Louis Stephen Santiago

List of Publications by Year in Descending Order

96 papers	6,662 citations	33 h-index	81 g-index
99 ext. papers	7,744 ext. citations	4.4 avg, IF	5.74 L-index

#	Paper	IF	Citations
96	Large variation in availability of Maya food plant sources during ancient droughts.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119,	11.5	3
95	Effects of temperature, soil moisture and light intensity on the temporal pattern of floral gene expression and flowering of avocado buds (Persea americana cv. Hass). *Scientia Horticulturae*, **2021**, 280, 109940	4.1	1
94	Towards a statistically robust determination of minimum water potential and hydraulic risk in plants. *New Phytologist*, **2021**, 232, 404-417	9.8	7
93	Shade tree species affect gas exchange and hydraulic conductivity of cacao cultivars in an agroforestry system. *Tree Physiology*, **2021**, 41, 240-253	4.2	1
92	Unraveling the relative role of light and water competition between lianas and trees in tropical forests: A vegetation model analysis. *Journal of Ecology*, **2021**, 109, 519-540	6	6
91	Hydraulic traits of Neotropical canopy liana and tree species across a broad range of wood density: implications for predicting drought mortality with models. *Tree Physiology*, **2021**, 41, 24-34	4.2	4
90	Species-specific performance and trade-off between growth and survival in the early-successional light-demanding group. *Photosynthetica*, **2021**, 59, 203-214	2.2	2
89	Small biodiversity effects on leaf litter production of a seasonal heath vegetation. *Journal of Vegetation Science*, **2020**, 31, 877-886	3.1	0
88	Going underground: new approaches to assess dynamic root behaviour during drought. *New Phytologist*, **2020**, 225, 599-600	9.8	
87	Functional traits of leaves and photosynthetic stems of species from a sarcocaulescent scrub in the southern Baja California Peninsula. *American Journal of Botany*, **2020**, 107, 1410-1422	2.7	5
86	Physiological Responses of Onion Varieties to varying Photoperiod and Temperature Regimes. *Agriculture (Switzerland)*, **2019**, 9, 214	3	4
85	Bayesian inference of hydraulic properties in and around a white fir using a process-based ecohydrologic model. *Environmental Modelling and Software*, **2019**, 115, 76-85	5.2	4
84	Atlantic forest and leaf traits: an overview. *Trees - Structure and Function*, **2019**, 33, 1535-1547	2.6	19
83	Modeling of xylem vessel occlusion in grapevine. *Tree Physiology*, **2019**, 39, 1438-1445	4.2	9
82	Traits uncover quasi-neutral community assembly in a coastal heath vegetation. *Journal of Plant Ecology*, **2019**, 12, 703-712	1.7	3
81	The physiological response of Hass avocado to salinity as influenced by rootstock. *Scientia Horticulturae*, **2019**, 256, 108629	4.1	10
80	Large hydraulic safety margins protect Neotropical canopy rainforest tree species against hydraulic failure during drought. *Annals of Forest Science*, **2019**, 76, 1	3.1	15

79	Costs and benefits of photosynthetic stems in desert species from southern California. *Functional Plant Biology*, **2019**, 46, 175-186	2.7	4
78	Coordination and trade-offs among hydraulic safety, efficiency and drought avoidance traits in Amazonian rainforest canopy tree species. *New Phytologist*, **2018**, 218, 1015-1024	9.8	57
77	Isotopic composition of leaf carbon (δ13C) and nitrogen (δ15N) of deciduous and evergreen understorey trees in two tropical Brazilian Atlantic forests. *Journal of Tropical Ecology*, **2018**, 34, 145-156	1.3	17
76	Orchard establishment, precocity, and eco-physiological traits of several pomegranate cultivars. *Scientia Horticulturae*, **2018**, 235, 221-227	4.1	4
75	Stomatal behaviour and stem xylem traits are coordinated for woody plant species under exceptional drought conditions. *Plant, Cell and Environment*, **2018**, 41, 2617-2626	8.4	30
74	Climate and soils together regulate photosynthetic carbon isotope discrimination within C3 plants worldwide. *Global Ecology and Biogeography*, **2018**, 27, 1056-1067	6.1	45
73	Evaluation of leaf carbon isotopes and functional traits in avocado reveals water-use efficient cultivars. *Agriculture, Ecosystems and Environment*, **2018**, 263, 60-66	5.7	9
72	Reconciling seasonal hydraulic risk and plant water use through probabilistic soil-plant dynamics. *Global Change Biology*, **2017**, 23, 3758-3769	11.4	26
71	High N, dry: Experimental nitrogen deposition exacerbates native shrub loss and nonnative plant invasion during extreme drought. *Global Change Biology*, **2017**, 23, 4333-4345	11.4	48
70	Stem photosynthesis and hydraulics are coordinated in desert plant species. *New Phytologist*, **2017**, 216, 1119-1129	9.8	33
69	Functional strategies of tropical dry forest plants in relation to growth form and isotopic composition. *Environmental Research Letters*, **2017**, 12, 115006	6.2	20
68	Trade-offs between water transport capacity and drought resistance in neotropical canopy liana and tree species. *Tree Physiology*, **2017**, 37, 1404-1414	4.2	24
67	Using leaf δ13C and photosynthetic parameters to understand acclimation to irradiance and leaf age effects during tropical forest regeneration. *Forest Ecology and Management*, **2016**, 379, 50-60	3.9	17
66	Testing the 'microbubble effect' using the Cavitron technique to measure xylem water extraction curves. *AoB PLANTS*, **2016**, 8,	2.9	17
65	Drought Survival Strategies of Tropical Trees. *Tree Physiology*, **2016**, 243-258		21
64	Facing Shortage or Excessive Light: How Tropical and Subtropical Trees Adjust Their Photosynthetic Behavior and Life History Traits to a Dynamic Forest Environment. *Tree Physiology*, **2016**, 319-336		12
63	Is Photosynthesis Nutrient Limited in Tropical Trees?. *Tree Physiology*, **2016**, 299-315		7
62	Carbon Allocation and Water Relations of Lianas Versus Trees. *Tree Physiology*, **2016**, 103-124		13

61	Multiple strategies for drought survival among woody plant species. *Functional Ecology*, **2016**, 30, 517-526	5.6	85
60	Plant hydraulic responses to long-term dry season nitrogen deposition alter drought tolerance in a Mediterranean-type ecosystem. *Oecologia*, **2016**, 181, 721-31	2.9	25
59	Nutrient limitation of eco-physiological processes in tropical trees. *Trees - Structure and Function*, **2015**, 29, 1291-1300	2.6	22
58	Strong phylogenetic signals and phylogenetic niche conservatism in ecophysiological traits across divergent lineages of Magnoliaceae. *Scientific Reports*, **2015**, 5, 12246	4.9	37
57	Global-scale environmental control of plant photosynthetic capacity **2015**, 25, 2349-65		78
56	Extractable nitrogen and microbial community structure respond to grassland restoration regardless of historical context and soil composition. *AoB PLANTS*, **2015**, 7,	2.9	9
55	Global effects of soil and climate on leaf photosynthetic traits and rates. *Global Ecology and Biogeography*, **2015**, 24, 706-717	6.1	179
54	Rapid recovery of photosynthesis and water relations following soil drying and re-watering is related to the adaptation of desert shrub Ephedra alata subsp. alenda (Ephedraceae) to arid environments. *Environmental and Experimental Botany*, **2015**, 109, 113-121	5.9	25
53	Lianas always outperform tree seedlings regardless of soil nutrients: results from a long-term fertilization experiment. *Ecology*, **2015**, 96, 1866-76	4.6	31
52	Biogeomorphology of a Mojave Desert landscape Configurations and feedbacks of abiotic and biotic land surfaces during landform evolution. *Geomorphology*, **2014**, 206, 23-36	4.3	29
51	Light use efficiency of California redwood forest understory plants along a moisture gradient. *Oecologia*, **2014**, 174, 351-63	2.9	7
50	Coordination of stem and leaf hydraulic conductance in southern California shrubs: a test of the hydraulic segmentation hypothesis. *New Phytologist*, **2014**, 203, 842-50	9.8	104
49	Stem, root, and older leaf N:P ratios are more responsive indicators of soil nutrient availability than new foliage. *Ecology*, **2014**, 95, 2062-8	4.6	92
48	Determinants of change in subtropical tree diameter growth with ontogenetic stage. *Oecologia*, **2014**, 175, 1315-24	2.9	18
47	PrometheusWiki Gold Leaf Protocol: gas exchange using LI-COR 6400. *Functional Plant Biology*, **2014**, 41, 223-226	2.7	29
46	Physiological implications of the liana growth form **2014**, 288-298		8
45	Can vessel dimension explain tolerance toward fungal vascular wilt diseases in woody plants? Lessons from Dutch elm disease and esca disease in grapevine. *Frontiers in Plant Science*, **2014**, 5, 253	6.2	76
44	Contrasting physiological responses of ozone-tolerant Phaseolus vulgaris and Nicotiana tobaccum varieties to ozone and nitric acid. *Environmental Sciences: Processes and Impacts*, **2014**, 16, 2488-95	4.3	0

43	Ecological Role of Hybridization in Adaptive Radiations: A Case Study in theDubautia arboreaDubautia ciliolata(Asteraceae) Complex. *International Journal of Plant Sciences*, **2013**, 174, 749-759	2.6	12
42	Exotic annuals reduce soil heterogeneity in coastal sage scrub soil chemical and biological characteristics. *Soil Biology and Biochemistry*, **2013**, 58, 70-81	7.5	19
41	Forest dynamics of a subtropical monsoon forest in Dinghushan, China: recruitment, mortality and the pace of community change. *Journal of Tropical Ecology*, **2013**, 29, 131-145	1.3	29
40	Source water, phenology and growth of two tropical dry forest tree species growing on shallow karst soils. *Trees - Structure and Function*, **2013**, 27, 1297-1307	2.6	25
39	Biological soil crust community types differ in key ecological functions. *Soil Biology and Biochemistry*, **2013**, 65, 168-171	7.5	60
38	Nutrients limit photosynthesis in seedlings of a lowland tropical forest tree species. *Oecologia*, **2012**, 168, 311-9	2.9	58
37	Tropical tree seedling growth responses to nitrogen, phosphorus and potassium addition. *Journal of Ecology*, **2012**, 100, 309-316	6	166
36	Potassium, phosphorus, or nitrogen limit root allocation, tree growth, or litter production in a lowland tropical forest. *Ecology*, **2011**, 92, 1616-25	4.6	379
35	Global patterns of leaf mechanical properties. *Ecology Letters*, **2011**, 14, 301-12	10	314
34	Nonparametric tests for homogeneity of species assemblages: a data depth approach. *Biometrics*, **2011**, 67, 1481-8	1.8	11
33	Oceanographic anomalies and sea-level rise drive mangroves inland in the Pacific coast of Mexico. *Journal of Vegetation Science*, **2011**, 22, 143-151	3.1	63
32	Consequences of light absorptance in calculating electron transport rate of desert and succulent plants. *Photosynthetica*, **2011**, 49, 195-200	2.2	16
31	Plant water status and hydraulic conductance during flowering in the southern California coastal sage shrub Salvia mellifera (Lamiaceae). *American Journal of Botany*, **2011**, 98, 1286-92	2.7	18
30	Can Growth Form Classification Predict Litter Nutrient Dynamics and Decomposition Rates in Lowland Wet Forest?. *Biotropica*, **2010**, 42, 72-79	2.3	13
29	The incidence of crassulacean acid metabolism in Orchidaceae derived from carbon isotope ratios: a checklist of the flora of Panama and Costa Rica. *Botanical Journal of the Linnean Society*, **2010**, 163, 194-222	2.2	44
28	Compensatory growth responses to defoliation and light availability in two native Mexican woody plant species. *Journal of Tropical Ecology*, **2010**, 26, 163-171	1.3	9
27	A unique web resource for physiology, ecology and the environmental sciences: PrometheusWiki. *Functional Plant Biology*, **2010**, 37, 687	2.7	13
26	Carbon stable isotopic composition of soluble sugars in Tillandsia epiphytes varies in response to shifts in habitat. *Oecologia*, **2010**, 163, 583-90	2.9	5

25	Environmental regulation of carbon isotope composition and crassulacean acid metabolism in three plant communities along a water availability gradient. *Oecologia*, **2010**, 164, 871-80	2.9	9
24	Water relations of evergreen and drought-deciduous trees along a seasonally dry tropical forest chronosequence. *Oecologia*, **2010**, 164, 881-90	2.9	108
23	Hydraulic constraints on photosynthesis in subtropical evergreen broad leaf forest and pine woodland trees of the Florida Everglades. *Trees - Structure and Function*, **2010**, 24, 471-478	2.6	12
22	Belowground nitrogen dynamics in relation to hurricane damage along a tropical dry forest chronosequence. *Biogeochemistry*, **2010**, 98, 89-100	3.8	27
21	Crassulacean acid metabolism and epiphytism linked to adaptive radiations in the Orchidaceae. *Plant Physiology*, **2009**, 149, 1838-47	6.6	128
20	Correlated Evolution of Leaf Shape and Physiology in the Woody Sonchus Alliance (Asteraceae: Sonchinae) in Macaronesia. *International Journal of Plant Sciences*, **2009**, 170, 83-92	2.6	32
19	Fog interception by Sequoia sempervirens (D. Don) crowns decouples physiology from soil water deficit. *Plant, Cell and Environment*, **2009**, 32, 882-92	8.4	134
18	Why are non-photosynthetic tissues generally C enriched compared with leaves in C plants? Review and synthesis of current hypotheses. *Functional Plant Biology*, **2009**, 36, 199-213	2.7	304
17	Plant species traits are the predominant control on litter decomposition rates within biomes worldwide. *Ecology Letters*, **2008**, 11, 1065-71	10	1605
16	Extending the leaf economics spectrum to decomposition: evidence from a tropical forest. *Ecology*, **2007**, 88, 1126-31	4.6	108
15	A review of volatile analytical methods for determining the botanical origin of honey. *Food Chemistry*, **2007**, 103, 1032-1043	8.5	182
14	Leaf functional traits of tropical forest plants in relation to growth form. *Functional Ecology*, **2007**, 21, 19	5.6	140
13	Nighttime transpiration in woody plants from contrasting ecosystems. *Tree Physiology*, **2007**, 27, 561-75	4.2	318
12	Use of Coarse Woody Debris by the Plant Community of a Hawaiian Montane Cloud Forest1. *Biotropica*, **2006**, 32, 633-641	2.3	8
11	A comparison of sap flow measurements and potometry in two tropical lowland tree species with contrasting wood properties. *Revista De Biologia Tropical*, **2006**, 54, 73-81	1.3	8
10	Distribution of crassulacean acid metabolism in orchids of Panama: evidence of selection for weak and strong modes. *Functional Plant Biology*, **2005**, 32, 397-407	2.7	98
9	Nutrient cycling and plant–soil feedbacks along a precipitation gradient in lowland Panama. *Journal of Tropical Ecology*, **2005**, 21, 461-470	1.3	74
8	Leaf productivity along a precipitation gradient in lowland Panama: patterns from leaf to ecosystem. *Trees - Structure and Function*, **2005**, 19, 349-356	2.6	42

7	Coordinated changes in photosynthesis, water relations and leaf nutritional traits of canopy trees along a precipitation gradient in lowland tropical forest. *Oecologia*, **2004**, 139, 495-502	2.9	125
6	Leaf photosynthetic traits scale with hydraulic conductivity and wood density in Panamanian forest canopy trees. *Oecologia*, **2004**, 140, 543-50	2.9	389
5	A Test of Gas Exchange Measurements on Excised Canopy Branches of Ten Tropical Tree Species. *Photosynthetica*, **2003**, 41, 343-347	2.2	26
4	Use of Coarse Woody Debris by the Plant Community of a Hawaiian Montane Cloud Forest1. *Biotropica*, **2000**, 32, 633	2.3	46
3	Transpiration and forest structure in relation to soil waterlogging in a Hawaiian montane cloud forest. *Tree Physiology*, **2000**, 20, 673-681	4.2	87
2	Morphological and Physiological Responses of Hawaiian Hibiscus tiliaceus Populations to Light and Salinity. *International Journal of Plant Sciences*, **2000**, 161, 99-106	2.6	16
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