

# Ismael Aranda

## List of Publications by Year in descending order

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91  
papers

3,912  
citations

94433

37  
h-index

138484

58  
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93  
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93  
docs citations

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times ranked

4088  
citing authors

#	ARTICLE	IF	CITATIONS
1	Aerial and underground organs display specific metabolic strategies to cope with water stress under rising atmospheric $\text{CO}_2$ in <i>Fagus sylvatica</i> L. <i>Physiologia Plantarum</i> , 2022, 174, e13711.	5.2	3
2	Contrasting species decline but high sensitivity to increasing water stress on a mixed pine-oak ecotone. <i>Journal of Ecology</i> , 2021, 109, 109-124.	4.0	13
3	Seedlings from marginal and core populations of European beech ( <i>Fagus sylvatica</i> L.) respond differently to imposed drought and shade. <i>Trees - Structure and Function</i> , 2021, 35, 53-67.	1.9	19
4	Global transpiration data from sap flow measurements: the SAPFLUXNET database. <i>Earth System Science Data</i> , 2021, 13, 2607-2649.	9.9	65
5	Scion-rootstock interaction and drought systemic effect modulate the organ-specific terpene profiles in grafted <i>Pinus pinaster</i> Ait. <i>Environmental and Experimental Botany</i> , 2021, 186, 104437.	4.2	5
6	Towards a statistically robust determination of minimum water potential and hydraulic risk in plants. <i>New Phytologist</i> , 2021, 232, 404-417.	7.3	19
7	Specific leaf metabolic changes that underlie adjustment of osmotic potential in response to drought by four <i>Quercus</i> species. <i>Tree Physiology</i> , 2021, 41, 728-743.	3.1	16
8	Correlated evolution of morphology, gas exchange, growth rates and hydraulics as a response to precipitation and temperature regimes in oaks ( <i>Quercus</i> ). <i>New Phytologist</i> , 2020, 227, 794-809.	7.3	45
9	Leaf ecophysiological and metabolic response in <i>Quercus pyrenaica</i> Willd seedlings to moderate drought under enriched $\text{CO}_2$ atmosphere. <i>Journal of Plant Physiology</i> , 2020, 244, 153083.	3.5	13
10	Rising $[\text{CO}_2]$ effect on leaf drought-induced metabolome in <i>Pinus pinaster</i> Aiton: Ontogenetic- and genotypic-specific response exhibit different metabolic strategies. <i>Plant Physiology and Biochemistry</i> , 2020, 149, 201-216.	5.8	12
11	Fragmentation reduces severe drought impacts on tree functioning in holm oak forests. <i>Environmental and Experimental Botany</i> , 2020, 173, 104001.	4.2	5
12	Increased root investment can explain the higher survival of seedlings of <i>Q. mesica</i> <i>Quercus suber</i> than <i>Q. xeric</i> <i>Quercus ilex</i> in sandy soils during a summer drought. <i>Tree Physiology</i> , 2019, 39, 64-75.	3.1	8
13	Drought escape can provide high grain yields under early drought in lentils. <i>Theoretical and Experimental Plant Physiology</i> , 2019, 31, 273-286.	2.4	8
14	Thinking in the sustainability of <i>Nothofagus antarctica</i> silvopastoral systems, how differ the responses of seedlings from different provenances to water shortage?. <i>Agroforestry Systems</i> , 2019, 93, 689-701.	2.0	4
15	Divergent phenological and leaf gas exchange strategies of two competing tree species drive contrasting responses to drought at their altitudinal boundary. <i>Tree Physiology</i> , 2018, 38, 1152-1165.	3.1	12
16	Ecophysiological and metabolic response patterns to drought under controlled condition in open-pollinated maternal families from a <i>Fagus sylvatica</i> L. population. <i>Environmental and Experimental Botany</i> , 2018, 150, 209-221.	4.2	20
17	Extreme droughts affecting Mediterranean tree species growth and water-use efficiency: the importance of timing. <i>Tree Physiology</i> , 2018, 38, 1127-1137.	3.1	62
18	Metabolic response to elevated $\text{CO}_2$ levels in <i>Pinus pinaster</i> Aiton needles in an ontogenetic and genotypic-dependent way. <i>Plant Physiology and Biochemistry</i> , 2018, 132, 202-212.	5.8	13

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19	Mediterranean trees coping with severe drought: Avoidance might not be safe. <i>Environmental and Experimental Botany</i> , 2018, 155, 529-540.	4.2	31
20	<i>Fagus sylvatica</i> L. provenances maintain different leaf metabolic profiles and functional response. <i>Acta Oecologica</i> , 2017, 82, 1-9.	1.1	14
21	Leaf metabolic response to water deficit in <i>Pinus pinaster</i> Ait. relies upon ontogeny and genotype. <i>Environmental and Experimental Botany</i> , 2017, 140, 41-55.	4.2	39
22	Intra-population variability in the drought response of a beech ( <i>Fagus sylvatica</i> L.) population in the southwest of Europe. <i>Tree Physiology</i> , 2017, 37, 938-949.	3.1	30
23	The Role of Mesophyll Conductance in Oak Photosynthesis: Among- and Within-Species Variability. <i>Tree Physiology</i> , 2017, , 303-325.	2.5	6
24	Inter-genotypic differences in drought tolerance of maritime pine are modified by elevated [CO <sub>2</sub> ]. <i>Annals of Botany</i> , 2017, 120, 591-602.	2.9	13
25	Drought-induced shoot dieback starts with massive root xylem embolism and variable depletion of nonstructural carbohydrates in seedlings of two tree species. <i>New Phytologist</i> , 2017, 213, 597-610.	7.3	67
26	Xylem and Leaf Functional Adjustments to Drought in <i>Pinus sylvestris</i> and <i>Quercus pyrenaica</i> at Their Elevational Boundary. <i>Frontiers in Plant Science</i> , 2017, 8, 1200.	3.6	44
27	Organ-specific metabolic responses to drought in <i>Pinus pinaster</i> Ait.. <i>Plant Physiology and Biochemistry</i> , 2016, 102, 17-26.	5.8	47
28	Non-targeted Metabolomic Profile of <i>Fagus Sylvatica</i> L. Leaves using Liquid Chromatography with Mass Spectrometry and Gas Chromatography with Mass Spectrometry. <i>Phytochemical Analysis</i> , 2015, 26, 171-182.	2.4	47
29	Variation in photosynthetic performance and hydraulic architecture across European beech ( <i>Fagus</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock 35, 34-46.	3.1	83
30	Understanding the importance of intrapopulation functional variability and phenotypic plasticity in <i>Quercus suber</i> . <i>Tree Genetics and Genomes</i> , 2015, 11, 1.	1.6	24
31	Nucleotide polymorphisms in a pine ortholog of the <i>Arabidopsis</i> degrading enzyme cellulase KORRIGAN are associated with early growth performance in <i>Pinus pinaster</i> . <i>Tree Physiology</i> , 2015, 35, 1000-1006.	3.1	13
32	Genetic control of functional traits related to photosynthesis and water use efficiency in <i>Pinus pinaster</i> Ait. drought response: integration of genome annotation, allele association and QTL detection for candidate gene identification. <i>BMC Genomics</i> , 2014, 15, 464.	2.8	64
33	Exploring the impact of neutral evolution on intrapopulation genetic differentiation in functional traits in a long-lived plant. <i>Tree Genetics and Genomes</i> , 2014, 10, 1181-1190.	1.6	24
34	Differential impact of the most extreme drought event over the last half century on growth and sap flow in two coexisting Mediterranean trees. <i>Plant Ecology</i> , 2014, 215, 703-719.	1.6	32
35	Population variation and natural selection on leaf traits in cork oak throughout its distribution range. <i>Acta Oecologica</i> , 2014, 58, 49-56.	1.1	39
36	Geographical variation in growth form traits in <i>Quercus suber</i> and its relation to population evolutionary history. <i>Evolutionary Ecology</i> , 2014, 28, 55-68.	1.2	11

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37	Epigenetic Variability in the Genetically Uniform Forest Tree Species <i>Pinus pinea</i> L. PLoS ONE, 2014, 9, e103145.	2.5	77
38	Flushing phenology and fitness of European beech ( <i>Fagus sylvatica</i> L.) provenances from a trial in La Rioja, Spain, segregate according to their climate of origin. Agricultural and Forest Meteorology, 2013, 180, 76-85.	4.8	55
39	Effects of drought on mesophyll conductance and photosynthetic limitations at different tree canopy layers. Plant, Cell and Environment, 2013, 36, 1961-1980.	5.7	94
40	Differences in the leaf functional traits of six beech ( <i>Fagus sylvatica</i> L.) populations are reflected in their response to water limitation. Environmental and Experimental Botany, 2013, 87, 110-119.	4.2	56
41	The uniqueness of conifers. , 2013, , 67-96.		3
42	Functional and genetic characterization of gas exchange and intrinsic water use efficiency in a full-sib family of <i>Pinus pinaster</i> Ait. in response to drought. Tree Physiology, 2012, 32, 94-103.	3.1	43
43	Dehydrins in maritime pine ( <i>Pinus pinaster</i> ) and their expression related to drought stress response. Tree Genetics and Genomes, 2012, 8, 957-973.	1.6	34
44	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.	1.6	59
45	Annotated genetic linkage maps of <i>Pinus pinaster</i> Ait. from a Central Spain population using microsatellite and gene based markers. BMC Genomics, 2012, 13, 527.	2.8	13
46	Drought Response in Forest Trees: From the Species to the Gene. , 2012, , 293-333.		23
47	Species-specific water use by forest tree species: From the tree to the stand. Agricultural Water Management, 2012, 114, 67-77.	5.6	80
48	Metabolomics demonstrates divergent responses of two <i>Eucalyptus</i> species to water stress. Metabolomics, 2012, 8, 186-200.	3.0	113
49	Stomatal and non-stomatal limitations on leaf carbon assimilation in beech ( <i>Fagus sylvatica</i> L.) seedlings under natural conditions. Forest Systems, 2012, 21, 405.	0.3	12
50	Responses to water stress of gas exchange and metabolites in <i>Eucalyptus</i> and <i>Acacia</i> spp.. Plant, Cell and Environment, 2011, 34, 1609-1629.	5.7	105
51	Inter-clonal variation in functional traits in response to drought for a genetically homogeneous Mediterranean conifer. Environmental and Experimental Botany, 2011, 70, 104-109.	4.2	37
52	Light acclimation at the end of the growing season in two broadleaved oak species. Photosynthetica, 2011, 49, 581-592.	1.7	19
53	Mini-cuttings: an effective technique for the propagation of <i>Pinus pinaster</i> Ait.. New Forests, 2011, 41, 399-412.	1.7	43
54	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.	1.6	57

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55	The relevance of seed size in modulating leaf physiology and early plant performance in two tree species. <i>Trees - Structure and Function</i> , 2011, 25, 873-884.	1.9	13
56	Analysis of adaptive responses of <i>Pinus pinaster</i> to changing environmental conditions in the Mediterranean region. <i>BMC Proceedings</i> , 2011, 5, P87.	1.6	2
57	Intraspecific variation in growth and allocation patterns in seedlings of <i>Pinus pinaster</i> Ait. submitted to contrasting watering regimes: can water availability explain regional variation?. <i>Annals of Forest Science</i> , 2010, 67, 505-504.	2.0	38
58	Functional performance of oak seedlings naturally regenerated across microhabitats of distinct overstorey canopy closure. <i>New Forests</i> , 2010, 39, 245-259.	1.7	39
59	Intra-specific variability in biomass partitioning and carbon isotopic discrimination under moderate drought stress in seedlings from four <i>Pinus pinaster</i> populations. <i>Tree Genetics and Genomes</i> , 2010, 6, 169-178.	1.6	106
60	Natural selection on cork oak: allele frequency reveals divergent selection in cork oak populations along a temperature cline. <i>Evolutionary Ecology</i> , 2010, 24, 1031-1044.	1.2	14
61	Contrasting responses facing peak drought in seedlings of two co-occurring oak species. <i>Forestry</i> , 2010, 83, 369-378.	2.3	12
62	Phenotypic plasticity and local adaptation in leaf ecophysiological traits of 13 contrasting cork oak populations under different water availabilities. <i>Tree Physiology</i> , 2010, 30, 618-627.	3.1	160
63	Thermal acclimation of leaf dark respiration of beech seedlings experiencing summer drought in high and low light environments. <i>Tree Physiology</i> , 2010, 30, 214-224.	3.1	49
64	Elucidating the role of genetic drift and natural selection in cork oak differentiation regarding drought tolerance. <i>Molecular Ecology</i> , 2009, 18, 3803-3815.	3.9	83
65	Population differences in juvenile survival under increasing drought are mediated by seed size in cork oak ( <i>Quercus suber</i> L.). <i>Forest Ecology and Management</i> , 2009, 257, 1676-1683.	3.2	109
66	Light response in seedlings of a temperate ( <i>Quercus petraea</i> ) and a sub-Mediterranean species ( <i>Quercus pyrenaica</i> ): contrasting ecological strategies as potential keys to regeneration performance in mixed marginal populations. <i>Plant Ecology</i> , 2008, 195, 273-285.	1.6	40
67	Limited capacity to cope with excessive light in the open and with seasonal drought in the shade in Mediterranean <i>Ilex aquifolium</i> populations. <i>Trees - Structure and Function</i> , 2008, 22, 375-384.	1.9	14
68	Interactive responses of <i>Quercus suber</i> L. seedlings to light and mild water stress: effects on morphology and gas exchange traits. <i>Annals of Forest Science</i> , 2008, 65, 611-611.	2.0	15
69	Ability to avoid water stress in seedlings of two oak species is lower in a dense forest understory than in a medium canopy gap. <i>Forest Ecology and Management</i> , 2008, 255, 421-430.	3.2	30
70	Summer drought impedes beech seedling performance more in a sub-Mediterranean forest understory than in small gaps. <i>Tree Physiology</i> , 2008, 29, 249-259.	3.1	43
71	Elevated atmospheric CO <sub>2</sub> does not modify osmotic adjustment to light and drought in the Mediterranean oak <i>Quercus suber</i> L.. <i>Investigacion Agraria Sistemas Y Recursos Forestales</i> , 2008, 17, 3.	0.4	4
72	Influence of overstorey density on understory light, soil moisture, and survival of two underplanted oak species in a Mediterranean montane Scots pine forest. <i>Investigacion Agraria Sistemas Y Recursos Forestales</i> , 2008, 17, 31.	0.4	24

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73	Water-use efficiency in cork oak ( <i>Quercus suber</i> ) is modified by the interaction of water and light availabilities. <i>Tree Physiology</i> , 2007, 27, 671-677.	3.1	94
74	Developmental constraints limit the response of Canary Island pine seedlings to combined shade and drought. <i>Forest Ecology and Management</i> , 2006, 231, 164-168.	3.2	33
75	Assessment of salt tolerance in <i>Populus alba</i> clones using chlorophyll fluorescence. <i>Photosynthetica</i> , 2006, 44, 169-173.	1.7	29
76	Summer field performance of <i>Quercus petraea</i> (Matt.) Liebl and <i>Quercus pyrenaica</i> Willd seedlings, planted in three sites with contrasting canopy cover. <i>New Forests</i> , 2006, 33, 67-80.	1.7	14
77	Can CO <sub>2</sub> enrichment modify the effect of water and high light stress on biomass allocation and relative growth rate of cork oak seedlings?. <i>Trees - Structure and Function</i> , 2006, 20, 713-724.	1.9	9
78	Acclimation to light in seedlings of <i>Quercus petraea</i> (Mattuschka) Liebl. and <i>Quercus pyrenaica</i> Willd. planted along a forest-edge gradient. <i>Trees - Structure and Function</i> , 2006, 21, 45-54.	1.9	22
79	Influence of environmental conditions on germinant survival and diversity of Scots pine ( <i>Pinus</i> ) Tj ETQq1 1 0.784314rgBT /Oyerlock 10	2.5	34
80	Water relations of cork oak ( <i>Quercus suber</i> L.) seedlings in response to shading and moderate drought. <i>Annals of Forest Science</i> , 2005, 62, 377-384.	2.0	28
81	Seasonal changes in apparent hydraulic conductance and their implications for water use of European beech ( <i>Fagus sylvatica</i> L.) and sessile oak [ <i>Quercus petraea</i> (Matt.) Liebl] in South Europe. <i>Plant Ecology</i> , 2005, 179, 155-167.	1.6	75
82	Shade tolerance, photoinhibition sensitivity and phenotypic plasticity of <i>Ilex aquifolium</i> in continental Mediterranean sites. <i>Tree Physiology</i> , 2005, 25, 1041-1052.	3.1	101
83	Effects of the interaction between drought and shade on water relations, gas exchange and morphological traits in cork oak ( <i>Quercus suber</i> L.) seedlings. <i>Forest Ecology and Management</i> , 2005, 210, 117-129.	3.2	137
84	Improvement of growth conditions and gas exchange of <i>Fagus sylvatica</i> L. seedlings planted below a recently thinned <i>Pinus sylvestris</i> L. stand. <i>Trees - Structure and Function</i> , 2004, 18, 211-220.	1.9	32
85	Anatomical basis of the change in leaf mass per area and nitrogen investment with relative irradiance within the canopy of eight temperate tree species. <i>Acta Oecologica</i> , 2004, 25, 187-195.	1.1	88
86	Physiological responses of <i>Fagus sylvatica</i> L. seedlings under <i>Pinus sylvestris</i> L. and <i>Quercus pyrenaica</i> Willd. overstories. <i>Forest Ecology and Management</i> , 2002, 162, 153-164.	3.2	24
87	The greater seedling high-light tolerance of <i>Quercus robur</i> over <i>Fagus sylvatica</i> is linked to a greater physiological plasticity. <i>Trees - Structure and Function</i> , 2002, 16, 395-403.	1.9	244
88	Effects of relative irradiance on the leaf structure of <i>Fagus sylvatica</i> L. seedlings planted in the understory of a <i>Pinus sylvestris</i> L. stand after thinning. <i>Annals of Forest Science</i> , 2001, 58, 673-680.	2.0	27
89	Effects of thinning in a <i>Pinus sylvestris</i> L. stand on foliar water relations of <i>Fagus sylvatica</i> L. seedlings planted within the pinewood. <i>Trees - Structure and Function</i> , 2001, 15, 358-364.	1.9	40
90	Water relations and gas exchange in <i>Fagus sylvatica</i> L. and <i>Quercus petraea</i> (Mattuschka) Liebl. in a mixed stand at their southern limit of distribution in Europe. <i>Trees - Structure and Function</i> , 2000, 14, 344-352.	1.9	119

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91	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.	3.2	66