Stephen D Tyerman

List of Publications by Year
in descending order

183 papers	14,989 citations	14614 66 h-index	20900 115 g-index
195 all docs	195 docs citations	195 times ranked	12411 citing authors

#	Article	IF	Citations
1	Wheat grain yield on saline soils is improved by an ancestral Na+ transporter gene. Nature Biotechnology, 2012, 30, 360-364.	9.4	690
2	Plant aquaporins: multifunctional water and solute channels with expanding roles. Plant, Cell and Environment, 2002, 25, 173-194.	2.8	536
3	Aquaporins: Highly Regulated Channels Controlling Plant Water Relations. Plant Physiology, 2014, 164, 1600-1618.	2.3	536
4	The Role of Plasma Membrane Intrinsic Protein Aquaporins in Water Transport through Roots: Diurnal and Drought Stress Responses Reveal Different Strategies between Isohydric and Anisohydric Cultivars of Grapevine Â. Plant Physiology, 2009, 149, 445-460.	2.3	431
5	The Role of Molybdenum in Agricultural Plant Production. Annals of Botany, 2005, 96, 745-754.	1.4	403
6	Mechanisms of Cl^{â€‹} transport contributing to salt tolerance. Plant, Cell and Environment, 2010, 33, 566-589.	2.8	387
7	Plant aquaporins: their molecular biology, biophysics and significance for plant water relations. Journal of Experimental Botany, 1999, 50, 1055-1071.	2.4	310
8	Energy costs of salt tolerance in crop plants. New Phytologist, 2020, 225, 1072-1090.	3.5	284
9	New potent inhibitors of aquaporins: silver and gold compounds inhibit aquaporins of plant and human origin. FEBS Letters, 2002, 531, 443-447.	1.3	278
10	The identification of aluminium-resistance genes provides opportunities for enhancing crop production on acid soils. Journal of Experimental Botany, 2011, 62, 9-20.	2.4	272
11	The emerging importance of the SPX domainâ€containing proteins in phosphate homeostasis. New Phytologist, 2012, 193, 842-851.	3.5	269
12	GABA signalling modulates plant growth by directly regulating the activity of plant-specific anion transporters. Nature Communications, 2015, 6, 7879.	5.8	268
13	Inhibition of Water Channels by HgCl2 in Intact Wheat Root Cells1. Plant Physiology, 1999, 120, 849-858.	2.3	233
14	Fruit Calcium: Transport and Physiology. Frontiers in Plant Science, 2016, 7, 569.	1.7	233
15	Cell-Specific Vacuolar Calcium Storage Mediated by <i>CAX1</i> Regulates Apoplastic Calcium Concentration, Gas Exchange, and Plant Productivity in <i>Arabidopsis</i> Â Â. Plant Cell, 2011, 23, 240-257.	3.1	222
16	Calcium delivery and storage in plant leaves: exploring the link with water flow. Journal of Experimental Botany, 2011, 62, 2233-2250.	2.4	208
17	Î³-Aminobutyric acid (GABA) signalling in plants. Cellular and Molecular Life Sciences, 2017, 74, 1577-1603.	2.4	205
18	Aluminum activates an anion channel in the apical cells of wheat roots. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 6547-6552.	3.3	200

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19	Roles of Morphology, Anatomy, and Aquaporins in Determining Contrasting Hydraulic Behavior of Roots Â. Plant Physiology, 2009, 150, 348-364.	2.3	194
20	Chloroplast function and ion regulation in plants growing on saline soils: lessons from halophytes. Journal of Experimental Botany, 2017, 68, 3129-3143.	2.4	187
21	Malate-Permeable Channels and Cation Channels Activated by Aluminum in the Apical Cells of Wheat Roots. Plant Physiology, 2001, 125, 1459-1472.	2.3	177
22	Review: Nutrient loading of developing seeds. Functional Plant Biology, 2007, 34, 314.	1.1	170
23	Sources of water used by riparian Eucalyptus camaldulensis overlying highly saline groundwater. Oecologia, 1994, 100-100, 21-28.	0.9	167
24	A channel-like transporter for NH4+ on the symbiotic interface of N2-fixing plants. Nature, 1995, 378, 629-632.	13.7	167
25	Protocol: optimising hydroponic growth systems for nutritional and physiological analysis of Arabidopsis thaliana and other plants. Plant Methods, 2013, 9, 4.	1.9	167
26	Boron Toxicity Tolerance in Barley through Reduced Expression of the Multifunctional Aquaporin HvNIP2;1 Â. Plant Physiology, 2010, 153, 1706-1715.	2.3	159
27	A putative role for TIP and PIP aquaporins in dynamics of leaf hydraulic and stomatal conductances in grapevine under water stress and reâ€watering. Plant, Cell and Environment, 2013, 36, 828-843.	2.8	159
28	Rapid shootâ€toâ€root signalling regulates root hydraulic conductance via aquaporins. Plant, Cell and Environment, 2014, 37, 520-538.	2.8	155
29	Root ion channels and salinity. Scientia Horticulturae, 1998, 78, 175-235.	1.7	153
30	Nonâ€selective cation channel activity of aquaporin AtPIP2;1 regulated by Ca²⁺ and pH. Plant, Cell and Environment, 2017, 40, 802-815.	2.8	153
31	Plasma membrane of Beta vulgaris storage root shows high water channel activity regulated by cytoplasmic pH and a dual range of calcium concentrations. Journal of Experimental Botany, 2006, 57, 609-621.	2.4	149
32	Functional characterization of the rice <i>SPXâ€MFS</i> family reveals a key role of <i>OsSPXâ€MFS1</i> in controlling phosphate homeostasis in leaves. New Phytologist, 2012, 196, 139-148.	3.5	139
33	Evolution of chloroplast retrograde signaling facilitates green plant adaptation to land. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5015-5020.	3.3	138
34	Nitrate transport capacity of the <i>Arabidopsis thaliana</i> NRT2 family members and their interactions with AtNAR2.1. New Phytologist, 2012, 194, 724-731.	3.5	136
35	Channel-mediated permeation of ammonia gas through the peribacteroid membrane of soybean nodules. FEBS Letters, 2000, 465, 110-114.	1.3	132
36	Characterization of Water Channels in Wheat Root Membrane Vesicles. Plant Physiology, 1997, 115, 561-567.	2.3	128

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37	The K⁺/Na⁺ Selectivity of a Cation Channel in the Plasma Membrane of Root Cells Does Not Differ in Salt-Tolerant and Salt-Sensitive Wheat Species. Plant Physiology, 1991, 97, 598-605.	2.3	127
38	Transposon-Mediated Alteration of <i>TaMATE1B</i> Expression in Wheat Confers Constitutive Citrate Efflux from Root Apices. Plant Physiology, 2013, 161, 880-892.	2.3	127
39	Calcium storage in plants and the implications for calcium biofortification. Protoplasma, 2010, 247, 215-231.	1.0	117
40	OsSPX-MFS3, a vacuolar phosphate efflux transporter, is involved in maintaining Pi homeostasis in rice. Plant Physiology, 2015, 169, pp.01005.2015.	2.3	109
41	Computational water stress indices obtained from thermal image analysis of grapevine canopies. Irrigation Science, 2012, 30, 523-536.	1.3	108
42	Potassium in the Grape (Vitis vinifera L.) Berry: Transport and Function. Frontiers in Plant Science, 2017, 8, 1629.	1.7	107
43	Anion Channels in Plants. Annual Review of Plant Biology, 1992, 43, 351-373.	14.2	105
44	Determination of permeability coefficients, reflection coefficients, and hydraulic conductivity ofChara corallina using the pressure probe: Effects of solute concentrations. Journal of Membrane Biology, 1983, 75, 85-96.	1.0	104
45	Linking Metabolism to Membrane Signaling: The GABAâ€"Malate Connection. Trends in Plant Science, 2016, 21, 295-301.	4.3	104
46	Molybdate transport through the plant sulfate transporter SHST1. FEBS Letters, 2008, 582, 1508-1513.	1.3	103
47	Ammonia and amino acid transport across symbiotic membranes in nitrogen-fixing legume nodules. Cellular and Molecular Life Sciences, 2001, 58, 61-71.	2.4	102
48	Magnesium transporters, MGT2/MRS2â€1 and MGT3/MRS2â€5, are important for magnesium partitioning within <i>Arabidopsis thaliana</i> mesophyll vacuoles. New Phytologist, 2011, 190, 583-594.	3.5	99
49	Non-destructive measurement of grapevine water potential using near infrared spectroscopy. Australian Journal of Grape and Wine Research, 2011, 17, 62-71.	1.0	97
50	A channel that allows inwardly directed fluxes of anions in protoplasts derived from wheat roots. Planta, 1994, 192, 295.	1.6	94
51	Maize NPF6 Proteins Are Homologs of Arabidopsis CHL1 That Are Selective for Both Nitrate and Chloride. Plant Cell, 2017, 29, 2581-2596.	3.1	93
52	HvALMT1 from barley is involved in the transport of organic anions. Journal of Experimental Botany, 2010, 61, 1455-1467.	2.4	92
53	Soybean <i>SAT1</i> (<i>Symbiotic Ammonium Transporter 1</i>) encodes a bHLH transcription factor involved in nodule growth and NH ₄ ⁺ transport. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4814-4819.	3.3	92
54	Engineering Strategies to Boost Crop Productivity by Cutting Respiratory Carbon Loss. Plant Cell, 2019, 31, 297-314.	3.1	86

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55	<i>OsPAP10c</i>, a novel secreted acid phosphatase in rice, plays an important role in the utilization of external organic phosphorus. Plant, Cell and Environment, 2016, 39, 2247-2259.	2.8	85
56	Cell death in grape berries: varietal differences linked to xylem pressure and berry weight loss. Functional Plant Biology, 2008, 35, 173.	1.1	83
57	Characterization of an Ammonium Transport Protein from the Peribacteroid Membrane of Soybean Nodules. , 1998, 281, 1202-1206.		82
58	Channel-Like Characteristics of the Low-Affinity Barley Phosphate Transporter PHT1;6 When Expressed in<i>Xenopus</i>Oocytes. Plant Physiology, 2010, 152, 1431-1441.	2.3	82
59	Direct Effects of Ca2+-Channel Blockers on Plasma Membrane Cation Channels ofAmaranthus tricolorProtoplasts. Journal of Experimental Botany, 1992, 43, 1457-1473.	2.4	80
60	Constitutive overexpression of soybean plasma membrane intrinsic protein GmPIP1;6 confers salt tolerance. BMC Plant Biology, 2014, 14, 181.	1.6	80
61	Roles of Aquaporins in Root Responses to Irrigation. Plant and Soil, 2005, 274, 141-161.	1.8	79
62	Direct measurement of hydraulic properties in developing berries of Vitis vinifera L. cv Shiraz and Chardonnay. Australian Journal of Grape and Wine Research, 2004, 10, 170-181.	1.0	78
63	Identification and functional characterisation of aquaporins in the grapevine, Vitis vinifera. Functional Plant Biology, 2009, 36, 1065.	1.1	78
64	Characterization of the TaALMT1 Protein as an Al3+-Activated Anion Channel in Transformed Tobacco (Nicotiana tabacum L.) Cells. Plant and Cell Physiology, 2008, 49, 1316-1330.	1.5	77
65	Adjustment of Host Cells for Accommodation of Symbiotic Bacteria: Vacuole Defunctionalization, HOPS Suppression, and TIP1g Retargeting in <i>Medicago</i> Â Â Â. Plant Cell, 2014, 26, 3809-3822.	3.1	73
66	Citrate-Permeable Channels in the Plasma Membrane of Cluster Roots from White Lupin. Plant Physiology, 2004, 136, 3771-3783.	2.3	71
67	Water Flow in the Roots of Crop Species: The Influence of Root Structure, Aquaporin Activity, and Waterlogging. Advances in Agronomy, 2007, 96, 133-196.	2.4	71
68	Aluminum-Activated Malate Transporters Can Facilitate GABA Transport. Plant Cell, 2018, 30, 1147-1164.	3.1	71
69	Effect of Low O2 Concentration and Azide on Hydraulic Conductivity and Osmotic Volume of the Cortical Cells of Wheat Roots. Functional Plant Biology, 1991, 18, 603.	1.1	65
70	Current-Voltage Curves of Single Clâˆ’Channels which Coexist with Two Types of K+Channel in the Tonoplast ofChara corallina. Journal of Experimental Botany, 1989, 40, 105-117.	2.4	61
71	Adaptable and Multifunctional Ion-Conducting Aquaporins. Annual Review of Plant Biology, 2021, 72, 703-736.	8.6	60
72	Guard cell pressure/aperture characteristics measured with the pressure probe. Plant, Cell and Environment, 1995, 18, 795-800.	2.8	59

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73	Aquaporins and unloading of phloem-imported water in coats of developing bean seeds. Plant, Cell and Environment, 2007, 30, 1566-1577.	2.8	59
74	Hydraulic connection of grape berries to the vine: varietal differences in water conductance into and out of berries, and potential for backflow. Functional Plant Biology, 2009, 36, 541.	1.1	59
75	Water channels inChara corallina. Journal of Experimental Botany, 1997, 48, 1511-1518.	2.4	57
76	Divalent Cations Regulate the Ion Conductance Properties of Diverse Classes of Aquaporins. International Journal of Molecular Sciences, 2017, 18, 2323.	1.8	57
77	Pump and K+ inward rectifiers in the plasmalemma of wheat root protoplasts. Journal of Membrane Biology, 1994, 139, 103-16.	1.0	56
78	Inward membrane current inChara inflata: II. Effects of pH, Clâˆ'-channel blockers and NH 4 + , and significance for the hyperpolarized state. Journal of Membrane Biology, 1986, 89, 153-161.	1.0	55
79	A novel analysis of grapevine berry tissue demonstrates a variety-dependent correlation between tissue vitality and berry shrivel. Australian Journal of Grape and Wine Research, 2010, 16, 327-336.	1.0	55
80	Grapevine and Arabidopsis cation-chloride cotransporters localise to the Golgi and trans-Golgi network and indirectly influence long-distance ion homeostasis and plant salt tolerance. Plant Physiology, 2015, 169, pp.00499.2015.	2.3	55
81	Abscisic Acid Down-Regulates Hydraulic Conductance of Grapevine Leaves in Isohydric Genotypes Only. Plant Physiology, 2017, 175, 1121-1134.	2.3	54
82	Automated estimation of leaf area index from grapevine canopies using cover photography, video and computational analysis methods. Australian Journal of Grape and Wine Research, 2014, 20, 465-473.	1.0	53
83	Waterlogging in Australian agricultural landscapes: a review of plant responses and crop models. Crop and Pasture Science, 2013, 64, 549.	0.7	52
84	Multiple conductances in the large K+ channel from Chara corallina shown by a transient analysis method. Biophysical Journal, 1992, 61, 736-749.	0.2	51
85	Composition and synthesis of raphide crystals and druse crystals in berries of Vitis vinifera L. cv. Cabernet Sauvignon: Ascorbic acid as precursor for both oxalic and tartaric acids as revealed by radiolabelling studies. Australian Journal of Grape and Wine Research, 2004, 10, 134-142.	1.0	51
86	Comparison between gradient-dependent hydraulic conductivities of roots using the root pressure probe: the role of pressure propagations and implications for the relative roles of parallel radial pathways. Plant, Cell and Environment, 2007, 30, 861-874.	2.8	50
87	Ion channels in the plasma membrane ofAmaranthus protoplasts: One cation and one anion channel dominate the conductance. Journal of Membrane Biology, 1991, 121, 223-236.	1.0	49
88	The contrasting influence of short-term hypoxia on the hydraulic properties of cells and roots of wheat and lupin. Functional Plant Biology, 2010, 37, 183.	1.1	49
89	Ethylene negatively regulates aluminium-induced malate efflux from wheat roots and tobacco cells transformed with TaALMT1. Journal of Experimental Botany, 2014, 65, 2415-2426.	2.4	49
90	The dual benefit of arbuscular mycorrhizal fungi under soil zinc deficiency and toxicity: linking plant physiology and gene expression. Plant and Soil, 2017, 420, 375-388.	1.8	48

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91	Tree water sources over shallow, saline groundwater in the lower River Murray, south-eastern Australia: implications for groundwater recharge mechanisms. Australian Journal of Botany, 2006, 54, 193.	0.3	47
92	Application of shade treatments during Shiraz berry ripening to reduce the impact of high temperature. Australian Journal of Grape and Wine Research, 2016, 22, 422-437.	1.0	47
93	Impact of flooding on the water use of semi-arid riparian eucalypts. Journal of Hydrology, 1998, 206, 104-117.	2.3	46
94	Protonâ€coupled highâ€affinity phosphate transport revealed from heterologous characterization in <i>Xenopus</i> of barleyâ€root plasma membrane transporter, HvPHT1;1. Plant, Cell and Environment, 2011, 34, 681-689.	2.8	45
95	Structural variations in wheat HKT1;5 underpin differences in Na+ transport capacity. Cellular and Molecular Life Sciences, 2018, 75, 1133-1144.	2.4	45
96	Phosphorylation influences water and ion channel function of <scp>AtPIP2;1</scp>. Plant, Cell and Environment, 2020, 43, 2428-2442.	2.8	43
97	Water Relations of Seagrasses. Plant Physiology, 1982, 69, 957-965.	2.3	42
98	Voltage-Dependent Cation Channels Permeable to NH4+, K+, and Ca2+ in the Symbiosome Membrane of the Model Legume Lotus japonicus. Plant Physiology, 2002, 128, 370-378.	2.3	41
99	Hypoxia in grape berries: the role of seed respiration and lenticels on the berry pedicel and the possible link to cell death. Journal of Experimental Botany, 2018, 69, 2071-2083.	2.4	40
100	Inward membrane current inChara inflata: I. A voltage- and time-dependent Clâˆ’ component. Journal of Membrane Biology, 1986, 89, 139-152.	1.0	38
101	Role of membrane transport in phloem translocation of assimilates and water. Functional Plant Biology, 2001, 28, 697.	1.1	38
102	Tissue and nitrogen-linked expression profiles of ammonium and nitrate transporters in maize. BMC Plant Biology, 2019, 19, 206.	1.6	38
103	Floodwater infiltration through root channels on a sodic clay floodplain and the influence on a local tree species Eucalyptus largiflorens. Plant and Soil, 2003, 253, 275-286.	1.8	37
104	Impact of grapevine exposure to smoke on vine physiology and the composition and sensory properties of wine. Theoretical and Experimental Plant Physiology, 2016, 28, 67-83.	1.1	36
105	Cell-specific compartmentation of mineral nutrients is an essential mechanism for optimal plant productivityâ€" another role for<i>TPC1</i>?. Plant Signaling and Behavior, 2011, 6, 1656-1661.	1.2	34
106	Comparison Between Osmotic and Hydrostatic Water Flows in a Higher Plant Cell: Determination of Hydraulic Conductivities and Reflection Coefficients in Isolated Epidermis of Tradescantia virginiana. Functional Plant Biology, 1982, 9, 461.	1.1	33
107	Expression of a CO2-permeable aquaporin enhances mesophyll conductance in the C4 species Setaria viridis. ELife, 2021, 10, .	2.8	33
108	Turgor-Volume Regulation and Cellular Water Relations of Nicotiana tabacum Roots Grown in High Salinities. Functional Plant Biology, 1989, 16, 517.	1.1	32

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109	Association between water and carbon dioxide transport in leaf plasma membranes: assessing the role of aquaporins. Plant, Cell and Environment, 2017, 40, 789-801.	2.8	32
110	A Comparison of Petiole Hydraulics and Aquaporin Expression in an Anisohydric and Isohydric Cultivar of Grapevine in Response to Water-Stress Induced Cavitation. Frontiers in Plant Science, 2017, 8, 1893.	1.7	32
111	Variable effects of arbuscular mycorrhizal fungal inoculation on physiological and molecular measures of root and stomatal conductance of diverse <i>Medicago truncatula</i> accessions. Plant, Cell and Environment, 2019, 42, 285-294.	2.8	32
112	Posidonia australis Growing in Altered Salinities: Leaf Growth, Regulation of Turgor and the Development of Osmotic Gradients. Functional Plant Biology, 1984, 11, 35.	1.1	32
113	Nonselective Currents and Channels in Plasma Membranes of Protoplasts from Coats of Developing Seeds of Bean. Plant Physiology, 2002, 128, 388-399.	2.3	31
114	Ion channels in the plasma membrane of protoplasts from the halophytic angiosperm Zostera muelleri. Journal of Membrane Biology, 1994, 142, 381-93.	1.0	30
115	A Barley Efflux Transporter Operates in a Na⁺-Dependent Manner, as Revealed by a Multidisciplinary Platform. Plant Cell, 2016, 28, 202-218.	3.1	29
116	Divalent cation gating of an ammonium permeable channel in the symbiotic membrane from soybean nodules. Plant Journal, 1998, 16, 313-324.	2.8	28
117	Root Ideotype Influences Nitrogen Transport and Assimilation in Maize. Frontiers in Plant Science, 2018, 9, 531.	1.7	28
118	Non-Invasive Tools to Detect Smoke Contamination in Grapevine Canopies, Berries and Wine: A Remote Sensing and Machine Learning Modeling Approach. Sensors, 2019, 19, 3335.	2.1	27
119	Cytosolic GABA inhibits anion transport by wheat ALMT1. New Phytologist, 2020, 225, 671-678.	3.5	27
120	Comparing Hydraulics Between Two Grapevine Cultivars Reveals Differences in Stomatal Regulation Under Water Stress and Exogenous ABA Applications. Frontiers in Plant Science, 2020, 11, 705.	1.7	27
121	Application of sprinkler cooling within the bunch zone during ripening of Cabernet Sauvignon berries to reduce the impact of high temperature. Australian Journal of Grape and Wine Research, 2017, 23, 48-57.	1.0	26
122	Water use of grazed salt bush plantations with saline watertable. Agricultural Water Management, 1999, 39, 169-185.	2.4	25
123	Electrical impedance of Shiraz berries correlates with decreasing cell vitality during ripening. Australian Journal of Grape and Wine Research, 2015, 21, 430-438.	1.0	25
124	Night-time responses to water supply in grapevines (Vitis vinifera L.) under deficit irrigation and partial root-zone drying. Agricultural Water Management, 2014, 138, 1-9.	2.4	24
125	Effect of water stress and elevated temperature on hypoxia and cell death in the mesocarp of Shiraz berries. Australian Journal of Grape and Wine Research, 2018, 24, 487-497.	1.0	24
126	Tolerance of salinized floodplain conditions in a naturally occurring Eucalyptus hybrid related to lowered plant water potential. Tree Physiology, 2000, 20, 953-963.	1.4	23

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127	NH4 Â+ Currents across the Peribacteroid Membrane of Soybean. Macroscopic and Microscopic Properties, Inhibition by Mg2+, and Temperature Dependence Indicate a SubpicoSiemens Channel Finely Regulated by Divalent Cations. Plant Physiology, 2005, 139, 1015-1029.	2.3	23
128	Water channels in Chara corallina. Journal of Experimental Botany, 1997, 48, 1511-1518.	2.4	23
129	Expression Patterns of Genes Encoding Sugar and Potassium Transport Proteins Are Simultaneously Upregulated or Downregulated When Carbon and Potassium Availability Is Modified in Shiraz (Vitis) Tj ETQq1 1 0.784314 rgBT /Overlo	1.5	22
130	Root Hydraulic and Aquaporin Responses to N Availability. Signaling and Communication in Plants, 2017, , 207-236.	0.5	22
131	Plant transporters involved in combating boron toxicity: beyond 3D structures. Biochemical Society Transactions, 2020, 48, 1683-1696.	1.6	22
132	Effects of Nppb and Niflumic Acid on Outward K+ and Cl- Currents Across the Plasma Membrane of Wheat Root Protoplasts. Functional Plant Biology, 1996, 23, 527.	1.1	22
133	Determination of Solute Permeability in Chara Internodes by a Turgor Minimum Method. Plant Physiology, 1984, 74, 464-468.	2.3	21
134	Effect of low oxygen concentration on the electrical properties of cortical cells of wheat roots. Journal of Plant Physiology, 1997, 150, 567-572.	1.6	20
135	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
136	Chloride transport and compartmentation within main and lateral roots of two grapevine rootstocks differing in salt tolerance. Trees - Structure and Function, 2013, 27, 1317-1325.	0.9	19
137	Comparison of isohydric and anisohydric Vitis vinifera L. cultivars reveals a fine balance between hydraulic resistances, driving forces and transpiration in ripening berries. Functional Plant Biology, 2017, 44, 324.	1.1	19
138	Deciphering aquaporin regulation and roles in seed biology. Journal of Experimental Botany, 2020, 71, 1763-1773.	2.4	19
139	Root growth of lupins is more sensitive to waterlogging than wheat. Functional Plant Biology, 2011, 38, 910.	1.1	18
140	Nonselective Cation Channels. Multiple Functions and Commonalities. Plant Physiology, 2002, 128, 327-328.	2.3	17
141	Roles of Aquaporins in Setaria viridis Stem Development and Sugar Storage. Frontiers in Plant Science, 2016, 7, 1815.	1.7	17
142	A Survey of Barley PIP Aquaporin Ionic Conductance Reveals Ca2+-Sensitive HvPIP2;8 Na+ and K+ Conductance. International Journal of Molecular Sciences, 2020, 21, 7135.	1.8	17
143	Oscillations in proton transport revealed from simultaneous measurements of net current and net proton fluxes from isolated root protoplasts: MIFE meets patch-clamp. Functional Plant Biology, 2001, 28, 591.	1.1	16
144	Root Water Transport Under Waterlogged Conditions and the Roles of Aquaporins. , 2010, , 151-180.		16

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145	Role of <scp>TaALMT1 malateâ€GABA</scp> transporter in alkaline <scp>pH</scp> tolerance of wheat. Plant, Cell and Environment, 2020, 43, 2443-2459.	2.8	16
146	Fast activation of a time-dependent outward current in protoplasts derived from coats of developing Phaseolus vulgaris seeds. Planta, 2000, 211, 894-898.	1.6	15
147	Title is missing!. Australian Journal of Botany, 2001, 49, 9.	0.3	15
148	Correlations between morpho-anatomical changes and radial hydraulic conductivity in roots of olive trees under water deficit and rewatering. Tree Physiology, 2015, 35, 1356-1365.	1.4	15
149	Water Relations of Coral Cay Vegetation on the Great Barrier Reef: Water Potentials and Osmotic Content. Australian Journal of Botany, 1984, 32, 449.	0.3	14
150	Mechanisms of solute efflux from seed coats: whole-cell K+currents in transfer cell protoplasts derived from coats of developing seeds ofVicia fabaL.. Journal of Experimental Botany, 1997, 48, 1565-1572.	2.4	14
151	Water relations and gas exchange of the root hemiparasite Santalum acuminatum (quandong). Australian Journal of Botany, 2001, 49, 479.	0.3	14
152	Modified Method for Producing Grapevine Plants in Controlled Environments. American Journal of Enology and Viticulture, 2014, 65, 261-267.	0.9	14
153	Comparative effects of deficit and partial root-zone drying irrigation techniques using moderately saline water on ion partitioning in Shiraz and Grenache grapevines. Australian Journal of Grape and Wine Research, 2016, 22, 296-306.	1.0	14
154	Pulsing Cl- channels in coat cells of developing bean seeds linked to hypo-osmotic turgor regulation. Journal of Experimental Botany, 2004, 55, 993-1001.	2.4	13
155	The role of ion channels in plant nutrition and prospects for their genetic manipulation. Plant and Soil, 1992, 146, 137-144.	1.8	12
156	Impact of deficit irrigation strategies in a saline environment on Shiraz yield, physiology, water use and tissue ion concentration. Australian Journal of Grape and Wine Research, 2015, 21, 468-478.	1.0	12
157	Differential fruitset between grapevine cultivars is related to differences in pollen viability and amine concentration in flowers. Australian Journal of Grape and Wine Research, 2016, 22, 149-158.	1.0	12
158	Roles of membrane transporters: connecting the dots from sequence to phenotype. Annals of Botany, 2019, 124, 201-208.	1.4	12
159	A novel method based on combination of semi-in vitro and in vivo conditions in Agrobacterium rhizogenes-mediated hairy root transformation of Glycine species. In Vitro Cellular and Developmental Biology - Plant, 2014, 50, 282-291.	0.9	11
160	Voltage-Dependent Cation Channels Permeable to NH4+, K+, and Ca2+ in the Symbiosome Membrane of the Model Legume Lotus japonicus. Plant Physiology, 2002, 128, 370-378.	2.3	10
161	Calcium-dependent K current in plasma membranes of dermal cells of developing bean cotyledons. Plant, Cell and Environment, 2004, 27, 251-262.	2.8	10
162	The devil in the detail of secretions. Plant, Cell and Environment, 2013, 36, 1407-1409.	2.8	10

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163	A laser ablation technique maps differences in elemental composition in roots of two barley cultivars subjected to salinity stress. Plant Journal, 2020, 101, 1462-1473.	2.8	10
164	First Report of Grapevine Rupestris Vein Feathering Virus in Grapevine in Australia. Plant Disease, 2021, 105, 515.	0.7	10
165	The feasibility of using a low-cost near-infrared, sensitive, consumer-grade digital camera mounted on a commercial UAV to assess Bambara groundnut yield. International Journal of Remote Sensing, 2022, 43, 393-423.	1.3	10
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