

Michael R Blatt

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192
papers

12,636
citations

72
h-index

107
g-index

220
ext. papers

14,498
ext. citations

7.1
avg, IF

6.84
L-index

#	Paper	IF	Citations
192	Stomatal size, speed, and responsiveness impact on photosynthesis and water use efficiency. <i>Plant Physiology</i> , 2014 , 164, 1556-70	6.6	466
191	Nitric oxide regulates K ⁺ and Cl ⁻ channels in guard cells through a subset of abscisic acid-evoked signaling pathways. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 11116-21	11.5	340
190	A ubiquitin-10 promoter-based vector set for fluorescent protein tagging facilitates temporal stability and native protein distribution in transient and stable expression studies. <i>Plant Journal</i> , 2010 , 64, 355-65	6.9	339
189	Ca ²⁺ channels at the plasma membrane of stomatal guard cells are activated by hyperpolarization and abscisic acid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 4967-72	11.5	321
188	Cellular signaling and volume control in stomatal movements in plants. <i>Annual Review of Cell and Developmental Biology</i> , 2000 , 16, 221-41	12.6	308
187	Reversible inactivation of K ⁺ channels of Vicia stomatal guard cells following the photolysis of caged inositol 1,4,5-trisphosphate. <i>Nature</i> , 1990 , 346, 766-9	50.4	298
186	Membrane voltage initiates Ca ²⁺ waves and potentiates Ca ²⁺ increases with abscisic acid in stomatal guard cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998 , 95, 4778-83	11.5	223
185	K ⁺ channels of stomatal guard cells. Characteristics of the inward rectifier and its control by pH. <i>Journal of General Physiology</i> , 1992 , 99, 615-44	3.4	205
184	A tobacco syntaxin with a role in hormonal control of guard cell ion channels. <i>Science</i> , 1999 , 283, 537-40	33.3	203
183	Sensitivity to abscisic acid of guard-cell K ⁺ channels is suppressed by abi1-1, a mutant Arabidopsis gene encoding a putative protein phosphatase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1995 , 92, 9520-4	11.5	197
182	EZ-Rhizo: integrated software for the fast and accurate measurement of root system architecture. <i>Plant Journal</i> , 2009 , 57, 945-56	6.9	182
181	A potassium-proton symport in Neurospora crassa. <i>Journal of General Physiology</i> , 1986 , 87, 649-74	3.4	176
180	Modulation of K ⁺ channels in Vicia stomatal guard cells by peptide homologs to the auxin-binding protein C terminus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1993 , 90, 11493-7	11.5	162
179	Abscisic acid triggers the endocytosis of the arabidopsis KAT1 K ⁺ channel and its recycling to the plasma membrane. <i>Current Biology</i> , 2007 , 17, 1396-402	6.3	161
178	Parallel control of the inward-rectifier K ⁺ channel by cytosolic free Ca ²⁺ and pH in Vicia guard cells. <i>Planta</i> , 1997 , 201, 84-95	4.7	153
177	Selective mobility and sensitivity to SNAREs is exhibited by the Arabidopsis KAT1 K ⁺ channel at the plasma membrane. <i>Plant Cell</i> , 2006 , 18, 935-54	11.6	151
176	K ⁺ channels of stomatal guard cells: bimodal control of the K ⁺ inward-rectifier evoked by auxin. <i>Plant Journal</i> , 1994 , 5, 55-68	6.9	146

175	Regulation of macronutrient transport. <i>New Phytologist</i> , 2009 , 181, 35-52	9.8	142
174	The abscisic acid-related SNARE homolog NtSyr1 contributes to secretion and growth: evidence from competition with its cytosolic domain. <i>Plant Cell</i> , 2002 , 14, 387-406	11.6	142
173	Membrane transport in stomatal guard cells: the importance of voltage control. <i>Journal of Membrane Biology</i> , 1992 , 126, 1-18	2.3	142
172	Functional conservation between yeast and plant endosomal Na(+)/H(+) antiporters. <i>FEBS Letters</i> , 2000 , 471, 224-8	3.8	141
171	The Membrane Transport System of the Guard Cell and Its Integration for Stomatal Dynamics. <i>Plant Physiology</i> , 2017 , 174, 487-519	6.6	137
170	A steep dependence of inward-rectifying potassium channels on cytosolic free calcium concentration increase evoked by hyperpolarization in guard cells. <i>Plant Physiology</i> , 1999 , 119, 277-88	6.6	136
169	A tripartite SNARE-K ⁺ channel complex mediates in channel-dependent K ⁺ nutrition in Arabidopsis. <i>Plant Cell</i> , 2009 , 21, 2859-77	11.6	135
168	A new family of K ⁺ transporters from Arabidopsis that are conserved across phyla. <i>FEBS Letters</i> , 1997 , 415, 206-11	3.8	135
167	Protein phosphorylation is a prerequisite for intracellular Ca ²⁺ release and ion channel control by nitric oxide and abscisic acid in guard cells. <i>Plant Journal</i> , 2005 , 43, 520-9	6.9	132
166	Control of guard cell ion channels by hydrogen peroxide and abscisic acid indicates their action through alternate signaling pathways. <i>Plant Physiology</i> , 2003 , 131, 385-8	6.6	128
165	Potassium channel currents in intact stomatal guard cells: rapid enhancement by abscisic acid. <i>Planta</i> , 1990 , 180, 445-455	4.7	127
164	OnGuard, a computational platform for quantitative kinetic modeling of guard cell physiology. <i>Plant Physiology</i> , 2012 , 159, 1026-42	6.6	125
163	Nitric oxide block of outward-rectifying K ⁺ channels indicates direct control by protein nitrosylation in guard cells. <i>Plant Physiology</i> , 2004 , 136, 4275-84	6.6	124
162	Systems dynamic modeling of the stomatal guard cell predicts emergent behaviors in transport, signaling, and volume control. <i>Plant Physiology</i> , 2012 , 159, 1235-51	6.6	120
161	Molecular Evolution of Grass Stomata. <i>Trends in Plant Science</i> , 2017 , 22, 124-139	13.1	119
160	Plant neurobiology: no brain, no gain?. <i>Trends in Plant Science</i> , 2007 , 12, 135-6	13.1	118
159	Optogenetic manipulation of stomatal kinetics improves carbon assimilation, water use, and growth. <i>Science</i> , 2019 , 363, 1456-1459	33.3	117
158	Arabidopsis SNAREs SYP61 and SYP121 coordinate the trafficking of plasma membrane aquaporin PIP2;7 to modulate the cell membrane water permeability. <i>Plant Cell</i> , 2014 , 26, 3132-47	11.6	117

157	External K ⁺ modulates the activity of the Arabidopsis potassium channel SKOR via an unusual mechanism. <i>Plant Journal</i> , 2006 , 46, 269-81	6.9	113
156	Membrane trafficking and polar growth in root hairs and pollen tubes. <i>Journal of Experimental Botany</i> , 2007 , 58, 65-74	7	112
155	KCl leakage from microelectrodes and its impact on the membrane parameters of a nonexcitable cell. <i>Journal of Membrane Biology</i> , 1983 , 72, 223-34	2.3	110
154	Potassium-dependent, bipolar gating of K ⁺ channels in guard cells. <i>Journal of Membrane Biology</i> , 1988 , 102, 235-246	2.3	106
153	A 2in1 cloning system enables ratiometric bimolecular fluorescence complementation (rBiFC). <i>BioTechniques</i> , 2012 , 53, 311-14	2.5	103
152	Alteration of anion channel kinetics in wild-type and <i>abi1-1</i> transgenic <i>Nicotiana benthamiana</i> guard cells by abscisic acid. <i>Plant Journal</i> , 1997 , 12, 203-13	6.9	101
151	Protein phosphorylation activates the guard cell Ca ²⁺ channel and is a prerequisite for gating by abscisic acid. <i>Plant Journal</i> , 2002 , 32, 185-94	6.9	101
150	Evolutionary Conservation of ABA Signaling for Stomatal Closure. <i>Plant Physiology</i> , 2017 , 174, 732-747	6.6	100
149	Dynamic regulation of guard cell anion channels by cytosolic free Ca ²⁺ concentration and protein phosphorylation. <i>Plant Journal</i> , 2010 , 61, 816-25	6.9	99
148	The trafficking protein SYP121 of Arabidopsis connects programmed stomatal closure and K ⁺ channel activity with vegetative growth. <i>Plant Journal</i> , 2012 , 69, 241-51	6.9	97
147	A cytolytic delta-endotoxin from <i>Bacillus thuringiensis</i> var. <i>israelensis</i> forms cation-selective channels in planar lipid bilayers. <i>FEBS Letters</i> , 1989 , 244, 259-62	3.8	97
146	Selective regulation of maize plasma membrane aquaporin trafficking and activity by the SNARE SYP121. <i>Plant Cell</i> , 2012 , 24, 3463-81	11.6	95
145	Millisecond UV-B irradiation evokes prolonged elevation of cytosolic-free Ca ²⁺ and stimulates gene expression in transgenic parsley cell cultures. <i>Plant Journal</i> , 1999 , 20, 109-17	6.9	95
144	Electrical characteristics of stomatal guard cells: The ionic basis of the membrane potential and the consequence of potassium chlorides leakage from microelectrodes. <i>Planta</i> , 1987 , 170, 272-87	4.7	95
143	A minimal cysteine motif required to activate the SKOR K ⁺ channel of Arabidopsis by the reactive oxygen species H ₂ O ₂ . <i>Journal of Biological Chemistry</i> , 2010 , 285, 29286-94	5.4	92
142	A new catch in the SNARE. <i>Trends in Plant Science</i> , 2004 , 9, 187-95	13.1	92
141	Potassium-proton symport in <i>Neurospora</i> : kinetic control by pH and membrane potential. <i>Journal of Membrane Biology</i> , 1987 , 98, 169-89	2.3	92
140	What makes a gate? The ins and outs of Kv-like K ⁺ channels in plants. <i>Trends in Plant Science</i> , 2009 , 14, 383-90	13.1	88

139	Overexpression of auxin-binding protein enhances the sensitivity of guard cells to auxin. <i>Plant Physiology</i> , 2000 , 124, 1229-38	6.6	88
138	A novel motif essential for SNARE interaction with the K(+) channel KC1 and channel gating in Arabidopsis. <i>Plant Cell</i> , 2010 , 22, 3076-92	11.6	85
137	NO ₃ - transport across the plasma membrane of Arabidopsis thaliana root hairs: kinetic control by pH and membrane voltage. <i>Journal of Membrane Biology</i> , 1995 , 145, 49-66	2.3	85
136	Hormonal Control of Ion Channel Gating. <i>Annual Review of Plant Biology</i> , 1993 , 44, 543-567		85
135	Ion channel gating in plants: physiological implications and integration for stomatal function. <i>Journal of Membrane Biology</i> , 1991 , 124, 95-112	2.3	85
134	The effect of elevated CO ₂ concentrations on K ⁺ and anion channels of Vicia faba L. guard cells. <i>Planta</i> , 1997 , 203, 145-154	4.7	79
133	Plant Physiology Welcomes 26 New Assistant Features Editors. <i>Plant Physiology</i> , 2020 , 182, 447-448	6.6	78
132	Plant Physiology and The Plant Cell Go Online Only. <i>Plant Physiology</i> , 2014 , 166, 1677-1677	6.6	78
131	Plant Physiology Welcomes Its New Topical Reviews. <i>Plant Physiology</i> , 2013 , 162, 1767-1767	6.6	78
130	Plant Physiology Plugged In. <i>Plant Physiology</i> , 2013 , 161, 3-4	6.6	78
129	Electrical characteristics of stomatal guard cells: The contribution of ATP-dependent, electrogenic transport revealed by current-voltage and difference-current-voltage analysis. <i>Journal of Membrane Biology</i> , 1987 , 98, 257-274	2.3	78
128	Plant Physiology Is Recruiting Assistant Features Editors for 2021. <i>Plant Physiology</i> , 2020 , 184, 3-3	6.6	78
127	A fast brassinolide-regulated response pathway in the plasma membrane of Arabidopsis thaliana. <i>Plant Journal</i> , 2011 , 66, 528-40	6.9	76
126	Localization and control of expression of Nt-Syr1, a tobacco SNARE protein. <i>Plant Journal</i> , 2000 , 24, 369-81	6.4	75
125	Evolution of chloroplast retrograde signaling facilitates green plant adaptation to land. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 5015-5020	11.5	74
124	SNAREs: cogs and coordinators in signaling and development. <i>Plant Physiology</i> , 2008 , 147, 1504-15	6.6	74
123	Role of "active" potassium transport in the regulation of cytoplasmic pH by nonanimal cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1987 , 84, 2737-41	11.5	74
122	Mechanisms of fusicoccin action: kinetic modification and inactivation of K(+) channels in guard cells. <i>Planta</i> , 1989 , 178, 509-23	4.7	73

121	Hydrogen sulfide regulates inward-rectifying K ⁺ channels in conjunction with stomatal closure. <i>Plant Physiology</i> , 2015 , 168, 29-35	6.6	72
120	K ⁺ channels of Cf-9 transgenic tobacco guard cells as targets for <i>Cladosporium fulvum</i> Avr9 elicitor-dependent signal transduction. <i>Plant Journal</i> , 1999 , 19, 453-62	6.9	71
119	Phosphatase antagonist okadaic acid inhibits steady-state K ⁺ currents in guard cells of <i>Vicia faba</i> . <i>Plant Journal</i> , 1994 , 5, 727-733	6.9	71
118	Nitrate reductase mutation alters potassium nutrition as well as nitric oxide-mediated control of guard cell ion channels in <i>Arabidopsis</i> . <i>New Phytologist</i> , 2016 , 209, 1456-69	9.8	70
117	Selective targeting of plasma membrane and tonoplast traffic by inhibitory (dominant-negative) SNARE fragments. <i>Plant Journal</i> , 2007 , 51, 1099-115	6.9	69
116	Evidence for K ⁺ channel control in <i>Vicia</i> guard cells coupled by G-proteins to a 7TMS receptor mimetic. <i>Plant Journal</i> , 1995 , 8, 187-198	6.9	69
115	Systems dynamic modeling of a guard cell Cl ⁻ channel mutant uncovers an emergent homeostatic network regulating stomatal transpiration. <i>Plant Physiology</i> , 2012 , 160, 1956-67	6.6	68
114	Electrocoupling of ion transporters in plants. <i>Journal of Membrane Biology</i> , 1993 , 136, 327-32	2.3	66
113	PYR/PYL/RCAR abscisic acid receptors regulate K ⁺ and Cl ⁻ channels through reactive oxygen species-mediated activation of Ca ²⁺ channels at the plasma membrane of intact <i>Arabidopsis</i> guard cells. <i>Plant Physiology</i> , 2013 , 163, 566-77	6.6	65
112	The <i>Arabidopsis</i> R-SNARE VAMP721 Interacts with KAT1 and KC1 K ⁺ Channels to Moderate K ⁺ Current at the Plasma Membrane. <i>Plant Cell</i> , 2015 , 27, 1697-717	11.6	64
111	K(+)-sensitive gating of the K ⁺ outward rectifier in <i>Vicia</i> guard cells. <i>Journal of Membrane Biology</i> , 1997 , 158, 241-56	2.3	64
110	Actin and cortical fiber reticulation in the siphonaceous alga <i>Vaucheria sessilis</i> . <i>Planta</i> , 1980 , 147, 363-754.7	4.7	63
109	Blue-light-induced cortical fiber reticulation concomitant with chloroplast aggregation in the alga <i>Vaucheria sessilis</i> . <i>Planta</i> , 1980 , 147, 355-62	4.7	62
108	Temporal Dynamics of Stomatal Behavior: Modeling and Implications for Photosynthesis and Water Use. <i>Plant Physiology</i> , 2017 , 174, 603-613	6.6	60
107	Binary 2in1 Vectors Improve in <i>Planta</i> (Co)localization and Dynamic Protein Interaction Studies. <i>Plant Physiology</i> , 2015 , 168, 776-87	6.6	59
106	Setting SNAREs in a different wood. <i>Traffic</i> , 2006 , 7, 627-38	5.7	57
105	Mechanisms of fusicoccin action: evidence for concerted modulations of secondary K(+) transport in a higher plant cell. <i>Planta</i> , 1989 , 178, 495-508	4.7	56
104	<i>Arabidopsis</i> Sec1/Munc18 protein SEC11 is a competitive and dynamic modulator of SNARE binding and SYP121-dependent vesicle traffic. <i>Plant Cell</i> , 2013 , 25, 1368-82	11.6	55

103	Signalling gates in abscisic acid-mediated control of guard cell ion channels. <i>Physiologia Plantarum</i> , 1997 , 100, 481-490	4.6	51
102	Voltage dependence of the Chara proton pump revealed by current-voltage measurement during rapid metabolic blockade with cyanide. <i>Journal of Membrane Biology</i> , 1990 , 114, 205-23	2.3	50
101	Mechanisms of fusicoccin action: A dominant role for secondary transport in a higher-plant cell. <i>Planta</i> , 1988 , 174, 187-200	4.7	50
100	Systems analysis of guard cell membrane transport for enhanced stomatal dynamics and water use efficiency. <i>Plant Physiology</i> , 2014 , 164, 1593-9	6.6	45
99	SNAREs--molecular governors in signalling and development. <i>Current Opinion in Plant Biology</i> , 2008 , 11, 600-9	9.9	45
98	A light-dependent current associated with chloroplast aggregation in the alga <i>Vaucheria sessilis</i> . <i>Planta</i> , 1981 , 152, 513-26	4.7	44
97	Binding of SEC11 indicates its role in SNARE recycling after vesicle fusion and identifies two pathways for vesicular traffic to the plasma membrane. <i>Plant Cell</i> , 2015 , 27, 675-94	11.6	41
96	Functional interaction of the SNARE protein NtSyp121 in Ca ²⁺ channel gating, Ca ²⁺ transients and ABA signalling of stomatal guard cells. <i>Molecular Plant</i> , 2008 , 1, 347-58	14.4	41
95	An Optimal Frequency in Ca ²⁺ Oscillations for Stomatal Closure Is an Emergent Property of Ion Transport in Guard Cells. <i>Plant Physiology</i> , 2016 , 170, 33-42	6.6	40
94	A vesicle-trafficking protein commandeers Kv channel voltage sensors for voltage-dependent secretion. <i>Nature Plants</i> , 2015 , 1, 15108	11.5	40
93	Heavy-meromyosin-decoration of microfilaments from <i>Mougeotia</i> protoplasts. <i>Planta</i> , 1980 , 150, 354-6	4.7	40
92	Potassium channel currents in intact stomatal guard cells: rapid enhancement by abscisic acid. <i>Planta</i> , 1990 , 180, 445-55	4.7	39
91	Extracellular Potassium Activity in Attached Leaves and its Relation to Stomatal Function. <i>Journal of Experimental Botany</i> , 1985 , 36, 240-251	7	39
90	Exploring emergent properties in cellular homeostasis using OnGuard to model K ⁺ and other ion transport in guard cells. <i>Journal of Plant Physiology</i> , 2014 , 171, 770-8	3.6	38
89	The Mechanism of Ion Permeation through K ⁺ Channels of Stomatal Guard Cells: Voltage-Dependent Block by Na ⁺ . <i>Journal of Plant Physiology</i> , 1991 , 138, 326-334	3.6	37
88	Distinct roles of the last transmembrane domain in controlling Arabidopsis K ⁺ channel activity. <i>New Phytologist</i> , 2009 , 182, 380-391	9.8	36
87	Clustering of the K ⁺ channel GORK of Arabidopsis parallels its gating by extracellular K ⁺ . <i>Plant Journal</i> , 2014 , 78, 203-14	6.9	34
86	Do calcineurin B-like proteins interact independently of the serine threonine kinase CIPK23 with the K ⁺ channel AKT1? Lessons learned from a maize <i>Trips</i> . <i>Plant Physiology</i> , 2012 , 159, 915-9	6.6	34

85	Tansley Review No. 108: Molecular events of vesicle trafficking and control by SNARE proteins in plants. <i>New Phytologist</i> , 1999 , 144, 389-418	9.8	34
84	Anion channel sensitivity to cytosolic organic acids implicates a central role for oxaloacetate in integrating ion flux with metabolism in stomatal guard cells. <i>Biochemical Journal</i> , 2011 , 439, 161-70	3.8	33
83	Protein-binding partners of the tobacco syntaxin NtSyr1. <i>FEBS Letters</i> , 2001 , 508, 253-8	3.8	32
82	Signal redundancy, gates and integration in the control of ion channels for stomatal movement. <i>Journal of Experimental Botany</i> , 1997 , 48 Spec No, 529-37	7	31
81	Cable correction of membrane currents recorded from root hairs of <i>Arabidopsis thaliana</i> L. <i>Journal of Experimental Botany</i> , 1994 , 45, 1-6	7	31
80	Ca ²⁺ signalling and control of guard-cell volume in stomatal movements. <i>Current Opinion in Plant Biology</i> , 2000 , 3, 196-204	9.9	31
79	Commandeering Channel Voltage Sensors for Secretion, Cell Turgor, and Volume Control. <i>Trends in Plant Science</i> , 2017 , 22, 81-95	13.1	30
78	Extracellular K ⁺ and Ba ²⁺ mediate voltage-dependent inactivation of the outward-rectifying K ⁺ channel encoded by the yeast gene TOK1. <i>FEBS Letters</i> , 1997 , 405, 337-44	3.8	30
77	A molecular framework for coupling cellular volume and osmotic solute transport control. <i>Journal of Experimental Botany</i> , 2011 , 62, 2363-70	7	29
76	Clathrin Heavy Chain Subunits Coordinate Endo- and Exocytic Traffic and Affect Stomatal Movement. <i>Plant Physiology</i> , 2017 , 175, 708-720	6.6	28
75	Extracellular Ba ²⁺ and voltage interact to gate Ca ²⁺ channels at the plasma membrane of stomatal guard cells. <i>FEBS Letters</i> , 2001 , 491, 99-103	3.8	28
74	Modelling water use efficiency in a dynamic environment: An example using <i>Arabidopsis thaliana</i> . <i>Plant Science</i> , 2016 , 251, 65-74	5.3	28
73	Unexpected Connections between Humidity and Ion Transport Discovered Using a Model to Bridge Guard Cell-to-Leaf Scales. <i>Plant Cell</i> , 2017 , 29, 2921-2939	11.6	27
72	An <i>Arabidopsis</i> stomatin-like protein affects mitochondrial respiratory supercomplex organization. <i>Plant Physiology</i> , 2014 , 164, 1389-400	6.6	27
71	Stomatal Response to Humidity: Blurring the Boundary between Active and Passive Movement. <i>Plant Physiology</i> , 2018 , 176, 485-488	6.6	26
70	The action spectrum for chloroplast movements and evidence for blue-light-photoreceptor cycling in the alga <i>Vaucheria</i> . <i>Planta</i> , 1983 , 159, 267-76	4.7	26
69	Guard Cell Starch Degradation Yields Glucose for Rapid Stomatal Opening in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2020 , 32, 2325-2344	11.6	25
68	Ion transport, membrane traffic and cellular volume control. <i>Current Opinion in Plant Biology</i> , 2011 , 14, 332-9	9.9	25

67	A generalized method for transfecting root epidermis uncovers endosomal dynamics in Arabidopsis root hairs. <i>Plant Journal</i> , 2007 , 51, 322-30	6.9	25
66	Mutations in the pore regions of the yeast K ⁺ channel YKC1 affect gating by extracellular K ⁺ . <i>EMBO Journal</i> , 1998 , 17, 7190-8	13	24
65	Interpretation of steady-state current-voltage curves: consequences and implications of current subtraction in transport studies. <i>Journal of Membrane Biology</i> , 1986 , 92, 91-110	2.3	24
64	A role for the vacuole in auxin-mediated control of cytosolic pH by Vicia mesophyll and guard cells. <i>Plant Journal</i> , 2002 , 13, 109-116	6.9	23
63	SNAREs SYP121 and SYP122 Mediate the Secretion of Distinct Cargo Subsets. <i>Plant Physiology</i> , 2018 , 178, 1679-1688	6.6	23
62	Stomatal Spacing Safeguards Stomatal Dynamics by Facilitating Guard Cell Ion Transport Independent of the Epidermal Solute Reservoir. <i>Plant Physiology</i> , 2016 , 172, 254-63	6.6	21
61	Speedy Grass Stomata: Emerging Molecular and Evolutionary Features. <i>Molecular Plant</i> , 2017 , 10, 912-914	14.4	20
60	VAMP721 Conformations Unmask an Extended Motif for K ⁺ Channel Binding and Gating Control. <i>Plant Physiology</i> , 2017 , 173, 536-551	6.6	19
59	Debunking a myth: plant consciousness. <i>Protoplasma</i> , 2021 , 258, 459-476	3.4	19
58	Voltage-sensor transitions of the inward-rectifying K ⁺ channel KAT1 indicate a latching mechanism biased by hydration within the voltage sensor. <i>Plant Physiology</i> , 2014 , 166, 960-75	6.6	18
57	Distributed structures underlie gating differences between the kin channel KAT1 and the Kout channel SKOR. <i>Molecular Plant</i> , 2010 , 3, 236-45	14.4	18
56	High-affinity NO ₃ ⁻ -H ⁺ cotransport in the fungus Neurospora: induction and control by pH and membrane voltage. <i>Journal of Membrane Biology</i> , 1997 , 160, 59-76	2.3	18
55	Applications of fluorescent marker proteins in plant cell biology. <i>Methods in Molecular Biology</i> , 2014 , 1062, 487-507	1.4	17
54	Global Sensitivity Analysis of OnGuard Models Identifies Key Hubs for Transport Interaction in Stomatal Dynamics. <i>Plant Physiology</i> , 2017 , 174, 680-688	6.6	16
53	Stomatal clustering in Begonia associates with the kinetics of leaf gaseous exchange and influences water use efficiency. <i>Journal of Experimental Botany</i> , 2017 , 68, 2309-2315	7	14
52	Expression, evolution and genomic complexity of potassium ion channel genes of Arabidopsis thaliana. <i>Journal of Plant Physiology</i> , 1997 , 150, 652-660	3.6	14
51	Evolution of rapid blue-light response linked to explosive diversification of ferns in angiosperm forests. <i>New Phytologist</i> , 2021 , 230, 1201-1213	9.8	14
50	Gating control and K uptake by the KAT1 K channel leveraged through membrane anchoring of the trafficking protein SYP121. <i>Plant, Cell and Environment</i> , 2018 , 41, 2668-2677	8.4	13

49	A bicistronic, Ubiquitin-10 promoter-based vector cassette for transient transformation and functional analysis of membrane transport demonstrates the utility of quantitative voltage clamp studies on intact Arabidopsis root epidermis. <i>Plant, Cell and Environment</i> , 2011 , 34, 554-64	8.4	11
48	Nitric Oxide and Plant Ion Channel Control 2006 , 153-171		11
47	Toward understanding vesicle traffic and the guard cell model. <i>New Phytologist</i> , 2002 , 153, 405-413	9.8	11
46	Early signalling events in the Avr9/Cf-9-dependent plant defence response. <i>Molecular Plant Pathology</i> , 2000 , 1, 3-8	5.7	11
45	Dual Sites for SEC11 on the SNARE SYP121 Implicate a Binding Exchange during Secretory Traffic. <i>Plant Physiology</i> , 2019 , 180, 228-239	6.6	10
44	Plant Physiology: Redefining the Enigma of Metabolism in Stomatal Movement. <i>Current Biology</i> , 2016 , 26, R107-9	6.3	10
43	Protocol: optimised electrophysiological analysis of intact guard cells from Arabidopsis. <i>Plant Methods</i> , 2012 , 8, 15	5.8	10
42	Ion Transport at the Plant Plasma Membrane 1-16		10
41	Membrane Transport and Ca ²⁺ Oscillations in Guard Cells 2007 , 115-133		9
40	Selective block by alpha-dendrotoxin of the K ⁺ inward rectifier at the Vicia guard cell plasma membrane. <i>Journal of Membrane Biology</i> , 1994 , 137, 249-59	2.3	9
39	K Channel-SEC11 Binding Exchange Regulates SNARE Assembly for Secretory Traffic. <i>Plant Physiology</i> , 2019 , 181, 1096-1113	6.6	9
38	Communication between the Plasma Membrane and Tonoplast Is an Emergent Property of Ion Transport. <i>Plant Physiology</i> , 2020 , 182, 1833-1835	6.6	9
37	Membrane voltage as a dynamic platform for spatiotemporal signaling, physiological, and developmental regulation. <i>Plant Physiology</i> , 2021 , 185, 1523-1541	6.6	9
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