Jose Luis Araus

List of Publications by Year
in descending order

168 papers	12,274 citations	28274 55 h-index	28297 105 g-index
169 all docs	169 docs citations	169 times ranked	10133 citing authors

#	Article	IF	Citations
1	Field high-throughput phenotyping: the new crop breeding frontier. Trends in Plant Science, 2014, 19, 52-61.	8.8	1,306
2	Prediction of Genetic Values of Quantitative Traits in Plant Breeding Using Pedigree and Molecular Markers. Genetics, 2010, 186, 713-724.	2.9	664
3	Breeding for Yield Potential and Stress Adaptation in Cereals. Critical Reviews in Plant Sciences, 2008, 27, 377-412.	5.7	638
4	Translating High-Throughput Phenotyping into Genetic Gain. Trends in Plant Science, 2018, 23, 451-466.	8.8	525
5	Spectral Vegetation Indices as Nondestructive Tools for Determining Durum Wheat Yield. Agronomy Journal, 2000, 92, 83-91.	1.8	339
6	Adapting maize production to climate change in sub-Saharan Africa. Food Security, 2013, 5, 345-360.	5.3	319
7	Highâ€throughput Phenotyping and Genomic Selection: The Frontiers of Crop Breeding Converge^F. Journal of Integrative Plant Biology, 2012, 54, 312-320.	8.5	287
8	Metabolic and Phenotypic Responses of Greenhouse-Grown Maize Hybrids to Experimentally Controlled Drought Stress. Molecular Plant, 2012, 5, 401-417.	8.3	251
9	Promising eco-physiological traits for genetic improvement of cereal yields in Mediterranean environments. Annals of Applied Biology, 2005, 146, 61-70.	2.5	248
10	Identification of Drought, Heat, and Combined Drought and Heat Tolerant Donors in Maize. Crop Science, 2013, 53, 1335-1346.	1.8	247
11	Enhancing drought tolerance in C4 crops. Journal of Experimental Botany, 2011, 62, 3135-3153.	4.8	238
12	Metabolite profiles of maize leaves in drought, heat and combined stress field trials reveal the relationship between metabolism and grain yield. Plant Physiology, 2015, 169, pp.01164.2015.	4.8	233
13	The Photosynthetic Role of Ears in C3 Cereals: Metabolism, Water Use Efficiency and Contribution to Grain Yield. Critical Reviews in Plant Sciences, 2007, 26, 1-16.	5.7	196
14	Remote Sensing for Precision Agriculture: Sentinel-2 Improved Features and Applications. Agronomy, 2020, 10, 641.	3.0	186
15	Water management practices and climate in ancient agriculture: inferences from the stable isotope composition of archaeobotanical remains. Vegetation History and Archaeobotany, 2005, 14, 510-517.	2.1	185
16	Ear of durum wheat under water stress: water relations and photosynthetic metabolism. Planta, 2005, 221, 446-458.	3.2	177
17	Gene expression, cellular localisation and function of glutamine synthetase isozymes in wheat (Triticum aestivum L.). Plant Molecular Biology, 2008, 67, 89-105.	3.9	172
18	Visible and Nearâ€Infrared Reflectance Assessment of Salinity Effects on Barley. Crop Science, 1997, 37, 198-202.	1.8	154

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19	Does ear C sink strength contribute to overcoming photosynthetic acclimation of wheat plants exposed to elevated CO2?. Journal of Experimental Botany, 2011, 62, 3957-3969.	4.8	146
20	Identification of Ancient Irrigation Practices based on the Carbon Isotope Discrimination of Plant Seeds: a Case Study from the South-East Iberian Peninsula. Journal of Archaeological Science, 1997, 24, 729-740.	2.4	137
21	Comparative UAV and Field Phenotyping to Assess Yield and Nitrogen Use Efficiency in Hybrid and Conventional Barley. Frontiers in Plant Science, 2017, 8, 1733.	3.6	136
22	Phenotyping maize for adaptation to drought. Frontiers in Physiology, 2012, 3, 305.	2.8	135
23	Combined use of Î´¹³C, Î´¹⁸O and Î´¹⁵N tracks nitrogen metabolism and genotypic adaptation of durum wheat to salinity and water deficit. New Phytologist, 2012, 194, 230-244.	7.3	115
24	Wheat ear counting in-field conditions: high throughput and low-cost approach using RGB images. Plant Methods, 2018, 14, 22.	4.3	114
25	Harvest index, a parameter conditioning responsiveness of wheat plants to elevated CO2. Journal of Experimental Botany, 2013, 64, 1879-1892.	4.8	111
26	Stable carbon and nitrogen isotopes and quality traits of fossil cereal grains provide clues on sustainability at the beginnings of Mediterranean agriculture. Rapid Communications in Mass Spectrometry, 2008, 22, 1653-1663.	1.5	106
27	Phenotyping for Abiotic Stress Tolerance in Maize^F. Journal of Integrative Plant Biology, 2012, 54, 238-249.	8.5	104
28	Relative contribution of shoot and ear photosynthesis to grain filling in wheat under good agronomical conditions assessed by differential organ Î´13C. Journal of Experimental Botany, 2014, 65, 5401-5413.	4.8	100
29	Breeding to adapt agriculture to climate change: affordable phenotyping solutions. Current Opinion in Plant Biology, 2018, 45, 237-247.	7.1	100
30	A Novel Remote Sensing Approach for Prediction of Maize Yield Under Different Conditions of Nitrogen Fertilization. Frontiers in Plant Science, 2016, 7, 666.	3.6	98
31	Physiological Traits Associated with Wheat Yield Potential and Performance under Water-Stress in a Mediterranean Environment. Frontiers in Plant Science, 2016, 7, 987.	3.6	93
32	Contribution of the ear and the flag leaf to grain filling in durum wheat inferred from the carbon isotope signature: Genotypic and growing conditions effects. Journal of Integrative Plant Biology, 2014, 56, 444-454.	8.5	90
33	Photosynthetic contribution of the ear to grain filling in wheat: a comparison of different methodologies for evaluation. Journal of Experimental Botany, 2016, 67, 2787-2798.	4.8	89
34	Comparative performance of Î´13C, Î´18O and Î´15N for phenotyping durum wheat adaptation to a dryland environment. Functional Plant Biology, 2013, 40, 595.	2.1	88
35	Comparison of flag leaf and ear photosynthesis with biomass and grain yield of durum wheat under various water conditions and genotypes. Agronomy for Sustainable Development, 2004, 24, 19-28.	0.8	87
36	Dissecting Maize Productivity: Ideotypes Associated with Grain Yield under Drought Stress and Wellâ€watered Conditions. Journal of Integrative Plant Biology, 2012, 54, 1007-1020.	8.5	84

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37	Measuring the dynamic photosynthome. Annals of Botany, 2018, 122, 207-220.	2.9	81
38	Comparative Performance of Ground vs. Aerially Assessed RGB and Multispectral Indices for Early-Growth Evaluation of Maize Performance under Phosphorus Fertilization. Frontiers in Plant Science, 2017, 8, 2004.	3.6	80
39	Wheat genotypic variability in grain yield and carbon isotope discrimination under Mediterranean conditions assessed by spectral reflectance. Journal of Integrative Plant Biology, 2014, 56, 470-479.	8.5	79
40	Nitrogen source and water regime effects on durum wheat photosynthesis and stable carbon and nitrogen isotope composition. Physiologia Plantarum, 2006, 126, 435-445.	5.2	78
41	Photosynthetic Gas Exchange Characteristics of Wheat Flag Leaf Blades and Sheaths during Grain Filling. Plant Physiology, 1987, 85, 667-673.	4.8	77
42	UAV and Ground Image-Based Phenotyping: A Proof of Concept with Durum Wheat. Remote Sensing, 2019, 11, 1244.	4.0	76
43	Stable isotopes in archaeobotanical research. Vegetation History and Archaeobotany, 2015, 24, 215-227.	2.1	74
44	Refixation of respiratory CO2in the ears of C3cereals. Journal of Experimental Botany, 1996, 47, 1567-1575.	4.8	73
45	Water and nitrogen conditions affect the relationships of Î”13C and Î”18O to gas exchange and growth in durum wheat. Journal of Experimental Botany, 2009, 60, 1633-1644.	4.8	72
46	Agronomic conditions and crop evolution in ancient Near East agriculture. Nature Communications, 2014, 5, 3953.	12.8	72
47	Shoot Î´15N gives a better indication than ion concentration or Î”13C of genotypic differences in the response of durum wheat to salinity. Functional Plant Biology, 2009, 36, 144.	2.1	67
48	Is heterosis in maize mediated through better water use?. New Phytologist, 2010, 187, 392-406.	7.3	67
49	Dual Î”¹³C/<i>Î´</i>¹⁸O response to water and nitrogen availability and its relationship with yield in fieldâ€grown durum wheat. Plant, Cell and Environment, 2011, 34, 418-433.	5.7	65
50	Editorial: Plant Phenotyping and Phenomics for Plant Breeding. Frontiers in Plant Science, 2017, 8, 2181.	3.6	65
51	Effect of salinity and water stress during the reproductive stage on growth, ion concentrations, Î”13C, and Î´15N of durum wheat and related amphiploids. Journal of Experimental Botany, 2010, 61, 3529-3542.	4.8	64
52	Productivity in prehistoric agriculture: physiological models for the quantification of cereal yields as an alternative to traditional approaches. Journal of Archaeological Science, 2003, 30, 681-693.	2.4	62
53	Gene expression and physiological responses to salinity and water stress of contrasting durum wheat genotypes. Journal of Integrative Plant Biology, 2016, 58, 48-66.	8.5	62
54	Effectiveness and profitability of the Mi-resistant tomatoes to control root-knot nematodes. European Journal of Plant Pathology, 2005, 111, 29-38.	1.7	61

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55	Oxygen isotope enrichment (Î”¹⁸O) reflects yield potential and drought resistance in maize. Plant, Cell and Environment, 2009, 32, 1487-1499.	5.7	61
56	Effect of source germplasm and season on the in vivo haploid induction rate in tropical maize. Euphytica, 2011, 180, 219-226.	1.2	59
57	Improving crop yield and resilience through optimization of photosynthesis: panacea or pipe dream?. Journal of Experimental Botany, 2021, 72, 3936-3955.	4.8	59
58	Agronomic and physiological traits associated with breeding advances of wheat under high-productive Mediterranean conditions. The case of Chile. Environmental and Experimental Botany, 2014, 103, 180-189.	4.2	58
59	Low-cost assessment of grain yield in durum wheat using RGB images. European Journal of Agronomy, 2019, 105, 146-156.	4.1	58
60	Wheat nitrogen metabolism during grain filling: comparative role of glumes and the flag leaf. Planta, 2006, 225, 165-181.	3.2	57
61	Molecular Characterization of a Diverse Maize Inbred Line Collection and its Potential Utilization for Stress Tolerance Improvement. Crop Science, 2011, 51, 2569-2581.	1.8	57
62	Photosynthetic capacity of field-grown durum wheat under different N availabilities: A comparative study from leaf to canopy. Environmental and Experimental Botany, 2009, 67, 145-152.	4.2	56
63	Grain yield losses in yellow-rusted durum wheat estimated using digital and conventional parameters under field conditions. Crop Journal, 2015, 3, 200-210.	5.2	56
64	Nitrogen source and water regime effects on barley photosynthesis and isotope signature. Functional Plant Biology, 2004, 31, 995.	2.1	54
65	Interactive Effects of Elevated [CO2] and Water Stress on Physiological Traits and Gene Expression during Vegetative Growth in Four Durum Wheat Genotypes. Frontiers in Plant Science, 2016, 7, 1738.	3.6	54
66	Interactive effect of water and nitrogen regimes on plant growth, root traits and water status of old and modern durum wheat genotypes. Planta, 2016, 244, 125-144.	3.2	54
67	Evaluating Maize Genotype Performance under Low Nitrogen Conditions Using RGB UAV Phenotyping Techniques. Sensors, 2019, 19, 1815.	3.8	54
68	Durum wheat ears perform better than the flag leaves under water stress: Gene expression and physiological evidence. Environmental and Experimental Botany, 2018, 153, 271-285.	4.2	52
69	New avenues for increasing yield and stability in C3 cereals: exploring ear photosynthesis. Current Opinion in Plant Biology, 2020, 56, 223-234.	7.1	52
70	Systems Responses to Progressive Water Stress in Durum Wheat. PLoS ONE, 2014, 9, e108431.	2.5	52
71	Photoprotection in water-stressed plants of durum wheat (Triticum turgidum var. durum): changes in chlorophyll fluorescence, spectral signature and photosynthetic pigments. Functional Plant Biology, 2002, 29, 35.	2.1	51
72	RELATIONSHIPS BETWEEN PHOTOSYNTHETIC CAPACITY AND LEAF STRUCTURE IN SEVERAL SHADE PLANTS. American Journal of Botany, 1986, 73, 1760-1770.	1.7	49

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73	Post-green revolution genetic advance in durum wheat: The case of Spain. Field Crops Research, 2018, 228, 158-169.	5.1	49
74	Near-Infrared Reflectance Spectroscopy (NIRS) Assessment of Î´¹⁸O and Nitrogen and Ash Contents for Improved Yield Potential and Drought Adaptation in Maize. Journal of Agricultural and Food Chemistry, 2011, 59, 467-474.	5.2	47
75	Comparative performance of remote sensing methods in assessing wheat performance under Mediterranean conditions. Agricultural Water Management, 2016, 164, 137-147.	5.6	47
76	How yield relates to ash content, Î”13C and Î”18O in maize grown under different water regimes. Annals of Botany, 2009, 104, 1207-1216.	2.9	46
77	Comparative response of <scp><i>Î´</i>¹³C</scp>, <scp><i>Î´</i>¹⁸O</scp> and <scp><i>Î´</i>¹⁵N</scp> in durum wheat exposed to salinity at the vegetative and reproductive stages. Plant, Cell and Environment, 2013, 36, 1214-1227.	5.7	46
78	Physiological traits contributed to the recent increase in yield potential of winter wheat from Henan Province, China. Journal of Integrative Plant Biology, 2014, 56, 492-504.	8.5	46
79	The Plant-Transpiration Response to Vapor Pressure Deficit (VPD) in Durum Wheat Is Associated With Differential Yield Performance and Specific Expression of Genes Involved in Primary Metabolism and Water Transport. Frontiers in Plant Science, 2018, 9, 1994.	3.6	45
80	Root traits and Î´13C and Î´18O of durum wheat under different water regimes. Functional Plant Biology, 2012, 39, 379.	2.1	43
81	The Hydrogen Isotope Composition Î´²H Reflects Plant Performance. Plant Physiology, 2019, 180, 793-812.	4.8	41
82	The combined use of vegetation indices and stable isotopes to predict durum wheat grain yield under contrasting water conditions. Agricultural Water Management, 2015, 158, 196-208.	5.6	39
83	Automatic wheat ear counting using machine learning based on RGB UAV imagery. Plant Journal, 2020, 103, 1603-1613.	5.7	39
84	Wheat ear carbon assimilation and nitrogen remobilization contribute significantly to grain yield. Journal of Integrative Plant Biology, 2016, 58, 914-926.	8.5	38
85	Detecting interactive effects of N fertilization and heat stress on maize productivity by remote sensing techniques. European Journal of Agronomy, 2016, 73, 11-24.	4.1	38
86	Phenotyping Conservation Agriculture Management Effects on Ground and Aerial Remote Sensing Assessments of Maize Hybrids Performance in Zimbabwe. Remote Sensing, 2018, 10, 349.	4.0	37
87	The Nitrogen Contribution of Different Plant Parts to Wheat Grains: Exploring Genotype, Water, and Nitrogen Effects. Frontiers in Plant Science, 2016, 7, 1986.	3.6	36
88	Estimating grain weight in archaeological cereal crops: a quantitative approach for comparison with current conditions. Journal of Archaeological Science, 2004, 31, 1635-1642.	2.4	35
89	Assessing durum wheat ear and leaf metabolomes in the field through hyperspectral data. Plant Journal, 2020, 102, 615-630.	5.7	35
90	Interactive Effects of CO2 Concentration and Water Regime on Stable Isotope Signatures, Nitrogen Assimilation and Growth in Sweet Pepper. Frontiers in Plant Science, 2017, 8, 2180.	3.6	33

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91	Automatic Wheat Ear Counting Using Thermal Imagery. Remote Sensing, 2019, 11, 751.	4.0	33
92	Carbon Isotope Ratios in Ear Parts of Triticale. Plant Physiology, 1992, 100, 1033-1035.	4.8	32
93	Differential <scp><scp>CO₂</scp></scp> effect on primary carbon metabolism of flag leaves in durum wheat (<scp><i>T</i></scp><i>riticum durum</i> Desf.). Plant, Cell and Environment, 2015, 38, 2780-2794.	5.7	29
94	Using unmanned aerial vehicleâ€based multispectral, RGB and thermal imagery for phenotyping of forest genetic trials: A case study in <scp><i>Pinus halepensis</i></scp>. Annals of Applied Biology, 2019, 174, 262-276.	2.5	29
95	Breeding effects on the genotypeÂÃ—Âenvironment interaction for yield of durum wheat grown after the Green Revolution: The case of Spain. Crop Journal, 2020, 8, 623-634.	5.2	29
96	Crop phenotyping in a context of global change: What to measure and how to do it. Journal of Integrative Plant Biology, 2022, 64, 592-618.	8.5	29
97	Is vegetative area, photosynthesis, or grape C uploading involved in the climate change-related grape sugar/anthocyanin decoupling in Tempranillo?. Photosynthesis Research, 2018, 138, 115-128.	2.9	27
98	Agronomic and physiological traits related to the genetic advance of semi-dwarf durum wheat: The case of Spain. Plant Science, 2020, 295, 110210.	3.6	26
99	Relationships between Photosynthetic Capacity and Leaf Structure in Several Shade Plants. American Journal of Botany, 1986, 73, 1760.	1.7	26
100	Comparative genomic and physiological analysis of nutrient response to , : and in barley seedlings. Physiologia Plantarum, 2008, 134, 134-150.	5.2	25
101	Ear photosynthesis in C3 cereals and its contribution to grain yield: methodologies, controversies, and perspectives. Journal of Experimental Botany, 2021, 72, 3956-3970.	4.8	24
102	Comparative effect of salinity on growth, grain yield, water use efficiency, Î´13C and Î´15N of landraces and improved durum wheat varieties. Plant Science, 2016, 251, 44-53.	3.6	23
103	Population dynamics of Meloidogyne incognita on cucumber grafted onto the Cucurbita hybrid RS841 or ungrafted and yield losses under protected cultivation. European Journal of Plant Pathology, 2017, 148, 795-805.	1.7	23
104	Cucumis metuliferus reduces Meloidogyne incognita virulence against the Mi1.2 resistance gene in a tomatoâ€“melon rotation sequence. Pest Management Science, 2019, 75, 1902-1910.	3.4	23
105	Transgenic solutions to increase yield and stability in wheat: shining hope or flash in the pan?. Journal of Experimental Botany, 2019, 70, 1419-1424.	4.8	23
106	¹³C/¹²C isotope labeling to study carbon partitioning and dark respiration in cereals subjected to water stress. Rapid Communications in Mass Spectrometry, 2009, 23, 2819-2828.	1.5	22
107	Durum wheat ideotypes in Mediterranean environments differing in water and temperature conditions. Agricultural Water Management, 2022, 259, 107257.	5.6	22
108	Phenotyping and other breeding approaches for a New Green Revolution. Journal of Integrative Plant Biology, 2014, 56, 422-424.	8.5	21

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109	Hydrological, engineering, agronomical, breeding and physiological pathways for the effective and efficient use of water in agriculture. Agricultural Water Management, 2016, 164, 190-196.	5.6	20
110	Metabolome Profiling Supports the Key Role of the Spike in Wheat Yield Performance. Cells, 2020, 9, 1025.	4.1	20
111	Selective Methods to Investigate Authenticity and Geographical Origin of Mediterranean Food Products. Food Reviews International, 2021, 37, 656-682.	8.4	20
112	Effect of irrigation salinity and ecotype on the growth, physiological indicators and seed yield and quality of Salicornia europaea. Plant Science, 2021, 304, 110819.	3.6	20
113	Impact of elevated CO2 and drought on yield and quality traits of a historical (Blanqueta) and a modern (Sula) durum wheat. Journal of Cereal Science, 2019, 87, 194-201.	3.7	18
114	Remote sensing techniques and stable isotopes as phenotyping tools to assess wheat yield performance: Effects of growing temperature and vernalization. Plant Science, 2020, 295, 110281.	3.6	18
115	Exploring the Potential of Meyerozyma guilliermondii on Physiological Performances and Defense Response against Fusarium Crown Rot on Durum Wheat. Pathogens, 2021, 10, 52.	2.8	18
116	High-Throughput and Precision Phenotyping for Cereal Breeding Programs. , 2013, , 341-374.		17
117	Heterosis for water status in maize seedlings. Agricultural Water Management, 2016, 164, 100-109.	5.6	17
118	Combined Use of Low-Cost Remote Sensing Techniques and Î´13C to Assess Bread Wheat Grain Yield under Different Water and Nitrogen Conditions. Agronomy, 2019, 9, 285.	3.0	17
119	A Novel Aspect of Essential Oils: Coating Seeds with Thyme Essential Oil induces Drought Resistance in Wheat. Plants, 2019, 8, 371.	3.5	14
120	Estimating Wheat Grain Yield Using Sentinel-2 Imagery and Exploring Topographic Features and Rainfall Effects on Wheat Performance in Navarre, Spain. Remote Sensing, 2020, 12, 2278.	4.0	14
121	Bridging the genotypeâ€"phenotype gap for a Mediterranean pine by semiâ€automatic crown identification and multispectral imagery. New Phytologist, 2021, 229, 245-258.	7.3	14
122	Farming and Earth Observation: Sentinel-2 data to estimate within-field wheat grain yield. International Journal of Applied Earth Observation and Geoinformation, 2022, 107, 102697.	2.8	14
123	RGB picture vegetation indexes for High-Throughput Phenotyping Platforms (HTPPs). Proceedings of SPIE, 2015, , .	0.8	13
124	Agronomic performance of irrigated quinoa in desert areas: Comparing different approaches for early assessment of salinity stress. Agricultural Water Management, 2020, 240, 106205.	5.6	13
125	Aphid Resistance: An Overlooked Ecological Dimension of Nonstructural Carbohydrates in Cereals. Frontiers in Plant Science, 2020, 11, 937.	3.6	13
126	Preharvest phenotypic prediction of grain quality and yield of durum wheat using multispectral imaging. Plant Journal, 2022, 109, 1507-1518.	5.7	13

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127	Estimating peanut and soybean photosynthetic traits using leaf spectral reflectance and advance regression models. Planta, 2022, 255, 93.	3.2	13
128	Seed Coating with Thyme Essential Oil or Paraburkholderia phytofirmans PsJN Strain: Conferring Septoria Leaf Blotch Resistance and Promotion of Yield and Grain Isotopic Composition in Wheat. Agronomy, 2019, 9, 586.	3.0	12
129	Assessing the evolution of wheat grain traits during the last 166Âyears using archived samples. Scientific Reports, 2020, 10, 21828.	3.3	12
130	Relationship of Line per se and Testcross Performance for Grain Yield of Tropical Maize in Drought and Wellâ€Watered Trials. Crop Science, 2013, 53, 1228-1236.	1.8	11
131	Reconstruction of Climate and Crop Conditions in the Past Based on the Carbon Isotope Signature of Archaeobotanical Remains. Journal of Nano Education (Print), 2007, 1, 319-332.	0.3	9
132	Factors preventing the performance of oxygen isotope ratios as indicators of grain yield in maize. Planta, 2016, 243, 355-368.	3.2	9
133	Leaf dorsoventrality as a paramount factor determining spectral performance in field-grown wheat under contrasting water regimes. Journal of Experimental Botany, 2018, 69, 3081-3094.	4.8	9
134	Vegetation indices derived from digital images and stable carbon and nitrogen isotope signatures as indicators of date palm performance under salinity. Agricultural Water Management, 2020, 230, 105949.	5.6	9
135	The promising MultispeQ device for tracing the effect of seed coating with biostimulants on growth promotion, photosynthetic state and waterâ€"nutrient stress tolerance in durum wheat. Euro-Mediterranean Journal for Environmental Integration, 2021, 6, 1.	1.3	9
136	Source-Sink Dynamics in Field-Grown Durum Wheat Under Contrasting Nitrogen Supplies: Key Role of Non-Foliar Organs During Grain Filling. Frontiers in Plant Science, 2022, 13, 869680.	3.6	9
137	Stable carbon isotopes in archaeological plant remains. Stratigraphy & Timescales, 2020, , 107-145.	0.5	8
138	Comparative Performance of High-Yielding European Wheat Cultivars Under Contrasting Mediterranean Conditions. Frontiers in Plant Science, 2021, 12, 687622.	3.6	8
139	New Technologies, Tools and Approaches for Improving Crop Breeding. Journal of Integrative Plant Biology, 2012, 54, 210-214.	8.5	7
140	Landscape transformations at the dawn of agriculture in southern Syria (10.7â€"9.9 ka cal. BP): Plant-specific responses to the impact of human activities and climate change. Quaternary Science Reviews, 2017, 158, 145-163.	3.0	7
141	Identification of traits associated with barley yield performance using contrasting nitrogen fertilizations and genotypes. Plant Science, 2019, 282, 83-94.	3.6	7
142	Reconstruction of Climate and Crop Conditions in the Past Based on the Carbon Isotope Signature of Archaeobotanical Remains. , 2007, , 319-332.		7
143	The Effect of Increased Ozone Levels on the Stable Carbon and Nitrogen Isotopic Signature of Wheat Cultivars and Landraces. Atmosphere, 2021, 12, 883.	2.3	6
144	Comparative Performances of Beneficial Microorganisms on the Induction of Durum Wheat Tolerance to Fusarium Head Blight. Microorganisms, 2021, 9, 2410.	3.6	6

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145	Leaf versus whole-canopy remote sensing methodologies for crop monitoring under conservation agriculture: a case of study with maize in Zimbabwe. Scientific Reports, 2020, 10, 16008.	3.3	5
146	Comparative effect of seed treatment with thyme essential oil and Paraburkholderia phytofirmans on growth, photosynthetic capacity, grain yield, Î´ 15 N and Î´ 13 C of durum wheat under drought and heat stress. Annals of Applied Biology, 0, , .	2.5	5
147	Carbon Isotope Composition and the NDVI as Phenotyping Approaches for Drought Adaptation in Durum Wheat: Beyond Trait Selection. Agronomy, 2020, 10, 1679.	3.0	4
148	Agronomical and analytical trait data assessed in a set of quinoa genotypes growing in the UAE under different irrigation salinity conditions. Data in Brief, 2020, 31, 105758.	1.0	4
149	New Technologies for Phenotyping. , 2015, , 1-14.		3
150	Cereal Crop Ear Counting in Field Conditions Using Zenithal RGB Images. Journal of Visualized Experiments, 2019, , .	0.3	3
151	Phenotyping: New Crop Breeding Frontier. , 2018, , 1-11.		3
152	Automatic wheat ear counting in-field conditions: simulation and implication of lower resolution images. , 2018, , .		3
153	Dataset of above and below ground traits assessed in Durum wheat cultivars grown under Mediterranean environments differing in water and temperature conditions. Data in Brief, 2022, 40, 107754.	1.0	3
154	Multiscale assessment of ground, aerial and satellite spectral data for monitoring wheat grain nitrogen content. Information Processing in Agriculture, 2023, 10, 504-522.	4.1	3
155	High Throughput Field Phenotyping. , 2022, , 495-512.		3
156	Evaluating the Performance of Different Commercial and Pre-Commercial Maize Varieties under Low Nitrogen Conditions Using Affordable Phenotyping Tools. Proceedings (mdpi), 2018, 2, .	0.2	2
157	Development of novel technological approaches for a reliable crop characterization under changing environmental conditions. NIR News, 2020, 31, 14-19.	0.3	2
158	Comparison of Proximal Remote Sensing Devices of Vegetable Crops to Determine the Role of Grafting in Plant Resistance to Meloidogyne incognita. Agronomy, 2022, 12, 1098.	3.0	2
159	Quantification of Pinus pinea L. Pinecone Productivity Using Machine Learning of UAV and Field Images. , 0, , .		2
160	Challenges and Bottlenecks in VAV Phenotyping. , 2018, , .		1
161	Phenotyping Conservation Agriculture Management Effects on Ground and Aerial Remote Sensing Assessments of Maize Hybrid Performance in Zimbabwe. Proceedings (mdpi), 2018, 2, 367.	0.2	1
162	Comparison of Proximal Remote Sensing Devices for Estimating Physiological Responses of Eggplants to Root-Knot Nematodes. Proceedings (mdpi), 2019, 18, 9.	0.2	1

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163	Sentinel-2 Responsiveness to Fertilization Gradients in Wheat at Field Level in CÃ³rdoba Province, Argentina. , 2020, , .		1
164	Phenotyping: New Crop Breeding Frontier. , 2019, , 493-503.		0
165	Machine Learning Matching of Sentinel-2 and GPS Combine Harvester Data to Estimate Within-Field Wheat Grain Yield. , 2021, , .		0
166	Wheat ear temperature estimation using a thermal radiometric camera. , 2019, , .		0
167	Open-Source Software for Crop Physiological Assessments Using High Resolution RGB Images. , 2020, , .		0
168	Implications of Very Deep Super-Resolution (VDSR) on RGB imagery for grain yield assessment in wheat. , 2020, , .		0