Ismael Aranda

List of Publications by Year
in descending order

91 papers	3,912 citations	94269 37 h-index	138251 58 g-index
93 all docs	93 docs citations	93 times ranked	4088 citing authors

#	Article	IF	Citations
1	The greater seedling high-light tolerance of Quercus robur over Fagus sylvatica is linked to a greater physiological plasticity. Trees - Structure and Function, 2002, 16, 395-403.	0.9	244
2	Phenotypic plasticity and local adaptation in leaf ecophysiological traits of 13 contrasting cork oak populations under different water availabilities. Tree Physiology, 2010, 30, 618-627.	1.4	160
3	Effects of the interaction between drought and shade on water relations, gas exchange and morphological traits in cork oak (Quercus suber L.) seedlings. Forest Ecology and Management, 2005, 210, 117-129.	1.4	137
4	Water relations and gas exchange in Fagus sylvatica L. and Quercus petraea (Mattuschka) Liebl. in a mixed stand at their southern limit of distribution in Europe. Trees - Structure and Function, 2000, 14, 344-352.	0.9	119
5	Metabolomics demonstrates divergent responses of two Eucalyptus species to water stress. Metabolomics, 2012, 8, 186-200.	1.4	113
6	Population differences in juvenile survival under increasing drought are mediated by seed size in cork oak (Quercus suber L.). Forest Ecology and Management, 2009, 257, 1676-1683.	1.4	109
7	Intra-specific variability in biomass partitioning and carbon isotopic discrimination under moderate drought stress in seedlings from four Pinus pinaster populations. Tree Genetics and Genomes, 2010, 6, 169-178.	0.6	106
8	Responses to water stress of gas exchange and metabolites in Eucalyptus and Acacia spp.. Plant, Cell and Environment, 2011, 34, 1609-1629.	2.8	105
9	Shade tolerance, photoinhibition sensitivity and phenotypic plasticity of Ilex aquifolium in continental Mediterranean sites. Tree Physiology, 2005, 25, 1041-1052.	1.4	101
10	Water-use efficiency in cork oak (Quercus suber) is modified by the interaction of water and light availabilities. Tree Physiology, 2007, 27, 671-677.	1.4	94
11	Effects of drought on mesophyll conductance and photosynthetic limitations at different tree canopy layers. Plant, Cell and Environment, 2013, 36, 1961-1980.	2.8	94
12	Anatomical basis of the change in leaf mass per area and nitrogen investment with relative irradiance within the canopy of eight temperate tree species. Acta Oecologica, 2004, 25, 187-195.	0.5	88
13	Elucidating the role of genetic drift and natural selection in cork oak differentiation regarding drought tolerance. Molecular Ecology, 2009, 18, 3803-3815.	2.0	83
14	Variation in photosynthetic performance and hydraulic architecture across European beech (Fagus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 35, 34-46.	1.4	83
15	Species-specific water use by forest tree species: From the tree to the stand. Agricultural Water Management, 2012, 114, 67-77.	2.4	80
16	Epigenetic Variability in the Genetically Uniform Forest Tree Species Pinus pinea L. PLoS ONE, 2014, 9, e103145.	1.1	77
17	Seasonal changes in apparent hydraulic conductance and their implications for water use of European beech (Fagus sylvatica L.) and sessile oak [Quercus petraea (Matt.) Liebl] in South Europe. Plant Ecology, 2005, 179, 155-167.	0.7	75
18	Droughtâ€induced shoot dieback starts with massive root xylem embolism and variable depletion of nonstructural carbohydrates in seedlings of two tree species. New Phytologist, 2017, 213, 597-610.	3.5	67

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19	Seasonal water relations of three broadleaved species (Fagus sylvatica L., Quercus petraea) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 5 Peninsula. Forest Ecology and Management, 1996, 84, 219-229.	1.4	66
20	Global transpiration data from sap flow measurements: the SAPFLUXNET database. Earth System Science Data, 2021, 13, 2607-2649.	3.7	65
21	Genetic control of functional traits related to photosynthesis and water use efficiency in Pinus pinaster Ait. drought response: integration of genome annotation, allele association and QTL detection for candidate gene identification. BMC Genomics, 2014, 15, 464.	1.2	64
22	Extreme droughts affecting Mediterranean tree speciesâ€™ growth and water-use efficiency: the importance of timing. Tree Physiology, 2018, 38, 1127-1137.	1.4	62
23	Variation in functional leaf traits among beech provenances during a Spanish summer reflects the differences in their origin. Tree Genetics and Genomes, 2012, 8, 1111-1121.	0.6	59
24	Factors affecting cork oak growth under dry conditions: local adaptation and contrasting additive genetic variance within populations. Tree Genetics and Genomes, 2011, 7, 285-295.	0.6	57
25	Differences in the leaf functional traits of six beech (Fagus sylvatica L.) populations are reflected in their response to water limitation. Environmental and Experimental Botany, 2013, 87, 110-119.	2.0	56
26	Flushing phenology and fitness of European beech (Fagus sylvatica L.) provenances from a trial in La Rioja, Spain, segregate according to their climate of origin. Agricultural and Forest Meteorology, 2013, 180, 76-85.	1.9	55
27	Thermal acclimation of leaf dark respiration of beech seedlings experiencing summer drought in high and low light environments. Tree Physiology, 2010, 30, 214-224.	1.4	49
28	Nonâ€targeted Metabolomic Profile of Fagus Sylvatica L. Leaves using Liquid Chromatography with Mass Spectrometry and Gas Chromatography with Mass Spectrometry. Phytochemical Analysis, 2015, 26, 171-182.	1.2	47
29	Organ-specific metabolic responses to drought in Pinus pinaster Ait.. Plant Physiology and Biochemistry, 2016, 102, 17-26.	2.8	47
30	Correlated evolution of morphology, gas exchange, growth rates and hydraulics as a response to precipitation and temperature regimes in oaks (Quercus). New Phytologist, 2020, 227, 794-809.	3.5	45
31	Xylem and Leaf Functional Adjustments to Drought in Pinus sylvestris and Quercus pyrenaica at Their Elevational Boundary. Frontiers in Plant Science, 2017, 8, 1200.	1.7	44
32	Summer drought impedes beech seedling performance more in a sub-Mediterranean forest understory than in small gaps. Tree Physiology, 2008, 29, 249-259.	1.4	43
33	Mini-cuttings: an effective technique for the propagation of Pinus pinaster Ait.. New Forests, 2011, 41, 399-412.	0.7	43
34	Functional and genetic characterization of gas exchange and intrinsic water use efficiency in a full-sib family of Pinus pinaster Ait. in response to drought. Tree Physiology, 2012, 32, 94-103.	1.4	43
35	Effects of thinning in a Pinus sylvestris L. stand on foliar water relations of Fagus sylvatica L. seedlings planted within the pinewood. Trees - Structure and Function, 2001, 15, 358-364.	0.9	40
36	Light response in seedlings of a temperate (Quercus petraea) and a sub-Mediterranean species (Quercus pyrenaica): contrasting ecological strategies as potential keys to regeneration performance in mixed marginal populations. Plant Ecology, 2008, 195, 273-285.	0.7	40

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37	Functional performance of oak seedlings naturally regenerated across microhabitats of distinct overstorey canopy closure. New Forests, 2010, 39, 245-259.	0.7	39
38	Population variation and natural selection on leaf traits in cork oak throughout its distribution range. Acta Oecologica, 2014, 58, 49-56.	0.5	39
39	Leaf metabolic response to water deficit in Pinus pinaster Ait. relies upon ontogeny and genotype. Environmental and Experimental Botany, 2017, 140, 41-55.	2.0	39
40	Intraspecific variation in growth and allocation patterns in seedlings of Pinus pinaster Ait. submitted to contrasting watering regimes: can water availability explain regional variation?. Annals of Forest Science, 2010, 67, 505-504.	0.8	38
41	Inter-clonal variation in functional traits in response to drought for a genetically homogeneous Mediterranean conifer. Environmental and Experimental Botany, 2011, 70, 104-109.	2.0	37
42	Influence of environmental conditions on germinant survival and diversity of Scots pine (Pinus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	1.1	34
43	Dehydrins in maritime pine (Pinus pinaster) and their expression related to drought stress response. Tree Genetics and Genomes, 2012, 8, 957-973.	0.6	34
44	Developmental constraints limit the response of Canary Island pine seedlings to combined shade and drought. Forest Ecology and Management, 2006, 231, 164-168.	1.4	33
45	Improvement of growth conditions and gas exchange of Fagus sylvatica L. seedlings planted below a recently thinned Pinus sylvestris L. stand. Trees - Structure and Function, 2004, 18, 211-220.	0.9	32
46	Differential impact of the most extreme drought event over the last half century on growth and sap flow in two coexisting Mediterranean trees. Plant Ecology, 2014, 215, 703-719.	0.7	32
47	Mediterranean trees coping with severe drought: Avoidance might not be safe. Environmental and Experimental Botany, 2018, 155, 529-540.	2.0	31
48	Ability to avoid water stress in seedlings of two oak species is lower in a dense forest understory than in a medium canopy gap. Forest Ecology and Management, 2008, 255, 421-430.	1.4	30
49	Intra-population variability in the drought response of a beech (Fagus sylvatica L.) population in the southwest of Europe. Tree Physiology, 2017, 37, 938-949.	1.4	30
50	Assessment of salt tolerance in Populus alba clones using chlorophyll fluorescence. Photosynthetica, 2006, 44, 169-173.	0.9	29
51	Water relations of cork oak (Quercus suber L.) seedlings in response to shading and moderate drought. Annals of Forest Science, 2005, 62, 377-384.	0.8	28
52	Effects of relative irradiance on the leaf structure of Fagus sylvatica L. seedlings planted in the understory of a Pinus sylvestris L. stand after thinning. Annals of Forest Science, 2001, 58, 673-680.	0.8	27
53	Physiological responses of Fagus sylvatica L. seedlings under Pinus sylvestris L. and Quercus pyrenaica Willd. overstories. Forest Ecology and Management, 2002, 162, 153-164.	1.4	24
54	Exploring the impact of neutral evolution on intrapopulation genetic differentiation in functional traits in a long-lived plant. Tree Genetics and Genomes, 2014, 10, 1181-1190.	0.6	24

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55	Understanding the importance of intrapopulation functional variability and phenotypic plasticity in Quercus suber. Tree Genetics and Genomes, 2015, 11, 1.	0.6	24
56	Influence of overstory density on understory light, soil moisture, and survival of two underplanted oak species in a Mediterranean montane Scots pine forest. Investigacion Agraria Sistemas Y Recursos Forestales, 2008, 17, 31.	0.4	24
57	Drought Response in Forest Trees: From the Species to the Gene. , 2012, , 293-333.		23
58	Acclimation to light in seedlings of Quercus petraea (Mattuschka) Liebl. and Quercus pyrenaica Willd. planted along a forest-edge gradient. Trees - Structure and Function, 2006, 21, 45-54.	0.9	22
59	Ecophysiological and metabolic response patterns to drought under controlled condition in open-pollinated maternal families from a Fagus sylvatica L. population. Environmental and Experimental Botany, 2018, 150, 209-221.	2.0	20
60	Light acclimation at the end of the growing season in two broadleaved oak species. Photosynthetica, 2011, 49, 581-592.	0.9	19
61	Seedlings from marginal and core populations of European beech (Fagus sylvatica L.) respond differently to imposed drought and shade. Trees - Structure and Function, 2021, 35, 53-67.	0.9	19
62	Towards a statistically robust determination of minimum water potential and hydraulic risk in plants. New Phytologist, 2021, 232, 404-417.	3.5	19
63	Specific leaf metabolic changes that underlie adjustment of osmotic potential in response to drought by four Quercus species. Tree Physiology, 2021, 41, 728-743.	1.4	16
64	Interactive responses of Quercus suber L. seedlings to light and mild water stress: effects on morphology and gas exchange traits. Annals of Forest Science, 2008, 65, 611-611.	0.8	15
65	Summer field performance of Quercus petraea (Matt.) Liebl and Quercus pyrenaica Willd seedlings, planted in three sites with contrasting canopy cover. New Forests, 2006, 33, 67-80.	0.7	14
66	Limited capacity to cope with excessive light in the open and with seasonal drought in the shade in Mediterranean Ilex aquifolium populations. Trees - Structure and Function, 2008, 22, 375-384.	0.9	14
67	Natural selection on cork oak: allele frequency reveals divergent selection in cork oak populations along a temperature cline. Evolutionary Ecology, 2010, 24, 1031-1044.	0.5	14
68	Fagus sylvatica L. provenances maintain different leaf metabolic profiles and functional response. Acta Oecologica, 2017, 82, 1-9.	0.5	14
69	The relevance of seed size in modulating leaf physiology and early plant performance in two tree species. Trees - Structure and Function, 2011, 25, 873-884.	0.9	13
70	Annotated genetic linkage maps of Pinus pinaster Ait. from a Central Spain population using microsatellite and gene based markers. BMC Genomics, 2012, 13, 527.	1.2	13
71	Nucleotide polymorphisms in a pine ortholog of theArabidopsisdegrading enzyme cellulase KORRIGAN are associated with early growth performance inPinus pinaster. Tree Physiology, 2015, 35, 1000-1006.	1.4	13
72	Inter-genotypic differences in drought tolerance of maritime pine are modified by elevated [CO2]. Annals of Botany, 2017, 120, 591-602.	1.4	13

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73	Metabolic response to elevated CO2 levels in Pinus pinaster Aiton needles in an ontogenetic and genotypic-dependent way. Plant Physiology and Biochemistry, 2018, 132, 202-212.	2.8	13
74	Leaf ecophysiological and metabolic response in Quercus pyrenaica Willd seedlings to moderate drought under enriched CO2 atmosphere. Journal of Plant Physiology, 2020, 244, 153083.	1.6	13
75	Contrasting species decline but high sensitivity to increasing water stress on a mixed pineâ€“oak ecotone. Journal of Ecology, 2021, 109, 109-124.	1.9	13
76	Contrasting responses facing peak drought in seedlings of two co-occurring oak species. Forestry, 2010, 83, 369-378.	1.2	12
77	Divergent phenological and leaf gas exchange strategies of two competing tree species drive contrasting responses to drought at their altitudinal boundary. Tree Physiology, 2018, 38, 1152-1165.	1.4	12
78	Rising [CO2] effect on leaf drought-induced metabolome in Pinus pinaster Aiton: Ontogenetic- and genotypic-specific response exhibit different metabolic strategies. Plant Physiology and Biochemistry, 2020, 149, 201-216.	2.8	12
79	Stomatal and non-stomatal limitations on leaf carbon assimilation in beech (Fagus sylvatica L.) seedlings under natural conditions. Forest Systems, 2012, 21, 405.	0.1	12
80	Geographical variation in growth form traits in Quercus suber and its relation to population evolutionary history. Evolutionary Ecology, 2014, 28, 55-68.	0.5	11
81	Can CO2 enrichment modify the effect of water and high light stress on biomass allocation and relative growth rate of cork oak seedlings?. Trees - Structure and Function, 2006, 20, 713-724.	0.9	9
82	Increased root investment can explain the higher survival of seedlings of â€˜mesicâ€™ Quercus suber than â€˜xericâ€™ Quercus ilex in sandy soils during a summer drought. Tree Physiology, 2019, 39, 64-75.	1.4	8
83	Drought escape can provide high grain yields under early droughtÂin lentils. Theoretical and Experimental Plant Physiology, 2019, 31, 273-286.	1.1	8
84	The Role of Mesophyll Conductance in Oak Photosynthesis: Among- and Within-Species Variability. Tree Physiology, 2017, , 303-325.	0.9	6
85	Fragmentation reduces severe drought impacts on tree functioning in holm oak forests. Environmental and Experimental Botany, 2020, 173, 104001.	2.0	5
86	Scion-rootstock interaction and drought systemic effect modulate the organ-specific terpene profiles in grafted Pinus pinaster Ait. Environmental and Experimental Botany, 2021, 186, 104437.	2.0	5
87	Thinking in the sustainability of Nothofagus antarctica silvopastoral systems, how differ the responses of seedlings from different provenances to water shortage?. Agroforestry Systems, 2019, 93, 689-701.	0.9	4
88	Elevated atmospheric CO2 does not modify osmotic adjustment to light and drought in the Mediterranean oak Quercus suber L.. Investigacion Agraria Sistemas Y Recursos Forestales, 2008, 17, 3.	0.4	4
89	The uniqueness of conifers. , 2013, , 67-96.		3
90	Aerial and underground organs display specific metabolic strategies to cope with water stress under rising atmospheric <scp>CO₂</scp> in <scp>Fagus sylvatica</scp> L.. Physiologia Plantarum, 2022, 174, e13711.	2.6	3

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91	Analysis of adaptive responses of Pinus pinaster to changing environmental conditions in the Mediterranean region. BMC Proceedings, 2011, 5, P87.	1.8	2