Michael R Blatt

List of Publications by Year
in descending order

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214
papers

15,369
citations

8732

75
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20900

115
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220
all docs

220
docs citations

220
times ranked

9267
citing authors

#	Article	IF	Citations
1	Stomatal Size, Speed, and Responsiveness Impact on Photosynthesis and Water Use Efficiency Â. Plant Physiology, 2014, 164, 1556-1570.	2.3	753
2	A ubiquitin-10 promoter-based vector set for fluorescent protein tagging facilitates temporal stability and native protein distribution in transient and stable expression studies. Plant Journal, 2010, 64, 355-365.	2.8	499
3	Nitric oxide regulates K+ and Cl- channels in guard cells through a subset of abscisic acid-evoked signaling pathways. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 11116-11121.	3.3	371
4	Cellular Signaling and Volume Control in Stomatal Movements in Plants. Annual Review of Cell and Developmental Biology, 2000, 16, 221-241.	4.0	345
5	Ca2+ channels at the plasma membrane of stomatal guard cells are activated by hyperpolarization and abscisic acid. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 4967-4972.	3.3	342
6	Reversible inactivation of K+ channels of Vcia stomatal guard cells following the photolysis of caged inositol 1,4,5-trisphosphate. Nature, 1990, 346, 766-769.	13.7	324
7	Membrane voltage initiates Ca2+ waves and potentiates Ca2+ increases with abscisic acid in stomatal guard cells. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 4778-4783.	3.3	244
8	The Membrane Transport System of the Guard Cell and Its Integration for Stomatal Dynamics. Plant Physiology, 2017, 174, 487-519.	2.3	231
9	K+ channels of stomatal guard cells. Characteristics of the inward rectifier and its control by pH.. Journal of General Physiology, 1992, 99, 615-644.	0.9	230
10	EZâ€R<scp>hizo</scp>: integrated software for the fast and accurate measurement of root system architecture. Plant Journal, 2009, 57, 945-956.	2.8	228
11	A Tobacco Syntaxin with a Role in Hormonal Control of Guard Cell Ion Channels. Science, 1999, 283, 537-540.	6.0	223
12	Sensitivity to abscisic acid of guard-cell K+ channels is suppressed by abi1-1, a mutant Arabidopsis gene encoding a putative protein phosphatase.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 9520-9524.	3.3	212
13	Optogenetic manipulation of stomatal kinetics improves carbon assimilation, water use, and growth. Science, 2019, 363, 1456-1459.	6.0	205
14	Molecular Evolution of Grass Stomata. Trends in Plant Science, 2017, 22, 124-139.	4.3	202
15	<i>Arabidopsis</i> SNAREs SYP61 and SYP121 Coordinate the Trafficking of Plasma Membrane Aquaporin PIP2;7 to Modulate the Cell Membrane Water Permeability. Plant Cell, 2014, 26, 3132-3147.	3.1	192
16	A potassium-proton symport in Neurospora crassa.. Journal of General Physiology, 1986, 87, 649-674.	0.9	191
17	Membrane transport in stomatal guard cells: The importance of voltage control. Journal of Membrane Biology, 1992, 126, 1-18.	1.0	185
18	Abscisic Acid Triggers the Endocytosis of the Arabidopsis KAT1 K+ Channel and Its Recycling to the Plasma Membrane. Current Biology, 2007, 17, 1396-1402.	1.8	184

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19	A 2in1 cloning system enables ratiometric bimolecular fluorescence complementation (rBiFC). BioTechniques, 2012, 53, 311-314.	0.8	178
20	Regulation of macronutrient transport. New Phytologist, 2009, 181, 35-52.	3.5	176
21	Modulation of K+ channels in Vicia stomatal guard cells by peptide homologs to the auxin-binding protein C terminus.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 11493-11497.	3.3	174
22	Selective Mobility and Sensitivity to SNAREs Is Exhibited by the Arabidopsis KAT1 K+ Channel at the Plasma Membrane. Plant Cell, 2006, 18, 935-954.	3.1	169
23	Parallel control of the inward-rectifier K+ channel by cytosolic free Ca2+ and pH inVicia guard cells. Planta, 1997, 201, 84-95.	1.6	164
24	K+ channels of stomatal guard cells: bimodal control of the K+ inward-rectifier evoked by auxin. Plant Journal, 1994, 5, 55-68.	2.8	163
25	Functional conservation between yeast and plant endosomal Na+/H+antiporters1. FEBS Letters, 2000, 471, 224-228.	1.3	160
26	Evolutionary Conservation of ABA Signaling for Stomatal Closure. Plant Physiology, 2017, 174, 732-747.	2.3	158
27	A Tripartite SNARE-K+ Channel Complex Mediates in Channel-Dependent K+ Nutrition in<i>Arabidopsis</i>Â. Plant Cell, 2009, 21, 2859-2877.	3.1	156
28	A new family of K+transporters fromArabidopsisthat are conserved across phyla. FEBS Letters, 1997, 415, 206-211.	1.3	153
29	OnGuard, a Computational Platform for Quantitative Kinetic Modeling of Guard Cell Physiology Â Â. Plant Physiology, 2012, 159, 1026-1042.	2.3	153
30	A Steep Dependence of Inward-Rectifying Potassium Channels on Cytosolic Free Calcium Concentration Increase Evoked by Hyperpolarization in Guard Cells1. Plant Physiology, 1999, 119, 277-288.	2.3	148
31	The Abscisic Acidâ€“Related SNARE Homolog NtSyr1 Contributes to Secretion and Growth. Plant Cell, 2002, 14, 387-406.	3.1	148
32	Plant neurobiology: no brain, no gain?. Trends in Plant Science, 2007, 12, 135-136.	4.3	146
33	Control of Guard Cell Ion Channels by Hydrogen Peroxide and Abscisic Acid Indicates Their Action through Alternate Signaling Pathways. Plant Physiology, 2003, 131, 385-388.	2.3	144
34	Protein phosphorylation is a prerequisite for intracellular Ca2+ release and ion channel control by nitric oxide and abscisic acid in guard cells. Plant Journal, 2005, 43, 520-529.	2.8	142
35	Membrane trafficking and polar growth in root hairs and pollen tubes. Journal of Experimental Botany, 2006, 58, 65-74.	2.4	139
36	External K+modulates the activity of the Arabidopsis potassium channel SKOR via an unusual mechanism. Plant Journal, 2006, 46, 269-281.	2.8	138

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37	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
38	Systems Dynamic Modeling of the Stomatal Guard Cell Predicts Emergent Behaviors in Transport, Signaling, and Volume Control Â Â. Plant Physiology, 2012, 159, 1235-1251.	2.3	136
39	Potassium channel currents in intact stomatal guard cells: rapid enhancement by abscisic acid. Planta, 1990, 180, 445-455.	1.6	133
40	Nitric Oxide Block of Outward-Rectifying K+ Channels Indicates Direct Control by Protein Nitrosylation in Guard Cells. Plant Physiology, 2004, 136, 4275-4284.	2.3	131
41	Potassium-dependent, bipolar gating of K+ channels in guard cells. Journal of Membrane Biology, 1988, 102, 235-246.	1.0	129
42	KCl leakage from microelectrodes and its impact on the membrane parameters of a nonexcitable cell. Journal of Membrane Biology, 1983, 72, 223-234.	1.0	120
43	A Novel Motif Essential for SNARE Interaction with the K+ Channel KC1 and Channel Gating in<i>Arabidopsis</i>Â. Plant Cell, 2010, 22, 3076-3092.	3.1	119
44	A cytolytic Î´-endotoxin fromBacillus thuringiensisvar.israelensisforms cation-selective channels in planar lipid bilayers. FEBS Letters, 1989, 244, 259-262.	1.3	118
45	Temporal Dynamics of Stomatal Behavior: Modeling and Implications for Photosynthesis and Water Use. Plant Physiology, 2017, 174, 603-613.	2.3	118
46	Dynamic regulation of guard cell anion channels by cytosolic free Ca²⁺concentration and protein phosphorylation. Plant Journal, 2010, 61, 816-825.	2.8	115
47	The trafficking protein SYP121 of Arabidopsis connects programmed stomatal closure and K⁺ channel activity with vegetative growth. Plant Journal, 2012, 69, 241-251.	2.8	115
48	Alteration of anion channel kinetics in wild-type and abi1-1 transgenic Nicotiana benthamiana guard cells by abscisic acid. Plant Journal, 1997, 12, 203-213.	2.8	111
49	Protein phosphorylation activates the guard cell Ca2+channel and is a prerequisite for gating by abscisic acid. Plant Journal, 2002, 32, 185-194.	2.8	111
50	A Minimal Cysteine Motif Required to Activate the SKOR K+ Channel of Arabidopsis by the Reactive Oxygen Species H2O2*. Journal of Biological Chemistry, 2010, 285, 29286-29294.	1.6	111
51	Selective Regulation of Maize Plasma Membrane Aquaporin Trafficking and Activity by the SNARE SYP121. Plant Cell, 2012, 24, 3463-3481.	3.1	109
52	Hormonal Control of Ion Channel Gating. Annual Review of Plant Biology, 1993, 44, 543-567.	14.2	108
53	A new catch in the SNARE. Trends in Plant Science, 2004, 9, 187-195.	4.3	106
54	NO 3 ? transport across the plasma membrane of Arabidopsis thaliana root hairs: Kinetic control by pH and membrane voltage. Journal of Membrane Biology, 1995, 145, 49-66.	1.0	105

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55	Electrical characteristics of stomatal guard cells: The ionic basis of the membrane potential and the consequence of potassium chlorides leakage from microelectrodes. Planta, 1987, 170, 272-287.	1.6	104
56	Ion channel gating in plants: Physiological implications and integration for stomatal function. Journal of Membrane Biology, 1991, 124, 95-112.	1.0	104
57	Millisecond UV-B irradiation evokes prolonged elevation of cytosolic-free Ca2+ and stimulates gene expression in transgenic parsley cell cultures. Plant Journal, 1999, 20, 109-117.	2.8	104
58	A fast brassinolideâ€•regulated response pathway in the plasma membrane of <i>Arabidopsis thaliana</i>. Plant Journal, 2011, 66, 528-540.	2.8	102
59	Overexpression of Auxin-Binding Protein Enhances the Sensitivity of Guard Cells to Auxin. Plant Physiology, 2000, 124, 1229-1238.	2.3	100
60	Potassium-proton symport inNeurospora: kinetic control by pH and membrane potential. Journal of Membrane Biology, 1987, 98, 169-189.	1.0	99
61	What makes a gate? The ins and outs of Kv-like K+ channels in plants. Trends in Plant Science, 2009, 14, 383-390.	4.3	98
62	Electrical characteristics of stomatal guard cells: The contribution of ATP-dependent, â€œElectrogenicâ€• transport revealed by current-voltage and difference-current-voltage analysis. Journal of Membrane Biology, 1987, 98, 257-274.	1.0	95
63	Hydrogen Sulfide Regulates Inward-Rectifying K+ Channels in Conjunction with Stomatal Closure Â. Plant Physiology, 2015, 168, 29-35.	2.3	95
64	Nitrate reductase mutation alters potassium nutrition as well as nitric oxideâ€•mediated control of guard cell ion channels in <i>Arabidopsis</i>. New Phytologist, 2016, 209, 1456-1469.	3.5	93
65	The effect of elevated CO 2 concentrations on K + and anion channels of Vicia faba L. guard cells. Planta, 1997, 203, 145-154.	1.6	91
66	Electrocoupling of ion transporters in plants. Journal of Membrane Biology, 1993, 136, 327-32.	1.0	90
67	SNAREs: Cogs and Coordinators in Signaling and Development. Plant Physiology, 2008, 147, 1504-1515.	2.3	90
68	Mechanisms of fusicoccin action: kinetic modification and inactivation of K+ channels in guard cells. Planta, 1989, 178, 509-523.	1.6	86
69	The Arabidopsis R-SNARE VAMP721 Interacts with KAT1 and KC1 K+ Channels to Moderate K+ Current at the Plasma Membrane. Plant Cell, 2015, 27, 1697-1717.	3.1	84
70	Binary 2in1 Vectors Improve in Planta (Co)localization and Dynamic Protein Interaction Studies. Plant Physiology, 2015, 168, 776-787.	2.3	84
71	Systems Dynamic Modeling of a Guard Cell Clâˆ’ Channel Mutant Uncovers an Emergent Homeostatic Network Regulating Stomatal Transpiration Â Â. Plant Physiology, 2012, 160, 1956-1967.	2.3	83
72	PYR/PYL/RCAR Abscisic Acid Receptors Regulate K+ and Clâˆ’ Channels through Reactive Oxygen Species-Mediated Activation of Ca2+ Channels at the Plasma Membrane of Intact Arabidopsis Guard Cells Â Â. Plant Physiology, 2013, 163, 566-577.	2.3	82

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73	Role of "active" potassium transport in the regulation of cytoplasmic pH by nonanimal cells.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 2737-2741.	3.3	81
74	Phosphatase antagonist okadaic acid inhibits steady-state K+ currents in guard cells of Vicia faba. Plant Journal, 1994, 5, 727-733.	2.8	79
75	K+ channels of Cf-9 transgenic tobacco guard cells as targets for Cladosporium fulvum Avr9 elicitor-dependent signal transduction. Plant Journal, 1999, 19, 453-462.	2.8	79
76	Localization and control of expression of Nt-Syr1, a tobacco snare protein. Plant Journal, 2000, 24, 369-382.	2.8	79
77	Evidence for K+ channel control in Vicia guard cells coupled by G-proteins to a 7TMS receptor mimetic. Plant Journal, 1995, 8, 187-198.	2.8	77
78	K + -Sensitive Gating of the K + Outward Rectifier in Vicia Guard Cells. Journal of Membrane Biology, 1997, 158, 241-256.	1.0	77
79	Selective targeting of plasma membrane and tonoplast traffic by inhibitory (dominantâ€negative) SNARE fragments. Plant Journal, 2007, 51, 1099-1115.	2.8	77
80	Actin and cortical fiber reticulation in the siphonaceous alga Vaucheria sessilis. Planta, 1980, 147, 363-375.	1.6	69
81	Blue-light-induced cortical fiber reticulation concomitant with chloroplast aggregation in the alga Vaucheria sessilis. Planta, 1980, 147, 355-362.	1.6	66
82	Setting SNAREs in a Different Wood. Traffic, 2006, 7, 627-638.	1.3	66
83	<i>Arabidopsis</i>Sec1/Munc18 Protein SEC11 Is a Competitive and Dynamic Modulator of SNARE Binding and SYP121-Dependent Vesicle Traffic Â. Plant Cell, 2013, 25, 1368-1382.	3.1	66
84	Potassium channel currents in intact stomatal guard cells: rapid enhancement by abscisic acid. Planta, 1990, 180, 445-55.	1.6	65
85	Mechanisms of fusicoccin action: evidence for concerted modulations of secondary K+ transport in a higher plant cell. Planta, 1989, 178, 495-508.	1.6	63
86	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
87	Guard Cell Starch Degradation Yields Glucose for Rapid Stomatal Opening in Arabidopsis. Plant Cell, 2020, 32, 2325-2344.	3.1	62
88	Signalling gates in abscisic acid-mediated control of guard cell ion channels. Physiologia Plantarum, 1997, 100, 481-490.	2.6	58
89	Systems Analysis of Guard Cell Membrane Transport for Enhanced Stomatal Dynamics and Water Use Efficiency Â Â. Plant Physiology, 2014, 164, 1593-1599.	2.3	57
90	SNAREs SYP121 and SYP122 Mediate the Secretion of Distinct Cargo Subsets. Plant Physiology, 2018, 178, 1679-1688.	2.3	56

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91	Binding of SEC11 Indicates Its Role in SNARE Recycling after Vesicle Fusion and Identifies Two Pathways for Vesicular Traffic to the Plasma Membrane. Plant Cell, 2015, 27, 675-694.	3.1	55
92	A vesicle-trafficking protein commandeers Kv channel voltage sensors for voltage-dependent secretion. Nature Plants, 2015, 1, 15108.	4.7	53
93	A light-dependent current associated with chloroplast aggregation in the alga Vaucheria sessilis. Planta, 1981, 152, 513-526.	1.6	52
94	Mechanisms of fusicoccin action: A dominant role for secondary transport in a higher-plant cell. Planta, 1988, 174, 187-200.	1.6	51
95	An Optimal Frequency in Ca²⁺ Oscillations for Stomatal Closure Is an Emergent Property of Ion Transport in Guard Cells. Plant Physiology, 2016, 170, 33-42.	2.3	51
96	Clathrin Heavy Chain Subunits Coordinate Endo- and Exocytic Traffic and Affect Stomatal Movement. Plant Physiology, 2017, 175, 708-720.	2.3	50
97	SNAREsâ€"molecular governors in signalling and development. Current Opinion in Plant Biology, 2008, 11, 600-609.	3.5	49
98	Functional Interaction of the SNARE Protein NtSyp121 in Ca2+ Channel Gating, Ca2+ Transients and ABA Signalling of Stomatal Guard Cells. Molecular Plant, 2008, 1, 347-358.	3.9	49
99	Exploring emergent properties in cellular homeostasis using OnGuard to model K+ and other ion transport in guard cells. Journal of Plant Physiology, 2014, 171, 770-778.	1.6	49
100	Protein-binding partners of the tobacco syntaxin NtSyr1. FEBS Letters, 2001, 508, 253-258.	1.3	47
101	Commandeering Channel Voltage Sensors for Secretion, Cell Turgor, and Volume Control. Trends in Plant Science, 2017, 22, 81-95.	4.3	47
102	Do Calcineurin B-Like Proteins Interact Independently of the Serine Threonine Kinase CIPK23 with the K+ Channel AKT1? Lessons Learned from a MÃ©nage Ã Trois. Plant Physiology, 2012, 159, 915-919.	2.3	46
103	Clustering of the <scp>K</scp>⁺ channel <scp>GORK</scp> of <scp>A</scp>rabidopsis parallels its gating by extracellular <scp>K</scp>⁺. Plant Journal, 2014, 78, 203-214.	2.8	45
104	Heavy-meromyosin-decoration of microfilaments from Mougeotia protoplasts. Planta, 1980, 150, 354-356.	1.6	44
105	The Mechanism of Ion Permeation through K+ Channels of Stomatal Guard Cells: Voltage-Dependent Block by Na+. Journal of Plant Physiology, 1991, 138, 326-334.	1.6	42
106	Modelling water use efficiency in a dynamic environment: An example using Arabidopsis thaliana. Plant Science, 2016, 251, 65-74.	1.7	42
107	Extracellular Potassium Activity in Attached Leaves and its Relation to Stomatal Function. Journal of Experimental Botany, 1985, 36, 240-251.	2.4	41
108	Anion channel sensitivity to cytosolic organic acids implicates a central role for oxaloacetate in integrating ion flux with metabolism in stomatal guard cells. Biochemical Journal, 2011, 439, 161-170.	1.7	40

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109	Small Pores with a Big Impact. Plant Physiology, 2017, 174, 467-469.	2.3	40
110	Unexpected Connections between Humidity and Ion Transport Discovered Using a Model to Bridge Guard Cell-to-Leaf Scales. Plant Cell, 2017, 29, 2921-2939.	3.1	39
111	Distinct roles of the last transmembrane domain in controlling <i>Arabidopsis </i>K⁺ channel activity. New Phytologist, 2009, 182, 380-391.	3.5	38
112	Signal redundancy, gates and integration in the control of ion channels for stomatal movement. Journal of Experimental Botany, 1997, 48, 529-537.	2.4	37
113	Tansley Review No. 108. New Phytologist, 1999, 144, 389-418.	3.5	36
114	Speedy Grass Stomata: Emerging Molecular and Evolutionary Features. Molecular Plant, 2017, 10, 912-914.	3.9	36
115	Ca(2+) signalling and control of guard-cell volume in stomatal movements. Current Opinion in Plant Biology, 2000, 3, 196-204.	3.5	36
116	A molecular framework for coupling cellular volume and osmotic solute transport control. Journal of Experimental Botany, 2011, 62, 2363-2370.	2.4	35
117	Stomatal Spacing Safeguards Stomatal Dynamics by Facilitating Guard Cell Ion Transport Independent of the Epidermal Solute Reservoir. Plant Physiology, 2016, 172, 254-263.	2.3	35
118	Stomatal Response to Humidity: Blurring the Boundary between Active and Passive Movement. Plant Physiology, 2018, 176, 485-488.	2.3	35
119	Debunking a myth: plant consciousness. Protoplasma, 2021, 258, 459-476.	1.0	35
120	SAUR proteins and PP2C.D phosphatases regulate H+-ATPases and K+ channels to control stomatal movements. Plant Physiology, 2021, 185, 256-273.	2.3	35
121	Cable correction of membrane currents recorded from root hairs ofArabidopsis thalianaL.. Journal of Experimental Botany, 1994, 45, 1-6.	2.4	34
122	Extracellular K+ and Ba2+ mediate voltage-dependent inactivation of the outward-rectifying K+ channel encoded by the yeast gene TOK1. FEBS Letters, 1997, 405, 337-344.	1.3	34
123	A role for the vacuole in auxin-mediated control of cytosolic pH by Vicia mesophyll and guard cells. Plant Journal, 2002, 13, 109-116.	2.8	34
124	Interpretation of steady-state current-voltage curves: Consequences and implications of current subtraction in transport studies. Journal of Membrane Biology, 1986, 92, 91-110.	1.0	33
125	Vigilante Science. Plant Physiology, 2015, 169, 907-909.	2.3	33
126	Evolution of rapid blueâ€light response linked to explosive diversification of ferns in angiosperm forests. New Phytologist, 2021, 230, 1201-1213.	3.5	33

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127	The action spectrum for chloroplast movements and evidence for blue-light-photoreceptor cycling in the alga Vaucheria. Planta, 1983, 159, 267-276.	1.6	31
128	Extracellular Ba2+ and voltage interact to gate Ca2+ channels at the plasma membrane of stomatal guard cells. FEBS Letters, 2001, 491, 99-103.	1.3	31
129	An Arabidopsis Stomatin-Like Protein Affects Mitochondrial Respiratory Supercomplex Organization Â Â Â. Plant Physiology, 2014, 164, 1389-1400.	2.3	31
130	Applications of Fluorescent Marker Proteins in Plant Cell Biology. Methods in Molecular Biology, 2014, 1062, 487-507.	0.4	31
131	Ion transport, membrane traffic and cellular volume control. Current Opinion in Plant Biology, 2011, 14, 332-339.	3.5	29
132	Guard cell endomembrane Ca2+-ATPases underpin a â€˜carbon memoryâ€™ of photosynthetic assimilation that impacts on water-use efficiency. Nature Plants, 2021, 7, 1301-1313.	4.7	28
133	A generalized method for transfecting root epidermis uncovers endosomal dynamics in Arabidopsis root hairs. Plant Journal, 2007, 51, 322-330.	2.8	27
134	Mutations in the pore regions of the yeast K+ channel YKC1 affect gating by extracellular K+. EMBO Journal, 1998, 17, 7190-7198.	3.5	26
135	VAMP721 Conformations Unmask an Extended Motif for K⁺ Channel Binding and Gating Control. Plant Physiology, 2017, 173, 536-551.	2.3	26
136	Stomatal clustering in Begonia associates with the kinetics of leaf gaseous exchange and influences water use efficiency. Journal of Experimental Botany, 2017, 68, 2309-2315.	2.4	25
137	Membrane voltage as a dynamic platform for spatiotemporal signaling, physiological, and developmental regulation. Plant Physiology, 2021, 185, 1523-1541.	2.3	24
138	Global Sensitivity Analysis of OnGuard Models Identifies Key Hubs for Transport Interaction in Stomatal Dynamics. Plant Physiology, 2017, 174, 680-688.	2.3	23
139	A constraintâ€“relaxationâ€“recovery mechanism for stomatal dynamics. Plant, Cell and Environment, 2019, 42, 2399-2410.	2.8	23
140	High-Affinity NO âˆ’ 3 -H + Cotransport in the Fungus Neurospora: Induction and Control by pH and Membrane Voltage. Journal of Membrane Biology, 1997, 160, 59-76.	1.0	21
141	Voltage-Sensor Transitions of the Inward-Rectifying K+ Channel KAT1 Indicate a Latching Mechanism Biased by Hydration within the Voltage Sensor Â Â. Plant Physiology, 2014, 166, 960-975.	2.3	21
142	Gating control and <scp>K⁺</scp> uptake by the <scp>KAT1 K⁺</scp> channel leaveraged through membrane anchoring of the trafficking protein <scp>SYP121</scp>. Plant, Cell and Environment, 2018, 41, 2668-2677.	2.8	21
143	Communication between the Plasma Membrane and Tonoplast Is an Emergent Property of Ion Transport. Plant Physiology, 2020, 182, 1833-1835.	2.3	21
144	Distributed Structures Underlie Gating Differences between the Kin Channel KAT1 and the Kout Channel SKOR. Molecular Plant, 2010, 3, 236-245.	3.9	20

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145	Synergy among Exocyst and SNARE Interactions Identifies a Functional Hierarchy in Secretion during Vegetative Growth. Plant Cell, 2020, 32, 2951-2963.	3.1	19
146	What can mechanistic models tell us about guard cells, photosynthesis, and water use efficiency?. Trends in Plant Science, 2022, 27, 166-179.	4.3	18
147	Manipulation and Misconduct in the Handling of Image Data. Plant Cell, 2013, 25, 3147-3148.	3.1	17
148	K⁺ Channel-SEC11 Binding Exchange Regulates SNARE Assembly for Secretory Traffic. Plant Physiology, 2019, 181, 1096-1113.	2.3	16
149	Expression, evolution and genomic complexity of potassium ion channel genes of Arabidopsis thaliana. Journal of Plant Physiology, 1997, 150, 652-660.	1.6	15
150	Does the Anonymous Voice Have a Place in Scholarly Publishing?. Plant Physiology, 2016, 170, 1899-1902.	2.3	14
151	Plant Physiology: Redefining the Enigma of Metabolism in Stomatal Movement. Current Biology, 2016, 26, R107-R109.	1.8	14
152	Dual Sites for SEC11 on the SNARE SYP121 Implicate a Binding Exchange during Secretory Traffic. Plant Physiology, 2019, 180, 228-239.	2.3	14
153	Protocol: optimised electrophyiological analysis of intact guard cells from Arabidopsis. Plant Methods, 2012, 8, 15.	1.9	13
154	Selective block by ?-dendrotoxin of the K+ inward rectifier at the Vicia guard cell plasma membrane. Journal of Membrane Biology, 1994, 137, 249-59.	1.0	12
155	Early signalling events in the Avr9/Cf-9-dependent plant defence response. Molecular Plant Pathology, 2000, 1, 3-8.	2.0	12
156	Toward understanding vesicle traffic and the guard cell model. New Phytologist, 2002, 153, 405-413.	3.5	12
157	Nitric Oxide and Plant Ion Channel Control. , 2006, , 153-171.		12
158	Membrane Transport and Ca2+ Oscillations in Guard Cells. , 2007, , 115-133.		12
159	A bicistronic, <i>Ubiquitinâ€10</i> promoterâ€based vector cassette for transient transformation and functional analysis of membrane transport demonstrates the utility of quantitative voltage clamp studies on intact <i>Arabidopsis</i> root epidermis. Plant, Cell and Environment, 2011, 34, 554-564.	2.8	12
160	Manipulation and Misconduct in the Handling of Image Data. Plant Physiology, 2013, 163, 3-4.	2.3	11
161	Editorial: Rootsâ€”The Hidden Provider. Frontiers in Plant Science, 2017, 8, 1021.	1.7	11
162	Interactive domains between pore loops of the yeast K+ channel TOK1 associate with extracellular K+ sensitivity. Biochemical Journal, 2006, 393, 645-655.	1.7	10

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163	Focus on Water. Plant Physiology, 2014, 164, 1553-1555.	2.3	9
164	A GPI Signal Peptide-Anchored Split-Ubiquitin (GPS) System for Detecting Soluble Bait Protein Interactions at the Membrane. Plant Physiology, 2018, 178, 13-17.	2.3	9
165	Light-Driven Chloride Transport Kinetics of Halorhodopsin. Biophysical Journal, 2018, 115, 353-360.	0.2	9
166	Wind-evoked anemotropism affects the morphology and mechanical properties of Arabidopsis. Journal of Experimental Botany, 2021, 72, 1906-1918.	2.4	9
167	A FRET method for investigating dimer/monomer status and conformation of the UVR8 photoreceptor. Photochemical and Photobiological Sciences, 2019, 18, 367-374.	1.6	8
168	Dynamic membranesâ€"the indispensable platform for plant growth, signaling, and development. Plant Physiology, 2021, 185, 547-549.	2.3	8
169	TOWARD THE LINK BETWEEN MEMBRANES TRANSPORT AND PHOTOPERCEPTION IN PLANT. Photochemistry and Photobiology, 1987, 45, 933-938.	1.3	7
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