i>Scientific Reports</i> , 2017, 7, 8392.	3.3	3
119	Root chemistry and soil fauna, but not soil abiotic conditions explain the effects of plant diversity on root decomposition. <i>Oecologia</i> , 2017, 185, 499-511.	2.0	13
120	Biodiversity effects on ecosystem functioning in a 15-year grassland experiment: Patterns, mechanisms, and open questions. <i>Basic and Applied Ecology</i> , 2017, 23, 1-73.	2.7	307
121	Plant species richness negatively affects root decomposition in grasslands. <i>Journal of Ecology</i> , 2017, 105, 209-218.	4.0	41
122	Land-use and hydroperiod affect kettle hole sediment carbon and nitrogen biogeochemistry. <i>Science of the Total Environment</i> , 2017, 574, 46-56.	8.0	28
123	The role of nutrients in drought-induced tree mortality and recovery. <i>New Phytologist</i> , 2017, 214, 513-520.	7.3	252
124	Detecting the fingerprint of drought across Europe's forests: do carbon isotope ratios and stem growth rates tell similar stories?. <i>Forest Ecosystems</i> , 2017, 4, .	3.1	19
125	Where does it come from, where does it go? The role of the xylem for plant CO ₂ efflux. <i>Journal of Experimental Botany</i> , 2017, 68, 2633-2636.	4.8	3
126	A multi-species synthesis of physiological mechanisms in drought-induced tree mortality. <i>Nature Ecology and Evolution</i> , 2017, 1, 1285-1291.	7.8	739

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127	Above and below ground carbohydrate allocation differs between ash (<i>Fraxinus excelsior</i> L.) and beech (<i>Fagus sylvatica</i> L.). PLoS ONE, 2017, 12, e0184247.	2.5	8
128	A coastal and an interior Douglas fir provenance exhibit different metabolic strategies to deal with drought stress. Tree Physiology, 2016, 36, tpv105.	3.1	27
129	A method for <i>in situ</i> monitoring of the isotope composition of tree xylem water using laser spectroscopy. Plant, Cell and Environment, 2016, 39, 2055-2063.	5.7	77
130	High-resolution isotope measurements resolve rapid ecohydrological dynamics at the soil-plant interface. New Phytologist, 2016, 210, 839-849.	7.3	149
131	The importance of landscape diversity for carbon fluxes at the landscape level: small-scale heterogeneity matters. Wiley Interdisciplinary Reviews: Water, 2016, 3, 601-617.	6.5	32
132	Visualizing land-use and management complexity within biogeochemical cycles of an agricultural landscape. Ecosphere, 2016, 7, e01282.	2.2	17
133	Plant functional diversity increases grassland productivity-related water vapor fluxes: an Ecotron and modeling approach. Ecology, 2016, 97, 2044-2054.	3.2	25
134	Improvement of water and light availability after thinning at a xeric site: which matters more? A dual isotope approach. New Phytologist, 2016, 210, 108-121.	7.3	95
135	Impact of interspecific competition and drought on the allocation of new assimilates in trees. Plant Biology, 2016, 18, 785-796.	3.8	60
136	Circadian rhythms have significant effects on leaf-to-canopy scale gas exchange under field conditions. GigaScience, 2016, 5, 43.	6.4	31
137	Jack-of-all-trades effects drive biodiversity-ecosystem multifunctionality relationships in European forests. Nature Communications, 2016, 7, 11109.	12.8	185
138	Effects of mistletoe removal on growth, N and C reserves, and carbon and oxygen isotope composition in Scots pine hosts. Tree Physiology, 2016, 36, 562-575.	3.1	26
139	When a Tree Dies in the Forest: Scaling Climate-Driven Tree Mortality to Ecosystem Water and Carbon Fluxes. Ecosystems, 2016, 19, 1133-1147.	3.4	73
140	Desiccation of sediments affects assimilate transport within aquatic plants and carbon transfer to microorganisms. Plant Biology, 2016, 18, 947-961.	3.8	2
141	Importance of tree height and social position for drought-related stress on tree growth and mortality. Trees - Structure and Function, 2016, 30, 1467-1482.	1.9	73
142	Hydrogen isotopic differences between C ₃ and C ₄ land plant lipids: consequences of compartmentation in C ₄ photosynthetic chemistry and C ₃ photorespiration. Plant, Cell and Environment, 2016, 39, 2676-2690.	5.7	22
143	Drought responses by individual tree species are not often correlated with tree species diversity in European forests. Journal of Applied Ecology, 2016, 53, 1725-1734.	4.0	76
144	Recovery of trees from drought depends on belowground sink control. Nature Plants, 2016, 2, 16111.	9.3	170

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145	Forest understory plant and soil microbial response to an experimentally induced drought and heat pulse event: the importance of maintaining the continuum. <i>Global Change Biology</i> , 2016, 22, 2861-2874.	9.5	51
146	Patterns of mast fruiting of common beech, sessile and common oak, Norway spruce and Scots pine in Central and Northern Europe. <i>Forest Ecology and Management</i> , 2016, 363, 237-251.	3.2	57
147	The fate and age of carbon – insights into the storage and remobilization dynamics in trees. <i>New Phytologist</i> , 2016, 209, 1338-1340.	7.3	37
148	Seasonal photosynthetic response of European beech to severe summer drought: Limitation, recovery and post-drought stimulation. <i>Agricultural and Forest Meteorology</i> , 2016, 220, 83-89.	4.8	54
149	Stomatal conductance and intrinsic water use efficiency in the drought year 2003: a case study of European beech. <i>Trees - Structure and Function</i> , 2016, 30, 153-174.	1.9	31
150	The influence of the soil on spring and autumn phenology in European beech. <i>Tree Physiology</i> , 2016, 36, 78-85.	3.1	30
151	Biotic homogenization can decrease landscape-scale forest multifunctionality. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3557-3562.	7.1	196
152	Water level changes affect carbon turnover and microbial community composition in lake sediments. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiv035.	2.7	39
153	Physiological significance of forest tree defoliation: Results from a survey in a mixed forest in Tuscany (central Italy). <i>Forest Ecology and Management</i> , 2016, 361, 170-178.	3.2	35
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