Rainer Hedrich

List of Publications by Year in Descending Order

351 papers	24,246 citations	90 h-index	139 g-index
369 ext. papers	28,064 ext. citations	9 avg, IF	6.9 L-index

#	Paper	IF	Citations
351	Transcriptome analyses of quinoa leaves revealed critical function of epidermal bladder cells in salt stress acclimation. *Plant Stress*, **2022**, 3, 100061		0
350	Chronic ozone exposure preferentially modifies root rather than foliar metabolism of date palm (Phoenix dactylifera) saplings. *Science of the Total Environment*, **2022**, 806, 150563	10.2	0
349	Ether anesthetics prevents touch-induced trigger hair calcium-electrical signals excite the Venus flytrap.. *Scientific Reports*, **2022**, 12, 2851	4.9	1
348	Sugar loading is not required for phloem sap flow in maize plants.. *Nature Plants*, **2022**, 8, 171-180	11.5	2
347	Molecular basis of multistep voltage activation in plant two-pore channel 1.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119,	11.5	1
346	Transporter networks can serve plant cells as nutrient sensors and mimic transceptor-like behavior.. *IScience*, **2022**, 25, 104078	6.1	0
345	GABA signalling modulates stomatal opening to enhance plant water use efficiency and drought resilience. *Nature Communications*, **2021**, 12, 1952	17.4	28
344	A voltage-dependent Ca homeostat operates in the plant vacuolar membrane. *New Phytologist*, **2021**, 230, 1449-1460	9.8	7
343	Stomata: the holey grail of plant evolution. *American Journal of Botany*, **2021**, 108, 366-371	2.7	7
342	Protein expression plasticity contributes to heat and drought tolerance of date palm. *Oecologia*, **2021**, 197, 903-919	2.9	2
341	Date palm responses to a chronic, realistic ozone exposure in a FACE experiment. *Environmental Research*, **2021**, 195, 110868	7.9	3
340	On the Origin of Carnivory: Molecular Physiology and Evolution of Plants on an Animal Diet. *Annual Review of Plant Biology*, **2021**, 72, 133-153	30.7	8
339	Under salt stress guard cells rewire ion transport and abscisic acid signaling. *New Phytologist*, **2021**, 231, 1040-1055	9.8	1
338	Optogenetic control of the guard cell membrane potential and stomatal movement by the light-gated anion channel ACR1. *Science Advances*, **2021**, 7,	14.3	8
337	How to Grow a Tree: Plant Voltage-Dependent Cation Channels in the Spotlight of Evolution. *Trends in Plant Science*, **2021**, 26, 41-52	13.1	8
336	PYL8 ABA receptors of Phoenix dactylifera play a crucial role in response to abiotic stress and are stabilized by ABA. *Journal of Experimental Botany*, **2021**, 72, 757-774	7	3
335	The Developmental and Genetic Architecture of the Sexually Selected Male Ornament of Swordtails. *Current Biology*, **2021**, 31, 911-922.e4	6.3	10

334	Physiological responses of date palm (Phoenix dactylifera) seedlings to seawater and flooding. *New Phytologist*, **2021**, 229, 3318-3329	9.8	3
333	Action potentials induce biomagnetic fields in carnivorous Venus flytrap plants. *Scientific Reports*, **2021**, 11, 1438	4.9	12
332	Salinity Effects on Guard Cell Proteome in. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	7
331	An optimized genetically encoded dual reporter for simultaneous ratio imaging of Ca and H reveals new insights into ion signaling in plants. *New Phytologist*, **2021**, 230, 2292-2310	9.8	13
330	Metabolic responses of date palm (Phoenix dactylifera L.) leaves to drought differ in summer and winter climate. *Tree Physiology*, **2021**, 41, 1685-1700	4.2	1
329	Optogenetic control of plant growth by a microbial rhodopsin. *Nature Plants*, **2021**, 7, 144-151	11.5	10
328	Mechanosensitive channel gating by delipidation. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	3
327	Acidosis-induced activation of anion channel SLAH3 in the flooding-related stress response of Arabidopsis. *Current Biology*, **2021**, 31, 3575-3585.e9	6.3	7
326	Rapid depolarization and cytosolic calcium increase go hand-in-hand in mesophyll cellsQzone response. *New Phytologist*, **2021**, 232, 1692-1702	9.8	2
325	The MscS-like channel YnaI has a gating mechanism based on flexible pore helices. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 28754-28762	11.5	16
324	Genomes of the Venus Flytrap and Close Relatives Unveil the Roots of Plant Carnivory. *Current Biology*, **2020**, 30, 2312-2320.e5	6.3	25
323	Prospects for the accelerated improvement of the resilient crop quinoa. *Journal of Experimental Botany*, **2020**, 71, 5333-5347	7	19
322	Pitfalls in auxin pharmacology. *New Phytologist*, **2020**, 227, 286-292	9.8	5
321	The Venus flytrap trigger hair-specific potassium channel KDM1 can reestablish the K+ gradient required for hapto-electric signaling. *PLoS Biology*, **2020**, 18, e3000964	9.7	13
320	Photosynthetic cyclic electron transport provides ATP for homeostasis during trap closure in Dionaea muscipula. *Annals of Botany*, **2020**, 125, 485-494	4.1	3
319	Calcium dynamics during trap closure visualized in transgenic Venus flytrap. *Nature Plants*, **2020**, 6, 1219-1224	11.5	30
318	Channelrhodopsin-mediated optogenetics highlights a central role of depolarization-dependent plant proton pumps. *Proceedings of the National Academy of Sciences of the United States of America* , **2020**, 117, 20920-20925	11.5	24
317	The calcium-permeable channel OSCA1.3 regulates plant stomatal immunity. *Nature*, **2020**, 585, 569-573	50.4	84

316	Sugar Beet () Guard Cells Responses to Salinity Stress: A Proteomic Analysis. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	5
315	The role of Arabidopsis ABA receptors from the PYR/PYL/RCAR family in stomatal acclimation and closure signal integration. *Nature Plants*, **2019**, 5, 1002-1011	11.5	49
314	Calcium signals in guard cells enhance the efficiency by which abscisic acid triggers stomatal closure. *New Phytologist*, **2019**, 224, 177-187	9.8	31
313	Voltage-dependent gating of SV channel TPC1 confers vacuole excitability. *Nature Communications*, **2019**, 10, 2659	17.4	25
312	Optimization of photosynthesis and stomatal conductance in the date palm Phoenix dactylifera during acclimation to heat and drought. *New Phytologist*, **2019**, 223, 1973-1988	9.8	11
311	Diatom Signaling: A Novel Channel Type Identified. *Current Biology*, **2019**, 29, R319-R321	6.3	
310	Effects of temperature on the cuticular transpiration barrier of two desert plants with water-spender and water-saver strategies. *Journal of Experimental Botany*, **2019**, 70, 1613-1625	7	37
309	Climate and development modulate the metabolome and antioxidative system of date palm leaves. *Journal of Experimental Botany*, **2019**, 70, 5959-5969	7	15
308	Venus flytrap trigger hairs are micronewton mechano-sensors that can detect small insect prey. *Nature Plants*, **2019**, 5, 670-675	11.5	29
307	A large-scale screening of quinoa accessions reveals an important role of epidermal bladder cells and stomatal patterning in salinity tolerance. *Environmental and Experimental Botany*, **2019**, 168, 103885	5.9	24
306	Anion channel SLAH3 is a regulatory target of chitin receptor-associated kinase PBL27 in microbial stomatal closure. *ELife*, **2019**, 8,	8.9	26
305	Acquiring Control: The Evolution of Stomatal Signalling Pathways. *Trends in Plant Science*, **2019**, 24, 342-351	13.1	34
304	On the origins of osmotically driven stomatal movements. *New Phytologist*, **2019**, 222, 84-90	9.8	17
303	Comparing Arabidopsis receptor kinase and receptor protein-mediated immune signaling reveals BIK1-dependent differences. *New Phytologist*, **2019**, 221, 2080-2095	9.8	41
302	Tip-localized Ca -permeable channels control pollen tube growth via kinase-dependent R- and S-type anion channel regulation. *New Phytologist*, **2018**, 218, 1089-1105	9.8	29
301	Spatio-temporal Aspects of Ca2+ Signalling: Lessons from Guard Cells and Pollen Tubes. *Journal of Experimental Botany*, **2018**,	7	19
300	Guard cells in fern stomata are connected by plasmodesmata, but control cytosolic Ca levels autonomously. *New Phytologist*, **2018**, 219, 206-215	9.8	13
299	Structure and Function of TPC1 Vacuole SV Channel Gains Shape. *Molecular Plant*, **2018**, 11, 764-775	14.4	38

298	AUX1-mediated root hair auxin influx governs SCF-type Ca signaling. *Nature Communications*, **2018**, 9, 1174	17.4	93
297	A Poly(A) Ribonuclease Controls the Cellotriose-Based Interaction between and Its Host Arabidopsis. *Plant Physiology*, **2018**, 176, 2496-2514	6.6	40
296	Advances and current challenges in calcium signaling. *New Phytologist*, **2018**, 218, 414-431	9.8	263
295	Venus Flytrap: How an Excitable, Carnivorous Plant Works. *Trends in Plant Science*, **2018**, 23, 220-234	13.1	56
294	Physiological responses of date palm (Phoenix dactylifera) seedlings to acute ozone exposure at high temperature. *Environmental Pollution*, **2018**, 242, 905-913	9.3	16
293	The Chara Genome: Secondary Complexity and Implications for Plant Terrestrialization. *Cell*, **2018**, 174, 448-464.e24	56.2	213
292	A Tandem Amino Acid Residue Motif in Guard Cell SLAC1 Anion Channel of Grasses Allows for the Control of Stomatal Aperture by Nitrate. *Current Biology*, **2018**, 28, 1370-1379.e5	6.3	29
291	Stomata in a saline world. *Current Opinion in Plant Biology*, **2018**, 46, 87-95	9.9	49
290	From Darwin to today: what modern biology tells us about the life of the green flesh-eater. *Current Biology*, **2018**, 28, R640-R641	6.3	
289	Auxin-Induced Plasma Membrane Depolarization Is Regulated by Auxin Transport and Not by AUXIN BINDING PROTEIN1. *Frontiers in Plant Science*, **2018**, 9, 1953	6.2	14
288	Mycorrhizal lipochitinoligosaccharides (LCOs) depolarize root hairs of Medicago truncatula. *PLoS ONE*, **2018**, 13, e0198126	3.7	2
287	Sulfate is Incorporated into Cysteine to Trigger ABA Production and Stomatal Closure. *Plant Cell*, **2018**, 30, 2973-2987	11.6	48
286	Understanding the Molecular Basis of Salt Sequestration in Epidermal Bladder Cells of Chenopodium quinoa. *Current Biology*, **2018**, 28, 3075-3085.e7	6.3	57
285	The Receptor-like Pseudokinase GHR1 Is Required for Stomatal Closure. *Plant Cell*, **2018**, 30, 2813-2837	11.6	54
284	High V-PPase activity is beneficial under high salt loads, but detrimental without salinity. *New Phytologist*, **2018**, 219, 1421-1432	9.8	25
283	Functional characterisation and cell specificity of BvSUT1, the transporter that loads sucrose into the phloem of sugar beet (Beta vulgaris L.) source leaves. *Plant Biology*, **2017**, 19, 315-326	3.7	20
282	Insect haptoelectrical stimulation of Venus flytrap triggers exocytosis in gland cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 4822-4827	11.5	34
281	Drought-Enhanced Xylem Sap Sulfate Closes Stomata by Affecting ALMT12 and Guard Cell ABA Synthesis. *Plant Physiology*, **2017**, 174, 798-814	6.6	54

280	Epidermal bladder cells confer salinity stress tolerance in the halophyte quinoa and Atriplex species. *Plant, Cell and Environment*, **2017**, 40, 1900-1915	8.4	61
279	The fungal UmSrt1 and maize ZmSUT1 sucrose transporters battle for plant sugar resources. *Journal of Integrative Plant Biology*, **2017**, 59, 422-435	8.3	12
278	The carnivorous Venus flytrap uses prey-derived amino acid carbon to fuel respiration. *New Phytologist*, **2017**, 214, 597-606	9.8	14
277	Detecting early signs of heat and drought stress in Phoenix dactylifera (date palm). *PLoS ONE*, **2017**, 12, e0177883	3.7	26
276	Control of basal jasmonate signalling and defence through modulation of intracellular cation flux capacity. *New Phytologist*, **2017**, 216, 1161-1169	9.8	37
275	Coprophagous features in carnivorous Nepenthes plants: a task for ureases. *Scientific Reports*, **2017**, 7, 11647	4.9	11
274	Biology of SLAC1-type anion channels - from nutrient uptake to stomatal closure. *New Phytologist*, **2017**, 216, 46-61	9.8	67
273	The desert plant Phoenix dactylifera closes stomata via nitrate-regulated SLAC1 anion channel. *New Phytologist*, **2017**, 216, 150-162	9.8	44
272	A high-quality genome assembly of quinoa provides insights into the molecular basis of salt bladder-based salinity tolerance and the exceptional nutritional value. *Cell Research*, **2017**, 27, 1327-1340	24.7	104
271	The Nonspecific Lipid Transfer Protein AtLtpI-4 Is Involved in Suberin Formation of Arabidopsis thaliana Crown Galls. *Plant Physiology*, **2016**, 172, 1911-1927	6.6	30
270	Do stomata of evolutionary distant species differ in sensitivity to environmental signals?. *New Phytologist*, **2016**, 211, 767-70	9.8	5
269	Abscisic acid controlled sex before transpiration in vascular plants. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 12862-12867	11.5	64
268	Effectiveness of cuticular transpiration barriers in a desert plant at controlling water loss at high temperatures. *AoB PLANTS*, **2016**, 8,	2.9	58
267	Acclimation to heat and drought□lessons to learn from the date palm (Phoenix dactylifera). *Environmental and Experimental Botany*, **2016**, 125, 20-30	5.9	32
266	The Venus Flytrap Dionaea muscipula Counts Prey-Induced Action Potentials to Induce Sodium Uptake. *Current Biology*, **2016**, 26, 286-95	6.3	92
265	Electrical Wiring and Long-Distance Plant Communication. *Trends in Plant Science*, **2016**, 21, 376-387	13.1	122
264	Current Injection Provokes Rapid Expansion of the Guard Cell Cytosolic Volume and Triggers Ca(2+) Signals. *Molecular Plant*, **2016**, 9, 471-480	14.4	8
263	Venus Flytrap HKT1-Type Channel Provides for Prey Sodium Uptake into Carnivorous Plant Without Conflicting with Electrical Excitability. *Molecular Plant*, **2016**, 9, 428-436	14.4	37

262	Gating of the two-pore cation channel AtTPC1 in the plant vacuole is based on a single voltage-sensing domain. *Plant Biology*, **2016**, 18, 750-60	3.7	15
261	Silent S-Type Anion Channel Subunit SLAH1 Gates SLAH3 Open for Chloride Root-to-Shoot Translocation. *Current Biology*, **2016**, 26, 2213-20	6.3	65
260	SLAH3-type anion channel expressed in poplar secretory epithelia operates in calcium kinase CPK-autonomous manner. *New Phytologist*, **2016**, 210, 922-33	9.8	10
259	Venus flytrap carnivorous lifestyle builds on herbivore defense strategies. *Genome Research*, **2016**, 26, 812-25	9.7	60
258	Integration of trap- and root-derived nitrogen nutrition of carnivorous Dionaea muscipula. *New Phytologist*, **2015**, 205, 1320-1329	9.8	17
257	Cytosolic Ca(2+) Signals Enhance the Vacuolar Ion Conductivity of Bulging Arabidopsis Root Hair Cells. *Molecular Plant*, **2015**, 8, 1665-74	14.4	25
256	amylase1 mutant Arabidopsis plants show improved drought tolerance due to reduced starch breakdown in guard cells. *Journal of Experimental Botany*, **2015**, 66, 6059-67	7	46
255	Identification of the transporter responsible for sucrose accumulation in sugar beet taproots. *Nature Plants*, **2015**, 1, 14001	11.5	107
254	Stomatal guard cells co-opted an ancient ABA-dependent desiccation survival system to regulate stomatal closure. *Current Biology*, **2015**, 25, 928-35	6.3	113
253	Elevated CO2-Induced Responses in Stomata Require ABA and ABA Signaling. *Current Biology*, **2015**, 25, 2709-16	6.3	142
252	Guard cell SLAC1-type anion channels mediate flagellin-induced stomatal closure. *New Phytologist*, **2015**, 208, 162-73	9.8	89
251	An RLP23-SOBIR1-BAK1 complex mediates NLP-triggered immunity. *Nature Plants*, **2015**, 1, 15140	11.5	215
250	Sugar transport across the plant vacuolar membrane: nature and regulation of carrier proteins. *Current Opinion in Plant Biology*, **2015**, 25, 63-70	9.9	77
249	Calcium sensor kinase activates potassium uptake systems in gland cells of Venus flytraps. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 7309-14	11.5	72
248	A mechanism of growth inhibition by abscisic acid in germinating seeds of Arabidopsis thaliana based on inhibition of plasma membrane H+-ATPase and decreased cytosolic pH, K+, and anions. *Journal of Experimental Botany*, **2015**, 66, 813-25	7	42
247	Carnivorous plants. *Current Biology*, **2015**, 25, R99-R100	6.3	2
246	Strategy of nitrogen acquisition and utilization by carnivorous Dionaea muscipula. *Oecologia*, **2014**, 174, 839-51	2.9	22
245	Mechano-stimulation triggers turgor changes associated with trap closure in the Darwin plant Dionaea muscipula. *Molecular Plant*, **2014**, 7, 744-6	14.4	9

244	proovread: large-scale high-accuracy PacBio correction through iterative short read consensus. *Bioinformatics*, **2014**, 30, 3004-11	7.2	350
243	A Single-Pore Residue Renders the Arabidopsis Root Anion Channel SLAH2 Highly Nitrate Selective. *Plant Cell*, **2014**, 26, 2554-2567	11.6	53
242	Secreted major Venus flytrap chitinase enables digestion of Arthropod prey. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2014**, 1844, 374-83	4	28
241	Salt bladders: do they matter?. *Trends in Plant Science*, **2014**, 19, 687-91	13.1	186
240	Two fatty acid desaturases, STEAROYL-ACYL CARRIER PROTEIN Δ9-DESATURASE6 and FATTY ACID DESATURASE3, are involved in drought and hypoxia stress signaling in Arabidopsis crown galls. *Plant Physiology*, **2014**, 164, 570-83	6.6	56
239	Site- and kinase-specific phosphorylation-mediated activation of SLAC1, a guard cell anion channel stimulated by abscisic acid. *Science Signaling*, **2014**, 7, ra86	8.8	130
238	The Venus flytrap attracts insects by the release of volatile organic compounds. *Journal of Experimental Botany*, **2014**, 65, 755-66	7	55
237	A unified nomenclature of NITRATE TRANSPORTER 1/PEPTIDE TRANSPORTER family members in plants. *Trends in Plant Science*, **2014**, 19, 5-9	13.1	403
236	Overexpression of a proton-coupled vacuolar glucose exporter impairs freezing tolerance and seed germination. *New Phytologist*, **2014**, 202, 188-197	9.8	44
235	Pollen tube growth regulation by free anions depends on the interaction between the anion channel SLAH3 and calcium-dependent protein kinases CPK2 and CPK20. *Plant Cell*, **2013**, 25, 4525-43	11.6	98
234	How do stomata sense reductions in atmospheric relative humidity?. *Molecular Plant*, **2013**, 6, 1703-6	14.4	22
233	Salt stress triggers phosphorylation of the Arabidopsis vacuolar K+ channel TPK1 by calcium-dependent protein kinases (CDPKs). *Molecular Plant*, **2013**, 6, 1274-1289	14.4	129
232	Analytical studies on the incorporation of aluminium in the cell walls of the marine diatom Stephanopyxis turris. *BioMetals*, **2013**, 26, 141-50	3.4	20
231	The Dionaea muscipula ammonium channel DmAMT1 provides NH_4^+ uptake associated with Venus flytrap prey digestion. *Current Biology*, **2013**, 23, 1649-57	6.3	44
230	The stomatal response to reduced relative humidity requires guard cell-autonomous ABA synthesis. *Current Biology*, **2013**, 23, 53-7	6.3	336
229	Open stomata 1 (OST1) kinase controls R-type anion channel QUAC1 in Arabidopsis guard cells. *Plant Journal*, **2013**, 74, 372-82	6.9	139
228	DNA methylation mediated control of gene expression is critical for development of crown gall tumors. *PLoS Genetics*, **2013**, 9, e1003267	6	43
227	Arabidopsis nanodomain-delimited ABA signaling pathway regulates the anion channel SLAH3. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 8296-301	11.5	151

226	On the cellular site of two-pore channel TPC1 action in the Poaceae. *New Phytologist*, **2013**, 200, 663-674	9.8	23
225	C-terminus-mediated voltage gating of Arabidopsis guard cell anion channel QUAC1. *Molecular Plant*, **2013**, 6, 1550-63	14.4	37
224	Vacuoles release sucrose via tonoplast-localised SUC4-type transporters. *Plant Biology*, **2012**, 14, 325-36	3.7	98
223	Poplar extrafloral nectaries: two types, two strategies of indirect defenses against herbivores. *Plant Physiology*, **2012**, 159, 1176-91	6.6	37
222	PHO1 expression in guard cells mediates the stomatal response to abscisic acid in Arabidopsis. *Plant Journal*, **2012**, 72, 199-211	6.9	30
221	Ion channels in plants. *Physiological Reviews*, **2012**, 92, 1777-811	47.9	308
220	Regulation of the V-type ATPase by redox modulation. *Biochemical Journal*, **2012**, 448, 243-51	3.8	20
219	Anion channels: master switches of stress responses. *Trends in Plant Science*, **2012**, 17, 221-9	13.1	105
218	Methods of staining and visualization of sphingolipid enriched and non-enriched plasma membrane regions of Arabidopsis thaliana with fluorescent dyes and lipid analogues. *Plant Methods*, **2012**, 8, 28	5.8	19
217	The protein composition of the digestive fluid from the venus flytrap sheds light on prey digestion mechanisms. *Molecular and Cellular Proteomics*, **2012**, 11, 1306-19	7.6	63
216	NRT/PTR transporters are essential for translocation of glucosinolate defence compounds to seeds. *Nature*, **2012**, 488, 531-4	50.4	312
215	Role of Ion Channels in Plants. *Springer Protocols*, **2012**, 295-322	0.3	4
214	Poplar extrafloral nectar is protected against plant and human pathogenic fungus. *Molecular Plant*, **2012**, 5, 1157-9	14.4	10
213	Luminal and cytosolic pH feedback on proton pump activity and ATP affinity of V-type ATPase from Arabidopsis. *Journal of Biological Chemistry*, **2012**, 287, 8986-93	5.4	30
212	Molecular Evolution of Slow and Quick Anion Channels (SLACs and QUACs/ALMTs). *Frontiers in Plant Science*, **2012**, 3, 263	6.2	83
211	Poplar wood rays are involved in seasonal remodeling of tree physiology. *Plant Physiology*, **2012**, 160, 1515-29	6.6	23
210	Multiple calcium-dependent kinases modulate ABA-activated guard cell anion channels. *Molecular Plant*, **2012**, 5, 1409-12	14.4	99
209	Stomatal closure by fast abscisic acid signaling is mediated by the guard cell anion channel SLAH3 and the receptor RCAR1. *Science Signaling*, **2011**, 4, ra32	8.8	272

208	Proton-driven sucrose symport and antiport are provided by the vacuolar transporters SUC4 and TMT1/2. *Plant Journal*, **2011**, 68, 129-36	6.9	160
207	A member of the mitogen-activated protein 3-kinase family is involved in the regulation of plant vacuolar glucose uptake. *Plant Journal*, **2011**, 68, 890-900	6.9	47
206	A novel calcium binding site in the slow vacuolar cation channel TPC1 senses luminal calcium levels. *Plant Cell*, **2011**, 23, 2696-707	11.6	81
205	A special pair of phytohormones controls excitability, slow closure, and external stomach formation in the Venus flytrap. *Proceedings of the National Academy of Sciences of the United States of America* , **2011**, 108, 15492-7	11.5	98
204	TPC1-SV channels gain shape. *Molecular Plant*, **2011**, 4, 428-41	14.4	126
203	Biology of Plant Potassium Channels. *Plant Cell Monographs*, **2011**, 253-274	0.6	2
202	Making sense out of Ca(2+) signals: their role in regulating stomatal movements. *Plant, Cell and Environment*, **2010**, 33, 305-21	8.4	65
201	Early signaling through the Arabidopsis pattern recognition receptors FLS2 and EFR involves Ca-associated opening of plasma membrane anion channels. *Plant Journal*, **2010**, 62, 367-78	6.9	172
200	Stomatal action directly feeds back on leaf turgor: new insights into the regulation of the plant water status from non-invasive pressure probe measurements. *Plant Journal*, **2010**, 62, 1072-82	6.9	71
199	AtALMT12 represents an R-type anion channel required for stomatal movement in Arabidopsis guard cells. *Plant Journal*, **2010**, 63, 1054-62	6.9	255
198	Ca(2+)-dependent activation of guard cell anion channels, triggered by hyperpolarization, is promoted by prolonged depolarization. *Plant Journal*, **2010**, 62, 265-76	6.9	31
197	Light-induced modification of plant plasma membrane ion transport. *Plant Biology*, **2010**, 12 Suppl 1, 64-79	3.7	26
196	A role for PSK signaling in wounding and microbial interactions in Arabidopsis. *Physiologia Plantarum*, **2010**, 139, 348-57	4.6	32
195	Inverse pH regulation of plant and fungal sucrose transporters: a mechanism to regulate competition for sucrose at the host/pathogen interface?. *PLoS ONE*, **2010**, 5, e12429	3.7	17
194	Guard cell-specific calcium sensitivity of high density and activity SV/TPC1 channels. *Plant and Cell Physiology*, **2010**, 51, 1548-54	4.9	36
193	Guard cell anion channel SLAC1 is regulated by CDPK protein kinases with distinct Ca2+ affinities. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 8023-8	11.5	412
192	Arabidopsis V-ATPase activity at the tonoplast is required for efficient nutrient storage but not for sodium accumulation. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 3251-6	11.5	239
191	Perception of the Arabidopsis danger signal peptide 1 involves the pattern recognition receptor AtPEPR1 and its close homologue AtPEPR2. *Journal of Biological Chemistry*, **2010**, 285, 13471-9	5.4	258

190	Arabidopsis thaliana POLYOL/MONOSACCHARIDE TRANSPORTERS 1 and 2: fructose and xylitol/H+ symporters in pollen and young xylem cells. *Journal of Experimental Botany*, **2010**, 61, 537-50	7	48
189	Increased activity of the vacuolar monosaccharide transporter TMT1 alters cellular sugar partitioning, sugar signaling, and seed yield in Arabidopsis. *Plant Physiology*, **2010**, 154, 665-77	6.6	118
188	Potassium-dependent wood formation in poplar: seasonal aspects and environmental limitations. *Plant Biology*, **2010**, 12, 259-67	3.7	17
187	K+ transport characteristics of the plasma membrane tandem-pore channel TPK4 and pore chimeras with its vacuolar homologs. *FEBS Letters*, **2010**, 584, 2433-9	3.8	20
186	Sucrose- and H-dependent charge movements associated with the gating of sucrose transporter ZmSUT1. *PLoS ONE*, **2010**, 5, e12605	3.7	28
185	Activity of guard cell anion channel SLAC1 is controlled by drought-stress signaling kinase-phosphatase pair. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 21425-30	11.5	635
184	Agrobacterium tumefaciens promotes tumor induction by modulating pathogen defense in Arabidopsis thaliana. *Plant Cell*, **2009**, 21, 2948-62	11.6	123
183	Heteromeric AtKC1{middle dot}AKT1 channels in Arabidopsis roots facilitate growth under K+-limiting conditions. *Journal of Biological Chemistry*, **2009**, 284, 21288-95	5.4	133
182	Salt stress affects xylem differentiation of grey poplar (Populus x canescens). *Planta*, **2009**, 229, 299-309	4.7	60
181	The fou2 mutation in the major vacuolar cation channel TPC1 confers tolerance to inhibitory luminal calcium. *Plant Journal*, **2009**, 58, 715-23	6.9	97
180	Outward-rectifying K+ channel activities regulate cell elongation and cell division of tobacco BY-2 cells. *Plant Journal*, **2009**, 57, 55-64	6.9	21
179	Stomata **2009**,		2
178	Silencing of NtMPK4 impairs CO-induced stomatal closure, activation of anion channels and cytosolic Casignals in Nicotiana tabacum guard cells. *Plant Journal*, **2008**, 55, 698-708	6.9	59
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