Anna Sala

List of Publications by Year
in descending order

85 papers	9,811 citations	61984 43 h-index	60623 81 g-index
90 all docs	90 docs citations	90 times ranked	8433 citing authors

#	Article	IF	Citations
1	Mechanisms of woody-plant mortality under rising drought, CO2 and vapour pressure deficit. Nature Reviews Earth & Environment, 2022, 3, 294-308.	29.7	163
2	Plant carbohydrate storage: intraâ€•and interâ€specific tradeâ€offs reveal a major life history trait. New Phytologist, 2022, 235, 2211-2222.	7.3	28
3	Plant carbohydrate depletion impairs water relations and spreads via ectomycorrhizal networks. New Phytologist, 2021, 229, 3172-3183.	7.3	52
4	Alpine treeline ecotones are potential refugia for a montane pine species threatened by bark beetle outbreaks. Ecological Applications, 2021, 31, e2274.	3.8	6
5	Soil moisture variation drives canopy water content dynamics across the western U.S.. Remote Sensing of Environment, 2021, 253, 112233.	11.0	25
6	Native and non-native understory vegetation responses to restoration treatments in a dry conifer forest over 23 years. Forest Ecology and Management, 2021, 481, 118684.	3.2	6
7	Storage of carbon reserves in spruce trees is prioritized over growth in the face of carbon limitation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	45
8	Relative water content consistently predicts drought mortality risk in seedling populations with different morphology, physiology and times to death. Plant, Cell and Environment, 2021, 44, 3322-3335.	5.7	40
9	Positive root pressure is critical for whole-plant desiccation recovery in two species of terrestrial resurrection ferns. Journal of Experimental Botany, 2020, 71, 1139-1150.	4.8	18
10	Forest Restoration Treatments in a Ponderosa Pine Forest Enhance Physiological Activity and Growth Under Climatic Stress. Bulletin of the Ecological Society of America, 2020, 101, e01772.	0.2	0
11	Forest restoration treatments in a ponderosa pine forest enhance physiological activity and growth under climatic stress. Ecological Applications, 2020, 30, e02188.	3.8	21
12	Conflicting functional effects of xylem pit structure relate to the growth-longevity trade-off in a conifer species. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15282-15287.	7.1	34
13	Plant water content integrates hydraulics and carbon depletion to predict drought-induced seedling mortality. Tree Physiology, 2019, 39, 1300-1312.	3.1	79
14	Satellite-based vegetation optical depth as an indicator of drought-driven tree mortality. Remote Sensing of Environment, 2019, 227, 125-136.	11.0	79
15	Wildfires and climate change push low-elevation forests across a critical climate threshold for tree regeneration. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6193-6198.	7.1	307
16	Seedling Survival at Timberline Is Critical to Conifer Mountain Forest Elevation and Extent. Frontiers in Forests and Global Change, 2019, 2, .	2.3	40
17	Greater focus on water pools may improve our ability to understand and anticipate droughtâ€induced mortality in plants. New Phytologist, 2019, 223, 22-32.	7.3	134
18	Eyes on the future â€" evidence for tradeâ€offs between growth, storage and defense in Norway spruce. New Phytologist, 2019, 222, 144-158.	7.3	88

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19	Coupled ecohydrology and plant hydraulics modeling predicts ponderosa pine seedling mortality and lower treeline in the <scp>US</scp> Northern Rocky Mountains. New Phytologist, 2019, 221, 1814-1830.	7.3	37
20	Limited evidence for <scp>CO</scp>₂â€related growth enhancement in northern Rocky Mountain lodgepole pine populations across climate gradients. Global Change Biology, 2018, 24, 3922-3937.	9.5	29
21	Non-structural carbohydrate dynamics associated with drought-induced die-off in woody species of a shrubland community. Annals of Botany, 2018, 121, 1383-1396.	2.9	29
22	Future global productivity will be affected by plant trait response to climate. Scientific Reports, 2018, 8, 2870.	3.3	95
23	Fuel dynamics after a bark beetle outbreak impacts experimental fuel treatments. Fire Ecology, 2018, 14, .	3.0	13
24	Management and Succession at the Lick Creek Demonstration/Research Forest, Montana. Journal of Forestry, 2018, 116, 481-486.	1.0	2
25	Anticipating fireâ€mediated impacts of climate change using a demographic framework. Functional Ecology, 2018, 32, 1729-1745.	3.6	55
26	Ecological effects and effectiveness of silvicultural restoration treatments in whitebark pine forests. Forest Ecology and Management, 2018, 429, 534-548.	3.2	14
27	Insect outbreak shifts the direction of selection from fast to slow growth rates in the long-lived conifer <i>Pinus ponderosa</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7391-7396.	7.1	59
28	A multi-species synthesis of physiological mechanisms in drought-induced tree mortality. Nature Ecology and Evolution, 2017, 1, 1285-1291.	7.8	739
29	Fortifying the forest: thinning and burning increase resistance to a bark beetle outbreak and promote forest resilience. Ecological Applications, 2016, 26, 1984-2000.	3.8	89
30	Individual traits as determinants of time to death under extreme drought in<i>Pinus sylvestris</i>L.. Tree Physiology, 2016, 36, 1196-1209.	3.1	48
31	Dynamics of nonâ€structural carbohydrates in terrestrial plants: a global synthesis. Ecological Monographs, 2016, 86, 495-516.	5.4	458
32	Sapwood Stored Resources Decline in Whitebark and Lodgepole Pines Attacked by Mountain Pine Beetles (Coleoptera: Curculionidae). Environmental Entomology, 2016, 45, 1463-1475.	1.4	1
33	Wilderness in the 21st Century: A Framework for Testing Assumptions about Ecological Intervention in Wilderness Using a Case Study of Fire Ecology in the Rocky Mountains. Journal of Forestry, 2016, 114, 384-395.	1.0	13
34	Tree mortality from drought, insects, and their interactions in a changing climate. New Phytologist, 2015, 208, 674-683.	7.3	641
35	Tree physiology and bark beetles. New Phytologist, 2015, 205, 955-957.	7.3	21
36	Lowâ€severity fire increases tree defense against bark beetle attacks. Ecology, 2015, 96, 1846-1855.	3.2	135

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37	Non-structural carbohydrates in woody plants compared among laboratories. Tree Physiology, 2015, 35, tpv073.	3.1	163
38	Ponderosa pine resin defenses and growth: metrics matter. Tree Physiology, 2015, 35, tpv098.	3.1	67
39	Species, elevation, and diameter affect whitebark pine and lodgepole pine stored resources in the sapwood and phloem: implications for bark beetle outbreaks. Canadian Journal of Forest Research, 2014, 44, 1312-1319.	1.7	20
40	Does carbon storage limit tree growth?. New Phytologist, 2014, 201, 1096-1100.	7.3	212
41	Nonstructural Carbon in Woody Plants. Annual Review of Plant Biology, 2014, 65, 667-687.	18.7	533
42	Plump trees win under drought. Nature Climate Change, 2014, 4, 666-667.	18.8	23
43	It is risky out there: the costs of emergence and the benefits of prolonged dormancy. Oecologia, 2013, 172, 937-947.	2.0	22
44	Carbon dynamics in trees: feast or famine?. Tree Physiology, 2012, 32, 764-775.	3.1	644
45	Masting in whitebark pine (<i>Pinus albicaulis</i>) depletes stored nutrients. New Phytologist, 2012, 196, 189-199.	7.3	127
46	Changing growth response to wildfire in oldâ€growth ponderosa pine trees in montane forests of north central<scp>I</scp>daho. Global Change Biology, 2012, 18, 1117-1126.	9.5	16
47	Carbon Storage in Trees: Does Relative Carbon Supply Decrease with Tree Size?. Tree Physiology, 2011, , 287-306.	2.5	22
48	Lack of fire has limited physiological impact on old-growth ponderosa pine in dry montane forests of north-central Idaho. , 2011, 21, 3227-3237.		4
49	Components of tree resilience: effects of successive lowâ€growth episodes in old ponderosa pine forests. Oikos, 2011, 120, 1909-1920.	2.7	580
50	Disappearing plants: why they hide and how they return. Ecology, 2010, 91, 3407-3413.	3.2	37
51	Physiological mechanisms of droughtâ€induced tree mortality are far from being resolved. New Phytologist, 2010, 186, 274-281.	7.3	535
52	Mechanism of waterâ€stress induced cavitation in conifers: bordered pit structure and function support the hypothesis of seal capillaryâ€seeding. Plant, Cell and Environment, 2010, 33, 2101-2111.	5.7	216
53	Interactive effects of historical logging and fire exclusion on ponderosa pine forest structure in the northern Rockies. Ecological Applications, 2010, 20, 1851-1864.	3.8	126
54	Effect of environmental factors and bulb mass on the invasive geophyte Oxalis pes-caprae development. Acta Oecologica, 2010, 36, 92-99.	1.1	16

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55	Lack of direct evidence for the carbon-starvation hypothesis to explain drought-induced mortality in trees. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, E68; author reply e69.	7.1	63
56	Heightâ€related growth declines in ponderosa pine are not due to carbon limitation. Plant, Cell and Environment, 2009, 32, 22-30.	5.7	155
57	How do plants know when other plants are flowering? Resource depletion, pollen limitation and mastâ€seeding in a perennial wildflower. Ecology Letters, 2009, 12, 1119-1126.	6.4	116
58	Reproductive output of ponderosa pine in response to thinning and prescribed burning in western Montana. Canadian Journal of Forest Research, 2008, 38, 844-850.	1.7	18
59	Perpetuating old ponderosa pine. Forest Ecology and Management, 2007, 249, 141-157.	3.2	131
60	Effects of fire exclusion on forest structure and composition in unlogged ponderosa pine/Douglas-fir forests. Forest Ecology and Management, 2006, 237, 418-428.	3.2	47
61	Hydraulic compensation in northern Rocky Mountain conifers: does successional position and life history matter?. Oecologia, 2006, 149, 1-11.	2.0	13
62	Fire exclusion and nitrogen mineralization in low elevation forests of western Montana. Soil Biology and Biochemistry, 2006, 38, 952-961.	8.8	29
63	FREQUENT FIRE ALTERS NITROGEN TRANSFORMATIONS IN PONDEROSA PINE STANDS OF THE INLAND NORTHWEST. Ecology, 2006, 87, 2511-2522.	3.2	110
64	Sensitivity of the Invasive Geophyte Oxalis pes-caprae to Nutrient Availability and Competition. Annals of Botany, 2006, 99, 637-645.	2.9	28
65	Physiological responses of ponderosa pine in western Montana to thinning, prescribed fire and burning season. Tree Physiology, 2005, 25, 339-348.	3.1	96
66	The hydraulic architecture of Pinaceae â€“ a review. Plant Ecology, 2004, 171, 3-13.	1.6	172
67	Forest structure and organic horizon analysis along a fire chronosequence in the low elevation forests of western Montana. Forest Ecology and Management, 2004, 203, 331-343.	3.2	75
68	Xylem vulnerability to cavitation in Pseudotsuga menziesii and Pinus ponderosa from contrasting habitats. Tree Physiology, 2003, 23, 43-50.	3.1	64
69	PLASTICITY AND GENETIC DIVERSITY MAY ALLOW SALTCEDAR TO INVADE COLD CLIMATES IN NORTH AMERICA. , 2002, 12, 1652-1660.		233
70	Local adaptation across a climatic gradient despite small effective population size in the rare sapphire rockcress. Proceedings of the Royal Society B: Biological Sciences, 2001, 268, 1715-1721.	2.6	137
71	Dwarf mistletoe affects whole-tree water relations of Douglas fir and western larch primarily through changes in leaf to sapwood ratios. Oecologia, 2001, 126, 42-52.	2.0	68
72	Are old forests underestimated as global carbon sinks?. Global Change Biology, 2001, 7, 339-344.	9.5	161

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73	Ecological implications of xylem cavitation for several Pinaceae in the Pacific Northern USA. Functional Ecology, 2000, 14, 538-545.	3.6	113
74	Succession May Maintain High Leaf Area: Sapwood Ratios and Productivity in OldSubalpine Forests. Ecosystems, 2000, 3, 254-268.	3.4	24
75	Modelling Canopy Gas Exchange During Summer Drought. Ecological Studies, 1999, , 149-161.	1.2	8
76	Leaf Traits and Canopy Organization. Ecological Studies, 1999, , 121-133.	1.2	13
77	Water relations of riparian plants from warm desert regions. Wetlands, 1998, 18, 687-696.	1.5	165
78	Ecophysiological Responses of Three Riparian Graminoids to Changes in the Soil Water Table. International Journal of Plant Sciences, 1997, 158, 835-843.	1.3	18
79	Plant water relations ofTamarix ramosissimain response to the imposition and alleviation of soil moisture stress. Journal of Arid Environments, 1997, 36, 527-540.	2.4	43
80	Invasive capacity of Tamarix ramosissima in a Mojave Desert floodplain: the role of drought. Oecologia, 1997, 111, 12-18.	2.0	216
81	Simulations of canopy net photosynthesis and transpiration in Quercus ilex L. under the influence of seasonal drought. Agricultural and Forest Meteorology, 1996, 78, 203-222.	4.8	171
82	Water Use by Tamarix Ramosissima and Associated Phreatophytes in a Mojave Desert Floodplain. , 1996, 6, 888-898.		191
83	Nutrient content in Quercus ilex canopies: Seasonal and spatial variation within a catchment. Plant and Soil, 1995, 168-169, 297-304.	3.7	36
84	Nutrient content in Quercus ilex canopies: Seasonal and spatial variation within a catchment. , 1995, , 297-304.		8
85	Canopy structure within a Quercus ilex forested watershed: variations due to location, phenological development, and water availability. Trees - Structure and Function, 1994, 8, 254.	1.9	50