Jose M Torres-Ruiz

List of Publications by Year
in descending order

71 papers	4,301 citations	126708 33 h-index	118652 62 g-index
73 all docs	73 docs citations	73 times ranked	6075 citing authors

#	Article	IF	Citations
1	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	4.2	1,038
2	A synthesis of radial growth patterns preceding tree mortality. Global Change Biology, 2017, 23, 1675-1690.	4.2	394
3	Regulation of photosynthesis and stomatal and mesophyll conductance under water stress and recovery in olive trees: correlation with gene expression of carbonic anhydrase and aquaporins. Journal of Experimental Botany, 2014, 65, 3143-3156.	2.4	167
4	Mechanisms of woody-plant mortality under rising drought, CO2 and vapour pressure deficit. Nature Reviews Earth & Environment, 2022, 3, 294-308.	12.2	163
5	Direct X-Ray Microtomography Observation Confirms the Induction of Embolism upon Xylem Cutting under Tension. Plant Physiology, 2015, 167, 40-43.	2.3	156
6	Evidence for Hydraulic Vulnerability Segmentation and Lack of Xylem Refilling under Tension. Plant Physiology, 2016, 172, 1657-1668.	2.3	132
7	A regulated deficit irrigation strategy for hedgerow olive orchards with high plant density. Plant and Soil, 2013, 372, 279-295.	1.8	110
8	Vulnerability curves by centrifugation: is there an open vessel artefact, and are â€˜râ€™ shaped curves necessarily invalid?. Plant, Cell and Environment, 2012, 35, 601-610.	2.8	106
9	Variation in xylem vulnerability to embolism in European beech from geographically marginal populations. Tree Physiology, 2018, 38, 173-185.	1.4	93
10	Vulnerability to cavitation in Olea europaea currentâ€year shoots: further evidence of an openâ€vessel artifact associated with centrifuge and airâ€injection techniques. Physiologia Plantarum, 2014, 152, 465-474.	2.6	92
11	Assessing inter- and intraspecific variability of xylem vulnerability to embolism in oaks. Forest Ecology and Management, 2018, 424, 53-61.	1.4	84
12	Balancing the risks of hydraulic failure and carbon starvation: a twig scale analysis in declining <scp>S</scp>cots pine. Plant, Cell and Environment, 2015, 38, 2575-2588.	2.8	79
13	Role of hydraulic and chemical signals in leaves, stems and roots in the stomatal behaviour of olive trees under water stress and recovery conditions. Tree Physiology, 2015, 35, 415-424.	1.4	74
14	Are needles of Pinus pinaster more vulnerable to xylem embolism than branches? New insights from Xâ€ray computed tomography. Plant, Cell and Environment, 2016, 39, 860-870.	2.8	74
15	Xylem embolism in leaves does not occur with open stomata: evidence from direct observations using the optical visualization technique. Journal of Experimental Botany, 2020, 71, 1151-1159.	2.4	71
16	Shoot hydraulic characteristics, plant water status and stomatal response in olive trees under different soil water conditions. Plant and Soil, 2013, 373, 77-87.	1.8	69
17	Improving xylem hydraulic conductivity measurements by correcting the error caused by passive water uptake. Physiologia Plantarum, 2012, 146, 129-135.	2.6	65
18	Online-monitoring of tree water stress in a hedgerow olive orchard using the leaf patch clamp pressure probe. Agricultural Water Management, 2011, 100, 25-35.	2.4	64

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19	Steps toward an improvement in process-based models of water use by fruit trees: A case study in olive. Agricultural Water Management, 2012, 114, 37-49.	2.4	62
20	Neither xylem collapse, cavitation, or changing leaf conductance drive stomatal closure in wheat. Plant, Cell and Environment, 2020, 43, 854-865.	2.8	59
21	Assessment of trunk diameter variation derived indices as water stress indicators in mature olive trees. Agricultural Water Management, 2010, 97, 1293-1302.	2.4	57
22	Xylem resistance to embolism: presenting a simple diagnostic test for the open vessel artefact. New Phytologist, 2017, 215, 489-499.	3.5	56
23	An inconvenient truth about xylem resistance to embolism in the model species for refilling Laurus nobilis L.. Annals of Forest Science, 2018, 75, 1.	0.8	53
24	Combining sap flow and trunk diameter measurements to assess water needs in mature olive orchards. Environmental and Experimental Botany, 2011, 72, 330-338.	2.0	48
25	Testing the plant pneumatic method to estimate xylem embolism resistance in stems of temperate trees. Tree Physiology, 2018, 38, 1016-1025.	1.4	47
26	Hydraulic failure and tree mortality: from correlation to causation. Trends in Plant Science, 2022, 27, 335-345.	4.3	47
27	Is xylem of angiosperm leaves less resistant to embolism than branches? Insights from microCT, hydraulics, and anatomy. Journal of Experimental Botany, 2018, 69, 5611-5623.	2.4	46
28	Effect of shading and water stress on light interception, physiology and yield of apple trees. Agricultural Water Management, 2018, 210, 140-148.	2.4	46
29	The interplay of hydraulic failure and cell vitality explains tree capacity to recover from drought. Physiologia Plantarum, 2021, 172, 247-257.	2.6	42
30	Leaf water potential measurements using the pressure chamber: Synthetic testing of assumptions towards best practices for precision and accuracy. Plant, Cell and Environment, 2022, 45, 2037-2061.	2.8	40
31	A comparison of five methods to assess embolism resistance in trees. Forest Ecology and Management, 2020, 468, 118175.	1.4	39
32	Genetic differentiation in functional traits among European sessile oak populations. Tree Physiology, 2019, 39, 1736-1749.	1.4	38
33	Concomitant measurements of stem sap flow and leaf turgor pressure in olive trees using the leaf patch clamp pressure probe. Agricultural Water Management, 2012, 114, 50-58.	2.4	37
34	Use of maximum trunk diameter measurements to detect water stress in mature â€˜Arbequinaâ€™ olive trees under deficit irrigation. Agricultural Water Management, 2011, 98, 1813-1821.	2.4	36
35	Assessing water stress in a hedgerow olive orchard from sap flow and trunk diameter measurements. Irrigation Science, 2013, 31, 729-746.	1.3	35
36	Where do leaf water leaks come from? Tradeâ€offs underlying the variability in minimum conductance across tropical savanna species with contrasting growth strategies. New Phytologist, 2021, 229, 1415-1430.	3.5	34

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37	Exploring the Hydraulic Failure Hypothesis of Esca Leaf Symptom Formation. Plant Physiology, 2019, 181, 1163-1174.	2.3	32
38	Direct observation and modelling of embolism spread between xylem conduits: a case study in Scots pine. Plant, Cell and Environment, 2016, 39, 2774-2785.	2.8	27
39	The DroughtBox: A new tool for phenotyping residual branch conductance and its temperature dependence during drought. Plant, Cell and Environment, 2020, 43, 1584-1594.	2.8	26
40	Lack of vulnerability segmentation in four angiosperm tree species: evidence from direct X-ray microtomography observation. Annals of Forest Science, 2020, 77, 1.	0.8	26
41	Interaction of drought and frost in tree ecophysiology: rethinking the timing of risks. Annals of Forest Science, 2021, 78, 1.	0.8	26
42	Drought acclimation of Quercus ilex leaves improves tolerance to moderate drought but not resistance to severe water stress. Plant, Cell and Environment, 2022, 45, 1967-1984.	2.8	26
43	Quantifying in situ phenotypic variability in the hydraulic properties of four tree species across their distribution range in Europe. PLoS ONE, 2018, 13, e0196075.	1.1	25
44	Overâ€accumulation of abscisic acid in transgenic tomato plants increases the risk of hydraulic failure. Plant, Cell and Environment, 2020, 43, 548-562.	2.8	24
45	Differences in functional and xylem anatomical features allow Cistus species to co-occur and cope differently with drought in the Mediterranean region. Tree Physiology, 2017, 37, 755-766.	1.4	22
46	Acclimation of hydraulic and morphological traits to water deficit delays hydraulic failure during simulated drought in poplar. Tree Physiology, 2021, 41, 2008-2021.	1.4	21
47	Is the productive performance of olive trees under localized irrigation affected by leaving some roots in drying soil?. Agricultural Water Management, 2013, 123, 79-92.	2.4	18
48	How does contemporary selection shape oak phenotypes?. Evolutionary Applications, 2020, 13, 2772-2790.	1.5	18
49	Droughtâ€induced lacuna formation in the stem causes hydraulic conductance to decline before xylem embolism in Selaginella. New Phytologist, 2020, 227, 1804-1817.	3.5	18
50	High variation in hydraulic efficiency but not xylem safety between roots and branches in four temperate broadâ€leaved tree species. Functional Ecology, 2022, 36, 699-712.	1.7	17
51	Seasonal and long-term consequences of esca grapevine disease on stem xylem integrity. Journal of Experimental Botany, 2021, 72, 3914-3928.	2.4	16
52	Time of irrigation affects vine water relations and the daily patterns of leaf gas exchanges and vascular flows to kiwifruit (Actinidia deliciosa Chev.). Agricultural Water Management, 2016, 166, 101-110.	2.4	14
53	Importance of Physiological Traits Vulnerability in Determine Halophytes Tolerance to Salinity Excess: A Comparative Assessment in Atriplex halimus. Plants, 2020, 9, 690.	1.6	12
54	Embolism resistance in petioles and leaflets of palms. Annals of Botany, 2019, 124, 1173-1183.	1.4	11

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55	Conifer desiccation in the 2021 NW heatwave confirms the role of hydraulic damage. Tree Physiology, 2022, 42, 722-726.	1.4	11
56	The Olive Tree Under Water Stress. , 2018, , 439-479.		10
57	In situ estimation of genetic variation of functional and ecological traits in Quercus petraea and Q. robur. Tree Genetics and Genomes, 2020, 16, 1.	0.6	9
58	LOSS OF HYDRAULIC FUNCTIONING AT LEAF, STEM AND ROOT LEVEL AND ITS ROLE IN THE STOMATAL BEHAVIOUR DURING DROUGHT IN OLIVE TREES. Acta Horticulturae, 2013, , 333-339.	0.1	8
59	PHYSIOLOGICAL AND GENETIC RESPONSE OF OLIVE LEAVES TO WATER STRESS AND RECOVERY: IMPLICATIONS OF MESOPHYLL CONDUCTANCE AND GENETIC EXPRESSION OF AQUAPORINS AND CARBONIC ANHYDRASE. Acta Horticulturae, 2011, , 99-105.	0.1	5
60	XYLEM FUNCTIONING AND WATER RELATIONS OF THE ELASTIC LIVING TISSUE OF THE BARK: NEW INSIGHTS ABOUT THEIR COORDINATION. Acta Horticulturae, 2013, , 163-169.	0.1	4
61	INFLUENCE OF THE WATER TREATMENT ON THE XYLEM ANATOMY AND FUNCTIONALITY OF CURRENT YEAR SHOOTS OF OLIVE TREES. Acta Horticulturae, 2011, , 203-208.	0.1	4
62	Let plant hydraulics catch the wave. The Journal of Plant Hydraulics, 0, 3, e002.	1.0	3
63	XIM4 meeting report, Sept. 25-27 2019, Padua (Italy). The Journal of Plant Hydraulics, 0, 6, e002.	1.0	3
64	Connection matters: exploring the implications of scionâ€“rootstock alignment in grafted grapevines. Australian Journal of Grape and Wine Research, 2022, 28, 561-571.	1.0	3
65	DETERMINING EVAPOTRANSPIRATION IN AN OLIVE ORCHARD IN SOUTHWEST SPAIN. Acta Horticulturae, 2012, , 251-258.	0.1	2
66	Virtual issue on Plant hydraulics: update on the recent discoveries. Physiologia Plantarum, 2020, 168, 758-761.	2.6	2
67	INFLUENCE OF IRRIGATION SCHEDULING ON FRUIT QUALITY OF YOUNG POTTED 'MANZANILLA DE SEVILLA' OLIVE TREES. Acta Horticulturae, 2011, , 177-182.	0.1	2
68	STOMATAL CONTROL AND HYDRAULIC CONDUCTIVITY IN 'MANZANILLA' OLIVE TREES UNDER DIFFERENT WATER REGIMES. Acta Horticulturae, 2011, , 149-155.	0.1	1
69	SEASONAL CHANGES OF HYDRAULIC CONDUCTANCE OF MATURE OLIVE TREES UNDER DIFFERENT WATER REGIMES. Acta Horticulturae, 2009, , 263-270.	0.1	1
70	INFLUENCE OF THE SOIL WATER CONTENT AND DISTRIBUTION ON BOTH THE HYDRAULIC AND TRANSPIRATION PERFORMANCE OF 'MANZANILLA' OLIVE TREES. Acta Horticulturae, 2011, , 323-330.	0.1	1
71	SAP FLOW RESPONSE TO OLIVE WATER STRESS: A COMPARATIVE STUDY WITH TRUNK DIAMETER VARIATIONS AND LEAF TURGOR PRESSURE. Acta Horticulturae, 2012, , 101-110.	0.1	0