Steven Jansen

List of Publications by Year
in descending order

206 papers	20,513 citations	23500 58 h-index	11899 134 g-index
228 all docs	228 docs citations	228 times ranked	17317 citing authors

#	Article	IF	Citations
1	Towards a worldwide wood economics spectrum. Ecology Letters, 2009, 12, 351-366.	3.0	2,219
2	TRY â€“ a global database of plant traits. Global Change Biology, 2011, 17, 2905-2935.	4.2	2,002
3	Global convergence in the vulnerability of forests to drought. Nature, 2012, 491, 752-755.	13.7	1,944
4	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	4.2	1,038
5	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.	3.3	554
6	Structure and function of bordered pits: new discoveries and impacts on wholeâ€plant hydraulic function. New Phytologist, 2008, 177, 608-626.	3.5	486
7	Weak tradeoff between xylem safety and xylemâ€specific hydraulic efficiency across the world's woody plant species. New Phytologist, 2016, 209, 123-136.	3.5	466
8	A synthesis of radial growth patterns preceding tree mortality. Global Change Biology, 2017, 23, 1675-1690.	4.2	394
9	Testing hypotheses that link wood anatomy to cavitation resistance and hydraulic conductivity in the genus <i>Acer</i>. New Phytologist, 2011, 190, 709-723.	3.5	393
10	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.	3.3	362
11	Research frontiers for improving our understanding of droughtâ€induced tree and forest mortality. New Phytologist, 2018, 218, 15-28.	3.5	334
12	Methods for measuring plant vulnerability to cavitation: a critical review. Journal of Experimental Botany, 2013, 64, 4779-4791.	2.4	319
13	Evolutionary control of leaf element composition in plants. New Phytologist, 2007, 174, 516-523.	3.5	304
14	Morphological variation of intervessel pit membranes and implications to xylem function in angiosperms. American Journal of Botany, 2009, 96, 409-419.	0.8	258
15	Low growth resilience to drought is related to future mortality risk in trees. Nature Communications, 2020, 11, 545.	5.8	228
16	Aluminum Hyperaccumulation in Angiosperms: A Review of Its Phylogenetic Significance. Botanical Review, The, 2002, 68, 235-269.	1.7	222
17	Linking hydraulic traits to tropical forest function in a size-structured and trait-driven model (TFSÂv.1-Hydro). Geoscientific Model Development, 2016, 9, 4227-4255.	1.3	211
18	A global analysis of parenchyma tissue fractions in secondary xylem of seed plants. New Phytologist, 2016, 209, 1553-1565.	3.5	209

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19	sPlot â€" A new tool for global vegetation analyses. Journal of Vegetation Science, 2019, 30, 161-186.	1.1	185
20	How to quantify conduits in wood?. Frontiers in Plant Science, 2013, 4, 56.	1.7	182
21	Embolism resistance as a key mechanism to understand adaptive plant strategies. Current Opinion in Plant Biology, 2013, 16, 287-292.	3.5	181
22	How adaptable is the hydraulic system of European beech in the face of climate changeâ€related precipitation reduction?. New Phytologist, 2016, 210, 443-458.	3.5	178
23	Monocyte-driven atypical cytokine storm and aberrant neutrophil activation as key mediators of COVID-19 disease severity. Nature Communications, 2021, 12, 4117.	5.8	170
24	INTERVESSEL PIT MEMBRANE THICKNESS AS A KEY DETERMINANT OF EMBOLISM RESISTANCE IN ANGIOSPERM XYLEM. IAWA Journal, 2016, 37, 152-171.	2.7	169
25	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.	3.3	159
26	Direct X-Ray Microtomography Observation Confirms the Induction of Embolism upon Xylem Cutting under Tension. Plant Physiology, 2015, 167, 40-43.	2.3	156
27	A synthesis of tree functional traits related to droughtâ€induced mortality in forests across climatic zones. Journal of Applied Ecology, 2017, 54, 1669-1686.	1.9	148
28	Changes in pit membrane porosity due to deflection and stretching: the role of vestured pits. Journal of Experimental Botany, 2004, 55, 1569-1575.	2.4	143
29	More than just a vulnerable pipeline: xylem physiology in the light of ion-mediated regulation of plant water transport. Journal of Experimental Botany, 2011, 62, 4701-4718.	2.4	138
30	Nanobubbles: a new paradigm for air-seeding in xylem. Trends in Plant Science, 2015, 20, 199-205.	4.3	138
31	A broad survey of hydraulic and mechanical safety in the xylem of conifers. Journal of Experimental Botany, 2014, 65, 4419-4431.	2.4	135
32	Noninvasive Measurement of Vulnerability to Drought-Induced Embolism by X-Ray Microtomography. Plant Physiology, 2016, 170, 273-282.	2.3	133
33	Evidence for Hydraulic Vulnerability Segmentation and Lack of Xylem Refilling under Tension. Plant Physiology, 2016, 172, 1657-1668.	2.3	132
34	The Relationships between Xylem Safety and Hydraulic Efficiency in the Cupressaceae: The Evolution of Pit Membrane Form and Function Â Â. Plant Physiology, 2010, 153, 1919-1931.	2.3	123
35	Automated analysis of threeâ€dimensional xylem networks using highâ€resolution computed tomography. New Phytologist, 2011, 191, 1168-1179.	3.5	122
36	Early-Warning Signals of Individual Tree Mortality Based on Annual Radial Growth. Frontiers in Plant Science, 2018, 9, 1964.	1.7	117

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37	Embolism resistance of three boreal conifer species varies with pit structure. New Phytologist, 2009, 182, 675-686.	3.5	115
38	Xylem Surfactants Introduce a New Element to the Cohesion-Tension Theory. Plant Physiology, 2017, 173, 1177-1196.	2.3	110
39	Woody plants optimise stomatal behaviour relative to hydraulic risk. Ecology Letters, 2018, 21, 968-977.	3.0	109
40	The amount of parenchyma and living fibers affects storage of nonstructural carbohydrates in young stems and roots of temperate trees. American Journal of Botany, 2016, 103, 603-612.	0.8	100
41	Variation in xylem structure from tropics to tundra: Evidence from vestured pits. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8833-8837.	3.3	92
42	Aluminium Accumulation in Leaves of 127 Species in Melastomataceae, with Comments on the Order Myrtales. Annals of Botany, 2002, 90, 53-64.	1.4	91
43	The evolution and function of vessel and pit characters with respect to cavitation resistance across 10 Prunus species. Tree Physiology, 2013, 33, 684-694.	1.4	82
44	Linking xylem water storage with anatomical parameters in five temperate tree species. Tree Physiology, 2016, 36, 756-769.	1.4	81
45	Vessel diameter is related to amount and spatial arrangement of axial parenchyma in woody angiosperms. Plant, Cell and Environment, 2018, 41, 245-260.	2.8	81
46	The Parenchyma of Secondary Xylem and Its Critical Role in Tree Defense against Fungal Decay in Relation to the CODIT Model. Frontiers in Plant Science, 2016, 7, 1665.	1.7	79
47	Leaf economics and plant hydraulics drive leaf : wood area ratios. New Phytologist, 2019, 224, 1544-1556.	3.5	77
48	Plant water potential improves prediction of empirical stomatal models. PLoS ONE, 2017, 12, e0185481.	1.1	77
49	Do quantitative vessel and pit characters account for ionâ€mediated changes in the hydraulic conductance of angiosperm xylem?. New Phytologist, 2011, 189, 218-228.	3.5	74
50	Are needles of <i>Pinus pinaster</i> more vulnerable to xylem embolism than branches? New insights from Xâ€ray computed tomography. Plant, Cell and Environment, 2016, 39, 860-870.	2.8	74
51	Anatomical features associated with water transport in imperforate tracheary elements of vessel-bearing angiosperms. Annals of Botany, 2011, 107, 953-964.	1.4	73
52	Herbaceous angiosperms are not more vulnerable to drought-induced embolism than angiosperm trees. Plant Physiology, 2016, 172, pp.00829.2016.	2.3	70
53	The beneficial effect of aluminium and the role of citrate in Al accumulation in Melastoma malabathricum. New Phytologist, 2005, 165, 773-780.	3.5	69
54	The relationship between aluminium and silicon accumulation in leaves of Faramea marginata (Rubiaceae). New Phytologist, 2002, 156, 437-444.	3.5	66

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55	Plasmodesmatal pores in the torus of bordered pit membranes affect cavitation resistance of conifer xylem. Plant, Cell and Environment, 2012, 35, 1109-1120.	2.8	66
56	Function and three-dimensional structure of intervessel pit membranes in angiosperms: a review. IAWA Journal, 2019, 40, 673-702.	2.7	66
57	The Role of Xylem Parenchyma in the Storage and Utilization of Nonstructural Carbohydrates. , 2015, , 209-234.		65
58	Pore constrictions in intervessel pit membranes provide a mechanistic explanation for xylem embolism resistance in angiosperms. New Phytologist, 2021, 230, 1829-1843.	3.5	63
59	An increase in xylem embolism resistance of grapevine leaves during the growing season is coordinated with stomatal regulation, turgor loss point and intervessel pit membranes. New Phytologist, 2021, 229, 1955-1969.	3.5	62
60	Intervascular pit membranes with a torus in the wood of Ulmus (Ulmaceae) and related genera. New Phytologist, 2004, 163, 51-59.	3.5	61
61	High porosity with tiny pore constrictions and unbending pathways characterize the 3D structure of intervessel pit membranes in angiosperm xylem. Plant, Cell and Environment, 2020, 43, 116-130.	2.8	60
62	Modelling the mechanical behaviour of pit membranes in bordered pits with respect to cavitation resistance in angiosperms. Annals of Botany, 2014, 114, 325-334.	1.4	59
63	Is embolism resistance in plant xylem associated with quantity and characteristics of lignin?. Trees - Structure and Function, 2018, 32, 349-358.	0.9	58
64	A Comparative Study of Metal Levels in Leaves of Some Al-accumulating Rubiaceae. Annals of Botany, 2003, 91, 657-663.	1.4	57
65	Xylem resistance to embolism: presenting a simple diagnostic test for the open vessel artefact. New Phytologist, 2017, 215, 489-499.	3.5	56
66	Robustness of trait connections across environmental gradients and growth forms. Global Ecology and Biogeography, 2019, 28, 1806-1826.	2.7	56
67	Leaf gas exchange performance and the lethal water potential of five European species during drought. Tree Physiology, 2016, 36, tpv117.	1.4	55
68	Vesselâ€associated cells in angiosperm xylem: Highly specialized living cells at the symplastâ€“apoplast boundary. American Journal of Botany, 2018, 105, 151-160.	0.8	55
69	Vestured pits: their occurrence and systematic importance in eudicots. Taxon, 2001, 50, 135-167.	0.4	53
70	Cavitation Resistance in Seedless Vascular Plants: The Structure and Function of Interconduit Pit Membranes Â Â. Plant Physiology, 2014, 165, 895-904.	2.3	53
71	The effects of aluminium on plant growth in a temperate and deciduous aluminium accumulating species. AoB PLANTS, 2016, 8, .	1.2	53
72	An inconvenient truth about xylem resistance to embolism in the model species for refilling Laurus nobilis L.. Annals of Forest Science, 2018, 75, 1.	0.8	53

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73	Global plant trait relationships extend to the climatic extremes of the tundra biome. Nature Communications, 2020, 11, 1351.	5.8	52
74	Al?Fe interactions and growth enhancement in Melastoma malabathricum and Miscanthus sinensis dominating acid sulphate soils. Plant, Cell and Environment, 2006, 29, 2124-2132.	2.8	51
75	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
76	Using the CODIT model to explain secondary metabolites of xylem in defence systems of temperate trees against decay fungi. Annals of Botany, 2020, 125, 701-720.	1.4	50
77	Ecological trends in the wood anatomy of Vaccinioideae (Ericaceae s.l.). Flora: Morphology, Distribution, Functional Ecology of Plants, 2004, 199, 309-319.	0.6	49
78	Linking droughtâ€induced xylem embolism resistance to wood anatomical traits in Neotropical trees. New Phytologist, 2021, 229, 1453-1466.	3.5	49
79	Bordered pits in xylem of vesselless angiosperms and their possible misinterpretation as perforation plates. Plant, Cell and Environment, 2017, 40, 2133-2146.	2.8	47
80	Testing the plant pneumatic method to estimate xylem embolism resistance in stems of temperate trees. Tree Physiology, 2018, 38, 1016-1025.	1.4	47
81	Infrared Nanospectroscopy Reveals the Chemical Nature of Pit Membranes in Water-Conducting Cells of the Plant Xylem. Plant Physiology, 2018, 177, 1629-1638.	2.3	47
82	Drought-Induced Xylem Embolism Limits the Recovery of Leaf Gas Exchange in Scots Pine. Plant Physiology, 2020, 184, 852-864.	2.3	47
83	Dimensions of invasiveness: Links between local abundance, geographic range size, and habitat breadth in Europeâ€™s alien and native floras. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	47
84	Aluminium Accumulation in Leaves of Rubiaceae: Systematic and Phylogenetic Implications. Annals of Botany, 2000, 85, 91-101.	1.4	46
85	Arabidopsis thaliana as a model species for xylem hydraulics: does size matter?. Journal of Experimental Botany, 2013, 64, 2295-2305.	2.4	46
86	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
87	Vulnerability and hydraulic segmentations at the stemâ€“leaf transition: coordination across Neotropical trees. New Phytologist, 2020, 228, 512-524.	3.5	46
88	On the ascent of sap in the presence of bubbles. American Journal of Botany, 2015, 102, 1561-1563.	0.8	44
89	Changing regional weather-crop yield relationships across Europe between 1901 and 2012. Climate Research, 2016, 70, 195-214.	0.4	44
90	From the sap's perspective: The nature of vessel surfaces in angiosperm xylem. American Journal of Botany, 2018, 105, 172-185.	0.8	43

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91	No gas source, no problem: Proximity to preâ€existing embolism and segmentation affect embolism spreading in angiosperm xylem by gas diffusion. Plant, Cell and Environment, 2021, 44, 1329-1345.	2.8	43
92	Vestured Pits: Do They Promote Safer Water Transport?. International Journal of Plant Sciences, 2003, 164, 405-413.	0.6	41
93	The role of wood anatomy in phylogeny reconstruction of Ericales. Cladistics, 2007, 23, 229-294.	1.5	40
94	Ion-mediated enhancement of xylem hydraulic conductivity in four Acer species: relationships with ecological and anatomical features. Tree Physiology, 2012, 32, 1434-1441.	1.4	40
95	Nobodyâ€™s perfect: can irregularities in pit structure influence vulnerability to cavitation?. Frontiers in Plant Science, 2013, 4, 453.	1.7	40
96	Positive pressure in xylem and its role in hydraulic function. New Phytologist, 2021, 230, 27-45.	3.5	39
97	Vestures in Woody Plants: A Review. IAWA Journal, 1998, 19, 347-382.	2.7	36
98	A SURVEY OF THE SYSTEMATIC WOOD ANATOMY OF THE RUBIACEAE. IAWA Journal, 2002, 23, 1-67.	2.7	35
99	The Effect of Preparation Techniques on Sem-Imaging of Pit Membranes. IAWA Journal, 2008, 29, 161-178.	2.7	35
100	Relationships within balsaminoid Ericales: a wood anatomical approach. American Journal of Botany, 2005, 92, 941-953.	0.8	34
101	Comparative Anatomy of Intervessel Pits in Two Mangrove Species Growing Along a Natural Salinity Gradient in Gazi Bay, Kenya. Annals of Botany, 2007, 100, 271-281.	1.4	33
102	Pit membrane chemistry influences the magnitude of ion-mediated enhancement of xylem hydraulic conductance in four Lauraceae species. Tree Physiology, 2011, 31, 48-58.	1.4	33
103	Hydraulic and mechanical dysfunction of Norway spruce sapwood due to extreme summer drought in Scandinavia. Forest Ecology and Management, 2018, 409, 527-540.	1.4	33
104	The Pneumatron: An automated pneumatic apparatus for estimating xylem vulnerability to embolism at high temporal resolution. Plant, Cell and Environment, 2020, 43, 131-142.	2.8	33
105	Perforated Pit Membranes in Imperforate Tracheary Elements of Some Angiosperms. Annals of Botany, 2006, 97, 1045-1053.	1.4	32
106	Exploring the Hydraulic Failure Hypothesis of Esca Leaf Symptom Formation. Plant Physiology, 2019, 181, 1163-1174.	2.3	32
107	Within-tree variability and sample storage effects of bordered pit membranes in xylem of Acer pseudoplatanus. Trees - Structure and Function, 2020, 34, 61-71.	0.9	31
108	Hydraulic prediction of droughtâ€induced plant dieback and topâ€kill depends on leaf habit and growth form. Ecology Letters, 2021, 24, 2350-2363.	3.0	31

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109	Dynamic surface tension of xylem sap lipids. Tree Physiology, 2020, 40, 433-444.	1.4	30
110	Vessel grouping patterns in subfamilies Apocynoideae and Periplocoideae confirm phylogenetic value of wood structure within Apocynaceae. American Journal of Botany, 2009, 96, 2168-2183.	0.8	29
111	Comparative Wood Anatomy of Epacrids (Styphelioideae, Ericaceae s.l.). Annals of Botany, 2003, 91, 835-856.	1.4	28
112	Pit membranes in tracheary elements of Rosaceae and related families: new records of tori and pseudotori. American Journal of Botany, 2007, 94, 503-514.	0.8	27
113	Wood anatomy of Rauvolfioideae (Apocynaceae): a search for meaningful nonâ€ÐNA characters at the tribal level. American Journal of Botany, 2008, 95, 1199-1215.	0.8	27
114	Unraveling the Phylogeny of Heptacodium and Zabelia (Caprifoliaceae): An Interdisciplinary Approach. Systematic Botany, 2011, 36, 231-252.	0.2	27
115	A Permeable Cuticle, Not Open Stomata, Is the Primary Source of Water Loss From Expanding Leaves. Frontiers in Plant Science, 2020, 11, 774.	1.7	27
116	Lipids in xylem sap of woody plants across the angiosperm phylogeny. Plant Journal, 2021, 105, 1477-1494.	2.8	27
117	Challenges in understanding air-seeding in angiosperm xylem. Acta Horticulturae, 2018, , 13-20.	0.1	27
118	Hanging by a Thread: Natural Metallic Mordant Processes in Traditional Indonesian Textiles1. Economic Botany, 2011, 65, 241-259.	0.8	26
119	Secondary Xylem Parenchyma â€“ From Classical Terminology to Functional Traits. IAWA Journal, 2016, 37, 1-15.	2.7	26
120	Mechanical properties and structureâ€“function trade-offs in secondary xylem of young roots and stems. Journal of Experimental Botany, 2019, 70, 3679-3691.	2.4	26
121	Revisiting the Functional Basis of Sclerophylly Within the Leaf Economics Spectrum of Oaks: Different Roads to Rome. Current Forestry Reports, 2020, 6, 260-281.	3.4	26
122	Lack of vulnerability segmentation in four angiosperm tree species: evidence from direct X-ray microtomography observation. Annals of Forest Science, 2020, 77, 1.	0.8	26
123	Root xylem in three woody angiosperm species is not more vulnerable to embolism than stem xylem. Plant and Soil, 2020, 450, 479-495.	1.8	26
124	Searching for the taxonomic position of the African genus <i>Colletoecema</i> (Rubiaceae): morphology and anatomy compared to an <i>rps</i>16-intron analysis of the Rubioideae. Canadian Journal of Botany, 2000, 78, 288-304.	1.2	26
125	Aluminium Accumulation and Intra-Tree Distribution Patterns in Three Arbor aluminosa (Symplocos) Species from Central Sulawesi. PLoS ONE, 2016, 11, e0149078.	1.1	25
126	Overâ€accumulation of abscisic acid in transgenic tomato plants increases the risk of hydraulic failure. Plant, Cell and Environment, 2020, 43, 548-562.	2.8	24

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127	Floral ontogeny in the Plumbaginaceae. Journal of Plant Research, 1995, 108, 289-304.	1.2	23
128	The Micromorphology of Pit Membranes in Tracheary Elements of Ericales: New Records of Tori or Pseudo-tori?. Annals of Botany, 2006, 98, 943-951.	1.4	22
129	A search for phylogenetically informative wood characters within Lecythidaceae s.l.. American Journal of Botany, 2007, 94, 483-502.	0.8	22
130	Does the leaf economic spectrum hold within plant functional types? A Bayesian multivariate trait metaâ€analysis. Ecological Applications, 2020, 30, e02064.	1.8	22
131	Wood anatomy of Elaeagnaceae, with comments on vestured pits, helical thickenings, and systematic relationships. American Journal of Botany, 2000, 87, 20-28.	0.8	21
132	On research priorities to advance understanding of the safetyâ€“efficiency tradeoff in xylem. New Phytologist, 2016, 211, 1156-1158.	3.5	21
133	Topography strongly affects drought stress and xylem embolism resistance in woody plants from a karst forest in Southwest China. Functional Ecology, 2021, 35, 566-577.	1.7	21
134	<i>Gaertnera</i> and <i>Pagamea</i>: Genera Within the <i>Psychotrieae</i> or Constituting the Tribe <i>Gaertnereae?</i> A Wood Anatomical and Palynological Approach. Botanica Acta, 1996, 109, 466-476.	1.6	20
135	The Distribution and Phylogeny of Aluminium Accumulating Plants in the Ericales. Plant Biology, 2004, 6, 498-505.	1.8	20
136	Comparative Wood Anatomy of the Primuloid Clade (Ericales s.l.). Systematic Botany, 2005, 30, 163-183.	0.2	20
137	The application of various anatomical techniques for studying the hydraulic network in tomato fruit pedicels. Protoplasma, 2010, 246, 25-31.	1.0	20
138	Vestured pits in Malvales s.l.: a character with taxonomic significance hidden in the secondary xylem. Taxon, 2000, 49, 169-182.	0.4	19
139	Searching for the taxonomic position of the African genus <i>Colletoecema</i> (Rubiaceae): morphology and anatomy compared to an <i>rps</i>16-intron analysis of the Rubioideae. Canadian Journal of Botany, 2000, 78, 288-304.	1.2	19
140	The chemical identity of intervessel pit membranes in<i>Acer</i>challenges hydrogel control of xylem hydraulic conductivity. AoB PLANTS, 2016, 8, .	1.2	19
141	Low intra-tree variability in resistance to embolism in four Pinaceae species. Annals of Forest Science, 2016, 73, 681-689.	0.8	19
142	Phylogeny Best Explains Latitudinal Patterns of Xylem Tissue Fractions for Woody Angiosperm Species Across China. Frontiers in Plant Science, 2019, 10, 556.	1.7	19
143	Vestured pits and scalariform perforation plate morphology modify the relationships between angiosperm vessel diameter, climate and maximum plant height. New Phytologist, 2019, 221, 1802-1813.	3.5	19
144	The systematic value of endexine ornamentation in some Psychotrieae pollen (Rubiaceae-Rubioideae). Grana, 1996, 35, 129-137.	0.4	18

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145	The evolution of aluminum accumulation in ferns and lycophytes. American Journal of Botany, 2017, 104, 573-583.	0.8	18
146	The acquisitiveâ€"conservative axis of leaf trait variation emerges even in homogeneous environments. Annals of Botany, 2022, 129, 709-722.	1.4	18
147	Droughtâ€induced lacuna formation in the stem causes hydraulic conductance to decline before xylem embolism in <i>Selaginella</i>. New Phytologist, 2020, 227, 1804-1817.	3.5	18
148	Functional biogeography of Neotropical moist forests: Traitâ€"climate relationships and assembly patterns of tree communities. Global Ecology and Biogeography, 2021, 30, 1430-1446.	2.7	18
149	Xylem embolism spread is largely prevented by interconduit pit membranes until the majority of conduits are gasâ€filled. Plant, Cell and Environment, 2022, 45, 1204-1215.	2.8	18
150	High exposure of global tree diversity to human pressure. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	18
151	How drought and deciduousness shape xylem plasticity in three Costa Rican woody plant species. IAWA Journal, 2014, 35, 337-355.	2.7	17
152	Hydraulic anatomy affects genotypic variation in plant water use and shows differential organ specific plasticity to drought in Sorghum bicolor. Environmental and Experimental Botany, 2018, 156, 25-37.	2.0	17
153	Stem and leaf xylem of angiosperm trees experiences minimal embolism in temperate forests during two consecutive summers with moderate drought. Plant Biology, 2022, 24, 1208-1223.	1.8	17
154	Cavitation in lipid bilayers poses strict negative pressure stability limit in biological liquids. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10733-10739.	3.3	16
155	Contributions to the Wood Anatomy of the Rubioideae (Rubiaceae). Journal of Plant Research, 2001, 114, 269-289.	1.2	15
156	Anatomical specificities of two paleoendemic flowering desiccation tolerant species of the genus Ramonda (Gesneriaceae). Flora: Morphology, Distribution, Functional Ecology of Plants, 2017, 233, 186-193.	0.6	15
157	From systematic to ecological wood anatomy and finally plant hydraulics: are we making progress in understanding xylem evolution?. New Phytologist, 2014, 203, 12-15.	3.5	14
158	Does fertilization explain the extraordinary hydraulic behaviour of apple trees?. Journal of Experimental Botany, 2019, 70, 1915-1925.	2.4	14
159	The Distribution and Structure of Pits Between Vessels and Imperforate Tracheary Elements in Angiosperm Woods. IAWA Journal, 2008, 29, 1-15.	2.7	13
160	Using the Pneumatic method to estimate embolism resistance in species with long vessels: A commentary on the article â€œA comparison of five methods to assess embolism resistance in treesâ€. Forest Ecology and Management, 2021, 479, 118547.	1.4	13
161	Nectaries in ferns: their taxonomic distribution, structure, function, and sugar composition. American Journal of Botany, 2022, 109, 46-57.	0.8	13
162	ALUMINIUM ACCUMULATION IN RUBIACEAE: AN ADDITIONAL CHARACTER FOR THE DELIMITATION OF THE SUBFAMILY RUBIOIDEAE?. IAWA Journal, 2000, 21, 197-212.	2.7	12

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163	The Hydraulic Architecture of Petioles and Leaves in Tropical Fern Species under Different Levels of Canopy Openness. International Journal of Plant Sciences, 2016, 177, 209-216.	0.6	12
164	A heuristic classification of woody plants based on contrasting shade and drought strategies. Tree Physiology, 2019, 39, 767-781.	1.4	12
165	A semi-automated method for measuring xylem vessel length distribution. Theoretical and Experimental Plant Physiology, 2020, 32, 331-340.	1.1	12
166	The Pneumatron estimates xylem embolism resistance in angiosperms based on gas diffusion kinetics: a mini-review. Acta Horticulturae, 2020, , 193-200.	0.1	12
167	Embolism resistance of conifer roots can be accurately measured with the flow-centrifuge method. The Journal of Plant Hydraulics, 0, 2, e002.	1.0	12
168	Pit characters determine drought-induced embolism resistance of leaf xylem across 18 Neotropical tree species. Plant Physiology, 2022, 190, 371-386.	2.3	12
169	Wood Anatomy of the Predominantly African Representatives of the Tribe Psychotrieae (Rubiaceae-Rubioideae). IAWA Journal, 1997, 18, 169-196.	2.7	11
170	Chassalia petitiana (Rubiaceae-Psychotrieae), an Overlooked Epiphytic Species Hidden in the African Canopy. Systematic Botany, 1999, 24, 315.	0.2	11
171	Morphology, anatomy, and taxonomic position of Pagameopsis (Rubiaceae-Rubioideae). Brittonia, 2001, 53, 490-504.	0.8	11
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