Mark A Tester

List of Publications by Citations

218 papers	28,857 citations	77 h-index	169 g-index
233 ext. papers	34,132 ext. citations	8.3 avg, IF	7.61 L-index

#	Paper	IF	Citations
218	Mechanisms of salinity tolerance. *Annual Review of Plant Biology*, **2008**, 59, 651-81	30.7	7075
217	Na+ tolerance and Na+ transport in higher plants. *Annals of Botany*, **2003**, 91, 503-27	4.1	2050
216	Breeding technologies to increase crop production in a changing world. *Science*, **2010**, 327, 818-22	33.3	1426
215	Phenomics--technologies to relieve the phenotyping bottleneck. *Trends in Plant Science*, **2011**, 16, 635-44	13.1	987
214	Salt resistant crop plants. *Current Opinion in Biotechnology*, **2014**, 26, 115-24	11.4	630
213	Evaluating physiological responses of plants to salinity stress. *Annals of Botany*, **2017**, 119, 1-11	4.1	538
212	Wheat grain yield on saline soils is improved by an ancestral Na+ transporter gene. *Nature Biotechnology*, **2012**, 30, 360-4	44.5	515
211	Functional analysis of AtHKT1 in Arabidopsis shows that Na(+) recirculation by the phloem is crucial for salt tolerance. *EMBO Journal*, **2003**, 22, 2004-14	13	425
210	Shoot Na+ exclusion and increased salinity tolerance engineered by cell type-specific alteration of Na+ transport in Arabidopsis. *Plant Cell*, **2009**, 21, 2163-78	11.6	387
209	Root plasma membrane transporters controlling K+/Na+ homeostasis in salt-stressed barley. *Plant Physiology*, **2007**, 145, 1714-25	6.6	357
208	The genome of Chenopodium quinoa. *Nature*, **2017**, 542, 307-312	50.4	345
207	Boron-toxicity tolerance in barley arising from efflux transporter amplification. *Science*, **2007**, 318, 1446-9	33.3	341
206	The Na+ transporter AtHKT1;1 controls retrieval of Na+ from the xylem in Arabidopsis. *Plant, Cell and Environment*, **2007**, 30, 497-507	8.4	340
205	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, 4089-103	7	318
204	Chemical Priming of Plants Against Multiple Abiotic Stresses: Mission Possible?. *Trends in Plant Science*, **2016**, 21, 329-340	13.1	316
203	Nonselective cation channels in plants. *Annual Review of Plant Biology*, **2002**, 53, 67-107	30.7	314
202	Quantifying the three main components of salinity tolerance in cereals. *Plant, Cell and Environment*, **2009**, 32, 237-49	8.4	307

201	Tansley Review No. 21 Plant ion channels: whole-cell and single channel studies. *New Phytologist*, **1990**, 114, 305-340	9.8	300
200	HKT1;5-like cation transporters linked to Na+ exclusion loci in wheat, Nax2 and Kna1. *Plant Physiology*, **2007**, 143, 1918-28	6.6	297
199	Breeding crops to feed 10 billion. *Nature Biotechnology*, **2019**, 37, 744-754	44.5	296
198	Cell-type-specific calcium responses to drought, salt and cold in the Arabidopsis root. *Plant Journal*, **2000**, 23, 267-78	6.9	294
197	Free oxygen radicals regulate plasma membrane Ca2+- and K+-permeable channels in plant root cells. *Journal of Cell Science*, **2003**, 116, 81-8	5.3	291
196	Sodium fluxes through nonselective cation channels in the plasma membrane of protoplasts from Arabidopsis roots. *Plant Physiology*, **2002**, 128, 379-87	6.6	277
195	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	3.7	260
194	Nomenclature for HKT transporters, key determinants of plant salinity tolerance. *Trends in Plant Science*, **2006**, 11, 372-4	13.1	254
193	Control of sodium transport in durum wheat. *Plant Physiology*, **2005**, 137, 807-18	6.6	237
192	High-throughput shoot imaging to study drought responses. *Journal of Experimental Botany*, **2010**, 61, 3519-28	7	232
191	Different mechanisms of adaptation to cyclic water stress in two South Australian bread wheat cultivars. *Journal of Experimental Botany*, **2008**, 59, 3327-46	7	224
190	Sodium influx and accumulation in Arabidopsis. *Plant Physiology*, **2003**, 133, 307-18	6.6	222
189	Reassessment of tissue Na(+) concentration as a criterion for salinity tolerance in bread wheat. *Plant, Cell and Environment*, **2007**, 30, 1486-98	8.4	197
188	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, 1045-57	4.9	197
187	Accurate inference of shoot biomass from high-throughput images of cereal plants. *Plant Methods*, **2011**, 7, 2	5.8	194
186	Genetic analysis of abiotic stress tolerance in crops. *Current Opinion in Plant Biology*, **2011**, 14, 232-9	9.9	187
185	A weakly voltage-dependent, nonselective cation channel mediates toxic sodium influx in wheat. *Plant Physiology*, **2000**, 122, 823-34	6.6	183
184	High-throughput phenotyping to detect drought tolerance QTL in wild barley introgression lines. *PLoS ONE*, **2014**, 9, e97047	3.7	173

183	Abiotic stress tolerance in grasses. From model plants to crop plants. *Plant Physiology*, **2005**, 137, 791-3	6.6	169
182	Speed breeding in growth chambers and glasshouses for crop breeding and model plant research. *Nature Protocols*, **2018**, 13, 2944-2963	18.8	168
181	Arabidopsis thaliana root non-selective cation channels mediate calcium uptake and are involved in growth. *Plant Journal*, **2002**, 32, 799-808	6.9	159
180	The penetration of light through soil. *Plant, Cell and Environment*, **1987**, 10, 281-286	8.4	158
179	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	9.8	156
178	The identity of plant glutamate receptors. *Science*, **2001**, 292, 1486-7	33.3	155
177	The phenomenon of "nonmycorrhizal" plants. *Canadian Journal of Botany*, **1987**, 65, 419-431		150
176	Energy costs of salt tolerance in crop plants. *New Phytologist*, **2020**, 225, 1072-1090	9.8	144
175	Salinity tolerance loci revealed in rice using high-throughput non-invasive phenotyping. *Nature Communications*, **2016**, 7, 13342	17.4	134
174	A two-staged model of Na+ exclusion in rice explained by 3D modeling of HKT transporters and alternative splicing. *PLoS ONE*, **2012**, 7, e39865	3.7	134
173	Hyperpolarisation-activated calcium currents found only in cells from the elongation zone of Arabidopsis thaliana roots. *Plant Journal*, **2000**, 21, 225-9	6.9	127
172	Assessing the role of root plasma membrane and tonoplast Na+/H+ exchangers in salinity tolerance in wheat: in planta quantification methods. *Plant, Cell and Environment*, **2011**, 34, 947-961	8.4	126
171	The Na(+) transporter, TaHKT1;5-D, limits shoot Na(+) accumulation in bread wheat. *Plant Journal*, **2014**, 80, 516-26	6.9	117
170	NaCl-induced changes in cytosolic free Ca2+ in Arabidopsis thaliana are heterogeneous and modified by external ionic composition. *Plant, Cell and Environment*, **2008**, 31, 1063-73	8.4	116
169	HvNax3--a locus controlling shoot sodium exclusion derived from wild barley (Hordeum vulgare ssp. spontaneum). *Functional and Integrative Genomics*, **2010**, 10, 277-91	3.8	111
168	Expression of the Arabidopsis vacuolar H+-pyrophosphatase gene (AVP1) improves the shoot biomass of transgenic barley and increases grain yield in a saline field. *Plant Biotechnology Journal*, **2014**, 12, 378-86	11.6	110
167	Image-based phenotyping for non-destructive screening of different salinity tolerance traits in rice. *Rice*, **2014**, 7, 16	5.8	110
166	Sodium exclusion QTL associated with improved seedling growth in bread wheat under salinity stress. *Theoretical and Applied Genetics*, **2010**, 121, 877-94	6	108

165	Type-B response regulators ARR1 and ARR12 regulate expression of AtHKT1;1 and accumulation of sodium in Arabidopsis shoots. *Plant Journal*, **2010**, 64, 753-63	6.9	106
164	Improved salinity tolerance of rice through cell type-specific expression of AtHKT1;1. *PLoS ONE*, **2010**, 5, e12571	3.7	106
163	Role of biosurfactant and ion channel-forming activities of syringomycin in transmembrane ion flux: a model for the mechanism of action in the plant-pathogen interaction. *Molecular Plant-Microbe Interactions*, **1995**, 8, 610-20	3.6	106
162	Salt stress under the scalpel - dissecting the genetics of salt tolerance. *Plant Journal*, **2019**, 97, 148-163	6.9	104
161	Salinity tolerance of Arabidopsis: a good model for cereals?. *Trends in Plant Science*, **2007**, 12, 534-40	13.1	103
160	Dichotomy in the NRT gene families of dicots and grass species. *PLoS ONE*, **2010**, 5, e15289	3.7	101
159	Chloride on the Move. *Trends in Plant Science*, **2017**, 22, 236-248	13.1	97
158	A cytolytic delta-endotoxin from Bacillus thuringiensis var. israelensis forms cation-selective channels in planar lipid bilayers. *FEBS Letters*, **1989**, 244, 259-62	3.8	97
157	Investigating glutamate receptor-like gene co-expression in Arabidopsis thaliana. *Plant, Cell and Environment*, **2008**, 31, 861-71	8.4	95
156	Glutamate activates cation currents in the plasma membrane of Arabidopsis root cells. *Planta*, **2004** , 219, 167-75	4.7	91
155	Root-specific transcript profiling of contrasting rice genotypes in response to salinity stress. *Molecular Plant*, **2011**, 4, 25-41	14.4	90
154	Inward and outward K+-selective currents in the plasma membrane of protoplasts from maize root cortex and stele. *Plant Journal*, **1995**, 8, 811-825	6.9	89
153	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	9.8	89
152	New plant breeding technologies for food security. *Science*, **2019**, 363, 1390-1391	33.3	85
151	The response of the maize nitrate transport system to nitrogen demand and supply across the lifecycle. *New Phytologist*, **2013**, 198, 82-94	9.8	85
150	Cytoplasmic calcium stimulates exocytosis in a plant secretory cell. *Biophysical Journal*, **1992**, 63, 864-7	2.9	85
149	Variation in salinity tolerance and shoot sodium accumulation in Arabidopsis ecotypes linked to differences in the natural expression levels of transporters involved in sodium transport. *Plant, Cell and Environment*, **2010**, 33, 793-804	8.4	84
148	Direct measurement of k channels in thylakoid membranes by incorporation of vesicles into planar lipid bilayers. *Plant Physiology*, **1989**, 91, 249-52	6.6	83

147	Research NotesBacterial Blotch Disease of the Cultivated Mushroom Is Caused by an Ion Channel Forming Lipodepsipeptide Toxin. *Molecular Plant-Microbe Interactions*, **1991**, 4, 407	3.6	82
146	Genetic Components of Root Architecture Remodeling in Response to Salt Stress. *Plant Cell*, **2017**, 29, 3198-3213	11.6	80
145	Yield-related salinity tolerance traits identified in a nested association mapping (NAM) population of wild barley. *Scientific Reports*, **2016**, 6, 32586	4.9	79
144	Spatial control of transgene expression in rice (Oryza sativa L.) using the GAL4 enhancer trapping system. *Plant Journal*, **2005**, 41, 779-89	6.9	78
143	The regulation of anion loading to the maize root xylem. *Plant Physiology*, **2005**, 137, 819-28	6.6	78
142	High-Throughput Non-destructive Phenotyping of Traits that Contribute to Salinity Tolerance in. *Frontiers in Plant Science*, **2016**, 7, 1414	6.2	76
141	Partitioning of nutrient transport processes in roots. *Journal of Experimental Botany*, **2001**, 52, 445-57	7	74
140	Rice DUR3 mediates high-affinity urea transport and plays an effective role in improvement of urea acquisition and utilization when expressed in Arabidopsis. *New Phytologist*, **2012**, 193, 432-44	9.8	73
139	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	4.2	73
138	Characterization of a voltage-dependent Ca2+-selective channel from wheat roots. *Planta*, **1995**, 195, 478	4.7	71
137	Cytotoxicity of equinatoxin II from the sea anemone Actinia equina involves ion channel formation and an increase in intracellular calcium activity. *Journal of Membrane Biology*, **1990**, 118, 243-9	2.3	70
136	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	6	67
135	Identification of a Stelar-Localized Transport Protein That Facilitates Root-to-Shoot Transfer of Chloride in Arabidopsis. *Plant Physiology*, **2016**, 170, 1014-29	6.6	66
134	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	9.8	65
133	A novel protein kinase involved in Na(+) exclusion revealed from positional cloning. *Plant, Cell and Environment*, **2013**, 36, 553-68	8.4	60
132	Exclusion of Na+ via sodium ATPase (PpENA1) ensures normal growth of Physcomitrella patens under moderate salt stress. *Plant Physiology*, **2007**, 144, 1786-96	6.6	60
131	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, 6565-70	11.5	56
130	Permeation of Ca2+and monovalent cations through an outwardly rectifying channel in maize root stelar cells. *Journal of Experimental Botany*, **1997**, 48, 839-846	7	55

129	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	3.8	54
128	A SOS3 homologue maps to HvNax4, a barley locus controlling an environmentally sensitive Na+ exclusion trait. *Journal of Experimental Botany*, **2011**, 62, 1201-16	7	54
127	AtHKT1;1 mediates nernstian sodium channel transport properties in Arabidopsis root stelar cells. *PLoS ONE*, **2011**, 6, e24725	3.7	54
126	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	4.2	53
125	The impact of constitutive heterologous expression of a moss Na+ transporter on the metabolomes of rice and barley. *Metabolomics*, **2007**, 3, 307-317	4.7	53
124	The mechanism of zinc uptake in plants. *Planta*, **1996**, 198, 39	4.7	51
123	SLAH1, a homologue of the slow type anion channel SLAC1, modulates shoot Cl- accumulation and salt tolerance in Arabidopsis thaliana. *Journal of Experimental Botany*, **2016**, 67, 4495-505	7	51
122	Voltage dependence of the Chara proton pump revealed by current-voltage measurement during rapid metabolic blockade with cyanide. *Journal of Membrane Biology*, **1990**, 114, 205-23	2.3	50
121	Blockade of potassium channels in the plasmalemma ofChara corallina by tetraethylammonium, Ba2+, Na+ and Cs+. *Journal of Membrane Biology*, **1988**, 105, 77-85	2.3	49
120	Contrast in chloride exclusion between two grapevine genotypes and its variation in their hybrid progeny. *Journal of Experimental Botany*, **2011**, 62, 989-99	7	48
119	AVP1: One Protein, Many Roles. *Trends in Plant Science*, **2017**, 22, 154-162	13.1	47
118	Characterization of ion contents and metabolic responses to salt stress of different Arabidopsis AtHKT1;1 genotypes and their parental strains. *Molecular Plant*, **2013**, 6, 350-68	14.4	45
117	Cl - uptake, transport and accumulation in grapevine rootstocks of differing capacity for Cl - -exclusion. *Functional Plant Biology*, **2010**, 37, 665	2.7	45
116	Accounting for variation in designing greenhouse experiments with special reference to greenhouses containing plants on conveyor systems. *Plant Methods*, **2013**, 9, 5	5.8	44
115	Phosphate inflow into Trifolium subterraneum L.: Effects of photon irradiance and mycorrhizal infection. *Soil Biology and Biochemistry*, **1985**, 17, 807-810	7.5	41
114	The Genome Sequence of the Wild Tomato Provides Insights Into Salinity Tolerance. *Frontiers in Plant Science*, **2018**, 9, 1402	6.2	41
113	Mapping of novel salt tolerance QTL in an Excalibur Kukri doubled haploid wheat population. *Theoretical and Applied Genetics*, **2018**, 131, 2179-2196	6	39
112	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, 569-81	4.7	38

111	Potassium channels from the plasma membrane of rye roots characterized following incorporation into planar lipid bilayers. *Planta*, **1992**, 186, 188-202	4.7	37
110	Modulates Chloride (Cl) Efflux from Roots of. *Frontiers in Plant Science*, **2016**, 7, 2013	6.2	36
109	Partitioning of nutrient transport processes in roots. *Journal of Experimental Botany*, **2001**, 52, 445-457	7	35
108	Salinity tolerance and sodium exclusion in genus Triticum. *Breeding Science*, **2009**, 59, 671-678	2	34
107	Barley yield formation under abiotic stress depends on the interplay between flowering time genes and environmental cues. *Scientific Reports*, **2019**, 9, 6397	4.9	33
106	Rapid pressure driven exocytosis-endocytosis cycle in a single plant cell. Capacitance measurements in aleurone protoplasts. *FEBS Letters*, **1993**, 333, 283-6	3.8	33
105	Pharmacology of K+ channels in the plasmalemma of the green algaChara corallina. *Journal of Membrane Biology*, **1988**, 103, 159-169	2.3	33
104	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, 1111-22	4.7	31
103	Genetic variation in the root growth response of barley genotypes to salinity stress. *Functional Plant Biology*, **2013**, 40, 516-530	2.7	30
102	Calcium requirement of wheat in saline and non-saline conditions. *Plant and Soil*, **2010**, 327, 331-345	4.2	30
101	Transmembrane calcium fluxes during Al stress. *Plant and Soil*, **1995**, 171, 125-130	4.2	30
100	Calcium/aluminium interactions in the cell wall and plasma membrane of Chara. *Planta*, **1995**, 195, 362	4.7	30
99	Using Phenomic Analysis of Photosynthetic Function for Abiotic Stress Response Gene Discovery. *The Arabidopsis Book*, **2016**, 14, e0185	3	30
98	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	6.2	29
97	Identification of Putative Transmembrane Proteins Involved in Salinity Tolerance in by Integrating Physiological Data, RNAseq, and SNP Analyses. *Frontiers in Plant Science*, **2017**, 8, 1023	6.2	29
96	Rice plants expressing the moss sodium pumping ATPase PpENA1 maintain greater biomass production under salt stress. *Plant Biotechnology Journal*, **2011**, 9, 838-47	11.6	29
95	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	2.3	29
94	Structural variations in wheat HKT1;5 underpin differences in Na transport capacity. *Cellular and Molecular Life Sciences*, **2018**, 75, 1133-1144	10.3	28

93	High-throughput phenotyping of plant shoots. *Methods in Molecular Biology*, **2012**, 918, 9-20	1.4	27
92	MVApp-Multivariate Analysis Application for Streamlined Data Analysis and Curation. *Plant Physiology*, **2019**, 180, 1261-1276	6.6	26
91	Comparison of Leaf Sheath Transcriptome Profiles with Physiological Traits of Bread Wheat Cultivars under Salinity Stress. *PLoS ONE*, **2015**, 10, e0133322	3.7	26
90	Genetics of Na exclusion and salinity tolerance in Afghani durum wheat landraces. *BMC Plant Biology*, **2017**, 17, 209	5.3	25
89	Cation permeability and selectivity of a root plasma membrane calcium channel. *Journal of Membrane Biology*, **2000**, 174, 71-83	2.3	25
88	Growth curve registration for evaluating salinity tolerance in barley. *Plant Methods*, **2017**, 13, 18	5.8	24
87	Genetic Diversity and Population Structure of Two Tomato Species from the Galapagos Islands. *Frontiers in Plant Science*, **2017**, 8, 138	6.2	24
86	Variation in shoot tolerance mechanisms not related to ion toxicity in barley. *Functional Plant Biology*, **2017**, 44, 1194-1206	2.7	23
85	Characterization of the high-affinity verapamil binding site in a plant plasma membrane Ca2+-selective channel. *Journal of Membrane Biology*, **1997**, 157, 139-45	2.3	23
84	Wide genetic diversity of salinity tolerance, sodium exclusion and growth in wild emmer wheat, Triticum dicoccoides. *Breeding Science*, **2010**, 60, 426-435	2	22
83	Variation for N Uptake System in Maize: Genotypic Response to N Supply. *Frontiers in Plant Science*, **2015**, 6, 936	6.2	21
82	Mobilizing Crop Biodiversity. *Molecular Plant*, **2020**, 13, 1341-1344	14.4	21
81	Overexpression of the NAC transcription factor JUNGBRUNNEN1 (JUB1) increases salinity tolerance in tomato. *Plant Physiology and Biochemistry*, **2019**, 140, 113-121	5.4	20
80	Diverse Traits Contribute to Salinity Tolerance of Wild Tomato Seedlings from the Galapagos Islands. *Plant Physiology*, **2020**, 182, 534-546	6.6	20
79	The K-Uptake Permease 5 (AtKUP5) Contains a Functional Cytosolic Adenylate Cyclase Essential for K Transport. *Frontiers in Plant Science*, **2018**, 9, 1645	6.2	20
78	Trait dissection of salinity tolerance with plant phenomics. *Methods in Molecular Biology*, **2012**, 913, 399-413	1.4	19
77	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, 134-44	6.9	18
76	Carbohydrate-reactive, pore-forming outer membrane proteins of Aeromonas hydrophila. *Infection and Immunity*, **1994**, 62, 4054-8	3.7	18

75	Plasma membrane Ca2+ channels in roots of higher plants and their role in aluminium toxicity. *Plant and Soil*, **1993**, 155-156, 119-122	4.2	17
74	Small amounts of ammonium (NH$ _4^+ $) can increase growth of maize (Zea mays). *Journal of Plant Nutrition and Soil Science*, **2016**, 179, 717-725	2.3	15
73	Maize maintains growth in response to decreased nitrate supply through a highly dynamic and developmental stage-specific transcriptional response. *Plant Biotechnology Journal*, **2016**, 14, 342-53	11.6	15
72	Different NaCl-induced calcium signatures in the Arabidopsis thaliana ecotypes Col-0 and C24. *PLoS ONE*, **2015**, 10, e0117564	3.7	15
71	Fluorescence-activated cell sorting for analysis of cell type-specific responses to salinity stress in Arabidopsis and rice. *Methods in Molecular Biology*, **2012**, 913, 265-76	1.4	15
70	Using planar lipid-bilayers to study plant ion channels. *Physiologia Plantarum*, **1994**, 91, 770-774	4.6	15
69	The Use of High-Throughput Phenotyping for Assessment of Heat Stress-Induced Changes in Arabidopsis. *Plant Phenomics*, **2020**, 2020, 3723916	7	15
68	Predicting Biomass and Yield in a Tomato Phenotyping Experiment Using UAV Imagery and Random Forest. *Frontiers in Artificial Intelligence*, **2020**, 3, 28	3	14
67	Effects of salinity and turgor on calcium influx in Chara. *Plant, Cell and Environment*, **1993**, 16, 547-554	8.4	14
66	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	9.8	14
65	Patch-clamp measurements of capacitance to study exocytosis and endocytosis. *Trends in Plant Science*, **1998**, 3, 110-114	13.1	13
64	Mitochondrial and chloroplast genomes provide insights into the evolutionary origins of quinoa (Chenopodium quinoa Willd.). *Scientific Reports*, **2019**, 9, 185	4.9	13
63	Abiotic Stress and Metabolomics **2018**, 61-85		12
62	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	1.4	12
61	Dissecting new genetic components of salinity tolerance in two-row spring barley at the vegetative and reproductive stages. *PLoS ONE*, **2020**, 15, e0236037	3.7	11
60	Nitrogen assimilation system in maize is regulated by developmental and tissue-specific mechanisms. *Plant Molecular Biology*, **2016**, 92, 293-312	4.6	11
59	Depolarizing the GM debate. *New Phytologist*, **2001**, 149, 9-12	9.8	10
58	Abiotic Stress and Metabolomics **2011**, 61-85		9

57	The control of long-distance K+ transport by ABA. *Trends in Plant Science*, **1999**, 4, 5-6	13.1	9
56	Compatible solutes and salt tolerance: Misuse of transgenic tobacco. *Trends in Plant Science*, **1996**, 1, 294-295	13.1	9
55	High-throughput 3D modelling to dissect the genetic control of leaf elongation in barley (Hordeum vulgare). *Plant Journal*, **2019**, 98, 555-570	6.9	9
54	Cation currents in protoplasts from the roots of a Na+ hyperaccumulating mutant of Capsicum annuum. *Journal of Experimental Botany*, **2006**, 57, 1171-80	7	8
53	A donor-specific QTL, exhibiting allelic variation for leaf sheath hairiness in a nested association mapping population, is located on barley chromosome 4H. *PLoS ONE*, **2017**, 12, e0189446	3.7	7
52	Genomic and Genetic Studies of Abiotic Stress Tolerance in Barley. *Compendium of Plant Genomes*, **2018**, 259-286	0.8	7
51	DES-TOMATO: A Knowledge Exploration System Focused On Tomato Species. *Scientific Reports*, **2017**, 7, 5968	4.9	7
50	Transition from a maternal to external nitrogen source in maize seedlings. *Journal of Integrative Plant Biology*, **2017**, 59, 261-274	8.3	6
49	Structural and functional analyses of PpENA1 provide insights into cation binding by type IID P-type ATPases in lower plants and fungi. *Biochimica Et Biophysica Acta - Biomembranes*, **2011**, 1808, 1483-92	3.8	6
48	Cell type-specific expression of sodium transporters improves salinity tolerance of rice. *GM Crops*, **2010**, 1, 273-5		6
47	Voltage Control of Calcium Influx in Intact Cells. *Functional Plant Biology*, **1997**, 24, 805	2.7	6
46	Early Growth Stage Characterization and the Biochemical Responses for Salinity Stress in Tomato. *Plants*, **2021**, 10,	4.5	6
45	Seeking clarity in the debate over the safety of GM foods. *Nature*, **1999**, 402, 575; author reply 575-6	50.4	5
44	The control of boron accumulation by two genotypes of wheat. *Plant and Soil*, **1993**, 155-156, 305-308	4.2	5
43	THE APPARENT WIDTH OF THE RHIZOSPHERE OF TRIFOLIUM SUBTERRANEUM L. FOR VESICULAR-ARBUSCULAR MYCORRHIZAL NFECTION: EFFECTS OF TIME AND OTHER FACTORS. *New Phytologist*, **1986**, 104, 547-558	9.8	5
42	A Model-Based Approach to Recovering the Structure of a Plant from Images. *Lecture Notes in Computer Science*, **2015**, 215-230	0.9	5
41	Investigation of a His-rich arabinogalactan-protein for micronutrient biofortification of cereal grain. *Physiologia Plantarum*, **2011**, 143, 271-86	4.6	4
40	Ferri- and Ferrocyanide Salts Change the Current/Voltage Relations ofChara corallina: No Correlation with the Transmembrane Redox System. *Journal of Experimental Botany*, **1990**, 41, 1559-1565	7	4

39	Phenotyping a diversity panel of quinoa using UAV-retrieved leaf area index, SPAD-based chlorophyll and a random forest approach. *Precision Agriculture*,1	5.6	4
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