Mark A Tester

List of Publications by Year
in descending order

214 papers	38,489 citations	5876 81 h-index	2940 189 g-index
234 all docs	234 docs citations	234 times ranked	24091 citing authors

#	Article	IF	Citations
1	Mechanisms of Salinity Tolerance. Annual Review of Plant Biology, 2008, 59, 651-681.	8.6	9,628
2	Na+ Tolerance and Na+ Transport in Higher Plants. Annals of Botany, 2003, 91, 503-527.	1.4	2,514
3	Breeding Technologies to Increase Crop Production in a Changing World. Science, 2010, 327, 818-822.	6.0	1,795
4	Phenomics â€“ technologies to relieve the phenotyping bottleneck. Trends in Plant Science, 2011, 16, 635-644.	4.3	1,321
5	Salt resistant crop plants. Current Opinion in Biotechnology, 2014, 26, 115-124.	3.3	915
6	Evaluating physiological responses of plants to salinity stress. Annals of Botany, 2017, 119, 1-11.	1.4	833
7	Wheat grain yield on saline soils is improved by an ancestral Na+ transporter gene. Nature Biotechnology, 2012, 30, 360-364.	9.4	690
8	Breeding crops to feed 10 billion. Nature Biotechnology, 2019, 37, 744-754.	9.4	577
9	The genome of Chenopodium quinoa. Nature, 2017, 542, 307-312.	13.7	569
10	Functional analysis of AtHKT1 in Arabidopsis shows that Na+ recirculation by the phloem is crucial for salt tolerance. EMBO Journal, 2003, 22, 2004-2014.	3.5	512
11	Shoot Na+ Exclusion and Increased Salinity Tolerance Engineered by Cell Typeâ€“Specific Alteration of Na+ Transport in <i>Arabidopsis</i> Â Â. Plant Cell, 2009, 21, 2163-2178.	3.1	480
12	Chemical Priming of Plants Against Multiple Abiotic Stresses: Mission Possible?. Trends in Plant Science, 2016, 21, 329-340.	4.3	467
13	Root Plasma Membrane Transporters Controlling K+/Na+ Homeostasis in Salt-Stressed Barley. Plant Physiology, 2007, 145, 1714-1725.	2.3	458
14	Boron-Toxicity Tolerance in Barley Arising from Efflux Transporter Amplification. Science, 2007, 318, 1446-1449.	6.0	422
15	The Na+transporter AtHKT1;1 controls retrieval of Na+from the xylem in Arabidopsis. Plant, Cell and Environment, 2007, 30, 497-507.	2.8	415
16	Quantifying the three main components of salinity tolerance in cereals. Plant, Cell and Environment, 2009, 32, 237-249.	2.8	385
17	HKT1;5-Like Cation Transporters Linked to Na+ Exclusion Loci in Wheat, Nax2 and Kna1. Plant Physiology, 2007, 143, 1918-1928.	2.3	378
18	Metabolic responses to salt stress of barley (Hordeum vulgare L.) cultivars, Sahara and Clipper, which differ in salinity tolerance. Journal of Experimental Botany, 2009, 60, 4089-4103.	2.4	375

#	Article	IF	Citations
19	Constitutive Overexpression of the OsNAS Gene Family Reveals Single-Gene Strategies for Effective Iron- and Zinc-Biofortification of Rice Endosperm. PLoS ONE, 2011, 6, e24476.	1.1	362
20	Cell-type-specific calcium responses to drought, salt and cold in theArabidopsisroot. Plant Journal, 2000, 23, 267-278.	2.8	353
21	NONSELECTIVECATIONCHANNELS INPLANTS. Annual Review of Plant Biology, 2002, 53, 67-107.	8.6	347
22	Nomenclature for HKT transporters, key determinants of plant salinity tolerance. Trends in Plant Science, 2006, 11, 372-374.	4.3	329
23	Tansley Review No. 21 Plant ion channels: wholeâ€cell and single channel studies. New Phytologist, 1990, 114, 305-340.	3.5	326
24	Free oxygen radicals regulate plasma membrane Ca2+- and K+-permeable channels in plant root cells. Journal of Cell Science, 2003, 116, 81-88.	1.2	324
25	High-throughput shoot imaging to study drought responses. Journal of Experimental Botany, 2010, 61, 3519-3528.	2.4	313
26	Sodium Fluxes through Nonselective Cation Channels in the Plasma Membrane of Protoplasts from Arabidopsis Roots. Plant Physiology, 2002, 128, 379-387.	2.3	307
27	Speed breeding in growth chambers and glasshouses for crop breeding and model plant research. Nature Protocols, 2018, 13, 2944-2963.	5.5	286
28	Different mechanisms of adaptation to cyclic water stress in two South Australian bread wheat cultivars. Journal of Experimental Botany, 2008, 59, 3327-3346.	2.4	285
29	Energy costs of salt tolerance in crop plants. New Phytologist, 2020, 225, 1072-1090.	3.5	284
30	Control of Sodium Transport in Durum Wheat. Plant Physiology, 2005, 137, 807-818.	2.3	264
31	High-Throughput Phenotyping to Detect Drought Tolerance QTL in Wild Barley Introgression Lines. PLoS ONE, 2014, 9, e97047.	1.1	262
32	Sodium Influx and Accumulation in Arabidopsis. Plant Physiology, 2003, 133, 307-318.	2.3	252
33	Accurate inference of shoot biomass from high-throughput images of cereal plants. Plant Methods, 2011, 7, 2.	1.9	243
34	Reassessment of tissue Na⁺ concentration as a criterion for salinity tolerance in bread wheat. Plant, Cell and Environment, 2007, 30, 1486-1498.	2.8	229
35	Evidence that l -Glutamate Can Act as an Exogenous Signal to Modulate Root Growth and Branching in Arabidopsis thaliana. Plant and Cell Physiology, 2006, 47, 1045-1057.	1.5	228
36	Salt stress under the scalpel â€“ dissecting the genetics of salt tolerance. Plant Journal, 2019, 97, 148-163.	2.8	219

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37	Genetic analysis of abiotic stress tolerance in crops. Current Opinion in Plant Biology, 2011, 14, 232-239.	3.5	218
38	Salinity tolerance loci revealed in rice using high-throughput non-invasive phenotyping. Nature Communications, 2016, 7, 13342.	5.8	218
39	Abiotic Stress Tolerance in Grasses. From Model Plants to Crop Plants. Plant Physiology, 2005, 137, 791-793.	2.3	216
40	Ammonium toxicity and the real cost of transport. Trends in Plant Science, 2001, 6, 335-337.	4.3	200
41	A Weakly Voltage-Dependent, Nonselective Cation Channel Mediates Toxic Sodium Influx in Wheat. Plant Physiology, 2000, 122, 823-834.	2.3	197
42	A Two-Staged Model of Na+ Exclusion in Rice Explained by 3D Modeling of HKT Transporters and Alternative Splicing. PLoS ONE, 2012, 7, e39865.	1.1	193
43	The phenomenon of "nonmycorrhizal" plants. Canadian Journal of Botany, 1987, 65, 419-431.	1.2	182
44	The penetration of light through soil. Plant, Cell and Environment, 1987, 10, 281-286.	2.8	182
45	Arbuscular mycorrhizal inhibition of growth in barley cannot be attributed to extent of colonization, fungal phosphorus uptake or effects on expression of plant phosphate transporter genes. New Phytologist, 2009, 181, 938-949.	3.5	177
46	The Identity of Plant Glutamate Receptors. Science, 2001, 292, 1486b-1487.	6.0	175
47	Arabidopsis thaliana root non-selective cation channels mediate calcium uptake and are involved in growth. Plant Journal, 2002, 32, 799-808.	2.8	174
48	The Na⁺ transporter, Ta<scp>HKT</scp>1;5â€Ð, limits shoot Na⁺ accumulation in bread wheat. Plant Journal, 2014, 80, 516-526.	2.8	170
49	High-Throughput Non-destructive Phenotyping of Traits that Contribute to Salinity Tolerance in Arabidopsis thaliana. Frontiers in Plant Science, 2016, 7, 1414.	1.7	161
50	Assessing the role of root plasma membrane and tonoplast Na⁺/H⁺ exchangers in salinity tolerance in wheat: <i>in planta</i> quantification methods. Plant, Cell and Environment, 2011, 34, 947-961.	2.8	159
51	Genetic Components of Root Architecture Remodeling in Response to Salt Stress. Plant Cell, 2017, 29, 3198-3213.	3.1	156
52	Chloride on the Move. Trends in Plant Science, 2017, 22, 236-248.	4.3	152
53	Image-based phenotyping for non-destructive screening of different salinity tolerance traits in rice. Rice, 2014, 7, 16.	1.7	149
54	Expression of the <i><scp>A</scp>rabidopsis</i> vacuolar <scp>H</scp>⁺â€pyrophosphatase gene (<i><scp>AVP</scp>1</i>) improves the shoot biomass of transgenic barley and increases grain yield in a saline field. Plant Biotechnology Journal, 2014, 12, 378-386.	4.1	147

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55	Type-B response regulators ARR1 and ARR12 regulate expression of AtHKT1;1 and accumulation of sodium in Arabidopsis shoots. Plant Journal, 2010, 64, 753-763.	2.8	145
56	Dichotomy in the NRT Gene Families of Dicots and Grass Species. PLoS ONE, 2010, 5, e15289.	1.1	143
57	NaClâ€induced changes in cytosolic free Ca²⁺ in <i>Arabidopsis thaliana</i> are heterogeneous and modified by external ionic composition. Plant, Cell and Environment, 2008, 31, 1063-1073.	2.8	140
58	Improved Salinity Tolerance of Rice Through Cell Type-Specific Expression of AtHKT1;1. PLoS ONE, 2010, 5, e12571.	1.1	140
59	Sodium exclusion QTL associated with improved seedling growth in bread wheat under salinity stress. Theoretical and Applied Genetics, 2010, 121, 877-894.	1.8	139
60	Hyperpolarisation-activated calcium currents found only in cells from the elongation zone of Arabidopsis thaliana roots. Plant Journal, 2000, 21, 225-229.	2.8	138
61	HvNax3â€"a locus controlling shoot sodium exclusion derived from wild barley (Hordeum vulgare ssp.) Tj ETQq1 1 0.784314 rgBT /Over	1.4	132
62	New plant breeding technologies for food security. Science, 2019, 363, 1390-1391.	6.0	125
63	Role of Biosurfactant and Ion Channel-Forming Activities of Syringomycin Tranransmembrane Ion Flux: A Model for the Mechanism of Action in the Plant-Pathogen Interaction. Molecular Plant-Microbe Interactions, 1995, 8, 610.	1.4	121
64	Inward and outward K⁺â€selective currents in the plasma membrane of protoplasts from maize root cortex and stele. Plant Journal, 1995, 8, 811-825.	2.8	120
65	A cytolytic Î´-endotoxin fromBacillus thuringiensisvar.israelensisforms cation-selective channels in planar lipid bilayers. FEBS Letters, 1989, 244, 259-262.	1.3	118
66	Yield-related salinity tolerance traits identified in a nested association mapping (NAM) population of wild barley. Scientific Reports, 2016, 6, 32586.	1.6	118
67	Salinity tolerance of Arabidopsis: a good model for cereals?. Trends in Plant Science, 2007, 12, 534-540.	4.3	116
68	Root-Specific Transcript Profiling of Contrasting Rice Genotypes in Response to Salinity Stress. Molecular Plant, 2011, 4, 25-41.	3.9	115
69	Characterization of a voltage-dependent Ca2+-selective channel from wheat roots. Planta, 1995, 195, 478.	1.6	110
70	Investigating glutamate receptorâ€like gene coâ€expression in <i>Arabidopsis thaliana</i>. Plant, Cell and Environment, 2008, 31, 861-871.	2.8	110
71	Variation in salinity tolerance and shoot sodium accumulation in <i>Arabidopsis</i> ecotypes linked to differences in the natural expression levels of transporters involved in sodium transport. Plant, Cell and Environment, 2010, 33, 793-804.	2.8	109
72	The response of the maize nitrate transport system to nitrogen demand and supply across the lifecycle. New Phytologist, 2013, 198, 82-94.	3.5	108

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73	Rice DUR3 mediates highâ€affinity urea transport and plays an effective role in improvement of urea acquisition and utilization when expressed in <i>Arabidopsis</i>. New Phytologist, 2012, 193, 432-444.	3.5	104
74	Glutamate activates cation currents in the plasma membrane of Arabidopsis root cells. Planta, 2004, 219, 167-175.	1.6	102
75	Identification of a Stelar-Localized Transport Protein That Facilitates Root-to-Shoot Transfer of Chloride in Arabidopsis. Plant Physiology, 2016, 170, 1014-1029.	2.3	100
76	Direct Measurement of K⁺ Channels in Thylakoid Membranes by Incorporation of Vesicles into Planar Lipid Bilayers. Plant Physiology, 1989, 91, 249-252.	2.3	98
77	EFFECTS OF PHOTON IRRADIANCE ON THE GROWTH OF SHOOTS AND ROOTS, ON THE RATE OF INITIATION OF MYCORRHIZAL INFECTION AND ON THE GROWTH OF INFECTION UNITS IN TRIFOLIUM SUBTERRANEUM L.. New Phytologist, 1986, 103, 375-390.	3.5	96
78	<i>Research Notes</i>Bacterial Blotch Disease of the Cultivated Mushroom Is Caused by an Ion Channel Forming Lipodepsipeptide Toxin. Molecular Plant-Microbe Interactions, 1991, 4, 407.	1.4	96
79	A water-centred framework to assess the effects of salinity on the growth and yield of wheat and barley. Plant and Soil, 2010, 336, 377-389.	1.8	94
80	Cytoplasmic calcium stimulates exocytosis in a plant secretory cell. Biophysical Journal, 1992, 63, 864-867.	0.2	92
81	Partitioning of nutrient transport processes in roots. Journal of Experimental Botany, 2001, 52, 445-457.	2.4	86
82	Spatial control of transgene expression in rice (Oryza sativa L.) using the GAL4 enhancer trapping system. Plant Journal, 2005, 41, 779-789.	2.8	86
83	The Regulation of Anion Loading to the Maize Root Xylem. Plant Physiology, 2005, 137, 819-828.	2.3	86
84	Cytotoxicity of equinatoxin II from the sea anemoneActinia equina involves ion channel formation and an increase in intracellular calcium activity. Journal of Membrane Biology, 1990, 118, 243-249.	1.0	81
85	A novel protein kinase involved in Na⁺ exclusion revealed from positional cloning. Plant, Cell and Environment, 2013, 36, 553-568.	2.8	79
86	The development of mycorrhizal infection in cucumber: effects of P supply on root growth, formation of entry points and growth of infection units. New Phytologist, 1994, 127, 507-514.	3.5	78
87	AVP1: One Protein, Many Roles. Trends in Plant Science, 2017, 22, 154-162.	4.3	78
88	Identification of novel quantitative trait loci for days to ear emergence and flag leaf glaucousness in a bread wheat (Triticum aestivum L.) population adapted to southern Australian conditions. Theoretical and Applied Genetics, 2012, 124, 697-711.	1.8	76
89	Quantifying the effect of soil compaction on three varieties of wheat (Triticum aestivum L.) using X-ray Micro Computed Tomography (CT). Plant and Soil, 2012, 353, 195-208.	1.8	71
90	Barley yield formation under abiotic stress depends on the interplay between flowering time genes and environmental cues. Scientific Reports, 2019, 9, 6397.	1.6	71

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91	The mechanism of zinc uptake in plants. Planta, 1996, 198, 39.	1.6	70
92	SLAH1, a homologue of the slow type anion channel SLAC1, modulates shoot Clâˆ’ accumulation and salt tolerance in <i>Arabidopsis thaliana</i>. Journal of Experimental Botany, 2016, 67, 4495-4505.	2.4	70
93	The Genome Sequence of the Wild Tomato Solanum pimpinellifolium Provides Insights Into Salinity Tolerance. Frontiers in Plant Science, 2018, 9, 1402.	1.7	69
94	Exclusion of Na+ via Sodium ATPase (PpENA1) Ensures Normal Growth of Physcomitrella patens under Moderate Salt Stress. Plant Physiology, 2007, 144, 1786-1796.	2.3	65
95	A SOS3 homologue maps to HvNax4, a barley locus controlling an environmentally sensitive Na+ exclusion trait. Journal of Experimental Botany, 2011, 62, 1201-1216.	2.4	65
96	Localization of iron in rice grain using synchrotron X-ray fluorescence microscopy and high resolution secondary ion mass spectrometry. Journal of Cereal Science, 2014, 59, 173-180.	1.8	65
97	AtNPF2.5 Modulates Chloride (Clâˆ’) Efflux from Roots of Arabidopsis thaliana. Frontiers in Plant Science, 2016, 7, 2013.	1.7	65
98	MVAppâ€"Multivariate Analysis Application for Streamlined Data Analysis and Curation. Plant Physiology, 2019, 180, 1261-1276.	2.3	64
99	Voltage dependence of theChara proton pump revealed by current-voltage measurement during rapid metabolic blockade with cyanide. Journal of Membrane Biology, 1990, 114, 205-223.	1.0	62
100	Ca2+-independent and Ca2+/GTP-binding protein-controlled exocytosis in a plant cell. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 6565-6570.	3.3	61
101	Characterization of Ion Contents and Metabolic Responses to Salt Stress of Different Arabidopsis AtHKT1;1 Genotypes and Their Parental Strains. Molecular Plant, 2013, 6, 350-368.	3.9	61
102	AtHKT1;1 Mediates Nernstian Sodium Channel Transport Properties in Arabidopsis Root Stelar Cells. PLoS ONE, 2011, 6, e24725.	1.1	61
103	Mapping of novel salt tolerance QTL in an Excaliburâ€‰Ã—â€‰Kukri doubled haploid wheat population. Theoretical and Applied Genetics, 2018, 131, 2179-2196.	1.8	60
104	Blockade of potassium channels in the plasmalemma ofChara corallina by tetraethylammonium, Ba2+, Na+ and Cs+. Journal of Membrane Biology, 1988, 105, 77-85.	1.0	59
105	Permeation of Ca2+and monovalent cations through an outwardly rectifying channel in maize root stelar cells. Journal of Experimental Botany, 1997, 48, 839-846.	2.4	59
106	Potassium channels from the plasma membrane of rye roots characterized following incorporation into planar lipid bilayers. Planta, 1992, 186, 188-202.	1.6	58
107	Accounting for variation in designing greenhouse experiments with special reference to greenhouses containing plants on conveyor systems. Plant Methods, 2013, 9, 5.	1.9	58
108	The impact of constitutive heterologous expression of a moss Na+ transporter on the metabolomes of rice and barley. Metabolomics, 2007, 3, 307-317.	1.4	57

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109	Contrast in chloride exclusion between two grapevine genotypes and its variation in their hybrid progeny. Journal of Experimental Botany, 2011, 62, 989-999.	2.4	57
110	Predicting Biomass and Yield in a Tomato Phenotyping Experiment Using UAV Imagery and Random Forest. Frontiers in Artificial Intelligence, 2020, 3, 28.	2.0	55
111	Cl - uptake, transport and accumulation in grapevine rootstocks of differing capacity for Cl - -exclusion. Functional Plant Biology, 2010, 37, 665.	1.1	54
112	Genetic variation in the root growth response of barley genotypes to salinity stress. Functional Plant Biology, 2013, 40, 516.	1.1	53
113	The Arabidopsis thaliana K+-Uptake Permease 5 (AtKUP5) Contains a Functional Cytosolic Adenylate Cyclase Essential for K+ Transport. Frontiers in Plant Science, 2018, 9, 1645.	1.7	53
114	Partitioning of nutrient transport processes in roots. Journal of Experimental Botany, 2001, 52, 445-457.	2.4	53
115	Mobilizing Crop Biodiversity. Molecular Plant, 2020, 13, 1341-1344.	3.9	50
116	Using Phenomic Analysis of Photosynthetic Function for Abiotic Stress Response Gene Discovery. The Arabidopsis Book, 2016, 14, e0185.	0.5	48
117	Calcium/aluminium interactions in the cell wall and plasma membrane of Chara. Planta, 1995, 195, 362.	1.6	47
118	Identification of Putative Transmembrane Proteins Involved in Salinity Tolerance in Chenopodium quinoa by Integrating Physiological Data, RNAseq, and SNP Analyses. Frontiers in Plant Science, 2017, 8, 1023.	1.7	47
119	Unmanned Aerial Vehicle-Based Phenotyping Using Morphometric and Spectral Analysis Can Quantify Responses of Wild Tomato Plants to Salinity Stress. Frontiers in Plant Science, 2019, 10, 370.	1.7	47
120	Structural variations in wheat HKT1;5 underpin differences in Na+ transport capacity. Cellular and Molecular Life Sciences, 2018, 75, 1133-1144.	2.4	45
121	Genetic Diversity and Population Structure of Two Tomato Species from the Galapagos Islands. Frontiers in Plant Science, 2017, 8, 138.	1.7	44
122	Diverse Traits Contribute to Salinity Tolerance of Wild Tomato Seedlings from the Galapagos Islands. Plant Physiology, 2020, 182, 534-546.	2.3	44
123	Phosphate inflow into Trifolium subterraneum L.: Effects of photon irradiance and mycorrhizal infection. Soil Biology and Biochemistry, 1985, 17, 807-810.	4.2	43
124	Cytoplasmic calcium affects the gating of potassium channels in the plasma membrane ofChara corallina: a whole-cell study using calcium-channel effectors. Planta, 1990, 180, 569-581.	1.6	43
125	Salinity tolerance and sodium exclusion in genus Triticum. Breeding Science, 2009, 59, 671-678.	0.9	43
126	Overexpression of the NAC transcription factor JUNGBRUNNEN1 (JUB1) increases salinity tolerance in tomato. Plant Physiology and Biochemistry, 2019, 140, 113-121.	2.8	42

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127	Pharmacology of K+ channels in the plasmalemma of the green algaChara corallina. Journal of Membrane Biology, 1988, 103, 159-169.	1.0	41
128	Rapid pressure driven exocytosis-endocytosis cycle in a single plant cell. FEBS Letters, 1993, 333, 283-286.	1.3	41
129	HVP10 encoding V-PPase is a prime candidate for the barley HvNax3 sodium exclusion gene: evidence from fine mapping and expression analysis. Planta, 2013, 237, 1111-1122.	1.6	41
130	Variation for N Uptake System in Maize: Genotypic Response to N Supply. Frontiers in Plant Science, 2015, 6, 936.	1.7	39
131	Potassium channels in the plasmalemma ofChara corallina are multi-ion pores: Voltage-dependent blockade by Cs+ and anomalous permeabilities. Journal of Membrane Biology, 1988, 105, 87-94.	1.0	38
132	Mitochondrial and chloroplast genomes provide insights into the evolutionary origins of quinoa (Chenopodium quinoa Willd.). Scientific Reports, 2019, 9, 185.	1.6	37
133	High-Throughput Phenotyping of Plant Shoots. Methods in Molecular Biology, 2012, 918, 9-20.	0.4	37
134	Rice plants expressing the moss sodium pumping ATPase PpENA1 maintain greater biomass production under salt stress. Plant Biotechnology Journal, 2011, 9, 838-847.	4.1	34
135	Calcium requirement of wheat in saline and non-saline conditions. Plant and Soil, 2010, 327, 331-345.	1.8	33
136	Comparison of Leaf Sheath Transcriptome Profiles with Physiological Traits of Bread Wheat Cultivars under Salinity Stress. PLoS ONE, 2015, 10, e0133322.	1.1	33
137	Genetics of Na+ exclusion and salinity tolerance in Afghani durum wheat landraces. BMC Plant Biology, 2017, 17, 209.	1.6	32
138	Transmembrane calcium fluxes during Al stress. Plant and Soil, 1995, 171, 125-130.	1.8	31
139	Characterization of the High-Affinity Verapamil Binding Site in a Plant Plasma Membrane Ca 2+ -selective Channel. Journal of Membrane Biology, 1997, 157, 139-145.	1.0	29
140	Growth curve registration for evaluating salinity tolerance in barley. Plant Methods, 2017, 13, 18.	1.9	29
141	Cation Permeability and Selectivity of a Root Plasma Membrane Calcium Channel. Journal of Membrane Biology, 2000, 174, 71-83.	1.0	28
142	Variation in shoot tolerance mechanisms not related to ion toxicity in barley. Functional Plant Biology, 2017, 44, 1194.	1.1	28
143	Phenotyping a diversity panel of quinoa using UAV-retrieved leaf area index, SPAD-based chlorophyll and a random forest approach. Precision Agriculture, 2022, 23, 961-983.	3.1	27
144	Wide genetic diversity of salinity tolerance, sodium exclusion and growth in wild emmer wheat, Triticum dicoccoides. Breeding Science, 2010, 60, 426-435.	0.9	26

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145	Trait Dissection of Salinity Tolerance with Plant Phenomics. Methods in Molecular Biology, 2012, 913, 399-413.	0.4	26
146	Small amounts of ammonium (NH$ _4^+ $) can increase growth of maize (<i>Zea mays</i>). Journal of Plant Nutrition and Soil Science, 2016, 179, 717-725.	1.1	26
147	The Use of High-Throughput Phenotyping for Assessment of Heat Stress-Induced Changes in Arabidopsis. Plant Phenomics, 2020, 2020, 3723916.	2.5	26
148	Maize maintains growth in response to decreased nitrate supply through a highly dynamic and developmental stageâ€specific transcriptional response. Plant Biotechnology Journal, 2016, 14, 342-353.	4.1	25
149	Dissecting new genetic components of salinity tolerance in two-row spring barley at the vegetative and reproductive stages. PLoS ONE, 2020, 15, e0236037.	1.1	25
150	Quinoa Phenotyping Methodologies: An International Consensus. Plants, 2021, 10, 1759.	1.6	24
151	Early Growth Stage Characterization and the Biochemical Responses for Salinity Stress in Tomato. Plants, 2021, 10, 712.	1.6	22
152	Genetic mapping of the early responses to salt stress in <i>Arabidopsis thaliana</i>. Plant Journal, 2021, 107, 544-563.	2.8	22
153	Simultaneous flux and current measurement from single plant protoplasts reveals a strong link between K+fluxes and current, but no link between Ca2+fluxes and current. Plant Journal, 2006, 46, 134-144.	2.8	20
154	Different NaCl-Induced Calcium Signatures in the Arabidopsis thaliana Ecotypes Col-0 and C24. PLoS ONE, 2015, 10, e0117564.	1.1	20
155	Highâ€throughput 3D modelling to dissect the genetic control of leaf elongation in barley (<i>Hordeum vulgare</i>). Plant Journal, 2019, 98, 555-570.	2.8	20
156	Carbohydrate-reactive, pore-forming outer membrane proteins of Aeromonas hydrophila. Infection and Immunity, 1994, 62, 4054-4058.	1.0	20
157	Fluorescence-Activated Cell Sorting for Analysis of Cell Type-Specific Responses to Salinity Stress in Arabidopsis and Rice. , 2012, 913, 265-276.		19
158	Strategies for engineering improved nitrogen use efficiency in crop plants via redistribution and recycling of organic nitrogen. Current Opinion in Biotechnology, 2022, 73, 263-269.	3.3	19
159	THE DEVELOPMENT OF MYCORRHIZAL ROOT SYSTEMS IN TRIFOLIUM SUBTERRANEUM L.: GROWTH OF ROOTS AND THE UNIFORMITY OF SPATIAL DISTRIBUTION OF MYCORRHIZAL INFECTION UNITS IN YOUNG PLANTS. New Phytologist, 1986, 103, 117-131.	3.5	18
160	Plasma membrane Ca2+ channels in roots of higher plants and their role in aluminium toxicity. Plant and Soil, 1993, 155-156, 119-122.	1.8	18
161	Effects of salinity and turgor on calcium influx in Chara. Plant, Cell and Environment, 1993, 16, 547-554.	2.8	18
162	Salinity tolerance and Na⁺ exclusion in wheat: variability, genetics, mapping populations and QTL analysis. Czech Journal of Genetics and Plant Breeding, 2011, 47, S85-S93.	0.4	18

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163	Haplotype variations of major flowering time genes in quinoa unveil their role in the adaptation to different environmental conditions. Plant, Cell and Environment, 2021, 44, 2565-2579.	2.8	17
164	Patch-clamp measurements of capacitance to study exocytosis and endocytosis. Trends in Plant Science, 1998, 3, 110-114.	4.3	16
165	Nitrogen assimilation system in maize is regulated by developmental and tissue-specific mechanisms. Plant Molecular Biology, 2016, 92, 293-312.	2.0	16
166	Using planar lipid-bilayers to study plant ion channels. Physiologia Plantarum, 1994, 91, 770-774.	2.6	15
167	Emerging Technologies to Enable Sustainable Controlled Environment Agriculture in the Extreme Environments of Middle East-North Africa Coastal Regions. Frontiers in Plant Science, 2020, 11, 801.	1.7	14
168	Genome-wide association study in quinoa reveals selection pattern typical for crops with a short breeding history. ELife, 0, 11, .	2.8	14
169	Characterization of epidermal bladder cells in <scp><i>Chenopodium quinoa</i></scp>. Plant, Cell and Environment, 2021, 44, 3836-3852.	2.8	13
170	NAC transcription factors ATAF1 and ANAC055 affect the heat stress response in Arabidopsis. Scientific Reports, 2022, 12, .	1.6	13
171	Voltage Control of Calcium Influx in Intact Cells. Functional Plant Biology, 1997, 24, 805.	1.1	12
172	Nature-Inspired Superhydrophobic Sand Mulches Increase Agricultural Productivity and Water-Use Efficiency in Arid Regions. ACS Agricultural Science and Technology, 2022, 2, 276-288.	1.0	12
173	Depolarizing the GM debate. New Phytologist, 2001, 149, 9-12.	3.5	11
174	Transition from a maternal to external nitrogen source in maize seedlings. Journal of Integrative Plant Biology, 2017, 59, 261-274.	4.1	11
175	Cation currents in protoplasts from the roots of a Na+ hyperaccumulating mutant of Capsicum annuum. Journal of Experimental Botany, 2006, 57, 1171-1180.	2.4	10
176	Plasma membrane Ca2+ channels in roots of higher plants and their role in aluminium toxicity. , 1993, , 125-128.		10
177	The diversity of quinoa morphological traits and seed metabolic composition. Scientific Data, 2022, 9, .	2.4	10
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