Frederic Lens

List of Publications by Year
in descending order

77 papers	9,731 citations	147801 31 h-index	71685 76 g-index
79 all docs	79 docs citations	79 times ranked	13249 citing authors

#	Article	IF	Citations
1	TRY â€“ a global database of plant traits. Global Change Biology, 2011, 17, 2905-2935.	9.5	2,002
2	Global convergence in the vulnerability of forests to drought. Nature, 2012, 491, 752-755.	27.8	1,944
3	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
4	Weak tradeoff between xylem safety and xylemâ€specific hydraulic efficiency across the world's woody plant species. New Phytologist, 2016, 209, 123-136.	7.3	466
5	Global traitâ€“environment relationships of plant communities. Nature Ecology and Evolution, 2018, 2, 1906-1917.	7.8	397
6	A synthesis of radial growth patterns preceding tree mortality. Global Change Biology, 2017, 23, 1675-1690.	9.5	394
7	Testing hypotheses that link wood anatomy to cavitation resistance and hydraulic conductivity in the genus <i>Acer</i>. New Phytologist, 2011, 190, 709-723.	7.3	393
8	Flowering-time genes modulate meristem determinacy and growth form in Arabidopsis thaliana. Nature Genetics, 2008, 40, 1489-1492.	21.4	353
9	Evolution of endemism on a young tropical mountain. Nature, 2015, 524, 347-350.	27.8	234
10	Embolism resistance as a key mechanism to understand adaptive plant strategies. Current Opinion in Plant Biology, 2013, 16, 287-292.	7.1	181
11	INTERVESSEL PIT MEMBRANE THICKNESS AS A KEY DETERMINANT OF EMBOLISM RESISTANCE IN ANGIOSPERM XYLEM. IAWA Journal, 2016, 37, 152-171.	2.7	169
12	IAWA List of Microscopic Bark Features. IAWA Journal, 2016, 37, 517-615.	2.7	167
13	Insular Woodiness on the Canary Islands: A Remarkable Case of Convergent Evolution. International Journal of Plant Sciences, 2013, 174, 992-1013.	1.3	104
14	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.	7.1	92
15	Climatic and soil factors explain the two-dimensional spectrum of global plant trait variation. Nature Ecology and Evolution, 2022, 6, 36-50.	7.8	89
16	Do quantitative vessel and pit characters account for ionâ€mediated changes in the hydraulic conductance of angiosperm xylem?. New Phytologist, 2011, 189, 218-228.	7.3	74
17	A network model links wood anatomy to xylem tissue hydraulic behaviour and vulnerability to cavitation. Plant, Cell and Environment, 2018, 41, 2718-2730.	5.7	71
18	Herbaceous angiosperms are not more vulnerable to drought-induced embolism than angiosperm trees. Plant Physiology, 2016, 172, pp.00829.2016.	4.8	70

#	ARTICLE	IF	CITATIONS
19	Vulnerability to xylem embolism as a major correlate of the environmental distribution of rain forest species on a tropical island. Plant, Cell and Environment, 2017, 40, 277-289.	5.7	67
20	Intervascular pit membranes with a torus in the wood of Ulmus (Ulmaceae) and related genera. New Phytologist, 2004, 163, 51-59.	7.3	61
21	Palynological Characters and Their Phylogenetic Signal in Rubiaceae. Botanical Review, The, 2005, 71, 354-414.	3.9	55
22	Ecological trends in the wood anatomy of Vaccinioideae (Ericaceae s.l.). Flora: Morphology, Distribution, Functional Ecology of Plants, 2004, 199, 309-319.	1.2	49
23	Large volume vessels are vulnerable to water-stress-induced embolism in stems of poplar. IAWA Journal, 2019, 40, 4-S4.	2.7	49
24	sPlotOpen â€“ An environmentally balanced, openâ€access, global dataset of vegetation plots. Global Ecology and Biogeography, 2021, 30, 1740-1764.	5.8	49
25	Stem anatomy supports <i>Arabidopsis thaliana</i> as a model for insular woodiness. New Phytologist, 2012, 193, 12-17.	7.3	48
26	Insular woody daisies (<i>Argyranthemum,</i> Asteraceae) are more resistant to droughtâ€induced hydraulic failure than their herbaceous relatives. Functional Ecology, 2018, 32, 1467-1478.	3.6	46
27	In-depth study of the microstructure of bamboo fibres and their relation to the mechanical properties. Journal of Reinforced Plastics and Composites, 2018, 37, 1099-1113.	3.1	45
28	The role of wood anatomy in phylogeny reconstruction of Ericales. Cladistics, 2007, 23, 229-294.	3.3	40
29	Traits and trade-offs in whole-tree hydraulic architecture along the vertical axis of Eucalyptus grandis. Annals of Botany, 2018, 121, 129-141.	2.9	40
30	Relationships within balsaminoid Ericales: a wood anatomical approach. American Journal of Botany, 2005, 92, 941-953.	1.7	34
31	The multiple fuzzy origins of woodiness within Balsaminaceae using an integrated approach. Where do we draw the line?. Annals of Botany, 2012, 109, 783-799.	2.9	34
32	Scalariform-to-simple transition in vessel perforation plates triggered by differences in climate during the evolution of Adoxaceae. Annals of Botany, 2016, 118, 1043-1056.	2.9	34
33	Exploring the Hydraulic Failure Hypothesis of Esca Leaf Symptom Formation. Plant Physiology, 2019, 181, 1163-1174.	4.8	32
34	Embolism resistance in stems of herbaceous Brassicaceae and Asteraceae is linked to differences in woodiness and precipitation. Annals of Botany, 2019, 124, 1-14.	2.9	32
35	A comparison of paraffin and resinâ€based techniques used in bark anatomy. Taxon, 2011, 60, 841-851.	0.7	31
36	First steps in studying the origins of secondary woodiness in<i>Begonia</i>(Begoniaceae): combining anatomy, phylogenetics, and stem transcriptomics. Biological Journal of the Linnean Society, 2016, 117, 121-138.	1.6	30

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37	Vessel grouping patterns in subfamilies Apocynoideae and Periplocoideae confirm phylogenetic value of wood structure within Apocynaceae. American Journal of Botany, 2009, 96, 2168-2183.	1.7	29
38	Similar hydraulic efficiency and safety across vesselless angiosperms and vessel-bearing species with scalariform perforation plates. Journal of Experimental Botany, 2019, 70, 3227-3240.	4.8	29
39	Comparative Wood Anatomy of Epacrids (Styphelioideae, Ericaceae s.l.). Annals of Botany, 2003, 91, 835-856.	2.9	28
40	Embolism and mechanical resistances play a key role in dehydration tolerance of a perennial grass Dactylis glomerata L.. Annals of Botany, 2018, 122, 325-336.	2.9	28
41	Pit membranes in tracheary elements of Rosaceae and related families: new records of tori and pseudotori. American Journal of Botany, 2007, 94, 503-514.	1.7	27
42	Wood anatomy of Rauvolfioideae (Apocynaceae): a search for meaningful nonâ€ĐNA characters at the tribal level. American Journal of Botany, 2008, 95, 1199-1215.	1.7	27
43	Woodiness within the Spermacoceaeâ€"Knoxieae alliance (Rubiaceae): retention of the basal woody condition in Rubiaceae or recent innovation?. Annals of Botany, 2009, 103, 1049-1064.	2.9	27
44	Functional network analysis of genes differentially expressed during xylogenesis in <i>soc1ful</i> woody Arabidopsis plants. Plant Journal, 2016, 86, 376-390.	5.7	27
45	Palynological Variation in Balsaminoid Ericales. II. Balsaminaceae, Tetrameristaceae, Pellicieraceae and General Conclusions. Annals of Botany, 2005, 96, 1061-1073.	2.9	26
46	Palynological Variation in Balsaminoid Ericales. I. Marcgraviaceae. Annals of Botany, 2005, 96, 1047-1060.	2.9	26
47	Evolution of fruit and seed characters in the Diervilla and Lonicera clades (Caprifoliaceae,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	2.9	25
48	Forensic Identification of Indian Snakeroot (<i>Rauvolfia serpentina</i> Benth. ex Kurz) Using <scp>DNA</scp> Barcoding. Journal of Forensic Sciences, 2013, 58, 822-830.	1.6	24
49	Morphology, Carbohydrate Composition and Vernalization Response in a Genetically Diverse Collection of Asian and European Turnips (Brassica rapa subsp. rapa). PLoS ONE, 2014, 9, e114241.	2.5	23
50	Intervessel pit membrane thickness best explains variation in embolism resistance amongst stems of <i>Arabidopsis thaliana</i> accessions. Annals of Botany, 2021, 128, 171-182.	2.9	23
51	The Micromorphology of Pit Membranes in Tracheary Elements of Ericales: New Records of Tori or Pseudo-tori?. Annals of Botany, 2006, 98, 943-951.	2.9	22
52	A search for phylogenetically informative wood characters within Lecythidaceae s.l.. American Journal of Botany, 2007, 94, 483-502.	1.7	22
53	Evolution of woody life form on tropical mountains in the tribe Spermacoceae (Rubiaceae). American Journal of Botany, 2017, 104, 419-438.	1.7	22
54	Computer-assisted timber identification based on features extracted from microscopic wood sections. IAWA Journal, 2020, 41, 660-680.	2.7	22

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55	On research priorities to advance understanding of the safetyâ€“efficiency tradeoff in xylem. New Phytologist, 2016, 211, 1156-1158.	7.3	21
56	The Distribution and Phylogeny of Aluminium Accumulating Plants in the Ericales. Plant Biology, 2004, 6, 498-505.	3.8	20
57	Comparative Wood Anatomy of the Primuloid Clade (Ericales s.l.). Systematic Botany, 2005, 30, 163-183.	0.5	20
58	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.	7.3	19
59	Temporal and palaeoclimatic context of the evolution of insular woodiness in the Canary Islands. Ecology and Evolution, 2021, 11, 12220-12231.	1.9	18
60	Intraspecific variation in embolism resistance and stem anatomy across four sunflower (<scp><i>Helianthus annuus</i></scp> L.) accessions. Physiologia Plantarum, 2018, 163, 59-72.	5.2	16
61	Axial sampling height outperforms site as predictor of wood trait variation. IAWA Journal, 2019, 40, 191-S3.	2.7	16
62	Contributions to the Wood Anatomy of the Rubioideae (Rubiaceae). Journal of Plant Research, 2001, 114, 269-289.	2.4	15
63	Pollination and protection against herbivory of Nepalese Coelogyninae (Orchidaceae). American Journal of Botany, 2011, 98, 1095-1103.	1.7	12
64	Pollen morphological variation in Vanguerieae (Ixoroideae Rubiaceae). Grana, 2000, 39, 90-102.	0.8	10
65	Comparative wood anatomy of Andromedeae s.s., Gaultherieae, Lyonieae and Oxydendreae (Vaccinioideae, Ericaceae s.l.). Botanical Journal of the Linnean Society, 2004, 144, 161-179.	1.6	10
66	WOOD ANATOMY OF THE VANGUERIEAE (IXOROIDEAERUBIACEAE), WITH SPECIAL EMPHASIS ON SOME GEOFRUTICES. IAWA Journal, 2000, 21, 443-455.	2.7	9
67	Micromorphology and Systematic Distribution of Pit Membrane Thickenings in Oleaceae: Tori and Pseudo-Tori. IAWA Journal, 2008, 29, 409-424.	2.7	9
68	The phylogenetic significance of vestured pits in Boraginaceae. Taxon, 2010, 59, 510-516.	0.7	8
69	An extension of the Plant Ontology project supporting wood anatomy and development research. IAWA Journal, 2012, 33, 113-117.	2.7	8
70	Phylogenetic and Ecological Signals in the Wood of Spathelioideae (Rutaceae). IAWA Journal, 2012, 33, 337-353.	2.7	8
71	The effects of intervessel pit characteristics on xylem hydraulic efficiency and photosynthesis in hemiepiphytic and nonâ€hemiepiphytic Ficus species. Physiologia Plantarum, 2019, 167, 661-675.	5.2	8
72	Evolution of wood anatomical characters in Nepenthes and close relatives of Caryophyllales. Annals of Botany, 2017, 119, 1179-1193.	2.9	7

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73	Inflorescence lignification of natural species and horticultural hybrids of Phalaenopsis orchids. Scientia Horticulturae, 2022, 295, 110845.	3.6	7
74	Q-NET â€“ a new scholarly network on quantitative wood anatomy. Dendrochronologia, 2021, 70, 125890.	2.2	6
75	A comparative ultrastructural study of pit membranes with plasmodesmata associated thickenings in four angiosperm species. Protoplasma, 2008, 233, 255-262.	2.1	5
76	Description and evolution of wood anatomical characters in the ebony wood genus Diospyros and its close relatives (Ebenaceae): a first step towards combatting illegal logging. IAWA Journal, 2020, 41, 577-619.	2.7	4
77	wood anatomy news: Message from the outgoing Executive Secretary. IAWA Journal, 2017, 38, 137-140.	2.7	0