Fernando Valladares

List of Publications by Year in descending order

273 papers	26,596 citations	9264 74 h-index	7348 152 g-index
280 all docs	280 docs citations	280 times ranked	25072 citing authors

#	Article	IF	Citations
1	Novel ecosystems: theoretical and management aspects of the new ecological world order. Global Ecology and Biogeography, 2006, 15, 1-7.	5.8	1,528
2	Shade Tolerance, a Key Plant Feature of Complex Nature and Consequences. Annual Review of Ecology, Evolution, and Systematics, 2008, 39, 237-257.	8.3	1,110
3	Refining the stressâ€gradient hypothesis for competition and facilitation in plant communities. Journal of Ecology, 2009, 97, 199-205.	4.0	1,071
4	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	9.5	1,038
5	TOLERANCE TO SHADE, DROUGHT, AND WATERLOGGING OF TEMPERATE NORTHERN HEMISPHERE TREES AND SHRUBS. Ecological Monographs, 2006, 76, 521-547.	5.4	863
6	The GenTree Dendroecological Collection, tree-ring and wood density data from seven tree species across Europe. Scientific Data, 2020, 7, 1.	5.3	830
7	The effects of phenotypic plasticity and local adaptation on forecasts of species range shifts under climate change. Ecology Letters, 2014, 17, 1351-1364.	6.4	802
8	Ecological limits to plant phenotypic plasticity. New Phytologist, 2007, 176, 749-763.	7.3	764
9	Quantitative estimation of phenotypic plasticity: bridging the gap between the evolutionary concept and its ecological applications. Journal of Ecology, 2006, 94, 1103-1116.	4.0	711
10	Heat freezes niche evolution. Ecology Letters, 2013, 16, 1206-1219.	6.4	708
11	Biodiversity Differences between Managed and Unmanaged Forests: Metaâ€Analysis of Species Richness in Europe. Conservation Biology, 2010, 24, 101-112.	4.7	679
12	Is the change of plant-plant interactions with abiotic stress predictable? A meta-analysis of field results in arid environments. Journal of Ecology, 2005, 93, 748-757.	4.0	623
13	PLASTIC PHENOTYPIC RESPONSE TO LIGHT OF 16 CONGENERIC SHRUBS FROM A PANAMANIAN RAINFOREST. Ecology, 2000, 81, 1925-1936.	3.2	576
14	Extreme climatic events and vegetation: the role of stabilizing processes. Global Change Biology, 2012, 18, 797-805.	9.5	376
15	Interactions between water stress, sun-shade acclimation, heat tolerance and photoinhibition in the sclerophyll Heteromeles arbutifolia. Plant, Cell and Environment, 1997, 20, 25-36.	5.7	358
16	Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. New Phytologist, 2015, 206, 614-636.	7.3	350
17	Global change and the evolution of phenotypic plasticity in plants. Annals of the New York Academy of Sciences, 2010, 1206, 35-55.	3.8	341
18	Low leafâ€level response to light and nutrients in Mediterranean evergreen oaks: a conservative resourceâ€use strategy?. New Phytologist, 2000, 148, 79-91.	7.3	288

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19	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.	1.9	244
20	Biodiversity and ecosystem functioning relations in European forests depend on environmental context. Ecology Letters, 2017, 20, 1414-1426.	6.4	244
21	Crown architecture in sun and shade environments: assessing function and tradeâ€offs with a threeâ€dimensional simulation model. New Phytologist, 2005, 166, 791-800.	7.3	241
22	Estimation of leaf area index and covered ground from airborne laser scanner (Lidar) in two contrasting forests. Agricultural and Forest Meteorology, 2004, 124, 269-275.	4.8	231
23	Tree diversity does not always improve resistance of forest ecosystems to drought. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14812-14815.	7.1	228
24	Soil as a mediator in plantâ€plant interactions in a semiâ€arid community. Journal of Vegetation Science, 2004, 15, 85-92.	2.2	225
25	Drought can be more critical in the shade than in the sun: a field study of carbon gain and photo-inhibition in a Californian shrub during a dry El NiÃ±o year. Plant, Cell and Environment, 2002, 25, 749-759.	5.7	221
26	Photosynthetic Acclimation to Simultaneous and Interacting Environmental Stresses Along Natural Light Gradients: Optimality and Constraints. Plant Biology, 2004, 6, 254-268.	3.8	208
27	Biotic homogenization can decrease landscape-scale forest multifunctionality. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3557-3562.	7.1	196
28	Do we Underestimate the Importance of Leaf Size in Plant Economics? Disproportional Scaling of Support Costs Within the Spectrum of Leaf Physiognomy. Annals of Botany, 2007, 100, 283-303.	2.9	189
29	Photosynthetic responses to dynamic light under field conditions in six tropical rainforest shrubs occuring along a light gradient. Oecologia, 1997, 111, 505-514.	2.0	188
30	Shedding light on shade: ecological perspectives of understorey plant life. Plant Ecology and Diversity, 2016, 9, 237-251.	2.4	181
31	A novel comparative research platform designed to determine the functional significance of tree species diversity in European forests. Perspectives in Plant Ecology, Evolution and Systematics, 2013, 15, 281-291.	2.7	179
32	Competition for light and water play contrasting roles in driving diversityâ€“productivity relationships in Iberian forests. Journal of Ecology, 2014, 102, 1202-1213.	4.0	174
33	The stress-gradient hypothesis does not fit all relationships between plant-plant interactions and abiotic stress: further insights from arid environments. Journal of Ecology, 2006, 94, 17-22.	4.0	172
34	Convergence in light capture efficiencies among tropical forest understory plants with contrasting crown architectures: a case of morphological compensation. American Journal of Botany, 2002, 89, 1275-1284.	1.7	171
35	Performance of seedlings of Mediterranean woody species under experimental gradients of irradiance and water availability: tradeâ€offs and evidence for niche differentiation. New Phytologist, 2006, 170, 795-806.	7.3	168
36	Multispecies comparison reveals that invasive and native plants differ in their traits but not in their plasticity. Functional Ecology, 2011, 25, 1248-1259.	3.6	168

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37	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.	3.1	160
38	Mapping local and global variability in plant trait distributions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10937-E10946.	7.1	159
39	Photoinhibition and drought in Mediterranean woody saplings: scaling effects and interactions in sun and shade phenotypes. Journal of Experimental Botany, 2004, 56, 483-494.	4.8	149
40	The functional ecology of shoot architecture in sun and shade plants of Heteromeles arbutifolia M. Roem., a Californian chaparral shrub. Oecologia, 1998, 114, 1-10.	2.0	146
41	Plasticity, instability and canalization: is the phenotypic variation in seedlings of sclerophyll oaks consistent with the environmental unpredictability of Mediterranean ecosystems?. New Phytologist, 2002, 156, 457-467.	7.3	142
42	Non-linear effects of drought under shade: reconciling physiological and ecological models in plant communities. Oecologia, 2012, 169, 293-305.	2.0	139
43	Species coexistence in a changing world. Frontiers in Plant Science, 2015, 6, 866.	3.6	132
44	Ecological and evolutionary responses of Mediterranean plants to global change. Environmental and Experimental Botany, 2014, 103, 53-67.	4.2	130
45	Tradeoffs Between Irradiance Capture and Avoidance in Semi-arid Environments Assessed with a Crown Architecture Model. Annals of Botany, 1999, 83, 459-469.	2.9	127
46	Plasticity and stress tolerance override local adaptation in the responses of Mediterranean holm oak seedlings to drought and cold. Tree Physiology, 2008, 29, 87-98.	3.1	127
47	Response of tree seedlings to the abiotic heterogeneity generated by nurse shrubs: an experimental approach at different scales. Ecography, 2005, 28, 757-768.	4.5	125
48	Plant functional traits of dominant native and invasive species in mediterraneanâ€climate ecosystems. Ecology, 2016, 97, 75-83.	3.2	123
49	BAAD: a Biomass And Allometry Database for woody plants. Ecology, 2015, 96, 1445-1445.	3.2	122
50	Ecophysiological Traits Associated with Drought in Mediterranean Tree Seedlings: Individual Responses versus Interspecific Trends in Eleven Species. Plant Biology, 2006, 8, 688-697.	3.8	120
51	Leaf-level phenotypic variability and plasticity of invasive Rhododendron ponticum and non-invasive Ilex aquifolium co-occurring at two contrasting European sites. Plant, Cell and Environment, 2003, 26, 941-956.	5.7	119
52	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.	3.2	109
53	Fossil leaf economics quantified: calibration, Eocene case study, and implications. Paleobiology, 2007, 33, 574-589.	2.0	107
54	Environmental heterogeneity leads to higher plasticity in dryâ€edge populations of a semiâ€arid Chilean shrub: insights into climate change responses. Journal of Ecology, 2015, 103, 338-350.	4.0	107

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55	CO2 exchange and thallus nitrogen across 75 contrasting lichen associations from different climate zones. Oecologia, 2002, 133, 295-306.	2.0	105
56	Light Heterogeneity and Plants: from Ecophysiology to Species Coexistence and Biodiversity. Progress in Botany Fortschritte Der Botanik, 2003, , 439-471.	0.3	103
57	Differential light responses of Mediterranean tree saplings: linking ecophysiology with regeneration niche in four co-occurring species. Tree Physiology, 2006, 26, 947-958.	3.1	102
58	Shade tolerance, photoinhibition sensitivity and phenotypic plasticity of Ilex aquifolium in continental Mediterranean sites. Tree Physiology, 2005, 25, 1041-1052.	3.1	101
59	Is Shade Beneficial for Mediterranean Shrubs Experiencing Periods of Extreme Drought and Late-winter Frosts?. Annals of Botany, 2008, 102, 923-933.	2.9	96
60	Light interception efficiency explained by two simple variables: a test using a diversity of smallâ€•to mediumâ€sized woody plants. New Phytologist, 2012, 193, 397-408.	7.3	96
61	Occurrence of the Nonâ€Native Annual Bluegrass on the Antarctic Mainland and Its Negative Effects on Native Plants. Conservation Biology, 2012, 26, 717-723.	4.7	91
62	Global root traits (GRooT) database. Global Ecology and Biogeography, 2021, 30, 25-37.	5.8	90
63	Studying phenotypic plasticity: the advantages of a broad approach. Biological Journal of the Linnean Society, 2012, 105, 1-7.	1.6	89
64	Flowering phenology of invasive alien plant species compared with native species in three Mediterranean-type ecosystems. Annals of Botany, 2009, 103, 485-494.	2.9	87
65	Climate and soils together regulate photosynthetic carbon isotope discrimination within C₃ plants worldwide. Global Ecology and Biogeography, 2018, 27, 1056-1067.	5.8	85
66	A functional analysis of the crown architecture of tropical forest Psychotria species: do species vary in light capture efficiency and consequently in carbon gain and growth?. Oecologia, 2004, 139, 163-177.	2.0	83
67	Elucidating the role of genetic drift and natural selection in cork oak differentiation regarding drought tolerance. Molecular Ecology, 2009, 18, 3803-3815.	3.9	83
68	Disparity in elevational shifts of <scp>E</scp>uropean trees in response to recent climate warming. Global Change Biology, 2013, 19, 2490-2499.	9.5	83
69	The relative importance for plant invasiveness of trait means, and their plasticity and integration in a multivariate framework. New Phytologist, 2012, 195, 912-922.	7.3	82
70	Growth and carbon isotopes of Mediterranean trees reveal contrasting responses to increased carbon dioxide and drought. Oecologia, 2014, 174, 307-317.	2.0	81
71	Species-specific water use by forest tree species: From the tree to the stand. Agricultural Water Management, 2012, 114, 67-77.	5.6	80
72	Global trends in phenotypic plasticity of plants. Ecology Letters, 2021, 24, 2267-2281.	6.4	80

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73	Title is missing!. Plant and Soil, 2002, 240, 343-352.	3.7	79
74	Functional traits and plasticity in response to light in seedlings of four Iberian forest tree species. Tree Physiology, 2006, 26, 1425-1433.	3.1	78
75	Enhanced growth of Juniperus thurifera under a warmer climate is explained by a positive carbon gain under cold and drought. Tree Physiology, 2012, 32, 326-336.	3.1	78
76	Exploring Phenotypic Plasticity in the LichenRamalina capitata: Morphology, Water Relations and Chlorophyll Content in North- and South-facing Populations. Annals of Botany, 1997, 80, 345-353.	2.9	77
77	Leaf litter traits of invasive species slow down decomposition compared to Spanish natives: a broad phylogenetic comparison. Oecologia, 2010, 162, 781-790.	2.0	77
78	Plant Trait Variation along an Altitudinal Gradient in Mediterranean High Mountain Grasslands: Controlling the Species Turnover Effect. PLoS ONE, 2015, 10, e0118876.	2.5	77
79	Irradiance and oak seedling survival and growth in a heterogeneous environment. Forest Ecology and Management, 2007, 242, 462-469.	3.2	74
80	Intensity and timing of warming and drought differentially affect growth patterns of co-occurring Mediterranean tree species. European Journal of Forest Research, 2013, 132, 469-480.	2.5	74
81	Continental mapping of forest ecosystem functions reveals a high but unrealised potential for forest multifunctionality. Ecology Letters, 2018, 21, 31-42.	6.4	74
82	Different flowering phenology of alien invasive species in Spain: evidence for the use of an empty temporal niche?. Plant Biology, 2009, 11, 803-811.	3.8	71
83	The exploitative segregation of plant roots. Science, 2020, 370, 1197-1199.	12.6	70
84	Canopy structure and spatial heterogeneity of understory light in an abandoned Holm oak woodland. Annals of Forest Science, 2006, 63, 749-761.	2.0	69
85	Impact of three global change drivers on a Mediterranean shrub. Ecology, 2009, 90, 2609-2621.	3.2	68
86	Diverse guilds provide complementary dispersal services in a woodland expansion process after land abandonment. Journal of Applied Ecology, 2014, 51, 1701-1711.	4.0	68
87	Early Dynamics of Plant Communities on Revegetated Motorway Slopes from Southern Spain: Is Hydroseeding Always Needed?. Restoration Ecology, 2006, 14, 297-307.	2.9	67
88	Does growth irradiance affect temperature dependence and thermal acclimation of leaf respiration? Insights from a Mediterranean tree with long-lived leaves. Plant, Cell and Environment, 2007, 30, 820-833.	5.7	67
89	Water stress responses of two Mediterranean tree species influenced by native soil microorganisms and inoculation with a plant growth promoting rhizobacterium. Tree Physiology, 2008, 28, 1693-1701.	3.1	67
90	The 2018 European heatwave led to stem dehydration but not to consistent growth reductions in forests. Nature Communications, 2022, 13, 28.	12.8	66

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91	Phenotypic plasticity blurs ecotypic divergence in the response of Quercus coccifera and Pinus halepensis to water stress. European Journal of Forest Research, 2008, 127, 495-506.	2.5	65
92	Plasticity in reproduction and growth among 52 rangeâ€wide populations of a <scp>M</scp>editerranean conifer: adaptive responses to environmental stress. Journal of Evolutionary Biology, 2013, 26, 1912-1924.	1.7	65
93	Global transpiration data from sap flow measurements: the SAPFLUXNET database. Earth System Science Data, 2021, 13, 2607-2649.	9.9	65
94	Dominant plant species modulate responses to hydroseeding, irrigation and fertilization during the restoration of semiarid motorway slopes. Ecological Engineering, 2010, 36, 1290-1298.	3.6	63
95	Extreme droughts affecting Mediterranean tree speciesâ€™ growth and water-use efficiency: the importance of timing. Tree Physiology, 2018, 38, 1127-1137.	3.1	62
96	Edge effects on epiphytic communities in a Mediterranean Quercus pyrenaica forest. Journal of Vegetation Science, 2007, 18, 81-90.	2.2	61
97	Recent Warming and Cooling in the Antarctic Peninsula Region has Rapid and Large Effects on Lichen Vegetation. Scientific Reports, 2017, 7, 5689.	3.3	61
98	The geometry of light interception by shoots of Heteromeles arbutifolia : morphological and physiological consequences for individual leaves. Oecologia, 1999, 121, 171-182.	2.0	60
99	Forests are not immune to plant invasions: phenotypic plasticity and local adaptation allow Prunella vulgaris to colonize a temperate evergreen rainforest. Biological Invasions, 2011, 13, 1615-1625.	2.4	60
100	Distribution and abundance of vines along the light gradient in a southern temperate rain forest. Journal of Vegetation Science, 2010, 21, 66-73.	2.2	58
101	Identifying the tree species compositions that maximize ecosystem functioning in European forests. Journal of Applied Ecology, 2019, 56, 733-744.	4.0	58
102	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
103	Inferring plant functional diversity from space: the potential of Sentinel-2. Remote Sensing of Environment, 2019, 233, 111368.	11.0	56
104	Differential and interactive effects of temperature and photoperiod on budburst and carbon reserves in two coâ€occurring Mediterranean oaks. Plant Biology, 2009, 11, 142-151.	3.8	54
105	Differences between structural and functional environmental heterogeneity caused by seed dispersal. Functional Ecology, 2004, 18, 787-792.	3.6	53
106	How Much Ecology Do We Need to Know to Restore Mediterranean Ecosystems?. Restoration Ecology, 2007, 15, 363-368.	2.9	53
107	Drivers of earthworm incidence and abundance across European forests. Soil Biology and Biochemistry, 2016, 99, 167-178.	8.8	53
108	Temporal dynamics of herbivory and water availability interactively modulate the outcome of a grassâ€“shrub interaction in a semiâ€arid ecosystem. Oikos, 2011, 120, 710-719.	2.7	52

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109	Disproportionate carbon and water maintenance costs of large corollas in hot Mediterranean ecosystems. Perspectives in Plant Ecology, Evolution and Systematics, 2014, 16, 83-92.	2.7	52
110	Dynamics of understorey herbaceous plant diversity following shrub clearing of cork oak forests: A five-year study. Forest Ecology and Management, 2008, 255, 3242-3253.	3.2	51
111	Invasive species can handle higher leaf temperature under water stress than Mediterranean natives. Environmental and Experimental Botany, 2011, 71, 207-214.	4.2	50
112	Agricultural matrix affects differently the alpha and beta structural and functional diversity of soil microbial communities in a fragmented Mediterranean holm oak forest. Soil Biology and Biochemistry, 2016, 92, 79-90.	8.8	50
113	The uncoupling of secondary growth, cone and litter production by intradecadal climatic variability in a mediterranean scots pine forest. Forest Ecology and Management, 2007, 253, 19-29.	3.2	47
114	Patterns and ecological consequences of abiotic heterogeneity in managed cork oak forests of Southern Spain. Ecological Research, 2008, 23, 127-139.	1.5	47
115	Norway maple displays greater seasonal growth and phenotypic plasticity to light than native sugar maple. Tree Physiology, 2012, 32, 1339-1347.	3.1	47
116	Phenotypic plasticity to light of two congeneric trees from contrasting habitats: Brazilian Atlantic Forest versus cerrado (savanna). Plant Biology, 2012, 14, 208-215.	3.8	46
117	Competition may explain the fineâ€scale spatial patterns and genetic structure of two coâ€occurring plant congeners. Journal of Ecology, 2011, 99, 838-848.	4.0	44
118	UV radiation increases phenolic compound protection but decreases reproduction in Silene littorea. PLoS ONE, 2020, 15, e0231611.	2.5	44
119	Plasticity influencing the light compensation point offsets the specialization for light niches across shrub species in a tropical forest understorey. Journal of Ecology, 2013, 101, 971-980.	4.0	42
120	Effects of forest fragmentation on the oakâ€“rodent mutualism. Oikos, 2015, 124, 1482-1491.	2.7	42
121	Traits fonctionnels et plasticitÃ© en relation avec les performances de semis de ligneux mÃ©diterranÃ©ens sous ombrage et en situation de sÃ©cheresse. Annals of Forest Science, 2008, 65, 311-311.	2.0	41
122	Homeostasis of respiration under drought and its important consequences for foliar carbon balance in a drier climate: insights from two contrasting Acacia species. Functional Plant Biology, 2010, 37, 323.	2.1	41
123	Contrasting growth and mortality responses to climate warming of two pine species in a continental Mediterranean ecosystem. Forest Ecology and Management, 2016, 363, 149-158.	3.2	41
124	The Ratio of Leaf to Total Photosynthetic Area Influences Shade Survival and Plastic Response to Light of Green-stemmed Leguminous Shrub Seedlings. Annals of Botany, 2003, 91, 577-584.	2.9	40
125	Climbing plants in a temperate rainforest understorey: searching for high light or coping with deep shade?. Annals of Botany, 2011, 108, 231-239.	2.9	40
126	Fungal disease incidence along tree diversity gradients depends on latitude in European forests. Ecology and Evolution, 2016, 6, 2426-2438.	1.9	40

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127	Climatic factors shaping intraspecific leaf trait variation of a neotropical tree along a rainfall gradient. PLoS ONE, 2018, 13, e0208512.	2.5	40
128	Seedling survival responses toÂirradiance are differentially influenced byÂlow-water availability inÂfourÂtree species ofÂtheÂIberian cool temperateâ€“Mediterranean ecotone. Acta Oecologica, 2006, 30, 322-332.	1.1	39
129	Fall fertilization of Holm oak affects N and P dynamics, root growth potential, and post-planting phenology and growth. Annals of Forest Science, 2011, 68, 647-656.	2.0	39
130	Phenotypic correlates of potential range size and range filling in European trees. Perspectives in Plant Ecology, Evolution and Systematics, 2014, 16, 219-227.	2.7	39
131	Population variation and natural selection on leaf traits in cork oak throughout its distribution range. Acta Oecologica, 2014, 58, 49-56.	1.1	39
132	Title is missing!. Plant and Soil, 2002, 240, 253-262.	3.7	38
133	Leaf phyllotaxis: Does it really affect light capture?. Plant Ecology, 2004, 174, 11-17.	1.6	38
134	Direct and Indirect Effects of Climate on Demography and Early Growth of Pinus sylvestris at the Rear Edge: Changing Roles of Biotic and Abiotic Factors. PLoS ONE, 2013, 8, e59824.	2.5	38
135	Trait-based plant ecology: moving towards a unifying species coexistence theory. Oecologia, 2016, 180, 919-922.	2.0	38
136	A major trade-off between structural and photosynthetic investments operative across plant and needle ages in three Mediterranean pines. Tree Physiology, 2018, 38, 543-557.	3.1	38
137	Growth versus storage: responses of Mediterranean oak seedlings to changes in nutrient and water availabilities. Annals of Forest Science, 2007, 64, 201-210.	2.0	37
138	Global change and Mediterranean forests: current impacts and potential responses. , 2014, , 47-76.		37
139	Water Storage in the Lichen Family Umbilicariaceae. Botanica Acta, 1998, 111, 99-107.	1.6	36
140	Flower size and longevity influence florivory in the large-flowered shrub Cistus ladanifer. Acta Oecologica, 2011, 37, 418-421.	1.1	36
141	Intrathalline variability of some structural and physical parameters in the lichen genus Lasallia. Canadian Journal of Botany, 1994, 72, 415-428.	1.1	35
142	Tertiary relict trees in a Mediterranean climate: abiotic constraints on the persistence of Prunus lusitanica at the eroding edge of its range. Journal of Biogeography, 2008, 35, 1425-1435.	3.0	35
143	Influence of species interactions on transpiration of Mediterranean tree species during a summer drought. European Journal of Forest Research, 2015, 134, 365-376.	2.5	35
144	Taxonomic and ecological relevance of the chlorophyll a fluorescence signature of tree species in mixed European forests. New Phytologist, 2016, 212, 51-65.	7.3	35

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145	Conifer proportion explains fine root biomass more than tree species diversity and site factors in major European forest types. Forest Ecology and Management, 2017, 406, 330-350.	3.2	34
146	The Architecture of Plant Crowns. Books in Soils, Plants, and the Environment, 2007, , .	0.1	34
147	Functional traits related to seedling performance in the Mediterranean leguminous shrub Retama sphaerocarpa: Insights from a provenance, fertilization, and rhizobial inoculation study. Environmental and Experimental Botany, 2008, 64, 145-154.	4.2	33
148	Early-successional vegetation changes after roadside prairie restoration modify processes related with soil functioning by changing microbial functional diversity. Soil Biology and Biochemistry, 2011, 43, 1245-1253.	8.8	33
149	Improving revegetation of gypsum slopes is not a simple matter of adding native species: Insights from a multispecies experiment. Ecological Engineering, 2007, 30, 67-77.	3.6	32
150	Colonization of Abandoned Land by Juniperus thurifera Is Mediated by the Interaction of a Diverse Dispersal Assemblage and Environmental Heterogeneity. PLoS ONE, 2012, 7, e46993.	2.5	32
151	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.	1.6	32
152	Recruitment patterns of four tree species along elevation gradients in Mediterranean mountains: Not only climate matters. Forest Ecology and Management, 2016, 360, 287-296.	3.2	32
153	Phylogeny and the prediction of tree functional diversity across novel continental settings. Global Ecology and Biogeography, 2017, 26, 553-562.	5.8	31
154	Mediterranean trees coping with severe drought: Avoidance might not be safe. Environmental and Experimental Botany, 2018, 155, 529-540.	4.2	31
155	Structural controls on photosynthetic capacity through juvenileâ€toâ€adult transition and needle ageing in Mediterranean pines. Functional Ecology, 2018, 32, 1479-1491.	3.6	30
156	Unravelling the effect of species mixing on water use and drought stress in Mediterranean forests: A modelling approach. Agricultural and Forest Meteorology, 2021, 296, 108233.	4.8	30
157	Functional traits and phylogeny: What is the main ecological process determining species assemblage in roadside plant communities?. Journal of Vegetation Science, 2008, 19, 381-392.	2.2	29
158	Size Matters: Understanding the Conflict Faced by Large Flowers in Mediterranean Environments. Botanical Review, The, 2016, 82, 204-228.	3.9	29
159	Plastic Phenotypic Response to Light of 16 Congeneric Shrubs from a Panamanian Rainforest. Ecology, 2000, 81, 1925.	3.2	29
160	Assessing transpiration inÂtheÂtussock grass StipaÂtenacissima L.: theÂcrucial role ofÂtheÂinterplay between morphology andÂphysiology. Acta Oecologica, 2006, 30, 386-398.	1.1	28
161	Costs versus risks: Architectural changes with changing light quantity and quality in saplings of temperate rainforest trees of different shade tolerance. Austral Ecology, 2012, 37, 35-43.	1.5	28
162	Interactive effects of forest die-off and drying-rewetting cycles on C and N mineralization. Geoderma, 2019, 333, 81-89.	5.1	28

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163	A Simulation Study on the Importance of Size-related Changes in Leaf Morphology and Physiology for Carbon Gain in an Epiphytic Bromeliad. Annals of Botany, 2002, 90, 437-443.	2.9	27
164	Habitat Fragmentation can Modulate Drought Effects on the Plant-soil-microbial System in Mediterranean Holm Oak (Quercus ilex) Forests. Microbial Ecology, 2015, 69, 798-812.	2.8	27
165	Survival vs. growth trade-off in early recruitment challenges global warming impacts on Mediterranean mountain trees. Perspectives in Plant Ecology, Evolution and Systematics, 2015, 17, 369-378.	2.7	27
166	Functional Analysis of the Intrathalline and Intracellular Chlorophyll Concentrations in the Lichen Family Umbilicariaceae. Annals of Botany, 1996, 78, 471-477.	2.9	26
167	Ecosystem development in roadside grasslands: biotic control, plantâ€“soil interactions, and dispersal limitations. , 2011, 21, 2806-2821.		26
168	Previous Land Use Alters the Effect of Climate Change and Facilitation on Expanding Woodlands of Spanish Juniper. Ecosystems, 2012, 15, 564-579.	3.4	26
169	More than just drought: complexity of recruitment patterns in Mediterranean forests. Oecologia, 2014, 176, 997-1007.	2.0	26
170	The functional trait space of tree species is influenced by the species richness of the canopy and the type of forest. Oikos, 2019, 128, 1435-1445.	2.7	26
171	Rank reversals in tree growth along tree size, competition and climatic gradients for four forest canopy dominant species in Central Spain. Annals of Forest Science, 2008, 65, 605-605.	2.0	25
172	Which Extent is Plasticity to Light Involved in the Ecotypic Differentiation of a Tree Species from Savanna and Forest?. Biotropica, 2011, 43, 695-703.	1.6	25
173	Juvenileâ€“adult tree associations in a continental Mediterranean ecosystem: no evidence for sustained and general facilitation at increased aridity. Journal of Vegetation Science, 2012, 23, 164-175.	2.2	25
174	Leaf and stem physiological responses to summer and winter extremes of woody species across temperate ecosystems. Oikos, 2014, 123, 1281-1290.	2.7	25
175	Climateâ€dependent variations in leaf respiration in a dryâ€land, low productivity Mediterranean forest: the importance of acclimation in both highâ€light and shaded habitats. Functional Ecology, 2008, 22, 172-184.	3.6	24
176	Transgenerational effects of three global change drivers on an endemic Mediterranean plant. Oikos, 2010, 119, 1435-1444.	2.7	24
177	Predicting forest management effects on oakâ€“rodent mutualisms. Oikos, 2016, 125, 1445-1457.	2.7	24
178	Water Distribution in Foliose Lichen Species: Interactions between Method of Hydration, Lichen Substances and Thallus Anatomy. Annals of Botany, 2000, 86, 595-601.	2.9	23
179	NEW ULTRASTRUCTURAL ASPECTS OF PYRENOIDS OF THE LICHEN PHOTOBIONT TREBOUXIA (MICROTHAMNIALES, CHLOROPHYTA)1. Journal of Phycology, 1995, 31, 114-119.	2.3	22
180	Potential effects of rising tropospheric concentrations of CO2 and O3 on green-algal lichens. New Phytologist, 1996, 132, 641-652.	7.3	22

#	Article	IF	Citations
181	Geomorphological significance of lichen colonization in a present snow hollow: Hoya del Cuchillar de las Navajas, Sierra de Gredos (Spain). Catena, 2001, 43, 323-340.	5.0	22
182	Implications of opposite phyllotaxis for light interception efficiency of Mediterranean woody plants. Trees - Structure and Function, 2005, 19, 671-679.	1.9	22
183	Temporal dynamics of marginal steppic vegetation over a 26â€year period of substantial environmental change. Journal of Vegetation Science, 2009, 20, 299-310.	2.2	22
184	The stable isotope ecology of terrestrial plant succession. Plant Ecology and Diversity, 2011, 4, 117-130.	2.4	22
185	S panish juniper gain expansion opportunities by counting on a functionally diverse dispersal assemblage community. Ecology and Evolution, 2013, 3, 3751-3763.	1.9	22
186	Temperature-Limited Floral Longevity in the Large-Flowered Mediterranean Shrub Cistus Ladanifer (Cistaceae). International Journal of Plant Sciences, 2015, 176, 131-140.	1.3	22
187	Phylogenetic community structure reveals differences in plant community assembly of an oligotrophic white-sand ecosystem from the Brazilian Atlantic Forest. Acta Botanica Brasilica, 2017, 31, 531-538.	0.8	22
188	Spontaneous forest regrowth in Southâ€West Europe: Consequences for nature's contributions to people. People and Nature, 2020, 2, 980-994.	3.7	22
189	Texture and Hygroscopic Features of the Upper Surface of the Thallus in the Lichen Family Umbilicariaceae. Annals of Botany, 1994, 73, 493-500.	2.9	21
190	Stress-induced dynamic adjustments of reproduction differentially affect fitness components of a semi-arid plant. Journal of Ecology, 2007, 96, 071203163438003-???.	4.0	21
191	Large and abundant flowers increase indirect costs of corollas: a study of coflowering sympatric Mediterranean species of contrasting flower size. Oecologia, 2013, 173, 73-81.	2.0	21
192	Fire drives abandoned pastures to a savanna-like state in the Brazilian Atlantic Forest. Perspectives in Ecology and Conservation, 2020, 18, 31-36.	1.9	21
193	Light quality and not quantity segregates germination of grazing increasers from decreasers in Mediterranean grasslands. Acta Oecologica, 2010, 36, 74-79.	1.1	20
194	Holm oak decline triggers changes in plant succession and microbial communities, with implications for ecosystem C and N cycling. Plant and Soil, 2017, 414, 247-263.	3.7	20
195	Intraspecific leaf trait variability along a boreal-to-tropical community diversity gradient. PLoS ONE, 2017, 12, e0172495.	2.5	20
196	Responses of Aspen Leaves to Heatflecks: Both Damaging and Non-Damaging Rapid Temperature Excursions Reduce Photosynthesis. Plants, 2019, 8, 145.	3.5	20
197	Additive effects of a potentially invasive grass and water stress on the performance of seedlings of gypsum specialists. Applied Vegetation Science, 2008, 11, 287-296.	1.9	18
198	Functional and evolutionary correlations of steep leaf angles in the mexical shrubland. Oecologia, 2010, 163, 25-33.	2.0	18

#	Article	IF	Citations
199	Understory light predictions in mixed conifer mountain forests: Role of aspect-induced variation in crown geometry and openness. Forest Ecology and Management, 2012, 276, 52-61.	3.2	18
200	The decreased competition in expanding versus mature juniper woodlands is counteracted by adverse climatic effects on growth. European Journal of Forest Research, 2012, 131, 977-987.	2.5	18
201	Intraspecific trait variability of trees is related to canopy species richness in European forests. Perspectives in Plant Ecology, Evolution and Systematics, 2019, 36, 24-32.	2.7	18
202	Individual vs. population plastic responses to elevated CO2, nutrient availability, and heterogeneity: a microcosm experiment with co-occurring species. Plant and Soil, 2007, 296, 53-64.	3.7	17
203	Evaluation of unventilated treeshelters in the context of Mediterranean climate: Insights from a study on Quercus faginea seedlings assessed with a 3D architectural plant model. Ecological Engineering, 2010, 36, 517-526.	3.6	17
204	Crown traits of coniferous trees and their relation to shade tolerance can differ with leaf type: a biophysical demonstration using computed tomography scanning data. Frontiers in Plant Science, 2015, 6, 172.	3.6	17
205	Population differentiation in a Mediterranean relict shrub: the potential role of local adaptation for coping with climate change. Oecologia, 2016, 180, 1075-1090.	2.0	17
206	Phenotypic plasticity closely linked to climate at origin and resulting in increased mortality under warming and frost stress in a common grass. Ecology and Evolution, 2019, 9, 1344-1352.	1.9	17
207	Diurnal Changes in Photosynthetic Efficiency and Carotenoid Composition of the Lichen Anaptychia ciliaris: Effects of Hydration and Light Intensity. Bryologist, 1995, 98, 375.	0.6	16
208	Seasonal water-use efficiency and chlorophyll fluorescence response in alpha grass (Stipa) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td	1.7	16
209	Contrasting water strategies of two Mediterranean shrubs of limited distribution: uncertain future under a drier climate. Tree Physiology, 2013, 33, 1284-1295.	3.1	16
210	Influence of landâ€use types and climatic variables on seasonal patterns of NDVI in Mediterranean Iberian ecosystems. Applied Vegetation Science, 2009, 12, 177-185.	1.9	15
211	Population size, centerâ€“periphery, and seed dispersersâ€™ effects on the genetic diversity and population structure of the Mediterranean relict shrub Cneorum tricoccon. Ecology and Evolution, 2017, 7, 7231-7242.	1.9	15
212	Global resource acquisition patterns of invasive and native plant species do not hold at the regional scale in Mediterranean type ecosystems. Biological Invasions, 2017, 19, 1143-1151.	2.4	15
213	Intraspecific perspective of phenotypic coordination of functional traits in Scots pine. PLoS ONE, 2020, 15, e0228539.	2.5	15
214	Phenotypes of Pinus sylvestris are more coordinated under local harsher conditions across Europe. Journal of Ecology, 2021, 109, 2580-2596.	4.0	15
215	Medullary Structure of the Umbilicariaceae. Lichenologist, 1995, 27, 189-199.	0.8	14
216	In situ Comparison of Daily Photosynthetic Activity Patterns of Saxicolous Lichens and Mosses in Sierra de Guadarrama, Central Spain. Bryologist, 1999, 102, 623.	0.6	14

#	Article	IF	Citations
217	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.	1.9	14
218	Natural selection on cork oak: allele frequency reveals divergent selection in cork oak populations along a temperature cline. Evolutionary Ecology, 2010, 24, 1031-1044.	1.2	14
219	Changes in rainfall amount and frequency do not affect the outcome of the interaction between the shrub Retama sphaerocarpa and its neighbouring grasses in two semiarid communities. Journal of Arid Environments, 2013, 91, 104-112.	2.4	14
220	Structural and Physiological Plasticity of the Lichen Catillaria corymbosa in Different Microhabitats of the Maritime Antarctica. Bryologist, 1997, 100, 171.	0.6	14
221	Porosimetric Study of the Lichen Family Umbilicariaceae: Anatomical Interpretation and Implications for Water Storage Capacity of the Thallus. American Journal of Botany, 1993, 80, 263.	1.7	13
222	Functional ecology of a narrow endemic plant and a widespread congener from semiarid Spain. Journal of Arid Environments, 2009, 73, 784-794.	2.4	13
223	Functional traits variation explains the distribution of Aextoxicon punctatum (Aextoxicaceae) in pronounced moisture gradients within fog-dependent forest fragments. Frontiers in Plant Science, 2015, 6, 511.	3.6	13
224	Some positive effects of the fragmentation of holm oak forests: Attenuation of water stress and enhancement of acorn production. Forest Ecology and Management, 2016, 370, 22-30.	3.2	13
225	Crown architecture and leaf habit are associated with intrinsically different light-harvesting efficiencies inQuercusseedlings from contrasting environments. Annals of Forest Science, 2006, 63, 511-518.	2.0	12
226	Pollinator-mediated phenotypic selection does not always modulate flower size and number in the large-flowered Mediterranean shrubCistus ladanifer(Cistaceae). Botanical Journal of the Linnean Society, 2014, 176, 540-555.	1.6	12
227	Tree vigour influences secondary growth but not responsiveness to climatic variability in Holm oak. Dendrochronologia, 2018, 49, 68-76.	2.2	12
228	Effects of tussock size and soil water content on whole plant gas exchange in Stipa tenacissima L.: Extrapolating from the leaf versus modelling crown architecture. Environmental and Experimental Botany, 2008, 62, 376-388.	4.2	11
229	The colonization of abandoned land by Spanish juniper: Linking biotic and abiotic factors at different spatial scales. Forest Ecology and Management, 2014, 329, 186-194.	3.2	11
230	Light inhibition of foliar respiration in response to soil water availability and seasonal changes in temperature in Mediterranean holm oak (Quercus ilex) forest. Functional Plant Biology, 2017, 44, 1178.	2.1	11
231	Local canopy diversity does not influence phenotypic expression and plasticity of tree seedlings exposed to different resource availabilities. Environmental and Experimental Botany, 2018, 156, 38-47.	4.2	11
232	Genetics to the rescue: managing forests sustainably in a changing world. Tree Genetics and Genomes, 2020, 16, 1.	1.6	11
233	The GenTree Leaf Collection: Interâ€•and intraspecific leaf variation in seven forest tree species in Europe. Global Ecology and Biogeography, 2021, 30, 590-597.	5.8	11
234	Lichen Colonization and Recolonization of Two Recently Deglaciated Zones in the Maritime Antarctic. Lichenologist, 1995, 27, 485-493.	0.8	10

#	Article	IF	Citations
235	Impact of simulated changes in rainfall regime and nutrient deposition on the relative dominance and isotopic composition of ruderal plants in anthropogenic grasslands. Plant and Soil, 2012, 352, 303-319.	3.7	9
236	Species richness influences the spatial distribution of trees in European forests. Oikos, 2020, 129, 380-390.	2.7	9
237	Both Mature Patches and Expanding Areas of Juniperus thurifera Forests Are Vulnerable to Climate Change But for Different Reasons. Forests, 2020, 11, 960.	2.1	9
238	Diversity of growth responses to recent droughts reveals the capacity of Atlantic Forest trees to cope well with current climatic variability. Forest Ecology and Management, 2021, 480, 118656.	3.2	9
239	Every little helps: the functional role of individuals in assembling any plant community, from the richest to monospecific ones. Journal of Vegetation Science, 0, , e13059.	2.2	9
240	Phenotypic plasticity and the leaf economics spectrum: plasticity is positively associated with specific leaf area. Oikos, 2022, 2022, .	2.7	9
241	Compromises in Data Selection in a Metaâ€Analysis of Biodiversity in Managed and Unmanaged Forests: Response to Halme et al.. Conservation Biology, 2010, 24, 1157-1160.	4.7	8
242	Fragmentation modulates the strong impact of habitat quality and plant cover on fertility and microbial activity of semiarid gypsum soils. Plant and Soil, 2012, 358, 213-223.	3.7	8
243	Different intra- and interspecific facilitation mechanisms between two Mediterranean trees under a climate change scenario. Oecologia, 2015, 177, 159-169.	2.0	8
244	Determinants of functional connectivity of holm oak woodlands: Fragment size and mouse foraging behavior. Forest Ecology and Management, 2016, 368, 111-122.	3.2	8
245	Quantitative approach to the fine structure of both symbionts of nine Umbilicaria species. Protoplasma, 1994, 178, 168-178.	2.1	7
246	Landâ€use legacies influence tree waterâ€use efficiency and nitrogen availability in recently established European forests. Functional Ecology, 2021, 35, 1325-1340.	3.6	7
247	Opportunistic Growth and Desiccation Tolerance. Books in Soils, Plants, and the Environment, 2007, , .	0.1	6
248	Gender, season and habitat: Patterns of variation in photosynthetic activity, growth and fecundity in Thymelaea velutina. Acta Oecologica, 2008, 34, 294-302.	1.1	6
249	Stable isotope views on ecosystem function: challenging or challenged?. Biology Letters, 2010, 6, 287-289.	2.3	6
250	Self-shading in cork oak seedlings: Functional implications in heterogeneous light environments. Acta Oecologica, 2010, 36, 423-430.	1.1	6
251	Dark Clouds over Spanish Science. Science, 2013, 340, 1292-1292.	12.6	6
252	Soil legacies determine the resistance of an experimental plant-soil system to drought. Catena, 2018, 166, 271-278.	5.0	6

#	Article	IF	Citations
253	Functional distance is driven more strongly by environmental factors than by genetic relatedness in Juniperus thurifera L. expanding forest stands. Annals of Forest Science, 2020, 77, 1.	2.0	6
254	A Mechanistic View of the Capacity of Forests to Cope with Climate Change. Managing Forest Ecosystems, 2017, , 15-40.	0.9	6
255	Interactive effects of seed size and drought stress on growth and allocation of Quercus brantii Lindl. seedlings from two provenances. Turk Tarim Ve Ormancilik Dergisi/Turkish Journal of Agriculture and Forestry, 0, , .	2.1	6
256	Lichen Colonization and Recolonization of Two Recently Deglaciated Zones in the Maritime Antarctic. Lichenologist, 1995, 27, 485.	0.8	5
257	Intraspecific variation in functional wood anatomy of tropical trees caused by effects of forest edge. Forest Ecology and Management, 2020, 473, 118305.	3.2	5
258	Fragmentation reduces severe drought impacts on tree functioning in holm oak forests. Environmental and Experimental Botany, 2020, 173, 104001.	4.2	5
259	Disentangling the role of sex dimorphism and forest structure as drivers of growth and wood density in expanding Juniperus thurifera L. woodlands. Annals of Forest Science, 2021, 78, 1.	2.0	5
260	Habitat fragmentation is linked to cascading effects on soil functioning and CO₂emissions in Mediterranean holm-oak-forests. PeerJ, 2018, 6, e5857.	2.0	5
261	Importance of overstorey attributes for understorey litter production and nutrient cycling in European forests. Forest Ecosystems, 2020, 7, 45.	3.1	5
262	Long-term spatial pattern change in a semi-arid plant community: The role of climate and composition. Acta Oecologica, 2012, 45, 8-15.	1.1	4
263	Spreading of the invasive Carpobrotus aff. acinaciformis in Mediterranean ecosystems: The advantage of performing in different light environments. Applied Vegetation Science, 2007, , 45-54.	1.9	4
264	Future paths for the â€˜exploitative segregation of plant rootsâ€™ model. Plant Signaling and Behavior, 2021, 16, 1891755.	2.4	3
265	The GenTree Platform: growth traits and tree-level environmental data in 12 European forest tree species. GigaScience, 2021, 10, .	6.4	3
266	Isolation and characterization of 10 microsatellite loci in Cneorum tricoccon (Cneoraceae), a Mediterranean relict plant. American Journal of Botany, 2012, 99, e307-e309.	1.7	2
267	Seed size underlies the uncoupling in species composition between canopy and recruitment layers in European forests. Forest Ecology and Management, 2019, 449, 117471.	3.2	2
268	Selfing and Drought-Stress Strategies Under Water Deficit for Two Herbaceous Species in the South American Andes. Frontiers in Plant Science, 2019, 10, 1595.	3.6	2
269	Early positive biodiversity effects on total biomass in experimental tree seedling assemblages with and without water limitation. Journal of Vegetation Science, 2021, 32, e13096.	2.2	2
270	Recruitment facilitation in expanding forests of Mediterranean juniper is sex-biased. Forest Ecology and Management, 2022, 505, 119937.	3.2	2

#	Article	IF	Citations
271	Ecology: Functions, Patterns, and Evolution. , 2004, , 404-406.		1
272	Costs versus risks: Architectural changes with changing light quantity and quality in saplings of temperate rainforest trees of different shade tolerance. , 2012, 37, 35.		1
273	The effect of plantâ€“plant interactions as a key biotic process mediating the spatial variation of phenotypes in a Pinus sylvestris forest. Trees - Structure and Function, 0, , 1.	1.9	0