

Julian I Schroeder

List of Publications by Year in descending order

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269
papers

52,678
citations

735

120
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222
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283
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283
docs citations

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times ranked

25710
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Abscisic Acid Inhibits Type 2C Protein Phosphatases via the PYR/PYL Family of START Proteins. <i>Science</i> , 2009, 324, 1068-1071. | 12.6 | 2,385 |
| 2 | Calcium channels activated by hydrogen peroxide mediate abscisic acid signalling in guard cells. <i>Nature</i> , 2000, 406, 731-734. | 27.8 | 1,938 |
| 3 | NADPH oxidase <i>AtrbohD</i> and <i>AtrbohF</i> genes function in ROS-dependent ABA signaling in <i>Arabidopsis</i> . <i>EMBO Journal</i> , 2003, 22, 2623-2633. | 7.8 | 1,474 |
| 4 | Plant salt-tolerance mechanisms. <i>Trends in Plant Science</i> , 2014, 19, 371-379. | 8.8 | 1,343 |
| 5 | Guard Cell Signal Transduction Network: Advances in Understanding Abscisic Acid, CO ₂ , and Ca ²⁺ Signaling. <i>Annual Review of Plant Biology</i> , 2010, 61, 561-591. | 18.7 | 1,165 |
| 6 | Phylogenetic Relationships within Cation Transporter Families of <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2001, 126, 1646-1667. | 4.8 | 1,110 |
| 7 | GUARDCELLSIGNALTRANSDUCTION. <i>Annual Review of Plant Biology</i> , 2001, 52, 627-658. | 14.3 | 1,038 |
| 8 | The receptor-like kinase <i>SERK3/BAK1</i> is a central regulator of innate immunity in plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 12217-12222. | 7.1 | 998 |
| 9 | Cadmium and iron transport by members of a plant metal transporter family in <i>Arabidopsis</i> with homology to <i>Nramp</i> genes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 4991-4996. | 7.1 | 800 |
| 10 | Genetic strategies for improving crop yields. <i>Nature</i> , 2019, 575, 109-118. | 27.8 | 799 |
| 11 | <i>SLAC1</i> is required for plant guard cell S-type anion channel function in stomatal signalling. <i>Nature</i> , 2008, 452, 487-491. | 27.8 | 733 |
| 12 | Guard cell abscisic acid signalling and engineering drought hardiness in plants. <i>Nature</i> , 2001, 410, 327-330. | 27.8 | 694 |
| 13 | Sodium-Driven Potassium Uptake by the Plant Potassium Transporter <i>HKT1</i> and Mutations Conferring Salt Tolerance. <i>Science</i> , 1995, 270, 1660-1663. | 12.6 | 628 |
| 14 | Structure and transport mechanism of a high-affinity potassium uptake transporter from higher plants. <i>Nature</i> , 1994, 370, 655-658. | 27.8 | 603 |
| 15 | Early abscisic acid signal transduction mechanisms: newly discovered components and newly emerging questions. <i>Genes and Development</i> , 2010, 24, 1695-1708. | 5.9 | 592 |
| 16 | Cytosolic calcium regulates ion channels in the plasma membrane of <i>Vicia faba</i> guard cells. <i>Nature</i> , 1989, 338, 427-430. | 27.8 | 586 |
| 17 | Enhanced salt tolerance mediated by <i>AtHKT1</i> transporter-induced Na ⁺ unloading from xylem vessels to xylem parenchyma cells. <i>Plant Journal</i> , 2005, 44, 928-938. | 5.7 | 572 |
| 18 | Tolerance to toxic metals by a gene family of phytochelatin synthases from plants and yeast. <i>EMBO Journal</i> , 1999, 18, 3325-3333. | 7.8 | 568 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Arsenic tolerance in <i>Arabidopsis</i> is mediated by two ABCC-type phytochelatin transporters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 21187-21192. | 7.1 | 555 |
| 20 | A defined range of guard cell calcium oscillation parameters encodes stomatal movements. <i>Nature</i> , 2001, 411, 1053-1057. | 27.8 | 531 |
| 21 | Abscisic Acid Activation of Plasma Membrane Ca ²⁺ Channels in Guard Cells Requires Cytosolic NAD(P)H and Is Differentially Disrupted Upstream and Downstream of Reactive Oxygen Species Production in <i>abi1-1</i> and <i>abi2-1</i> Protein Phosphatase 2C Mutants. <i>Plant Cell</i> , 2001, 13, 2513-2523. | 6.6 | 530 |
| 22 | CDPKs CPK6 and CPK3 Function in ABA Regulation of Guard Cell S-Type Anion- and Ca ²⁺ - Permeable Channels and Stomatal Closure. <i>PLoS Biology</i> , 2006, 4, e327. | 5.6 | 523 |
| 23 | Microarray Expression Analyses of Arabidopsis Guard Cells and Isolation of a Recessive Abscisic Acid Hypersensitive Protein Phosphatase 2C Mutant[W]. <i>Plant Cell</i> , 2004, 16, 596-615. | 6.6 | 508 |
| 24 | Alteration of Stimulus-Specific Guard Cell Calcium Oscillations and Stomatal Closing in Arabidopsis <i>det3</i> Mutant. <i>Science</i> , 2000, 289, 2338-2342. | 12.6 | 467 |
| 25 | Structural Mechanism of Abscisic Acid Binding and Signaling by Dimeric PYR1. <i>Science</i> , 2009, 326, 1373-1379. | 12.6 | 457 |
| 26 | Expression of an inward-rectifying potassium channel by the Arabidopsis KAT1 cDNA. <i>Science</i> , 1992, 258, 1654-1658. | 12.6 | 452 |
| 27 | PYR/PYL/RCAR family members are major <i>in vivo</i> ABI1 protein phosphatase 2C-interacting proteins in Arabidopsis. <i>Plant Journal</i> , 2010, 61, 290-299. | 5.7 | 451 |
| 28 | The Potassium Transporter AtHAK5 Functions in K ⁺ Deprivation-Induced High-Affinity K ⁺ Uptake and AKT1 K ⁺ Channel Contribution to K ⁺ Uptake Kinetics in Arabidopsis Roots. <i>Plant Physiology</i> , 2005, 137, 1105-1114. | 4.8 | 449 |
| 29 | The Arabidopsis HKT1 Gene Homolog Mediates Inward Na ⁺ Currents in <i>Xenopus laevis</i> Oocytes and Na ⁺ Uptake in <i>Saccharomyces cerevisiae</i> . <i>Plant Physiology</i> , 2000, 122, 1249-1260. | 4.8 | 445 |
| 30 | Using membrane transporters to improve crops for sustainable food production. <i>Nature</i> , 2013, 497, 60-66. | 27.8 | 440 |
| 31 | Mechanisms of abscisic acid-mediated control of stomatal aperture. <i>Current Opinion in Plant Biology</i> , 2015, 28, 154-162. | 7.1 | 438 |
| 32 | AtNRAMP3, a multispecific vacuolar metal transporter involved in plant responses to iron deficiency. <i>Plant Journal</i> , 2003, 34, 685-695. | 5.7 | 433 |
| 33 | HKT transporter-mediated salinity resistance mechanisms in Arabidopsis and monocot crop plants. <i>Trends in Plant Science</i> , 2009, 14, 660-668. | 8.8 | 433 |
| 34 | Evolution of Abscisic Acid Synthesis and Signaling Mechanisms. <i>Current Biology</i> , 2011, 21, R346-R355. | 3.9 | 425 |
| 35 | Voltage dependence of K ⁺ channels in guard-cell protoplasts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1987, 84, 4108-4112. | 7.1 | 421 |
| 36 | An mRNA Cap Binding Protein, ABH1, Modulates Early Abscisic Acid Signal Transduction in Arabidopsis. <i>Cell</i> , 2001, 106, 477-487. | 28.9 | 414 |

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|----|--|------|-----------|
| 37 | The <i>Arabidopsis</i> Nitrate Transporter NRT1.8 Functions in Nitrate Removal from the Xylem Sap and Mediates Cadmium Tolerance. <i>Plant Cell</i> , 2010, 22, 1633-1646. | 6.6 | 413 |
| 38 | Genomic scale profiling of nutrient and trace elements in <i>Arabidopsis thaliana</i> . <i>Nature Biotechnology</i> , 2003, 21, 1215-1221. | 17.5 | 407 |
| 39 | Reconstitution of abscisic acid activation of SLAC1 anion channel by CPK6 and OST1 kinases and branched ABI1 PP2C phosphatase action. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 10593-10598. | 7.1 | 393 |
| 40 | Blue light activates electrogenic ion pumping in guard cell protoplasts of <i>Vicia faba</i> . <i>Nature</i> , 1985, 318, 285-287. | 27.8 | 389 |
| 41 | Repetitive increases in cytosolic Ca ²⁺ of guard cells by abscisic acid activation of nonselective Ca ²⁺ permeable channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1990, 87, 9305-9309. | 7.1 | 381 |
| 42 | Long-distance transport, vacuolar sequestration, tolerance, and transcriptional responses induced by cadmium and arsenic. <i>Current Opinion in Plant Biology</i> , 2011, 14, 554-562. | 7.1 | 366 |
| 43 | Reactive Oxygen Species Activation of Plant Ca ²⁺ Channels. A Signaling Mechanism in Polar Growth, Hormone Transduction, Stress Signaling, and Hypothetically Mechanotransduction: Figure 1. <i>Plant Physiology</i> , 2004, 135, 702-708. | 4.8 | 364 |
| 44 | Carbonic anhydrases are upstream regulators of CO ₂ -controlled stomatal movements in guard cells. <i>Nature Cell Biology</i> , 2010, 12, 87-93. | 10.3 | 364 |
| 45 | Altered shoot/root Na ⁺ distribution and bifurcating salt sensitivity in <i>Arabidopsis</i> by genetic disruption of the Na ⁺ transporter AtHKT1. <i>FEBS Letters</i> , 2002, 531, 157-161. | 2.8 | 336 |
| 46 | Plant Ion Channels: Gene Families, Physiology, and Functional Genomics Analyses. <i>Annual Review of Physiology</i> , 2009, 71, 59-82. | 13.1 | 335 |
| 47 | Role of Farnesyltransferase in ABA Regulation of Guard Cell Anion Channels and Plant Water Loss. , 1998, 282, 287-290. | | 334 |
| 48 | Rice OsHKT2;1 transporter mediates large Na ⁺ influx component into K ⁺ -starved roots for growth. <i>EMBO Journal</i> , 2007, 26, 3003-3014. | 7.8 | 333 |
| 49 | Cameleon calcium indicator reports cytoplasmic calcium dynamics in <i>Arabidopsis</i> guard cells. <i>Plant Journal</i> , 1999, 19, 735-747. | 5.7 | 332 |
| 50 | The Role of Reactive Oxygen Species in Hormonal Responses. <i>Plant Physiology</i> , 2006, 141, 323-329. | 4.8 | 330 |
| 51 | Nomenclature for HKT transporters, key determinants of plant salinity tolerance. <i>Trends in Plant Science</i> , 2006, 11, 372-374. | 8.8 | 329 |
| 52 | Perspectives on the Physiology and Structure of Inward-Rectifying K ⁺ Channels in Higher Plants: Biophysical Implications for K Uptake. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 1994, 23, 441-471. | 18.3 | 326 |
| 53 | A gene family of silicon transporters. <i>Nature</i> , 1997, 385, 688-689. | 27.8 | 319 |
| 54 | Long-distance root-to-shoot transport of phytochelatin and cadmium in <i>Arabidopsis</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 10118-10123. | 7.1 | 319 |

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|----|--|------|-----------|
| 55 | AtKUP1: An Arabidopsis Gene Encoding High-Affinity Potassium Transport Activity. <i>Plant Cell</i> , 1998, 10, 51-62. | 6.6 | 314 |
| 56 | Identification of high levels of phytochelatins, glutathione and cadmium in the phloem sap of <i>Brassica napus</i> . A role for thiol-peptides in the long-distance transport of cadmium and the effect of cadmium on iron translocation. <i>Plant Journal</i> , 2008, 54, 249-259. | 5.7 | 311 |
| 57 | Isolation of a strong Arabidopsis guard cell promoter and its potential as a research tool. <i>Plant Methods</i> , 2008, 4, 6. | 4.3 | 295 |
| 58 | Potassium-selective single channels in guard cell protoplasts of <i>Vicia faba</i> . <i>Nature</i> , 1984, 312, 361-362. | 27.8 | 288 |
| 59 | Arabidopsis <i>abi1-1</i> and <i>abi2-1</i> Phosphatase Mutations Reduce Abscisic Acid-Induced Cytoplasmic Calcium Rises in Guard Cells. <i>Plant Cell</i> , 1999, 11, 1785-1798. | 6.6 | 286 |
| 60 | Arabidopsis SOMATIC EMBRYOGENESIS RECEPTOR KINASES1 and 2 Are Essential for Tapetum Development and Microspore Maturation. <i>Plant Cell</i> , 2005, 17, 3350-3361. | 6.6 | 283 |
| 61 | Plant hormone regulation of abiotic stress responses. <i>Nature Reviews Molecular Cell Biology</i> , 2022, 23, 680-694. | 37.0 | 279 |
| 62 | Disruption of the pollen-expressed <i>FERONIA</i> homologs <i>ANXUR1</i> and <i>ANXUR2</i> triggers pollen tube discharge. <i>Development (Cambridge)</i> , 2009, 136, 3279-3288. | 2.5 | 273 |
| 63 | Overexpression of Phytochelatin Synthase in Arabidopsis Leads to Enhanced Arsenic Tolerance and Cadmium Hypersensitivity. <i>Plant and Cell Physiology</i> , 2004, 45, 1787-1797. | 3.1 | 265 |
| 64 | Arabidopsis HT1 kinase controls stomatal movements in response to CO ₂ . <i>Nature Cell Biology</i> , 2006, 8, 391-397. | 10.3 | 261 |
| 65 | The plant cDNA LCT1 mediates the uptake of calcium and cadmium in yeast. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 12043-12048. | 7.1 | 259 |
| 66 | Glycine residues in potassium channel-like selectivity filters determine potassium selectivity in four-loop-per-subunit HKT transporters from plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 6428-6433. | 7.1 | 257 |
| 67 | Regulation of Drought Tolerance by the F-Box Protein MAX2 in Arabidopsis. <i>Plant Physiology</i> , 2014, 164, 424-439. | 4.8 | 254 |
| 68 | The Protein Phosphatase AtPP2CA Negatively Regulates Abscisic Acid Signal Transduction in Arabidopsis, and Effects of <i>abh1</i> on AtPP2CA mRNA. <i>Plant Physiology</i> , 2006, 140, 127-139. | 4.8 | 252 |
| 69 | Triple Loss of Function of Protein Phosphatases Type 2C Leads to Partial Constitutive Response to Endogenous Abscisic Acid. <i>Plant Physiology</i> , 2009, 150, 1345-1355. | 4.8 | 252 |
| 70 | A cyclic nucleotide-gated channel is essential for polarized tip growth of pollen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 14531-14536. | 7.1 | 248 |
| 71 | K ⁺ transport properties of K ⁺ channels in the plasma membrane of <i>Vicia faba</i> guard cells. <i>Journal of General Physiology</i> , 1988, 92, 667-683. | 1.9 | 245 |
| 72 | CO ₂ Sensing and CO ₂ Regulation of Stomatal Conductance: Advances and Open Questions. <i>Trends in Plant Science</i> , 2016, 21, 16-30. | 8.8 | 244 |

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|----|--|------|-----------|
| 73 | Plastidial transporters KEA1, -2, and -3 are essential for chloroplast osmoregulation, integrity, and pH regulation in <i>Arabidopsis</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 7480-7485. | 7.1 | 241 |
| 74 | Alkali cation selectivity of the wheat root high-affinity potassium transporter HKT1. <i>Plant Journal</i> , 1996, 10, 869-882. | 5.7 | 240 |
| 75 | Enhancement of Abscisic Acid Sensitivity and Reduction of Water Consumption in <i>Arabidopsis</i> by Combined Inactivation of the Protein Phosphatases Type 2C ABI1 and HAB1. <i>Plant Physiology</i> , 2006, 141, 1389-1399. | 4.8 | 235 |
| 76 | Calcium-Activated K ⁺ Channels and Calcium-Induced Calcium Release by Slow Vacuolar Ion Channels in Guard Cell Vacuoles Implicated in the Control of Stomatal Closure. <i>Plant Cell</i> , 1994, 6, 669. | 6.6 | 225 |
| 77 | Convergence of Calcium Signaling Pathways of Pathogenic Elicitors and Abscisic Acid in <i>Arabidopsis</i> Guard Cells. <i>Plant Physiology</i> , 2002, 130, 2152-2163. | 4.8 | 222 |
| 78 | High-Affinity K ⁺ Transport in <i>Arabidopsis</i> : AtHAK5 and AKT1 Are Vital for Seedling Establishment and Postgermination Growth under Low-Potassium Conditions. <i>Plant Physiology</i> , 2010, 153, 863-875. | 4.8 | 219 |
| 79 | Signaling mechanisms in abscisic acid-mediated stomatal closure. <i>Plant Journal</i> , 2021, 105, 307-321. | 5.7 | 214 |
| 80 | Involvement of ion channels and active transport in osmoregulation and signaling of higher plant cells. <i>Trends in Biochemical Sciences</i> , 1989, 14, 187-192. | 7.5 | 213 |
| 81 | FRET-based reporters for the direct visualization of abscisic acid concentration changes and distribution in <i>Arabidopsis</i> . <i>ELife</i> , 2014, 3, e01739. | 6.0 | 213 |
| 82 | Border Control: A Membrane-Linked Interactome of <i>Arabidopsis</i> . <i>Science</i> , 2014, 344, 711-716. | 12.6 | 213 |
| 83 | H ₂ O ₂ in plant peroxisomes: an in vivo analysis uncovers a Ca ²⁺ -dependent scavenging system. <i>Plant Journal</i> , 2010, 62, 760-772. | 5.7 | 211 |
| 84 | MAP3Kinase-dependent SnRK2-kinase activation is required for abscisic acid signal transduction and rapid osmotic stress response. <i>Nature Communications</i> , 2020, 11, 12. | 12.8 | 202 |
| 85 | Sodium Transporters in Plants. Diverse Genes and Physiological Functions. <i>Plant Physiology</i> , 2004, 136, 2457-2462. | 4.8 | 199 |
| 86 | Roles of Higher Plant K ⁺ Channels. <i>Plant Physiology</i> , 1997, 114, 1141-1149. | 4.8 | 197 |
| 87 | Strong regulation of slow anion channels and abscisic acid signaling in guard cells by phosphorylation and dephosphorylation events. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1995, 92, 9535-9539. | 7.1 | 196 |
| 88 | HKT transporters mediate salt stress resistance in plants: from structure and function to the field. <i>Current Opinion in Biotechnology</i> , 2015, 32, 113-120. | 6.6 | 195 |
| 89 | Disruption of a Guard Cell-Expressed Protein Phosphatase 2A Regulatory Subunit, RCN1, Confers Abscisic Acid Insensitivity in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2002, 14, 2849-2861. | 6.6 | 192 |
| 90 | PYR/RCAR Receptors Contribute to Ozone-, Reduced Air Humidity-, Darkness-, and CO ₂ -Induced Stomatal Regulation. <i>Plant Physiology</i> , 2013, 162, 1652-1668. | 4.8 | 190 |

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|-----|---|------|-----------|
| 91 | Electrical measurements on endomembranes. <i>Science</i> , 1992, 258, 873-874. | 12.6 | 189 |
| 92 | Carbonic anhydrases, EPF2 and a novel protease mediate CO ₂ control of stomatal development. <i>Nature</i> , 2014, 513, 246-250. | 27.8 | 189 |
| 93 | Phosphatidylinositol 3- and 4-Phosphate Are Required for Normal Stomatal Movements. <i>Plant Cell</i> , 2002, 14, 2399-2412. | 6.6 | 186 |
| 94 | Proteins for Transport of Water and Mineral Nutrients across the Membranes of Plant Cells. <i>Plant Cell</i> , 1999, 11, 661-675. | 6.6 | 178 |
| 95 | Molecular and functional characterization of a novel low-affinity cation transporter (LCT1) in higher plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 11079-11084. | 7.1 | 177 |
| 96 | The Identity of Plant Glutamate Receptors. <i>Science</i> , 2001, 292, 1486b-1487. | 12.6 | 175 |
| 97 | CO ₂ signaling in guard cells: Calcium sensitivity response modulation, a Ca ²⁺ -independent phase, and CO ₂ insensitivity of the <i>gca2</i> mutant. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 7506-7511. | 7.1 | 174 |
| 98 | Dominant Negative Guard Cell K ⁺ Channel Mutants Reduce Inward-Rectifying K ⁺ Currents and Light-Induced Stomatal Opening in Arabidopsis. <i>Plant Physiology</i> , 2001, 127, 473-485. | 4.8 | 173 |
| 99 | Calcium specificity signaling mechanisms in abscisic acid signal transduction in Arabidopsis guard cells. <i>ELife</i> , 2015, 4, . | 6.0 | 172 |
| 100 | OsHKT1;4-mediated Na ⁺ transport in stems contributes to Na ⁺ exclusion from leaf blades of rice at the reproductive growth stage upon salt stress. <i>BMC Plant Biology</i> , 2016, 16, 22. | 3.6 | 168 |
| 101 | Central functions of bicarbonate in S-type anion channel activation and OST1 protein kinase in CO ₂ signal transduction in guard cell. <i>EMBO Journal</i> , 2011, 30, 1645-1658. | 7.8 | 167 |
| 102 | Guard cell ABA and CO ₂ signaling network updates and Ca ²⁺ sensor priming hypothesis. <i>Current Opinion in Plant Biology</i> , 2006, 9, 654-663. | 7.1 | 164 |
| 103 | An ABA-increased interaction of the PYL6 ABA receptor with MYC2 Transcription Factor: A putative link of ABA and JA signaling. <i>Scientific Reports</i> , 2016, 6, 28941. | 3.3 | 155 |
| 104 | Chemical Genetics Reveals Negative Regulation of Abscisic Acid Signaling by a Plant Immune Response Pathway. <i>Current Biology</i> , 2011, 21, 990-997. | 3.9 | 152 |
| 105 | Molecular mechanisms of potassium and sodium uptake in plants. <i>Plant and Soil</i> , 2002, 247, 43-54. | 3.7 | 151 |
| 106 | Live Cell Imaging with R-GECO1 Sheds Light on flg22- and Chitin-Induced Transient [Ca ²⁺] cyt Patterns in Arabidopsis. <i>Molecular Plant</i> , 2015, 8, 1188-1200. | 8.3 | 150 |
| 107 | Plasma Membrane-Associated ROP10 Small GTPase Is a Specific Negative Regulator of Abscisic Acid Responses in Arabidopsis. <i>Plant Cell</i> , 2002, 14, 2787-2797. | 6.6 | 146 |
| 108 | Multiple Genes, Tissue Specificity, and Expression-Dependent Modulation Contribute to the Functional Diversity of Potassium Channels in Arabidopsis thaliana. <i>Plant Physiology</i> , 1995, 109, 1093-1106. | 4.8 | 145 |

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|-----|---|------|-----------|
| 109 | An Improved Grafting Technique for Mature Arabidopsis Plants Demonstrates Long-Distance Shoot-to-Root Transport of Phytochelatin in Arabidopsis. <i>Plant Physiology</i> , 2006, 141, 108-120. | 4.8 | 144 |
| 110 | Calcium elevationâ€dependent and attenuated resting calciumâ€dependent abscisic acid induction of stomatal closure and abscisic acidâ€induced enhancement of calcium sensitivities of Sâ€type anion and inwardâ€rectifying K⁺ channels in Arabidopsis guard cells. <i>Plant Journal</i> , 2009, 59, 207-220. | 5.7 | 142 |
| 111 | K ⁺ Transport by the OsHKT2;4 Transporter from Rice with Atypical Na ⁺ Transport Properties and Competition in Permeation of K ⁺ over Mg ²⁺ and Ca ²⁺ Ions. <i>Plant Physiology</i> , 2011, 156, 1493-1507. | 4.8 | 138 |
| 112 | Control of seed dormancy and germination by DOG1-AHG1 PP2C phosphatase complex via binding to heme. <i>Nature Communications</i> , 2018, 9, 2132. | 12.8 | 138 |
| 113 | Enhancement of Na ⁺ Uptake Currents, Time-Dependent Inward-Rectifying K ⁺ Channel Currents, and K ⁺ Channel Transcripts by K ⁺ Starvation in Wheat Root Cells. <i>Plant Physiology</i> , 2000, 122, 1387-1398. | 4.8 | 136 |
| 114 | Differential Sodium and Potassium Transport Selectivities of the Rice OsHKT2;1 and OsHKT2;2 Transporters in Plant Cells. <i>Plant Physiology</i> , 2009, 152, 341-355. | 4.8 | 135 |
| 115 | OPT3 Is a Component of the Iron-Signaling Network between Leaves and Roots and Misregulation of OPT3 Leads to an Over-Accumulation of Cadmium in Seeds. <i>Molecular Plant</i> , 2014, 7, 1455-1469. | 8.3 | 135 |
| 116 | Phytochelatinâ€metal(loid) transport into vacuoles shows different substrate preferences in barley and <i>Arabidopsis</i> . <i>Plant, Cell and Environment</i> , 2014, 37, 1192-1201. | 5.7 | 134 |
| 117 | Inward-rectifying K ⁺ channels in guard cells provide a mechanism for low-affinity K ⁺ uptake.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1991, 88, 11583-11587. | 7.1 | 132 |
| 118 | Rapid Up-Regulation of HKT1, a High-Affinity Potassium Transporter Gene, in Roots of Barley and Wheat following Withdrawal of Potassium. <i>Plant Physiology</i> , 1998, 118, 651-659. | 4.8 | 131 |
| 119 | A membrane protein / signaling protein interaction network for Arabidopsis version AMPv2. <i>Frontiers in Physiology</i> , 2010, 1, 24. | 2.8 | 131 |
| 120 | Reconstitution of CO ₂ Regulation of SLAC1 Anion Channel and Function of CO ₂ -Permeable PIP2;1 Aquaporin as CARBONIC ANHYDRASE4 Interactor. <i>Plant Cell</i> , 2016, 28, 568-582. | 6.6 | 130 |
| 121 | <i>Caenorhabditis elegans</i> expresses a functional phytochelatin synthase. <i>FEBS Journal</i> , 2001, 268, 3640-3643. | 0.2 | 128 |
| 122 | Abscisic acid and CO ₂ signalling via calcium sensitivity priming in guard cells, new CDPK mutant phenotypes and a method for improved resolution of stomatal stimulus-response analyses. <i>Annals of Botany</i> , 2012, 109, 5-17. | 2.9 | 125 |
| 123 | A Dof Transcription Factor, SCAP1, Is Essential for the Development of Functional Stomata in Arabidopsis. <i>Current Biology</i> , 2013, 23, 479-484. | 3.9 | 125 |
| 124 | The ATP Binding Cassette Transporter AtMRP5 Modulates Anion and Calcium Channel Activities in Arabidopsis Guard Cells. <i>Journal of Biological Chemistry</i> , 2007, 282, 1916-1924. | 3.4 | 117 |
| 125 | General Mechanisms for Solute Transport Across the Tonoplast of Plant Vacuoles: a Patchâ€Clamp Survey of Ion Channels and Proton Pumps. <i>Botanica Acta</i> , 1988, 101, 7-13. | 1.6 | 116 |
| 126 | The Peroxin Loss-of-Function Mutation abstinence by mutual consent Disrupts Male-Female Gametophyte Recognition. <i>Current Biology</i> , 2008, 18, 63-68. | 3.9 | 116 |

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|-----|--|------|-----------|
| 127 | Genetic Selection of Mutations in the High Affinity K ⁺ Transporter HKT1 That Define Functions of a Loop Site for Reduced Na ⁺ Permeability and Increased Na ⁺ Tolerance. <i>Journal of Biological Chemistry</i> , 1999, 274, 6839-6847. | 3.4 | 113 |
| 128 | Identification of Cyclic GMP-Activated Nonselective Ca ²⁺ -Permeable Cation Channels and Associated <i>CNGC5</i> and <i>CNGC6</i> Genes in Arabidopsis Guard Cells. <i>Plant Physiology</i> , 2013, 163, 578-590. | 4.8 | 111 |
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