

JosÃ© I GarcÃ­a-Plazaola

List of Publications by Year in descending order

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125
papers

4,790
citations

71097

41
h-index

118840

62
g-index

125
all docs

125
docs citations

125
times ranked

4987
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoprotective compounds as early markers to predict holm oak crown defoliation in declining Mediterranean savannahs. <i>Tree Physiology</i> , 2022, 42, 208-224.	3.1	15
2	More than just lipid balls: quantitative analysis of plastoglobule attributes and their stress-related responses. <i>Planta</i> , 2022, 255, 62.	3.2	12
3	Cell-level anatomy explains leaf age-dependent declines in mesophyll conductance and photosynthetic capacity in the evergreen Mediterranean oak <i>Quercus ilex</i> subsp. <i>rotundifolia</i> . <i>Tree Physiology</i> , 2022, , .	3.1	2
4	Assessing Plant Pigment Regulation in Circadian Experiments. <i>Methods in Molecular Biology</i> , 2022, 2494, 135-148.	0.9	1
5	Combined dynamics of the 500–600 nm leaf absorption and chlorophyll fluorescence changes in vivo: Evidence for the multifunctional energy quenching role of xanthophylls. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2021, 1862, 148351.	1.0	13
6	Alpine forbs rely on different photoprotective strategies during spring snowmelt. <i>Physiologia Plantarum</i> , 2021, 172, 1506-1517.	5.2	9
7	Shedding light on the dark side of xanthophyll cycles. <i>New Phytologist</i> , 2021, 230, 1336-1344.	7.3	37
8	Frozen in the dark: interplay of night-time activity of xanthophyll cycle, xylem attributes, and desiccation tolerance in fern resistance to winter. <i>Journal of Experimental Botany</i> , 2021, 72, 3168-3184.	4.8	10
9	Differences in biochemical, gas exchange and hydraulic response to water stress in desiccation tolerant and sensitive fronds of the fern <i>Anemia cafferorum</i> . <i>New Phytologist</i> , 2021, 231, 1415-1430.	7.3	15
10	Chlorophyll a fluorescence illuminates a path connecting plant molecular biology to Earth-system science. <i>Nature Plants</i> , 2021, 7, 998-1009.	9.3	88
11	Born to revive: molecular and physiological mechanisms of double tolerance in a paleotropical and resurrection plant. <i>New Phytologist</i> , 2020, 226, 741-759.	7.3	34
12	Ecophysiological changes and spore formation: two strategies in response to low temperature and high light stress in <i>Klebsormidium</i> cf. <i>flaccidum</i> (Klebsormidiophyceae). <i>Tj ETQq0 0 0 rgBT /Overlock.30 Tf 50&297 Td (St</i>	3.0	2
13	How do vascular plants perform photosynthesis in extreme environments? An integrative ecophysiological and biochemical story. <i>Plant Journal</i> , 2020, 101, 979-1000.	5.7	42
14	Desiccation Tolerance in Chlorophyllous Fern Spores: Are Ecophysiological Features Related to Environmental Conditions?. <i>Frontiers in Plant Science</i> , 2019, 10, 1130.	3.6	9
15	Life after Harvest: Circadian Regulation in Photosynthetic Pigments of Rocket Leaves during Supermarket Storage Affects the Nutritional Quality. <i>Nutrients</i> , 2019, 11, 1519.	4.1	4
16	Symbiosis at its limits: ecophysiological consequences of lichenization in the genus <i>Prasiola</i> in Antarctica. <i>Annals of Botany</i> , 2019, 124, 1211-1226.	2.9	13
17	Evolution, biosynthesis and protective roles of oligogalactolipids: Key molecules for terrestrial photosynthesis?. <i>Environmental and Experimental Botany</i> , 2019, 164, 135-148.	4.2	7
18	Plant pigment cycles in the high-Arctic Spitsbergen. <i>Polar Biology</i> , 2019, 42, 675-684.	1.2	8

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19	Non-invasive diagnosis of viability in seeds and lichens by infrared thermography under controlled environmental conditions. <i>Plant Methods</i> , 2019, 15, 147.	4.3	0
20	Modified Atmosphere Packaging and Dark/Light Refrigerated Storage in Green Leafy Vegetables Have an Impact on Nutritional Value. <i>Plant Foods for Human Nutrition</i> , 2019, 74, 99-106.	3.2	5
21	Rapid colour changes in <i>Euglena sanguinea</i> (Euglenophyceae) caused by internal lipid globule migration. <i>European Journal of Phycology</i> , 2019, 54, 91-101.	2.0	18
22	Unraveling metabolic mechanisms behind chloroplast desiccation tolerance: Chlorophyllous fern spore as a new promising unicellular model. <i>Plant Science</i> , 2019, 281, 251-260.	3.6	9
23	A field portable method for the semi-quantitative estimation of dehydration tolerance of photosynthetic tissues across distantly related land plants. <i>Physiologia Plantarum</i> , 2019, 167, 540-555.	5.2	18
24	When the sun never sets: daily changes in pigment composition in three subarctic woody plants during the summer solstice. <i>Trees - Structure and Function</i> , 2018, 32, 615-630.	1.9	12
25	First evidence of freezing tolerance in a resurrection plant: insights into molecular mobility and zeaxanthin synthesis in the dark. <i>Physiologia Plantarum</i> , 2018, 163, 472-489.	5.2	34
26	On the recalcitrant use of Arnon's method for chlorophyll determination. <i>New Phytologist</i> , 2018, 217, 474-476.	7.3	15
27	Desiccation Tolerance in Ferns: From the Unicellular Spore to the Multi-tissular Sporophyte. , 2018, , 401-426.		11
28	Shared mechanisms of photoprotection in photosynthetic organisms tolerant to desiccation or to low temperature. <i>Environmental and Experimental Botany</i> , 2018, 154, 66-79.	4.2	44
29	Can Parietin Transfer Energy Radiatively to Photosynthetic Pigments?. <i>Molecules</i> , 2018, 23, 1741.	3.8	5
30	Plant Photosynthetic Pigments: Methods and Tricks for Correct Quantification and Identification. , 2018, , 29-50.		8
31	Emissions of carotenoid cleavage products upon heat shock and mechanical wounding from a foliose lichen. <i>Environmental and Experimental Botany</i> , 2017, 133, 87-97.	4.2	32
32	Endogenous circadian rhythms in pigment composition induce changes in photochemical efficiency in plant canopies. <i>Plant, Cell and Environment</i> , 2017, 40, 1153-1162.	5.7	26
33	Diversity of winter photoinhibitory responses: a case study in co-occurring lichens, mosses, herbs and woody plants from subalpine environments. <i>Physiologia Plantarum</i> , 2017, 160, 282-296.	5.2	31
34	Near-infrared reflectance spectroscopy allows rapid and simultaneous evaluation of chloroplast pigments and antioxidants, carbon isotope discrimination and nitrogen content in <i>Populus</i> spp. leaves. <i>Forest Ecology and Management</i> , 2017, 399, 227-234.	3.2	11
35	Photoprotective Mechanisms in the Genus <i>Quercus</i> in Response to Winter Cold and Summer Drought. <i>Tree Physiology</i> , 2017, , 361-391.	2.5	6
36	Photoprotective Strategies of Mediterranean Plants in Relation to Morphological Traits and Natural Environmental Pressure: A Meta-Analytical Approach. <i>Frontiers in Plant Science</i> , 2017, 8, 1051.	3.6	42

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37	Unraveling the Photoprotective Response of Lichenized and Free-Living Green Algae (Trebouxiophyceae, Chlorophyta) to Photochilling Stress. <i>Frontiers in Plant Science</i> , 2017, 8, 1144.	3.6	10
38	Seed Carotenoid and Tocochromanol Composition of Wild Fabaceae Species Is Shaped by Phylogeny and Ecological Factors. <i>Frontiers in Plant Science</i> , 2017, 8, 1428.	3.6	27
39	Two Hymenophyllaceae species from contrasting natural environments exhibit a homoiochlorophyllous strategy in response to desiccation stress. <i>Journal of Plant Physiology</i> , 2016, 191, 82-94.	3.5	29
40	Leaf functional plasticity decreases the water consumption without further consequences for carbon uptake in <i>Quercus coccifera</i> L. under Mediterranean conditions. <i>Tree Physiology</i> , 2016, 36, 356-367.	3.1	27
41	Resilience of a semi-deciduous shrub, <i>Cistus salvifolius</i> , to severe summer drought and heat stress. <i>Functional Plant Biology</i> , 2015, 42, 219.	2.1	27
42	Ecophysiological roles of abaxial anthocyanins in a perennial understorey herb from temperate deciduous forests. <i>AoB PLANTS</i> , 2015, 7, plv042.	2.3	14
43	Activation of photoprotective winter photoinhibition in plants from different environments: a literature compilation and meta-analysis. <i>Physiologia Plantarum</i> , 2015, 155, 414-423.	5.2	54
44	Internal and external factors affecting photosynthetic pigment composition in plants: a meta-analytical approach. <i>New Phytologist</i> , 2015, 206, 268-280.	7.3	202
45	Opening Pandora's box: cause and impact of errors on plant pigment studies. <i>Frontiers in Plant Science</i> , 2015, 6, 148.	3.6	12
46	Versatility of carotenoids: An integrated view on diversity, evolution, functional roles and environmental interactions. <i>Environmental and Experimental Botany</i> , 2015, 119, 63-75.	4.2	124
47	Autofluorescence: Biological functions and technical applications. <i>Plant Science</i> , 2015, 236, 136-145.	3.6	106
48	Does age matter under winter photoinhibitory conditions? A case study in stems and leaves of European mistletoe (<i>Viscum album</i>). <i>Functional Plant Biology</i> , 2015, 42, 175.	2.1	6
49	Photosynthetic responses of trees in high-elevation forests: comparing evergreen species along an elevation gradient in the Central Andes. <i>AoB PLANTS</i> , 2015, 7, plv058.	2.3	25
50	Tocochromanols in wood: a potential new tool for dendrometabolomics. <i>Tree Physiology</i> , 2014, 34, 1411-1418.	3.1	2
51	Side-effects of domestication: cultivated legume seeds contain similar tocopherols and fatty acids but less carotenoids than their wild counterparts. <i>BMC Plant Biology</i> , 2014, 14, 1599.	3.6	68
52	Involvement of a Second Xanthophyll Cycle in Non-Photochemical Quenching of Chlorophyll Fluorescence: The Lutein Epoxide Story. <i>Advances in Photosynthesis and Respiration</i> , 2014, , 277-295.	1.0	17
53	Acclimation of leaf cohorts expanded under light and water stresses: an adaptive mechanism of <i>Eucryphia cordifolia</i> to face changes in climatic conditions?. <i>Tree Physiology</i> , 2014, 34, 1305-1320.	3.1	13
54	Does plant colour matter? Wax accumulation as an indicator of decline in <i>Juniperus thurifera</i> . <i>Tree Physiology</i> , 2014, 34, 267-274.	3.1	39

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55	Gas-exchange, photo- and antioxidant protection, and metal accumulation in I-214 and Eridano Populus sp. clones subjected to elevated zinc concentrations. <i>Environmental and Experimental Botany</i> , 2014, 107, 144-153.	4.2	24
56	Enhancement of zeaxanthin in two-steps by environmental stress induction in rocket and spinach. <i>Food Research International</i> , 2014, 65, 207-214.	6.2	17
57	Beyond Non-Photochemical Fluorescence Quenching: The Overlapping Antioxidant Functions of Zeaxanthin and Tocopherols. <i>Advances in Photosynthesis and Respiration</i> , 2014, , 583-603.	1.0	38
58	Antioxidant and photoprotective responses to elevated CO ₂ and heat stress during holm oak regeneration by resprouting, evaluated with NIRS (near-infrared reflectance spectroscopy). <i>Plant Biology</i> , 2013, 15, 5-17.	3.8	16
59	Salt crystal deposition as a reversible mechanism to enhance photoprotection in black mangrove. <i>Trees - Structure and Function</i> , 2013, 27, 229-237.	1.9	17
60	Effectiveness of arbuscular mycorrhizal fungi (AMF) for inducing the accumulation of major carotenoids, chlorophylls and tocopherol in green and red leaf lettuces. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 3119-3128.	3.6	98
61	Evidence for the absence of enzymatic reactions in the glassy state. A case study of xanthophyll cycle pigments in the desiccation-tolerant moss <i>Syntrichia ruralis</i> . <i>Journal of Experimental Botany</i> , 2013, 64, 3033-3043.	4.8	86
62	Physiology of the seasonal relationship between the photochemical reflectance index and photosynthetic light use efficiency. <i>Oecologia</i> , 2012, 170, 313-323.	2.0	119
63	Physical factors driving intertidal macroalgae distribution: physiological stress of a dominant fucoid at its southern limit. <i>Oecologia</i> , 2012, 170, 341-353.	2.0	79
64	Thermal energy dissipation and xanthophyll cycles beyond the Arabidopsis model. <i>Photosynthesis Research</i> , 2012, 113, 89-103.	2.9	97
65	Photoprotection mechanisms in <i>Quercus ilex</i> under contrasting climatic conditions. <i>Flora: Morphology, Distribution, Functional Ecology of Plants</i> , 2012, 207, 557-564.	1.2	38
66	Patterns of spatio-temporal distribution of winter chronic photoinhibition in leaves of three evergreen Mediterranean species with contrasting acclimation responses. <i>Physiologia Plantarum</i> , 2012, 144, 289-301.	5.2	15
67	Do fern gametophytes have the capacity for irradiance acclimation?. <i>Biologia Plantarum</i> , 2012, 56, 351-356.	1.9	6
68	Native Plant Communities in an Abandoned Pb-Zn Mining Area of Northern Spain: Implications for Phytoremediation and Germplasm Preservation. <i>International Journal of Phytoremediation</i> , 2011, 13, 256-270.	3.1	80
69	Dehydration-mediated activation of the xanthophyll cycle in darkness: is it related to desiccation tolerance?. <i>Planta</i> , 2011, 234, 579-588.	3.2	42
70	Activation of violaxanthin cycle in darkness is a common response to different abiotic stresses: a case study in <i>Pelvetia canaliculata</i> . <i>BMC Plant Biology</i> , 2011, 11, 181.	3.6	44
71	Tree size and light availability increase photochemical instead of non-photochemical capacities of <i>Nothofagus nitida</i> trees growing in an evergreen temperate rain forest. <i>Tree Physiology</i> , 2011, 31, 1128-1141.	3.1	16
72	Leaf functional and micro-morphological photoprotective attributes in two ecotypes of <i>Colobanthus quitensis</i> from the Andes and Maritime Antarctic. <i>Polar Biology</i> , 2010, 33, 885-896.	1.2	23

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73	Unravelling the roles of desiccation-induced xanthophyll cycle activity in darkness: a case study in <i>Lobaria pulmonaria</i> . <i>Planta</i> , 2010, 231, 1335-1342.	3.2	53
74	Differences in EDTA-assisted metal phytoextraction between metallicolous and non-metallicolous accessions of <i>Rumex acetosa</i> L.. <i>Environmental Pollution</i> , 2010, 158, 1710-1715.	7.5	64
75	Ageing and irradiance enhance vitamin E content in green edible tissues from crop plants. <i>Journal of the Science of Food and Agriculture</i> , 2010, 90, n/a-n/a.	3.5	22
76	Insights into carotenoid dynamics in non-foliar photosynthetic tissues of avocado. <i>Physiologia Plantarum</i> , 2010, 140, 69-78.	5.2	8
77	High irradiance induces photoprotective mechanisms and a positive effect on NH ₄ ⁺ stress in <i>Pisum sativum</i> L.. <i>Journal of Plant Physiology</i> , 2010, 167, 1038-1045.	3.5	43
78	Operation and regulation of the lutein epoxide cycle in seedlings of <i>Ocotea foetens</i> . <i>Functional Plant Biology</i> , 2010, 37, 859.	2.1	23
79	Lutein epoxide cycle, more than just a forest tale. <i>Plant Signaling and Behavior</i> , 2009, 4, 342-344.	2.4	18
80	Carotenoid composition in Rhodophyta: insights into xanthophyll regulation in <i>Corallina elongata</i> . <i>European Journal of Phycology</i> , 2009, 44, 221-230.	2.0	48
81	Alternative methods for sampling and preservation of photosynthetic pigments and tocopherols in plant material from remote locations. <i>Photosynthesis Research</i> , 2009, 101, 77-88.	2.9	25
82	Distribution and evolutionary trends of photoprotective isoprenoids (xanthophylls and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50_382 Td (to	5.2	56
83	Phytoextraction potential of two <i>Rumex acetosa</i> L. accessions collected from metalliferous and non-metalliferous sites: Effect of fertilization. <i>Chemosphere</i> , 2009, 74, 259-264.	8.2	64
84	Dark induction of the photoprotective xanthophyll cycle in response to dehydration. <i>Journal of Plant Physiology</i> , 2009, 166, 1734-1744.	3.5	40
85	Photoprotective responses of Mediterranean and Atlantic trees to the extreme heat-wave of summer 2003 in Southwestern Europe. <i>Trees - Structure and Function</i> , 2008, 22, 385-392.	1.9	55
86	Short- and long-term modulation of the lutein epoxide and violaxanthin cycles in two species of the Lauraceae: sweet bay laurel (<i>Laurus nobilis</i> L.) and avocado (<i>Persea americana</i> Mill.). <i>Plant Biology</i> , 2008, 10, 288-297.	3.8	21
87	Photoprotective implications of leaf variegation in <i>E. dens-canis</i> L. and <i>P. officinalis</i> L.. <i>Journal of Plant Physiology</i> , 2008, 165, 1255-1263.	3.5	62
88	Seasonal reversibility of acclimation to irradiance in leaves of common box (<i>Buxus sempervirens</i> L.) in a deciduous forest. <i>Flora: Morphology, Distribution, Functional Ecology of Plants</i> , 2008, 203, 254-260.	1.2	9
89	Dynamics of violaxanthin and lutein epoxide xanthophyll cycles in Lauraceae tree species under field conditions. <i>Tree Physiology</i> , 2007, 27, 1407-1414.	3.1	21
90	The lutein epoxide cycle in higher plants: its relationships to other xanthophyll cycles and possible functions. <i>Functional Plant Biology</i> , 2007, 34, 759.	2.1	120

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91	Plasticity of Photoprotective Mechanisms of <i>Buxus sempervirens</i> L. Leaves in Response to Extreme Temperatures. <i>Plant Biology</i> , 2007, 9, 59-68.	3.8	34
92	New Insights on Glyphosate Mode of Action in Nodular Metabolism: A Role of Shikimate Accumulation. <i>Journal of Agricultural and Food Chemistry</i> , 2006, 54, 2621-2628.	5.2	111
93	Do light acclimation mechanisms reduce the effects of light-dependent herbicides in duckweed (<i>Lemna</i>)? <i>Journal of Agricultural and Food Chemistry</i> , 2007, 55, 1474-1479.	1.5	4
94	Synthesis of low molecular weight thiols in response to Cd exposure in <i>Thlaspi caerulescens</i> . <i>Plant, Cell and Environment</i> , 2006, 29, 1422-1429.	5.7	62
95	Dynamics of the alpha-tocopherol pool as affected by external (environmental) and internal (leaf age) factors in <i>Buxus sempervirens</i> leaves. <i>Physiologia Plantarum</i> , 2005, 125, 333-344.	5.2	18
96	Functional role of red (retro)-carotenoids as passive light filters in the leaves of <i>Buxus sempervirens</i> L.: increased protection of photosynthetic tissues?. <i>Journal of Experimental Botany</i> , 2005, 56, 2629-2636.	4.8	69
97	Acclimation of antioxidant pools to the light environment in a natural forest canopy. <i>New Phytologist</i> , 2004, 163, 87-97.	7.3	47
98	Role of Red Carotenoids in Photoprotection During Winter Acclimation in <i>Buxus sempervirens</i> Leaves. <i>Plant Biology</i> , 2004, 6, 325-332.	3.8	47
99	Differential responses of three fungal species to environmental factors and their role in the mycorrhization of <i>Pinus radiata</i> D. Don. <i>Mycorrhiza</i> , 2004, 14, 11-18.	2.8	50
100	The lutein epoxide cycle in vegetative buds of woody plants. <i>Functional Plant Biology</i> , 2004, 31, 815.	2.1	31
101	Antioxidant and Pigment Composition during Autumnal Leaf Senescence in Woody Deciduous Species Differing in their Ecological Traits. <i>Plant Biology</i> , 2003, 5, 557-566.	3.8	48
102	Photoprotection in evergreen Mediterranean plants during sudden periods of intense cold weather. <i>Trees - Structure and Function</i> , 2003, 17, 285-291.	1.9	33
103	Do the capacity and kinetics for modification of xanthophyll cycle pool size depend on growth irradiance in temperate trees?. <i>Plant, Cell and Environment</i> , 2003, 26, 1787-1801.	5.7	83
104	The operation of the lutein epoxide cycle correlates with energy dissipation. <i>Functional Plant Biology</i> , 2003, 30, 319.	2.1	76
105	Occurrence and operation of the lutein epoxide cycle in <i>Quercus</i> species. <i>Functional Plant Biology</i> , 2002, 29, 1075.	2.1	48
106	Regulation of the xanthophyll cycle pool size in duckweed (<i>Lemna minor</i>) plants. <i>Physiologia Plantarum</i> , 2002, 116, 121-126.	5.2	23
107	Low light grown duckweed plants are more protected against the toxicity induced by Zn and Cd. <i>Plant Physiology and Biochemistry</i> , 2002, 40, 859-863.	5.8	66
108	Seasonal changes in photosynthetic pigments and antioxidants in beech (<i>Fagus sylvatica</i>) in a Mediterranean climate: implications for tree decline diagnosis. <i>Functional Plant Biology</i> , 2001, 28, 225.	2.1	43

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109	Photoprotective Responses to Winter Stress in Evergreen Mediterranean Ecosystems. <i>Plant Biology</i> , 2000, 2, 530-535.	3.8	57
110	Photoprotection mechanisms in European beech (<i>Fagus sylvatica</i> L.) seedlings from diverse climatic origins. <i>Trees - Structure and Function</i> , 2000, 14, 339-343.	1.9	23
111	Effects of drought on photoprotective mechanisms in European beech (<i>Fagus sylvatica</i> L.) seedlings from different provenances. <i>Trees - Structure and Function</i> , 2000, 14, 485-490.	1.9	97

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