SÃ©bastien Thomine

List of Publications by Year
in descending order

89 papers	10,888 citations	53794 45 h-index	64796 79 g-index
97 all docs	97 docs citations	97 times ranked	9067 citing authors

#	Article	IF	Citations
1	Calcium channels activated by hydrogen peroxide mediate abscisic acidsignalling in guard cells. Nature, 2000, 406, 731-734.	27.8	1,938
2	Phylogenetic Relationships within Cation Transporter Families of Arabidopsis. Plant Physiology, 2001, 126, 1646-1667.	4.8	1,110
3	Plant science: the key to preventing slow cadmium poisoning. Trends in Plant Science, 2013, 18, 92-99.	8.8	844
4	Cadmium and iron transport by members of a plant metal transporter family in Arabidopsis with homology to Nramp genes. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 4991-4996.	7.1	800
5	Mobilization of vacuolar iron by AtNRAMP3 and AtNRAMP4 is essential for seed germination on low iron. EMBO Journal, 2005, 24, 4041-4051.	7.8	562
6	AtNRAMP3, a multispecific vacuolar metal transporter involved in plant responses to iron deficiency. Plant Journal, 2003, 34, 685-695.	5.7	433
7	The nitrate/proton antiporter AtCLCa mediates nitrate accumulation in plant vacuoles. Nature, 2006, 442, 939-942.	27.8	432
8	Export of Vacuolar Manganese by AtNRAMP3 and AtNRAMP4 Is Required for Optimal Photosynthesis and Growth under Manganese Deficiency. Plant Physiology, 2010, 152, 1986-1999.	4.8	299
9	Arabidopsis thalianaMTP1 is a Zn transporter in the vacuolar membrane which mediates Zn detoxification and drives leaf Zn accumulation. FEBS Letters, 2005, 579, 4165-4174.	2.8	260
10	Functional characterization of NRAMP3 and NRAMP4 from the metal hyperaccumulator <i>Thlaspi caerulescens</i>. New Phytologist, 2009, 181, 637-650.	7.3	244
11	Identification of Features Regulating OST1 Kinase Activity and OST1 Function in Guard Cells Â. Plant Physiology, 2006, 141, 1316-1327.	4.8	209
12	Anion Channels/Transporters in Plants: From Molecular Bases to Regulatory Networks. Annual Review of Plant Biology, 2011, 62, 25-51.	18.7	196
13	The Arabidopsis vacuolar anion transporter, AtCLCc, is involved in the regulation of stomatal movements and contributes to salt tolerance. Plant Journal, 2010, 64, 563-576.	5.7	169
14	Iron transport in plants: better be safe than sorry. Current Opinion in Plant Biology, 2013, 16, 322-327.	7.1	163
15	The Mammalian Gene of Acetylcholinesterase-associated Collagen. Journal of Biological Chemistry, 1997, 272, 22840-22847.	3.4	158
16	Mechanisms of Cadmium Accumulation in Plants. Critical Reviews in Plant Sciences, 2020, 39, 322-359.	5.7	127
17	Immunity to plant pathogens and iron homeostasis. Plant Science, 2015, 240, 90-97.	3.6	123
18	Identification of mutations allowing Natural Resistance Associated Macrophage Proteins (NRAMP) to discriminate against cadmium. Plant Journal, 2015, 83, 625-637.	5.7	120

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19	Genome-wide analysis of plant metal transporters, with an emphasis on poplar. Cellular and Molecular Life Sciences, 2010, 67, 3763-3784.	5.4	111
20	The metal hyperaccumulators from New Caledonia can broaden our understanding of nickel accumulation in plants. Frontiers in Plant Science, 2013, 4, 279.	3.6	111
21	An anion current at the plasma membrane of tobacco protoplasts shows ATP-dependent voltage regulation and is modulated by auxin. Plant Journal, 1994, 6, 707-716.	5.7	97
22	The metal transporter PgIREG1 from the hyperaccumulator Psychotria gabriellae is a candidate gene for nickel tolerance and accumulation. Journal of Experimental Botany, 2014, 65, 1551-1564.	4.8	97
23	Scavenging Iron: A Novel Mechanism of Plant Immunity Activation by Microbial Siderophores Â Â. Plant Physiology, 2014, 164, 2167-2183.	4.8	94
24	Characterization of the Chloride Channel-Like, AtCLCg, Involved in Chloride Tolerance in<i>Arabidopsis thaliana</i>. Plant and Cell Physiology, 2016, 57, 764-775.	3.1	84
25	CLC-mediated anion transport in plant cells. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 195-201.	4.0	81
26	<i>NRAMP</i> genes function in <i>Arabidopsis thaliana</i> resistance to <i>Erwinia chrysanthemi</i> infection. Plant Journal, 2009, 58, 195-207.	5.7	80
27	Cytoplasmic acidification as an early phosphorylation-dependent response of tobacco cells to elicitors. Planta, 1996, 199, 416.	3.2	77
28	The prolineâ€ƒ160 in the selectivity filter of the Arabidopsis NO3âˆ’/H+ exchanger AtCLCa is essential for nitrate accumulation in planta. Plant Journal, 2010, 63, 861-869.	5.7	76
29	ATP Binding to the C Terminus of the Arabidopsis thaliana Nitrate/Proton Antiporter, AtCLCa, Regulates Nitrate Transport into Plant Vacuoles. Journal of Biological Chemistry, 2009, 284, 26526-26532.	3.4	74
30	Phosphorylation of the vacuolar anion exchanger AtCLCa is required for the stomatal response to abscisic acid. Science Signaling, 2014, 7, ra65.	3.6	74
31	Sulfate Is Both a Substrate and an Activator of the Voltage-Dependent Anion Channel of Arabidopsis Hypocotyl Cells. Plant Physiology, 1999, 121, 253-262.	4.8	72
32	Differences in Expression of Acetylcholinesterase and Collagen Q Control the Distribution and Oligomerization of the Collagen-Tailed Forms in Fast and Slow Muscles. Journal of Neuroscience, 1999, 19, 10672-10679.	3.6	69
33	Dynamic imaging of cytosolic zinc in <i><scp>A</scp>rabidopsis</i> roots combining <scp>FRET</scp> sensors and RootChip technology. New Phytologist, 2014, 202, 198-208.	7.3	69
34	15N-Metabolic labeling for comparative plasma membrane proteomics in Arabidopsis cells. Proteomics, 2007, 7, 750-754.	2.2	68
35	Vacuolar Iron Stores Gated by NRAMP3 and NRAMP4 Are the Primary Source of Iron in Germinating Seeds. Plant Physiology, 2018, 177, 1267-1276.	4.8	65
36	Post-Translational Regulation of AtFER2 Ferritin in Response to Intracellular Iron Trafficking during Fruit Development in Arabidopsis. Molecular Plant, 2009, 2, 1095-1106.	8.3	64

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37	Calcium channel antagonists induce direct inhibition of the outward rectifying potassium channel in tobacco protoplasts. FEBS Letters, 1994, 340, 45-50.	2.8	62
38	Autophagy as a possible mechanism for micronutrient remobilization from leaves to seeds. Frontiers in Plant Science, 2014, 5, 11.	3.6	62
39	Bypassing Iron Storage in Endodermal Vacuoles Rescues the Iron Mobilization Defect in the <i>natural resistance associated-macrophage protein3natural resistance associated-macrophage protein4</i> Double Mutant. Plant Physiology, 2015, 169, 748-759.	4.8	61
40	Anion channels in plant cells. FEBS Journal, 2011, 278, 4277-4292.	4.7	57
41	Regulation and function of AtNRAMP4 metal transporter protein. Soil Science and Plant Nutrition, 2004, 50, 1141-1150.	1.9	56
42	Anion channels and transporters in plant cell membranes. FEBS Letters, 2007, 581, 2367-2374.	2.8	54
43	Phosphatidylinositol 3-phosphateâ€“binding protein AtPH1 controls the localization of the metal transporter NRAMP1 in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3354-E3363.	7.1	54
44	Essential and Detrimental â€" an Update on Intracellular Iron Trafficking and Homeostasis. Plant and Cell Physiology, 2019, 60, 1420-1439.	3.1	52
45	Mutants impaired in vacuolar metal mobilization identify chloroplasts as a target for cadmium hypersensitivity in <i>Arabidopsis thaliana</i>. Plant, Cell and Environment, 2013, 36, 804-817.	5.7	50
46	Autophagy and Nutrients Management in Plants. Cells, 2019, 8, 1426.	4.1	50
47	Distinct Lytic Vacuolar Compartments are Embedded Inside the Protein Storage Vacuole of Dry and Germinating Arabidopsis thaliana Seeds. Plant and Cell Physiology, 2011, 52, 1142-1152.	3.1	43
48	Genotypic variations in the dynamics of metal concentrations in poplar leaves: A field study with a perspective on phytoremediation. Environmental Pollution, 2015, 199, 73-82.	7.5	43
49	Voltage-Dependent Anion Channel of Arabidopsis Hypocotyls: Nucleotide Regulation and Pharmacological Properties. Journal of Membrane Biology, 1997, 159, 71-82.	2.1	39
50	Anion-Channel Blockers Interfere with Auxin Responses in Dark-Grown Arabidopsis Hypocotyls. Plant Physiology, 1997, 115, 533-542.	4.8	38
51	Using Î¼PIXE for quantitative mapping of metal concentration in Arabidopsis thaliana seeds. Frontiers in Plant Science, 2013, 4, 168.	3.6	38
52	Micronutrient homeostasis in plants for more sustainable agriculture and healthier human nutrition. Journal of Experimental Botany, 2022, 73, 1789-1799.	4.8	35
53	Elicitor-induced chloride efflux and anion channels in tobacco cell suspensions. Plant Physiology and Biochemistry, 1998, 36, 665-674.	5.8	33
54	Autophagy is essential for optimal translocation of iron to seeds in Arabidopsis. Journal of Experimental Botany, 2019, 70, 859-869.	4.8	32

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55	Distinct pH regulation of slow and rapid anion channels at the plasma membrane of Arabidopsis thaliana hypocotyl cells. Journal of Experimental Botany, 2005, 56, 1897-1903.	4.8	30
56	Dynamic measurement of cytosolic pH and [NO ₃ ^{âˆ’}] uncovers the role of the vacuolar transporter AtCLCa in cytosolic pH homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15343-15353.	7.1	29
57	Sensing and transducing forces in plants with <scp>MSL</scp>10 and <scp>DEK</scp>1 mechanosensors. FEBS Letters, 2018, 592, 1968-1979.	2.8	28
58	Nucleotides Provide a Voltage-sensitive Gate for the Rapid Anion Channel of Arabidopsis Hypocotyl Cells. Journal of Biological Chemistry, 2001, 276, 36139-36145.	3.4	23
59	Variations in Mn(<scp>ii</scp>) speciation among organisms: what makes D. radiodurans different. Metallomics, 2015, 7, 136-144.	2.4	23
60	Cellular transduction of mechanical oscillations in plants by the plasma-membrane mechanosensitive channel MSL10. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	22
61	Wide crossâ€species RNAâ€Seq comparison reveals convergent molecular mechanisms involved in nickel hyperaccumulation across dicotyledons. New Phytologist, 2021, 229, 994-1006.	7.3	21
62	Elementary auxin response chains at the plasma membrane involve external abp1 and multiple electrogenic ion transport proteins. Plant Growth Regulation, 1996, 18, 23-28.	3.4	20
63	Handing off iron to the next generation: how does it get into seeds and what for?. Biochemical Journal, 2020, 477, 259-274.	3.7	20
64	Calcium and plasma membrane force-gated ion channels behind development. Current Opinion in Plant Biology, 2020, 53, 57-64.	7.1	18
65	Importing Manganese into the Chloroplast: Many Membranes to Cross. Molecular Plant, 2018, 11, 1109-1111.	8.3	17
66	Pulse Electron Double Resonance Detected Multinuclear NMR Spectra of Distant and Low Sensitivity Nuclei and Its Application to the Structure of Mn(II) Centers in Organisms. Journal of Physical Chemistry B, 2015, 119, 13515-13523.	2.6	15
67	Anion channels and hormone signalling in plant cells. Plant Physiology and Biochemistry, 1999, 37, 381-392.	5.8	12
68	Mechanotransduction in the spotlight of mechano-sensitive channels. Current Opinion in Plant Biology, 2022, 68, 102252.	7.1	12
69	ATP-Dependent Regulation of an Anion Channel at the Plasma Membrane of Protoplasts from Epidermal Cells of Arabidopsis Hypocotyls. Plant Cell, 1995, 7, 2091.	6.6	11
70	A quick journey into the diversity of iron uptake strategies in photosynthetic organisms. Plant Signaling and Behavior, 2021, 16, 1975088.	2.4	11
71	R type anion channel. Plant Signaling and Behavior, 2010, 5, 1347-1352.	2.4	10
72	Anion Channel Blockage by ATP as a Means for Membranes to Perceive the Energy Status of theÂCell. Molecular Plant, 2016, 9, 320-322.	8.3	10

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73	Duplication of <i>NRAMP3</i> Gene in Poplars Generated Two Homologous Transporters with Distinct Functions. Molecular Biology and Evolution, 2022, 39, .	8.9	7
74	Elementary auxin response chains at the plasma membrane involve external abp1 and multiple electrogenic ion transport proteins. , 1996, , 31-36.		6
75	Cd tolerance and accumulation in barley: screening of 36 North African cultivars on Cd-contaminated soil. Environmental Science and Pollution Research, 2021, 28, 42722-42736.	5.3	5
76	Water Balance and the Regulation of Stomatal Movements. , 2009, , 283-305.		4
77	A peep through anion channels. Nature, 2010, 467, 1058-1059.	27.8	4
78	The iron will of the research community: advances in iron nutrition and interactions in lockdown times. Journal of Experimental Botany, 2021, 72, 2011-2013.	4.8	3
79	Manganese matters: feeding manganese into the secretory system for cell wall synthesis. New Phytologist, 2021, 231, 2107-2109.	7.3	3
80	Cracking the calcium code. Trends in Plant Science, 2001, 6, 501.	8.8	2
81	Mining out for iron. Trends in Plant Science, 2001, 6, 140.	8.8	1
82	Molecular Mechanisms that Control Plant Tolerance to Heavy Metals and Possible Roles in Manipulating Metal Accumulation. , 2002, , .		1
83	Wide Cross-Species RNA-Seq Comparison Reveals Convergent Molecular Mechanisms Involved in Nickel Hyperaccumulation Across Angiosperms. SSRN Electronic Journal, 0, , .	0.4	1
84	Proteolipids: small hydrophobic peptides in the field of sodium tolerance. Trends in Plant Science, 2000, 5, 322.	8.8	0
85	New ways for old genes. Trends in Plant Science, 2000, 5, 515.	8.8	0
86	Stressed plants need their vitamins. Trends in Plant Science, 2002, 7, 241.	8.8	0
87	Playing with the switches. Trends in Plant Science, 2002, 7, 524.	8.8	0
88	Virtual special issue on: â€œPositive and negative impact of metal(loid)s in plant physiology and biochemistry: Basic and applied aspectsâ€. Plant Physiology and Biochemistry, 2021, 162, 137-138.	5.8	0
89	Regulation of Acetylcholinesterase Oligomerization in the Muscles by Associated-Acetylcholinesterase Collagen, ColQ. , 1998, , 134-134.		0