Anna L Jacobsen

List of Publications by Year
in descending order

69 papers	6,052 citations	117453 34 h-index	128067 60 g-index
74 all docs	74 docs citations	74 times ranked	5771 citing authors

#	ARTICLE	IF	CITATIONS
1	Seasonal patterns of increases in stem girth, vessel development, and hydraulic function in deciduous tree species. Annals of Botany, 2022, , .	1.4	4
2	Starch storage capacity of sapwood is related to dehydration avoidance during drought. American Journal of Botany, 2021, 108, 91-101.	0.8	15
3	Hydraulic function and conduit structure in the xylem of five oak species. IAWA Journal, 2021, 42, 279-298.	0.5	14
4	Diversity in conduit and pit structure among extant gymnosperm taxa. American Journal of Botany, 2021, 108, 559-570.	0.8	5
5	A seedâ€“seedling conflict for Atriplex polycarpa shrubs competing with exotic grasses and their residual dry matter. Ecosphere, 2021, 12, e03455.	1.0	1
6	HYDRAULICS OF PINUS (SUBSECTION PONDEROSAE) POPULATIONS ACROSS AN ELEVATION GRADIENT IN THE SANTA CATALINA MOUNTAINS OF SOUTHERN ARIZONA. MadroÃ±o, 2021, 67, .	0.3	4
7	Xylem biomechanics, water storage, and density within roots and shoots of an angiosperm tree species. Journal of Experimental Botany, 2021, 72, 7984-7997.	2.4	8
8	Trade-offs among transport, support, and storage in xylem from shrubs in a semiarid chaparral environment tested with structural equation modeling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	23
9	Embolism resistance of different aged stems of a California oak species (Quercus douglasii): optical and microCT methods differ from the benchtop-dehydration standard. Tree Physiology, 2020, 40, 5-18.	1.4	27
10	Forest and woodland replacement patterns following drought-related mortality. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29720-29729.	3.3	99
11	Factors controlling drought resistance in grapevine (<i>Vitis vinifera</i>, chardonnay): application of a new micro<scp>CT</scp> method to assess functional embolism resistance. American Journal of Botany, 2020, 107, 618-627.	0.8	12
12	Node frequency alters stem biomechanics and hydraulics in four deciduous woody species. Journal of Wood Science, 2020, 66, .	0.9	3
13	Highâ€resolution computed tomography reveals dynamics of desiccation and rehydration in fern petioles of a desiccationâ€tolerant fern. New Phytologist, 2019, 224, 97-105.	3.5	19
14	Wood structure and function change with maturity: Age of the vascular cambium is associated with xylem changes in currentâ€year growth. Plant, Cell and Environment, 2019, 42, 1816-1831.	2.8	44
15	Direct comparison of four methods to construct xylem vulnerability curves: Differences among techniques are linked to vessel network characteristics. Plant, Cell and Environment, 2019, 42, 2422-2436.	2.8	44
16	A Great Basin lake-level response to 38â€“34Âka Dansgaardâ€“Oeschger oscillations. Journal of Paleolimnology, 2019, 61, 263-278.	0.8	1
17	Large volume vessels are vulnerable to water-stress-induced embolism in stems of poplar. IAWA Journal, 2019, 40, 4-S4.	2.7	49
18	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

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19	Identifying which conduits are moving water in woody plants: a new HRCT-based method. Tree Physiology, 2018, 38, 1200-1212.	1.4	40
20	Functional lifespans of xylem vessels: Development, hydraulic function, and postâ€function of vessels in several species of woody plants. American Journal of Botany, 2018, 105, 142-150.	0.8	44
21	Extensive droughtâ€associated plant mortality as an agent of typeâ€conversion in chaparral shrublands. New Phytologist, 2018, 219, 498-504.	3.5	61
22	Going with the flow: Structural determinants of vascular tissue transport efficiency and safety. Plant, Cell and Environment, 2018, 41, 2715-2717.	2.8	17
23	Intra-organismal variation in the structure of plant vascular transport tissues in poplar trees. Trees - Structure and Function, 2018, 32, 1335-1346.	0.9	34
24	Post-Fire Ecophysiology of Endemic Chaparral Shrub Seedlings From Santa Catalina Island, Southern California. MadroÃ±o, 2018, 65, 106-116.	0.3	4
25	The Biology of Mediterranean-Type Ecosystems. , 2018, , .		46
26	Planning for the future. , 2018, , .		0
27	Characteristics of Mediterranean-Type Ecosystems. , 2018, , .		0
28	Form and Function of Mediterranean Shrublands. , 2018, , .		0
29	Organisms and their Interactions. , 2018, , .		0
30	Diversity and Community Structure. , 2018, , .		0
31	Evolution and Diversity. , 2018, , .		0
32	Ecosystems processes. , 2018, , .		0
33	Conflicting demands on angiosperm xylem: Tradeoffs among storage, transport and biomechanics. Plant, Cell and Environment, 2017, 40, 897-913.	2.8	135
34	Single vessel air injection estimates of xylem resistance to cavitation are affected by vessel network characteristics and sample length. Tree Physiology, 2016, 36, 1247-1259.	1.4	28
35	Towards understanding resprouting at the global scale. New Phytologist, 2016, 209, 945-954.	3.5	197
36	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

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37	On research priorities to advance understanding of the safetyâ€“efficiency tradeoff in xylem. New Phytologist, 2016, 211, 1156-1158.	3.5	21
38	Structural determinants of increased susceptibility to dehydrationâ€induced cavitation in postâ€fire resprouting chaparral shrubs. Plant, Cell and Environment, 2016, 39, 2473-2485.	2.8	34
39	Chaparral Shrub Hydraulic Traits, Size, and Life History Types Relate to Species Mortality during Californiaâ€™s Historic Drought of 2014. PLoS ONE, 2016, 11, e0159145.	1.1	83
40	Grapevine Xylem Development, Architecture, and Function. , 2015, , 133-162.		29
41	Integrative Xylem Analysis of Chaparral Shrubs. , 2015, , 189-207.		21
42	The standard centrifuge method accurately measures vulnerability curves of longâ€vesselled olive stems. New Phytologist, 2015, 205, 116-127.	3.5	89
43	Excising stem samples underwater at native tension does not induce xylem cavitation. Plant, Cell and Environment, 2015, 38, 1060-1068.	2.8	71
44	Geographic And Seasonal Variation In Chaparral Vulnerability To Cavitation. MadroÃ±o, 2014, 61, 317-327.	0.3	38
45	Mortality of resprouting chaparral shrubs after a fire and during a record drought: physiological mechanisms and demographic consequences. Global Change Biology, 2014, 20, 893-907.	4.2	115
46	Vulnerability to cavitation of central California Arctostaphylos (Ericaceae): a new analysis. Oecologia, 2013, 171, 329-334.	0.9	10
47	Xylem vulnerability to cavitation can be accurately characterised in species with long vessels using a centrifuge method. Plant Biology, 2013, 15, 496-504.	1.8	47
48	Factors Determining Mortality of Adult Chaparral Shrubs in an Extreme Drought Year in California. Aliso, 2013, 31, 49-57.	0.4	39
49	Xylem Transport Safety and Efficiency Differ among Fynbos Shrub Life History Types and between Two Sites Differing in Mean Rainfall. International Journal of Plant Sciences, 2012, 173, 474-483.	0.6	39
50	Allocation tradeoffs among chaparral shrub seedlings with different life history types (Rhamnaceae). American Journal of Botany, 2012, 99, 1464-1476.	0.8	26
51	Global convergence in the vulnerability of forests to drought. Nature, 2012, 491, 752-755.	13.7	1,944
52	No evidence for an open vessel effect in centrifugeâ€based vulnerability curves of a longâ€vesselled liana (<i>Vitis vinifera</i>). New Phytologist, 2012, 194, 982-990.	3.5	91
53	A global analysis of xylem vessel length in woody plants. American Journal of Botany, 2012, 99, 1583-1591.	0.8	109
54	Dieback and mortality of South African fynbos shrubs is likely driven by a novel pathogen and pathogenâ€induced hydraulic failure. Austral Ecology, 2012, 37, 227-235.	0.7	10

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55	Xylem root and shoot hydraulics is linked to life history type in chaparral seedlings. Functional Ecology, 2010, 24, 70-81.	1.7	54
56	Water stress tolerance of shrubs in Mediterraneanâ€type climate regions: Convergence of fynbos and succulent karoo communities with California shrub communities. American Journal of Botany, 2009, 96, 1445-1453.	0.8	38
57	Xylem function of aridâ€land shrubs from California, USA: an ecological and evolutionary analysis. Plant, Cell and Environment, 2009, 32, 1324-1333.	2.8	75
58	Plant Community Water Use and Invasibility of Semi-Arid Shrublands by Woody Species in Southern California. MadroÃ±o, 2009, 56, 213-220.	0.3	9
59	Comparative community physiology: nonconvergence in water relations among three semiâ€arid shrub communities. New Phytologist, 2008, 180, 100-113.	3.5	91
60	Linkage between water stress tolerance and life history type in seedlings of nine chaparral species (Rhamnaceae). Journal of Ecology, 2008, 96, 1252-1265.	1.9	92
61	LIFE HISTORY TYPE AND WATER STRESS TOLERANCE IN NINE CALIFORNIA CHAPARRAL SPECIES (RHAMNACEAE). Ecological Monographs, 2007, 77, 239-253.	2.4	80
62	Vessel Redundancy: Modeling Safety In Numbers. IAWA Journal, 2007, 28, 373-388.	2.7	51
63	CAVITATION RESISTANCE AMONG 26 CHAPARRAL SPECIES OF SOUTHERN CALIFORNIA. Ecological Monographs, 2007, 77, 99-115.	2.4	219
64	Xylem density, biomechanics and anatomical traits correlate with water stress in 17 evergreen shrub species of the Mediterranean-type climate region of South Africa. Journal of Ecology, 2007, 95, 171-183.	1.9	176
65	Cavitation resistance and seasonal hydraulics differ among three arid Californian plant communities. Plant, Cell and Environment, 2007, 30, 1599-1609.	2.8	118
66	Relationships among xylem transport, biomechanics and storage in stems and roots of nine Rhamnaceae species of the California chaparral. New Phytologist, 2007, 174, 787-798.	3.5	297
67	Do Xylem Fibers Affect Vessel Cavitation Resistance?. Plant Physiology, 2005, 139, 546-556.	2.3	351
68	Mechanisms for tolerating freezeâ€"thaw stress of two evergreen chaparral species: <i>Rhus ovata</i> and <i>Malosma laurina</i> (Anacardiaceae). American Journal of Botany, 2005, 92, 1102-1113.	0.8	42
69	Adaptive variation among oaks in wood anatomical properties is shaped by climate of origin and shows limited plasticity across environments. Functional Ecology, 0, , .	1.7	9