Sbastien Thomine

List of Publications by Year in Descending Order

85 papers	8,639 citations	40 h-index	92 g-index
97 ext. papers	9,968 ext. citations	8.9 avg, IF	5.7 L-index

#	Paper	IF	Citations
85	Micronutrient homeostasis in plants for more sustainable agriculture and healthier human nutrition.. *Journal of Experimental Botany*, **2022**,	7	4
84	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,	11.5	7
83	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	5.1	2
82	Manganese matters: feeding manganese into the secretory system for cell wall synthesis. *New Phytologist*, **2021**, 231, 2107-2109	9.8	
81	Wide cross-species RNA-Seq comparison reveals convergent molecular mechanisms involved in nickel hyperaccumulation across dicotyledons. *New Phytologist*, **2021**, 229, 994-1006	9.8	7
80	A quick journey into the diversity of iron uptake strategies in photosynthetic organisms. *Plant Signaling and Behavior*, **2021**, 16, 1975088	2.5	1
79	Dynamic measurement of cytosolic pH and [NO] 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	11.5	14
78	Handing off iron to the next generation: how does it get into seeds and what for?. *Biochemical Journal*, **2020**, 477, 259-274	3.8	9
77	Calcium and plasma membrane force-gated ion channels behind development. *Current Opinion in Plant Biology*, **2020**, 53, 57-64	9.9	9
76	Mechanisms of Cadmium Accumulation in Plants. *Critical Reviews in Plant Sciences*, **2020**, 39, 322-359	5.6	31
75	Essential and Detrimental - an Update on Intracellular Iron Trafficking and Homeostasis. *Plant and Cell Physiology*, **2019**, 60, 1420-1439	4.9	25
74	Autophagy and Nutrients Management in Plants. *Cells*, **2019**, 8,	7.9	24
73	Autophagy is essential for optimal translocation of iron to seeds in Arabidopsis. *Journal of Experimental Botany*, **2019**, 70, 859-869	7	22
72	Importing Manganese into the Chloroplast: Many Membranes to Cross. *Molecular Plant*, **2018**, 11, 1109-1111	11.4	5
71	Vacuolar Iron Stores Gated by NRAMP3 and NRAMP4 Are the Primary Source of Iron in Germinating Seeds. *Plant Physiology*, **2018**, 177, 1267-1276	6.6	34
70	Sensing and transducing forces in plants with MSL10 and DEK1 mechanosensors. *FEBS Letters*, **2018** , 592, 1968-1979	3.8	15
69	Phosphatidylinositol 3-phosphate-binding protein AtPH1 controls the localization of the metal transporter NRAMP1 in. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E3354-E3363	11.5	37

68	Subcellular localization of metal pools determined by TEM-EDS in embryo Arabidopsis thaliana mutants **2016**, 121-122		
67	Anion Channel Blockage by ATP as a Means for Membranes to Perceive the Energy Status of the Cell. *Molecular Plant*, **2016**, 9, 320-322	14.4	8
66	Characterization of the Chloride Channel-Like, AtCLCg, Involved in Chloride Tolerance in Arabidopsis thaliana. *Plant and Cell Physiology*, **2016**, 57, 764-75	4.9	58
65	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, 13515-23	3.4	14
64	Bypassing Iron Storage in Endodermal Vacuoles Rescues the Iron Mobilization Defect in the natural resistance associated-macrophage protein3natural resistance associated-macrophage protein4 Double Mutant. *Plant Physiology*, **2015**, 169, 748-59	6.6	46
63	Immunity to plant pathogens and iron homeostasis. *Plant Science*, **2015**, 240, 90-7	5.3	82
62	Variations in Mn(II) speciation among organisms: what makes D. radiodurans different. *Metallomics*, **2015**, 7, 136-44	4.5	21
61	Identification of mutations allowing Natural Resistance Associated Macrophage Proteins (NRAMP) to discriminate against cadmium. *Plant Journal*, **2015**, 83, 625-37	6.9	76
60	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	9.3	32
59	The metal transporter PgIREG1 from the hyperaccumulator Psychotria gabriellae is a candidate gene for nickel tolerance and accumulation. *Journal of Experimental Botany*, **2014**, 65, 1551-64	7	77
58	Scavenging iron: a novel mechanism of plant immunity activation by microbial siderophores. *Plant Physiology*, **2014**, 164, 2167-83	6.6	61
57	Autophagy as a possible mechanism for micronutrient remobilization from leaves to seeds. *Frontiers in Plant Science*, **2014**, 5, 11	6.2	50
56	Dynamic imaging of cytosolic zinc in Arabidopsis roots combining FRET sensors and RootChip technology. *New Phytologist*, **2014**, 202, 198-208	9.8	56
55	Phosphorylation of the vacuolar anion exchanger AtCLCa is required for the stomatal response to abscisic acid. *Science Signaling*, **2014**, 7, ra65	8.8	57
54	Plant science: the key to preventing slow cadmium poisoning. *Trends in Plant Science*, **2013**, 18, 92-9	13.1	601
53	Iron transport in plants: better be safe than sorry. *Current Opinion in Plant Biology*, **2013**, 16, 322-7	9.9	104
52	Using PIXE for quantitative mapping of metal concentration in Arabidopsis thaliana seeds. *Frontiers in Plant Science*, **2013**, 4, 168	6.2	26
51	Mutants impaired in vacuolar metal mobilization identify chloroplasts as a target for cadmium hypersensitivity in Arabidopsis thaliana. *Plant, Cell and Environment*, **2013**, 36, 804-17	8.4	40

50	The metal hyperaccumulators from New Caledonia can broaden our understanding of nickel accumulation in plants. *Frontiers in Plant Science*, **2013**, 4, 279	6.2	87
49	Anion channels/transporters in plants: from molecular bases to regulatory networks. *Annual Review of Plant Biology*, **2011**, 62, 25-51	30.7	149
48	Anion channels in plant cells. *FEBS Journal*, **2011**, 278, 4277-92	5.7	46
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, 1142-52	4.9	40
46	The proline 160 in the selectivity filter of the Arabidopsis NO(3)(-)/H(+) exchanger AtCLCa is essential for nitrate accumulation in planta. *Plant Journal*, **2010**, 63, 861-9	6.9	58
45	The Arabidopsis vacuolar anion transporter, AtCLCc, is involved in the regulation of stomatal movements and contributes to salt tolerance. *Plant Journal*, **2010**, 64, 563-76	6.9	126
44	Export of vacuolar manganese by AtNRAMP3 and AtNRAMP4 is required for optimal photosynthesis and growth under manganese deficiency. *Plant Physiology*, **2010**, 152, 1986-99	6.6	230
43	R type anion channel: a multifunctional channel seeking its molecular identity. *Plant Signaling and Behavior*, **2010**, 5, 1347-52	2.5	6
42	Genome-wide analysis of plant metal transporters, with an emphasis on poplar. *Cellular and Molecular Life Sciences*, **2010**, 67, 3763-84	10.3	93
41	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, 26526-32	5.4	67
40	Post-translational regulation of AtFER2 ferritin in response to intracellular iron trafficking during fruit development in Arabidopsis. *Molecular Plant*, **2009**, 2, 1095-106	14.4	55
39	NRAMP genes function in Arabidopsis thaliana resistance to Erwinia chrysanthemi infection. *Plant Journal*, **2009**, 58, 195-207	6.9	59
38	Functional characterization of NRAMP3 and NRAMP4 from the metal hyperaccumulator Thlaspi caerulescens. *New Phytologist*, **2009**, 181, 637-50	9.8	187
37	Water Balance and the Regulation of Stomatal Movements **2009**, 283-305		3
36	Review. CLC-mediated anion transport in plant cells. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2009**, 364, 195-201	5.8	63
35	15N-metabolic labeling for comparative plasma membrane proteomics in Arabidopsis cells. *Proteomics*, **2007**, 7, 750-4	4.8	65
34	Anion channels and transporters in plant cell membranes. *FEBS Letters*, **2007**, 581, 2367-74	3.8	44
33	Identification of features regulating OST1 kinase activity and OST1 function in guard cells. *Plant Physiology*, **2006**, 141, 1316-27	6.6	176

32	The nitrate/proton antiporter AtCLCa mediates nitrate accumulation in plant vacuoles. *Nature*, **2006**, 442, 939-42	50.4	366
31	Arabidopsis thaliana MTP1 is a Zn transporter in the vacuolar membrane which mediates Zn detoxification and drives leaf Zn accumulation. *FEBS Letters*, **2005**, 579, 4165-74	3.8	208
30	Mobilization of vacuolar iron by AtNRAMP3 and AtNRAMP4 is essential for seed germination on low iron. *EMBO Journal*, **2005**, 24, 4041-51	13	454
29	Distinct pH regulation of slow and rapid anion channels at the plasma membrane of Arabidopsis thaliana hypocotyl cells. *Journal of Experimental Botany*, **2005**, 56, 1897-903	7	24
28	Regulation and function of AtNRAMP4 metal transporter protein. *Soil Science and Plant Nutrition*, **2004**, 50, 1141-1150	1.6	41
27	AtNRAMP3, a multispecific vacuolar metal transporter involved in plant responses to iron deficiency. *Plant Journal*, **2003**, 34, 685-95	6.9	365
26	Stressed plants need their vitamins. *Trends in Plant Science*, **2002**, 7, 241	13.1	
25	Playing with the switches. *Trends in Plant Science*, **2002**, 7, 524	13.1	
24	Molecular Mechanisms that Control Plant Tolerance to Heavy Metals and Possible Roles in Manipulating Metal Accumulation **2002**,		1
23	Nucleotides provide a voltage-sensitive gate for the rapid anion channel of arabidopsis hypocotyl cells. *Journal of Biological Chemistry*, **2001**, 276, 36139-45	5.4	21
22	Phylogenetic relationships within cation transporter families of Arabidopsis. *Plant Physiology*, **2001**, 126, 1646-67	6.6	951
21	Calcium channels activated by hydrogen peroxide mediate abscisic acid signalling in guard cells. *Nature*, **2000**, 406, 731-4	50.4	1697
20	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, 4991-6	11.5	685
19	Proteolipids: small hydrophobic peptides in the field of sodium tolerance. *Trends in Plant Science*, **2000**, 5, 322	13.1	
18	New ways for old genes. *Trends in Plant Science*, **2000**, 5, 515	13.1	
17	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, 10672-9	6.6	63
16	Sulfate is both a substrate and an activator of the voltage-dependent anion channel of Arabidopsis hypocotyl cells. *Plant Physiology*, **1999**, 121, 253-62	6.6	67
15	Anion channels and hormone signalling in plant cells. *Plant Physiology and Biochemistry*, **1999**, 37, 381-392	3.4	10

14	Elicitor-induced chloride efflux and anion channels in tobacco cell suspensions. *Plant Physiology and Biochemistry*, **1998**, 36, 665-674	5.4	30
13	Anion-channel blockers interfere with auxin responses in dark-grown Arabidopsis hypocotyls. *Plant Physiology*, **1997**, 115, 533-42	6.6	36
12	The mammalian gene of acetylcholinesterase-associated collagen. *Journal of Biological Chemistry*, **1997**, 272, 22840-7	5.4	143
11	Voltage-dependent anion channel of Arabidopsis hypocotyls: nucleotide regulation and pharmacological properties. *Journal of Membrane Biology*, **1997**, 159, 71-82	2.3	36
10	Elementary auxin response chains at the plasma membrane involve external abp1 and multiple electrogenic ion transport proteins. *Plant Growth Regulation*, **1996**, 18, 23-28	3.2	19
9	Cytoplasmic acidification as an early phosphorylation-dependent response of tobacco cells to elicitors. *Planta*, **1996**, 199, 416	4.7	55
8	Elementary auxin response chains at the plasma membrane involve external abp1 and multiple electrogenic ion transport proteins **1996**, 31-36		2
7	ATP-Dependent Regulation of an Anion Channel at the Plasma Membrane of Protoplasts from Epidermal Cells of Arabidopsis Hypocotyls. *Plant Cell*, **1995**, 7, 2091	11.6	10
6	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	6.9	90
5	Calcium channel antagonists induce direct inhibition of the outward rectifying potassium channel in tobacco protoplasts. *FEBS Letters*, **1994**, 340, 45-50	3.8	41
4	Wide Cross-Species RNA-Seq Comparison Reveals Convergent Molecular Mechanisms Involved in Nickel Hyperaccumulation Across Angiosperms. *SSRN Electronic Journal*,	1	1
3	Dynamic measurement of cytosolic pH and [NO3-] uncovers the role of the vacuolar transporter AtCLCa in the control of cytosolic pH		1
2	Autophagy is essential for optimal Fe translocation to seeds in Arabidopsis		1
1	Wide cross-species RNA-Seq comparison reveals a highly conserved role for Ferroportins in nickel hyperaccumulation in plants		4