Christine Scoffoni

List of Publications by Year
in descending order

48 papers	5,091 citations	145106 33 h-index	232693 48 g-index
49 all docs	49 docs citations	49 times ranked	4840 citing authors

#	Article	IF	Citations
1	Combined high leaf hydraulic safety and efficiency provides drought tolerance in <i>Caragana</i> species adapted to low mean annual precipitation. New Phytologist, 2021, 229, 230-244.	3.5	63
2	Deciduous and evergreen oaks show contrasting adaptive responses in leaf mass per area across environments. New Phytologist, 2021, 230, 521-534.	3.5	38
3	Developmental and biophysical determinants of grass leaf size worldwide. Nature, 2021, 592, 242-247.	13.7	43
4	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.	2.2	68
5	Prediction of leaf water potential and relative water content using terahertz radiation spectroscopy. Plant Direct, 2020, 4, e00197.	0.8	33
6	Leaf Venation and Morphology Help Explain Physiological Variation in Yucca brevifolia and Hesperoyucca whipplei Across Microhabitats in the Mojave Desert, CA. Frontiers in Plant Science, 2020, 11, 578338.	1.7	5
7	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.	2.4	18
8	A stomatal safety-efficiency trade-off constrains responses to leaf dehydration. Nature Communications, 2019, 10, 3398.	5.8	118
9	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.	3.5	112
10	Students as ecologists: Strategies for successful mentorship of undergraduate researchers. Ecology and Evolution, 2019, 9, 4316-4326.	0.8	17
11	Covariation between leaf hydraulics and biomechanics is driven by leaf density in Mediterranean shrubs. Trees - Structure and Function, 2019, 33, 507-519.	0.9	9
12	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.	1.7	37
13	Embracing 3D Complexity in Leaf Carbonâ€“Water Exchange. Trends in Plant Science, 2019, 24, 15-24.	4.3	55
14	The Causes of Leaf Hydraulic Vulnerability and Its Influence on Gas Exchange in <i>Arabidopsis thaliana</i>. Plant Physiology, 2018, 178, 1584-1601.	2.3	50
15	Evolution of leaf structure and drought tolerance in species of Californian <i>Ceanothus</i>. American Journal of Botany, 2018, 105, 1672-1687.	0.8	20
16	Is xylem of angiosperm leaves less resistant to embolism than branches? Insights from microCT, hydraulics, and anatomy. Journal of Experimental Botany, 2018, 69, 5611-5623.	2.4	46
17	Outside-Xylem Vulnerability, Not Xylem Embolism, Controls Leaf Hydraulic Decline during Dehydration. Plant Physiology, 2017, 173, 1197-1210.	2.3	195
18	The Sites of Evaporation within Leaves. Plant Physiology, 2017, 173, 1763-1782.	2.3	105

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19	The anatomical and compositional basis of leaf mass per area. Ecology Letters, 2017, 20, 412-425.	3.0	139
20	The causes and consequences of leaf hydraulic decline with dehydration. Journal of Experimental Botany, 2017, 68, 4479-4496.	2.4	108
21	Leaf vein xylem conduit diameter influences susceptibility to embolism and hydraulic decline. New Phytologist, 2017, 213, 1076-1092.	3.5	102
22	Why are leaves hydraulically vulnerable?. Journal of Experimental Botany, 2016, 67, 4917-4919.	2.4	22
23	I Can See Clearly Now â€“ Embolism in Leaves. Trends in Plant Science, 2016, 21, 723-725.	4.3	7
24	Hydraulic basis for the evolution of photosynthetic productivity. Nature Plants, 2016, 2, 16072.	4.7	177
25	Resolving Australian analogs for an Eocene Patagonian paleorainforest using leaf size and floristics. American Journal of Botany, 2015, 102, 1160-1173.	0.8	31
26	How Does Leaf Anatomy Influence Water Transport outside the Xylem?. Plant Physiology, 2015, 168, 1616-1635.	2.3	177
27	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.	2.8	36
28	Modelling the outsideâ€xylem hydraulic conductance: towards a new understanding of leaf water relations. Plant, Cell and Environment, 2015, 38, 4-6.	2.8	15
29	Lightâ€induced plasticity in leaf hydraulics, venation, anatomy, and gas exchange in ecologically diverse Hawaiian lobeliads. New Phytologist, 2015, 207, 43-58.	3.5	77
30	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.	2.4	26
31	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.	2.3	43
32	Leaf Shrinkage with Dehydration: Coordination with Hydraulic Vulnerability and Drought Tolerance Â Â Â. Plant Physiology, 2014, 164, 1772-1788.	2.3	175
33	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.	1.1	22
34	Leaf and stem physiological responses to summer and winter extremes of woody species across temperate ecosystems. Oikos, 2014, 123, 1281-1290.	1.2	25
35	Leaf venation: structure, function, development, evolution, ecology and applications in the past, present and future. New Phytologist, 2013, 198, 983-1000.	3.5	573
36	Leaf mesophyll conductance and leaf hydraulic conductance: an introduction to their measurement and coordination. Journal of Experimental Botany, 2013, 64, 3965-3981.	2.4	189

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37	How do leaf veins influence the worldwide leaf economic spectrum? Review and synthesis. Journal of Experimental Botany, 2013, 64, 4053-4080.	2.4	171
38	Allometry of cells and tissues within leaves. American Journal of Botany, 2013, 100, 1936-1948.	0.8	79
39	The Heterogeneity and Spatial Patterning of Structure and Physiology across the Leaf Surface in Giant Leaves of Alocasia macrorrhiza. PLoS ONE, 2013, 8, e66016.	1.1	25
40	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.	2.4	110
41	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, , .	0.2	45
42	Developmentally based scaling of leaf venation architecture explains global ecological patterns. Nature Communications, 2012, 3, 837.	5.8	255
43	Rapid determination of comparative drought tolerance traits: using an osmometer to predict turgor loss point. Methods in Ecology and Evolution, 2012, 3, 880-888.	2.2	183
44	Combined impacts of irradiance and dehydration on leaf hydraulic conductance: insights into vulnerability and stomatal control. Plant, Cell and Environment, 2012, 35, 857-871.	2.8	106
45	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.	3.0	674
46	Decline of Leaf Hydraulic Conductance with Dehydration: Relationship to Leaf Size and Venation Architecture Â Â. Plant Physiology, 2011, 156, 832-843.	2.3	318
47	The rapid light response of leaf hydraulic conductance: new evidence from two experimental methods. Plant, Cell and Environment, 2008, 31, 1803-1812.	2.8	112
48	Testing for ion-mediated enhancement of the hydraulic conductance of the leaf xylem in diverse angiosperms. The Journal of Plant Hydraulics, 0, 4, e004.	1.0	4