Lawren Sack

List of Publications by Year
in descending order

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191 papers	25,388 citations	8755 75 h-index	7950 149 g-index
199 all docs	199 docs citations	199 times ranked	20268 citing authors

#	Article	IF	Citations
1	New handbook for standardised measurement of plant functional traits worldwide. Australian Journal of Botany, 2013, 61, 167.	0.6	2,818
2	TRY â€“ a global database of plant traits. Global Change Biology, 2011, 17, 2905-2935.	9.5	2,002
3	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
4	LEAF HYDRAULICS. Annual Review of Plant Biology, 2006, 57, 361-381.	18.7	813
5	The determinants of leaf turgor loss point and prediction of drought tolerance of species and biomes: a global metaâ€analysis. Ecology Letters, 2012, 15, 393-405.	6.4	674
6	The â€˜hydrologyâ€™ of leaves: co-ordination of structure and function in temperate woody species. Plant, Cell and Environment, 2003, 26, 1343-1356.	5.7	627
7	Global climatic drivers of leaf size. Science, 2017, 357, 917-921.	12.6	580
8	Leaf venation: structure, function, development, evolution, ecology and applications in the past, present and future. New Phytologist, 2013, 198, 983-1000.	7.3	573
9	Meta-analysis reveals that hydraulic traits explain cross-species patterns of drought-induced tree mortality across the globe. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5024-5029.	7.1	554
10	<scp>CTFS</scp>â€Forest<scp>GEO</scp>: a worldwide network monitoring forests in an era of global change. Global Change Biology, 2015, 21, 528-549.	9.5	473
11	The correlations and sequence of plant stomatal, hydraulic, and wilting responses to drought. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13098-13103.	7.1	362
12	Corrigendum to: New handbook for standardised measurement of plant functional traits worldwide. Australian Journal of Botany, 2016, 64, 715.	0.6	361
13	What is conservation physiology? Perspectives on an increasingly integrated and essential science. , 2013, 1, cot001-cot001.		350
14	LEAF STRUCTURAL DIVERSITY IS RELATED TO HYDRAULIC CAPACITY IN TROPICAL RAIN FOREST TREES. Ecology, 2006, 87, 483-491.	3.2	335
15	Global importance of largeâ€diameter trees. Global Ecology and Biogeography, 2018, 27, 849-864.	5.8	330
16	Which is a better predictor of plant traits: temperature or precipitation?. Journal of Vegetation Science, 2014, 25, 1167-1180.	2.2	323
17	Decline of Leaf Hydraulic Conductance with Dehydration: Relationship to Leaf Size and Venation Architecture Â Â. Plant Physiology, 2011, 156, 832-843.	4.8	318
18	Ecological differentiation in xylem cavitation resistance is associated with stem and leaf structural traits. Plant, Cell and Environment, 2011, 34, 137-148.	5.7	308

#	Article	IF	Citations
19	Hydraulics and life history of tropical dry forest tree species: coordination of speciesâ€™ drought and shade tolerance. New Phytologist, 2011, 191, 480-495.	7.3	256
20	Developmentally based scaling of leaf venation architecture explains global ecological patterns. Nature Communications, 2012, 3, 837.	12.8	255
21	Viewing leaf structure and evolution from a hydraulic perspective. Functional Plant Biology, 2010, 37, 488.	2.1	248
22	How does biomass distribution change with size and differ among species? An analysis for 1200 plant species from five continents. New Phytologist, 2015, 208, 736-749.	7.3	239
23	The hydraulic conductance of the angiosperm leaf lamina: a comparison of three measurement methods. Journal of Experimental Botany, 2002, 53, 2177-2184.	4.8	237
24	Global analysis of plasticity in turgor loss point, a key drought tolerance trait. Ecology Letters, 2014, 17, 1580-1590.	6.4	234
25	Plant diversity increases with the strength of negative density dependence at the global scale. Science, 2017, 356, 1389-1392.	12.6	222
26	Outside-Xylem Vulnerability, Not Xylem Embolism, Controls Leaf Hydraulic Decline during Dehydration. Plant Physiology, 2017, 173, 1197-1210.	4.8	195
27	Leaf mesophyll conductance and leaf hydraulic conductance: an introduction to their measurement and coordination. Journal of Experimental Botany, 2013, 64, 3965-3981.	4.8	189
28	Diversity of hydraulic traits in nine Cordia species growing in tropical forests with contrasting precipitation. New Phytologist, 2007, 175, 686-698.	7.3	184
29	Rapid determination of comparative drought tolerance traits: using an osmometer to predict turgor loss point. Methods in Ecology and Evolution, 2012, 3, 880-888.	5.2	183
30	How Does Leaf Anatomy Influence Water Transport outside the Xylem?. Plant Physiology, 2015, 168, 1616-1635.	4.8	177
31	Hydraulic basis for the evolution of photosynthetic productivity. Nature Plants, 2016, 2, 16072.	9.3	177
32	Hydraulic Analysis of Water Flow through Leaves of Sugar Maple and Red Oak. Plant Physiology, 2004, 134, 1824-1833.	4.8	176
33	The combined impacts of deep shade and drought on the growth and biomass allocation of shade-tolerant woody seedlings. Oecologia, 2002, 131, 175-185.	2.0	175
34	Leaf hydraulic architecture correlates with regeneration irradiance in tropical rainforest trees. New Phytologist, 2005, 167, 403-413.	7.3	175
35	Leaf Shrinkage with Dehydration: Coordination with Hydraulic Vulnerability and Drought Tolerance Â Â Â. Plant Physiology, 2014, 164, 1772-1788.	4.8	175
36	Evolution of C ₄ plants: a new hypothesis for an interaction of CO ₂ and water relations mediated by plant hydraulics. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 583-600.	4.0	172

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37	How strong is intracanopy leaf plasticity in temperate deciduous trees?. American Journal of Botany, 2006, 93, 829-839.	1.7	171
38	How do leaf veins influence the worldwide leaf economic spectrum? Review and synthesis. Journal of Experimental Botany, 2013, 64, 4053-4080.	4.8	171
39	Responses of temperate woody seedlings to shade and drought: do trade-offs limit potential niche differentiation?. Oikos, 2004, 107, 110-127.	2.7	167
40	Mapping local and global variability in plant trait distributions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10937-E10946.	7.1	159
41	Drought tolerance as predicted by leaf water potential at turgor loss point varies strongly across species within an Amazonian forest. Functional Ecology, 2015, 29, 1268-1277.	3.6	151
42	Leaf palmate venation and vascular redundancy confer tolerance of hydraulic disruption. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1567-1572.	7.1	148
43	Coordination of stem and leaf hydraulic conductance in southern <scp>C</scp>alifornia shrubs: a test of the hydraulic segmentation hypothesis. New Phytologist, 2014, 203, 842-850.	7.3	148
44	Decoding Leaf Hydraulics with a Spatially Explicit Model: Principles of Venation Architecture and Implications for Its Evolution. American Naturalist, 2010, 175, 447-460.	2.1	146
45	Ecosystem Traits Linking Functional Traits to Macroecology. Trends in Ecology and Evolution, 2019, 34, 200-210.	8.7	140
46	The anatomical and compositional basis of leaf mass per area. Ecology Letters, 2017, 20, 412-425.	6.4	139
47	Leaf Trait Diversification and Design in Seven Rare Taxa of the HawaiianPlantagoRadiation. International Journal of Plant Sciences, 2009, 170, 61-75.	1.3	132
48	Structural determinants of leaf light-harvesting capacity and photosynthetic potentials. , 2006, , 385-419.		128
49	Title is missing!. Plant Ecology, 2003, 168, 139-163.	1.6	123
50	How does moss photosynthesis relate to leaf and canopy structure? Trait relationships for 10 Hawaiian species of contrasting light habitats. New Phytologist, 2010, 185, 156-172.	7.3	122
51	ForestGEO: Understanding forest diversity and dynamics through a global observatory network. Biological Conservation, 2021, 253, 108907.	4.1	122
52	The dependence of leaf hydraulic conductance on irradiance during HPFM measurements: any role for stomatal response?. Journal of Experimental Botany, 2005, 56, 737-744.	4.8	119
53	A stomatal safety-efficiency trade-off constrains responses to leaf dehydration. Nature Communications, 2019, 10, 3398.	12.8	118
54	Variation of stomatal traits from cold temperate to tropical forests and association with water use efficiency. Functional Ecology, 2018, 32, 20-28.	3.6	115

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55	Hydraulic architecture of leaf venation in Laurus nobilis L.. Plant, Cell and Environment, 2002, 25, 1445-1450.	5.7	114
56	Comparative water use of native and invasive plants at multiple scales: a global metaâ€analysis. Ecology, 2010, 91, 2705-2715.	3.2	113
57	Pitfalls and Possibilities in the Analysis of Biomass Allocation Patterns in Plants. Frontiers in Plant Science, 2012, 3, 259.	3.6	113
58	The rapid light response of leaf hydraulic conductance: new evidence from two experimental methods. Plant, Cell and Environment, 2008, 31, 1803-1812.	5.7	112
59	Thresholds for leaf damage due to dehydration: declines of hydraulic function, stomatal conductance and cellular integrity precede those for photochemistry. New Phytologist, 2019, 223, 134-149.	7.3	112
60	Genetic variation in leaf pigment, optical and photosynthetic function among diverse phenotypes of Metrosideros polymorpha grown in a common garden. Oecologia, 2007, 151, 387-400.	2.0	110
61	Dynamics of leaf hydraulic conductance with water status: quantification and analysis of species differences under steady state. Journal of Experimental Botany, 2012, 63, 643-658.	4.8	110
62	Measurements of stem xylem hydraulic conductivity in the laboratory and field. Methods in Ecology and Evolution, 2012, 3, 685-694.	5.2	110
63	Leaf life span and the leaf economic spectrum in the context of whole plant architecture. Journal of Ecology, 2014, 102, 328-336.	4.0	109
64	The causes and consequences of leaf hydraulic decline with dehydration. Journal of Experimental Botany, 2017, 68, 4479-4496.	4.8	108
65	Fossil leaf economics quantified: calibration, Eocene case study, and implications. Paleobiology, 2007, 33, 574-589.	2.0	107
66	Plant Trait Networks: Improved Resolution of the Dimensionality of Adaptation. Trends in Ecology and Evolution, 2020, 35, 908-918.	8.7	107
67	Combined impacts of irradiance and dehydration on leaf hydraulic conductance: insights into vulnerability and stomatal control. Plant, Cell and Environment, 2012, 35, 857-871.	5.7	106
68	The Sites of Evaporation within Leaves. Plant Physiology, 2017, 173, 1763-1782.	4.8	105
69	Why do species of woody seedlings change rank in relative growth rate between low and high irradiance?. Functional Ecology, 2001, 15, 145-154.	3.6	104
70	A methodology to derive global maps of leaf traits using remote sensing and climate data. Remote Sensing of Environment, 2018, 218, 69-88.	11.0	104
71	Leaf vein xylem conduit diameter influences susceptibility to embolism and hydraulic decline. New Phytologist, 2017, 213, 1076-1092.	7.3	102
72	Evolution of leaf form correlates with tropicalâ€“temperate transitions in Viburnum (Adoxaceae). Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 3905-3913.	2.6	101

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73	Does climate directly influence <scp>NPP</scp> globally?. Global Change Biology, 2016, 22, 12-24.	9.5	98
74	Atmospheric and soil drought reduce nocturnal conductance in live oaks. Tree Physiology, 2007, 27, 611-620.	3.1	96
75	The Role of Bundle Sheath Extensions and Life Form in Stomatal Responses to Leaf Water Status Â Â. Plant Physiology, 2011, 156, 962-973.	4.8	96
76	Optimal plant water economy. Plant, Cell and Environment, 2017, 40, 881-896.	5.7	93
77	Global root traits (GRooT) database. Global Ecology and Biogeography, 2021, 30, 25-37.	5.8	90
78	The Developmental Basis of Stomatal Density and Flux Â. Plant Physiology, 2016, 171, 2358-2363.	4.8	86
79	Allometry of cells and tissues within leaves. American Journal of Botany, 2013, 100, 1936-1948.	1.7	79
80	Differentiation of leaf water flux and drought tolerance traits in hemiepiphytic and nonâ€hemiepiphytic Ficus tree species. Functional Ecology, 2010, 24, 731-740.	3.6	78
81	Lightâ€induced plasticity in leaf hydraulics, venation, anatomy, and gas exchange in ecologically diverse Hawaiian lobeliads. New Phytologist, 2015, 207, 43-58.	7.3	77
82	Scaling of xylem vessels and veins within the leaves of oak species. Biology Letters, 2008, 4, 302-306.	2.3	74
83	Xylem traits mediate a tradeâ€off between resistance to freezeâ€“thawâ€induced embolism and photosynthetic capacity in overwintering evergreens. New Phytologist, 2011, 191, 996-1005.	7.3	74
84	Adjustment of structure and function of Hawaiian Metrosideros polymorpha at high vs. low precipitation. Functional Ecology, 2007, 21, 1063-1071.	3.6	73
85	Detecting forest response to droughts with global observations of vegetation water content. Global Change Biology, 2021, 27, 6005-6024.	9.5	73
86	Anatomical constraints to nonstomatal diffusion conductance and photosynthesis in lycophytes and bryophytes. New Phytologist, 2019, 222, 1256-1270.	7.3	72
87	Differential Allocation to Photosynthetic and Non-Photosynthetic Nitrogen Fractions among Native and Invasive Species. PLoS ONE, 2013, 8, e64502.	2.5	71
88	Leaf water storage increases with salinity and aridity in the mangrove Avicennia marina: integration of leaf structure, osmotic adjustment and access to multiple water sources. Plant, Cell and Environment, 2017, 40, 1576-1591.	5.7	71
89	The Cohesionâ€Tension Theory. New Phytologist, 2004, 163, 451-452.	7.3	68
90	Relating leaf photosynthetic rate to whole-plant growth: drought and shade effects on seedlings of four Quercus species. Functional Plant Biology, 2008, 35, 725.	2.1	68

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91	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
92	Variation in leaf chlorophyll concentration from tropical to cold-temperate forests: Association with gross primary productivity. Ecological Indicators, 2018, 85, 383-389.	6.3	66
93	Hawaiian native forest conserves water relative to timber plantation: Species and stand traits influence water use. Ecological Applications, 2009, 19, 1429-1443.	3.8	64
94	Sources of Error in Mammalian Genetic Screens. G3: Genes, Genomes, Genetics, 2016, 6, 2781-2790.	1.8	64
95	Tree height and leaf drought tolerance traits shape growth responses across droughts in a temperate broadleaf forest. New Phytologist, 2021, 231, 601-616.	7.3	63
96	ABA Accumulation in Dehydrating Leaves Is Associated with Decline in Cell Volume, Not Turgor Pressure. Plant Physiology, 2018, 176, 489-495.	4.8	61
97	Native trees show conservative water use relative to invasive trees: results from a removal experiment in a Hawaiian wet forest. , 2014, 2, cou016-cou016.		57
98	Impact of light quality on leaf and shoot hydraulic properties: a case study in silver birch (Betula) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	5.7	56
99	Embracing 3D Complexity in Leaf Carbonâ€“Water Exchange. Trends in Plant Science, 2019, 24, 15-24.	8.8	55
100	Turning over a new â€˜leafâ€™: multiple functional significances of leaves versus phyllodes in Hawaiian Acacia koa. Plant, Cell and Environment, 2010, 33, 2084-2100.	5.7	54
101	Leaf Hydraulics and Its Implications in Plant Structure and Function. , 2005, , 93-114.		53
102	Ecology of hemiepiphytism in fig species is based on evolutionary correlation of hydraulics and carbon economy. Ecology, 2011, 92, 2117-2130.	3.2	53
103	Hydraulicallyâ€vulnerable trees survive on deepâ€water access during droughts in a tropical forest. New Phytologist, 2021, 231, 1798-1813.	7.3	51
104	The Causes of Leaf Hydraulic Vulnerability and Its Influence on Gas Exchange in Arabidopsis thaliana. Plant Physiology, 2018, 178, 1584-1601.	4.8	50
105	Forest Structure in Low-Diversity Tropical Forests: A Study of Hawaiian Wet and Dry Forests. PLoS ONE, 2014, 9, e103268.	2.5	47
106	Measurement of Leaf Hydraulic Conductance and Stomatal Conductance and Their Responses to Irradiance and Dehydration Using the Evaporative Flux Method (EFM). Journal of Visualized Experiments, 2012, , .	0.3	45
107	Leaf Vein Length per Unit Area Is Not Intrinsically Dependent on Image Magnification: Avoiding Measurement Artifacts for Accuracy and Precision Â Â. Plant Physiology, 2014, 166, 829-838.	4.8	43
108	Developmental and biophysical determinants of grass leaf size worldwide. Nature, 2021, 592, 242-247.	27.8	43

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109	The major veins of mesomorphic leaves revisited: tests for conductive overload in Acer saccharum (Aceraceae) and Quercus rubra (Fagaceae). American Journal of Botany, 2003, 90, 32-39.	1.7	42
110	Extending the generality of leaf economic design principles in the cycads, an ancient lineage. New Phytologist, 2015, 206, 817-829.	7.3	41
111	Climate sensitive size-dependent survival in tropical trees. Nature Ecology and Evolution, 2018, 2, 1436-1442.	7.8	41
112	Trait Multi-Functionality in Plant Stress Response. Integrative and Comparative Biology, 2020, 60, 98-112.	2.0	41
113	How are leaves plumbed inside a branch? Differences in leaf-to-leaf hydraulic sectoriality among six temperate tree species. Journal of Experimental Botany, 2005, 56, 2267-2273.	4.8	40
114	Leaf water potential measurements using the pressure chamber: Synthetic testing of assumptions towards best practices for precision and accuracy. Plant, Cell and Environment, 2022, 45, 2037-2061.	5.7	40
115	NOTE. ISOLATION OF FOUR NEW STRAINS OF CHLAMYDOMONAS REINHARDTII (CHLOROPHYTA) FROM SOIL SAMPLES1. Journal of Phycology, 1994, 30, 770-773.	2.3	39
116	Tradeâ€offs in seedling growth and survival within and across tropical forest microhabitats. Ecology and Evolution, 2014, 4, 3755-3767.	1.9	39
117	Predicting habitat affinities of plant species using commonly measured functional traits. Journal of Vegetation Science, 2017, 28, 1082-1095.	2.2	38
118	Regional forcing explains local species diversity and turnover on tropical islands. Global Ecology and Biogeography, 2018, 27, 474-486.	5.8	38
119	The Evolution of Photosynthetic Anatomy in Viburnum (Adoxaceae). International Journal of Plant Sciences, 2013, 174, 1277-1291.	1.3	37
120	Densityâ€dependent seedling mortality varies with light availability and species abundance in wet and dry Hawaiian forests. Journal of Ecology, 2016, 104, 773-780.	4.0	37
121	An extensive suite of functional traits distinguishes Hawaiian wet and dry forests and enables prediction of species vital rates. Functional Ecology, 2019, 33, 712-734.	3.6	37
122	Ecological variation in leaf biomechanics and its scaling with tissue structure across three mediterraneanâ€climate plant communities. Functional Ecology, 2013, 27, 544-554.	3.6	36
123	Are leaves â€˜freewheelin'? Testing for a <scp>W</scp>heelerâ€type effect in leaf xylem hydraulic decline. Plant, Cell and Environment, 2015, 38, 534-543.	5.7	36
124	Osmotic and hydraulic adjustment of mangrove saplings to extreme salinity. Tree Physiology, 2016, 36, 1562-1572.	3.1	36
125	Global Allocation Rules for Patterns of Biomass Partitioning. Science, 2002, 296, 1923a-1923.	12.6	35
126	Hydraulic conductance of Acacia phyllodes (foliage) is driven by primary nerve (vein) conductance and density. Plant, Cell and Environment, 2012, 35, 158-168.	5.7	35

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127	Are fern stomatal responses to different stimuli coordinated? Testing responses to light, vapor pressure deficit, and CO 2 for diverse species grown under contrasting irradiances. New Phytologist, 2014, 204, 92-104.	7.3	34
128	Leaf hydraulic conductance varies with vein anatomy across <scp>A</scp>rabidopsis thaliana wildâ€type and leaf vein mutants. Plant, Cell and Environment, 2015, 38, 2735-2746.	5.7	34
129	Prediction of leaf water potential and relative water content using terahertz radiation spectroscopy. Plant Direct, 2020, 4, e00197.	1.9	33
130	Crossovers in seedling relative growth rates between low and high irradiance: analyses and ecological potential. Functional Ecology, 2003, 17, 281-287.	3.6	32
131	Drought tolerance as a driver of tropical forest assembly: resolving spatial signatures for multiple processes. Ecology, 2016, 97, 503-514.	3.2	32
132	Stronger seasonal adjustment in leaf turgor loss point in lianas than trees in an Amazonian forest. Biology Letters, 2017, 13, 20160819.	2.3	32
133	Leaf rehydration capacity: Associations with other indices of drought tolerance and environment. Plant, Cell and Environment, 2018, 41, 2638-2653.	5.7	32
134	Resolving Australian analogs for an Eocene Patagonian paleorainforest using leaf size and floristics. American Journal of Botany, 2015, 102, 1160-1173.	1.7	31
135	Leaf turgor loss point shapes local and regional distributions of evergreen but not deciduous tropical trees. New Phytologist, 2021, 230, 485-496.	7.3	30
136	Harvesting water from unsaturated atmospheres: deliquescence of salt secreted onto leaf surfaces drives reverse sap flow in a dominant arid climate mangrove, Avicennia marina. New Phytologist, 2021, 231, 1401-1414.	7.3	30
137	Patterns of nitrogenâ€fixing tree abundance in forests across Asia and America. Journal of Ecology, 2019, 107, 2598-2610.	4.0	29
138	Leaf drought tolerance cannot be inferred from classic leaf traits in a tropical rainforest. Journal of Ecology, 2020, 108, 1030-1045.	4.0	29
139	Causes of variation in leaf-level drought tolerance within an Amazonian forest. The Journal of Plant Hydraulics, 0, 3, e004.	1.0	29
140	Leaf trait network architecture shifts with speciesâ€richness and climate across forests at continental scale. Ecology Letters, 2022, 25, 1442-1457.	6.4	29
141	Does global stoichiometric theory apply to bryophytes? Tests across an elevationâ€ƒÃ—â€ƒsoil age ecosystem matrix on Mauna Loa, Hawaii. Journal of Ecology, 2011, 99, 122-134.	4.0	27
142	Soybean leaf hydraulic conductance does not acclimate to growth at elevated [CO2] or temperature in growth chambers or in the field. Annals of Botany, 2013, 112, 911-918.	2.9	27
143	Bundle sheath lignification mediates the linkage of leaf hydraulics and venation. Plant, Cell and Environment, 2018, 41, 342-353.	5.7	27
144	Leaf mass per area is independent of vein length per area: avoiding pitfalls when modelling phenotypic integration (reply to Blonder et al. 2014). Journal of Experimental Botany, 2014, 65, 5115-5123.	4.8	26

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145	Speed versus endurance tradeoff in plants: Leaves with higher photosynthetic rates show stronger seasonal declines. Scientific Reports, 2017, 7, 42085.	3.3	26
146	The Heterogeneity and Spatial Patterning of Structure and Physiology across the Leaf Surface in Giant Leaves of Alocasia macrorrhiza. PLoS ONE, 2013, 8, e66016.	2.5	25
147	Leaf and stem physiological responses to summer and winter extremes of woody species across temperate ecosystems. Oikos, 2014, 123, 1281-1290.	2.7	25
148	Seedling recruitment factors in lowâ€diversity Hawaiian wet forest: towards global comparisons among tropical forests. Ecosphere, 2013, 4, 1-19.	2.2	24
149	Distribution of biomass dynamics in relation to tree size in forests across the world. New Phytologist, 2022, 234, 1664-1677.	7.3	24
150	Shoot surface water uptake enables leaf hydraulic recovery in Avicennia marina. New Phytologist, 2019, 224, 1504-1511.	7.3	23
151	The humidity inside leaves and why you should care: implications of unsaturation of leaf intercellular airspaces. American Journal of Botany, 2019, 106, 618-621.	1.7	23
152	Drivers of morphological diversity and distribution in the Hawaiian fern flora: Trait associations with size, growth form, and environment. American Journal of Botany, 2011, 98, 956-966.	1.7	22
153	Human impacts on leaf economics in heterogeneous landscapes: the effect of harvesting non-timber forest products from African mahogany across habitats and climates. Journal of Applied Ecology, 2011, 48, 844-852.	4.0	22
154	Making the best of the worst of times: traits underlying combined shade and drought tolerance of Ruscus aculeatus and Ruscus microglossum (Asparagaceae). Functional Plant Biology, 2014, 41, 11.	2.1	22
155	Why are leaves hydraulically vulnerable?. Journal of Experimental Botany, 2016, 67, 4917-4919.	4.8	22
156	Dryâ€season decline in tree sapflux is correlated with leaf turgor loss point in a tropical rainforest. Functional Ecology, 2018, 32, 2285-2297.	3.6	22
157	Disentangling the functional trait correlates of spatial aggregation in tropical forest trees. Ecology, 2019, 100, e02591.	3.2	22
158	When facilitation meets clonal integration in forest canopies. New Phytologist, 2020, 225, 135-142.	7.3	22
159	Contrasting Structure and Function of Pubescent and Glabrous Varieties of Hawaiian Metrosideros polymorpha (Myrtaceae) at High Elevation. Biotropica, 2007, 40, 070606001740001-???.	1.6	21
160	Tree Canopies Reflect Mycorrhizal Composition. Geophysical Research Letters, 2021, 48, e2021GL092764.	4.0	21
161	A unique web resource for physiology, ecology and the environmental sciences: PrometheusWiki. Functional Plant Biology, 2010, 37, 687.	2.1	20
162	Relationships between specific leaf area and leaf composition in succulent and non-succulent species of contrasting semi-desert communities in south-eastern Spain. Journal of Arid Environments, 2015, 118, 69-83.	2.4	20

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163	Evolution of leaf structure and drought tolerance in species of Californian Ceanothus. American Journal of Botany, 2018, 105, 1672-1687.	1.7	20
164	The Anatomical Determinants of Leaf Hydraulic Function. , 2015, , 255-271.		19
165	Seedling response to water stress in valley oak (Quercus lobata) is shaped by different gene networks across populations. Molecular Ecology, 2019, 28, 5248-5264.	3.9	19
166	Coordinated decline of leaf hydraulic and stomatal conductances under drought is not linked to leaf xylem embolism for different grapevine cultivars. Journal of Experimental Botany, 2020, 71, 7286-7300.	4.8	18
167	Shifting access to pools of shoot water sustains gas exchange and increases stem hydraulic safety during seasonal atmospheric drought. Plant, Cell and Environment, 2021, 44, 2898-2911.	5.7	17
168	Shifts in bryophyte carbon isotope ratio across an elevationÂÃ—Âsoil age matrix on Mauna Loa, Hawaii: do bryophytes behave like vascular plants?. Oecologia, 2011, 166, 11-22.	2.0	15
169	Is hemiepiphytism an adaptation to high irradiance? Testing seedling responses to light levels and drought in hemiepiphytic and nonâ€hemiepiphytic Ficus. Physiologia Plantarum, 2013, 148, 74-86.	5.2	15
170	Bacterial Leaf Nodule Symbiosis in Ardisia (Myrsinaceae): Does it Contribute to Seedling Growth Capacity?. Plant Biology, 2005, 7, 495-500.	3.8	13
171	Scaling of Frond Form in Hawaiian Tree Fern Cibotium glaucum: Compliance with Global Trends and Application for Field Estimation. Biotropica, 2008, 40, 686-691.	1.6	12
172	The second warning to humanity: contributions and solutions from conservation physiology. , 2021, 9, .		11
173	Trait convergence and diversification arising from a complex evolutionary history in Hawaiian species of Scaevola. Oecologia, 2016, 181, 1083-1100.	2.0	9
174	Repeated range expansion and niche shift in a volcanic hotspot archipelago: Radiation of C₄ Hawaiian Euphorbia subgenus Chamaesyce (Euphorbiaceae). Ecology and Evolution, 2018, 8, 8523-8536.	1.9	9
175	Response to Comment on â€œPlant diversity increases with the strength of negative density dependence at the global scaleâ€. Science, 2018, 360, .	12.6	9
176	Covariation between leaf hydraulics and biomechanics is driven by leaf density in Mediterranean shrubs. Trees - Structure and Function, 2019, 33, 507-519.	1.9	9
177	Functional traits indicate faster resource acquisition for alien herbs than native shrubs in an urban Mediterranean shrubland. Biological Invasions, 2020, 22, 2699-2712.	2.4	9
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