

# SÃ©bastien Thomine

## List of Publications by Year in descending order

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89  
papers

10,888  
citations

53794

45  
h-index

64796

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97  
docs citations

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times ranked

9067  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Micronutrient homeostasis in plants for more sustainable agriculture and healthier human nutrition. <i>Journal of Experimental Botany</i> , 2022, 73, 1789-1799.   | 4.8 | 35        |
| 2  | Duplication of <i>NRAMP3</i> Gene in Poplars Generated Two Homologous Transporters with Distinct Functions. <i>Molecular Biology and Evolution</i> , 2022, 39, .   | 8.9 | 7         |
| 3  | Mechanotransduction in the spotlight of mechano-sensitive channels. <i>Current Opinion in Plant Biology</i> , 2022, 68, 102252.  | 7.1 | 12        |
| 4  | Wide cross-species RNA-Seq comparison reveals convergent molecular mechanisms involved in nickel hyperaccumulation across dicotyledons. <i>New Phytologist</i> , 2021, 229, 994-1006.  | 7.3 | 21        |
| 5  | The iron will of the research community: advances in iron nutrition and interactions in lockdown times. <i>Journal of Experimental Botany</i> , 2021, 72, 2011-2013.   | 4.8 | 3         |
| 6  | Cd tolerance and accumulation in barley: screening of 36 North African cultivars on Cd-contaminated soil. <i>Environmental Science and Pollution Research</i> , 2021, 28, 42722-42736.   | 5.3 | 5         |
| 7  | Virtual special issue on: "Positive and negative impact of metal(loid)s in plant physiology and biochemistry: Basic and applied aspects". <i>Plant Physiology and Biochemistry</i> , 2021, 162, 137-138.   | 5.8 | 0         |
| 8  | Manganese matters: feeding manganese into the secretory system for cell wall synthesis. <i>New Phytologist</i> , 2021, 231, 2107-2109.   | 7.3 | 3         |
| 9  | A quick journey into the diversity of iron uptake strategies in photosynthetic organisms. <i>Plant Signaling and Behavior</i> , 2021, 16, 1975088.   | 2.4 | 11        |
| 10 | Cellular transduction of mechanical oscillations in plants by the plasma-membrane mechanosensitive channel MSL10. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .  | 7.1 | 22        |
| 11 | Calcium and plasma membrane force-gated ion channels behind development. <i>Current Opinion in Plant Biology</i> , 2020, 53, 57-64.  | 7.1 | 18        |
| 12 | Mechanisms of Cadmium Accumulation in Plants. <i>Critical Reviews in Plant Sciences</i> , 2020, 39, 322-359.   | 5.7 | 127       |
| 13 | Dynamic measurement of cytosolic pH and [NO <sub>3</sub> <sup>-</sup> ] uncovers the role of the vacuolar transporter AtCLCa in cytosolic pH homeostasis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 15343-15353. | 7.1 | 29        |
| 14 | Handing off iron to the next generation: how does it get into seeds and what for?. <i>Biochemical Journal</i> , 2020, 477, 259-274.  | 3.7 | 20        |
| 15 | Autophagy is essential for optimal translocation of iron to seeds in Arabidopsis. <i>Journal of Experimental Botany</i> , 2019, 70, 859-869.   | 4.8 | 32        |
| 16 | Essential and Detrimental "an Update on Intracellular Iron Trafficking and Homeostasis. <i>Plant and Cell Physiology</i> , 2019, 60, 1420-1439.  | 3.1 | 52        |
| 17 | Autophagy and Nutrients Management in Plants. <i>Cells</i> , 2019, 8, 1426.  | 4.1 | 50        |
| 18 | Vacuolar Iron Stores Gated by NRAMP3 and NRAMP4 Are the Primary Source of Iron in Germinating Seeds. <i>Plant Physiology</i> , 2018, 177, 1267-1276.   | 4.8 | 65        |

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|----|--|-----|-----------|
| 19 | Sensing and transducing forces in plants with <sc>MSL</sc>10 and <sc>DEK</sc>1 mechanosensors. FEBS Letters, 2018, 592, 1968-1979.   | 2.8 | 28        |
| 20 | Importing Manganese into the Chloroplast: Many Membranes to Cross. Molecular Plant, 2018, 11, 1109-1111.   | 8.3 | 17        |
| 21 | 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        |
| 22 | Anion Channel Blockage by ATP as a Means for Membranes to Perceive the Energy Status of the Cell. Molecular Plant, 2016, 9, 320-322.   | 8.3 | 10        |
| 23 | 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        |
| 24 | Identification of mutations allowing Natural Resistance Associated Macrophage Proteins (NRAMP) to discriminate against cadmium. Plant Journal, 2015, 83, 625-637.  | 5.7 | 120       |
| 25 | 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        |
| 26 | 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        |
| 27 | 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        |
| 28 | Immunity to plant pathogens and iron homeostasis. Plant Science, 2015, 240, 90-97.   | 3.6 | 123       |
| 29 | Variations in Mn(<sc>ii</sc>) speciation among organisms: what makes D. radiodurans different. Metallomics, 2015, 7, 136-144.  | 2.4 | 23        |
| 30 | Autophagy as a possible mechanism for micronutrient remobilization from leaves to seeds. Frontiers in Plant Science, 2014, 5, 11.  | 3.6 | 62        |
| 31 | Dynamic imaging of cytosolic zinc in <i><sc>A</sc>rabadopsis</i> roots combining <sc>FRET</sc> sensors and RootChip technology. New Phytologist, 2014, 202, 198-208.   | 7.3 | 69        |
| 32 | Phosphorylation of the vacuolar anion exchanger AtCLCa is required for the stomatal response to abscisic acid. Science Signaling, 2014, 7, ra65.   | 3.6 | 74        |
| 33 | The metal transporter PglREG1 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        |
| 34 | Scavenging Iron: A Novel Mechanism of Plant Immunity Activation by Microbial Siderophores. Plant Physiology, 2014, 164, 2167-2183.   | 4.8 | 94        |
| 35 | Plant science: the key to preventing slow cadmium poisoning. Trends in Plant Science, 2013, 18, 92-99.   | 8.8 | 844       |
| 36 | Iron transport in plants: better be safe than sorry. Current Opinion in Plant Biology, 2013, 16, 322-327.  | 7.1 | 163       |

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|----|---|------|-----------|
| 37 | Using $^{54}\text{Fe}$ -PIXE for quantitative mapping of metal concentration in <i>Arabidopsis thaliana</i> seeds. <i>Frontiers in Plant Science</i> , 2013, 4, 168.  | 3.6  | 38        |
| 38 | Mutants impaired in vacuolar metal mobilization identify chloroplasts as a target for cadmium hypersensitivity in <i>Arabidopsis thaliana</i> . <i>Plant, Cell and Environment</i> , 2013, 36, 804-817.               | 5.7  | 50        |
| 39 | The metal hyperaccumulators from New Caledonia can broaden our understanding of nickel accumulation in plants. <i>Frontiers in Plant Science</i> , 2013, 4, 279.  | 3.6  | 111       |
| 40 | Distinct Lytic Vacuolar Compartments are Embedded Inside the Protein Storage Vacuole of Dry and Germinating <i>Arabidopsis thaliana</i> Seeds. <i>Plant and Cell Physiology</i> , 2011, 52, 1142-1152.                | 3.1  | 43        |
| 41 | Anion Channels/Transporters in Plants: From Molecular Bases to Regulatory Networks. <i>Annual Review of Plant Biology</i> , 2011, 62, 25-51.  | 18.7 | 196       |
| 42 | Anion channels in plant cells. <i>FEBS Journal</i> , 2011, 278, 4277-4292.  | 4.7  | 57        |
| 43 | Genome-wide analysis of plant metal transporters, with an emphasis on poplar. <i>Cellular and Molecular Life Sciences</i> , 2010, 67, 3763-3784.  | 5.4  | 111       |
| 44 | The proline-160 in the selectivity filter of the <i>Arabidopsis</i> $\text{NO}_3^-/\text{H}^+$ exchanger AtCLCa is essential for nitrate accumulation in planta. <i>Plant Journal</i> , 2010, 63, 861-869.            | 5.7  | 76        |
| 45 | The <i>Arabidopsis</i> vacuolar anion transporter, AtCLCc, is involved in the regulation of stomatal movements and contributes to salt tolerance. <i>Plant Journal</i> , 2010, 64, 563-576.                           | 5.7  | 169       |
| 46 | A peep through anion channels. <i>Nature</i> , 2010, 467, 1058-1059.  | 27.8 | 4         |
| 47 | Export of Vacuolar Manganese by AtNRAMP3 and AtNRAMP4 Is Required for Optimal Photosynthesis and Growth under Manganese Deficiency. <i>Plant Physiology</i> , 2010, 152, 1986-1999.                                   | 4.8  | 299       |
| 48 | R type anion channel. <i>Plant Signaling and Behavior</i> , 2010, 5, 1347-1352.   | 2.4  | 10        |
| 49 | ATP Binding to the C Terminus of the <i>Arabidopsis thaliana</i> Nitrate/Proton Antiporter, AtCLCa, Regulates Nitrate Transport into Plant Vacuoles. <i>Journal of Biological Chemistry</i> , 2009, 284, 26526-26532. | 3.4  | 74        |
| 50 | Post-Translational Regulation of AtFER2 Ferritin in Response to Intracellular Iron Trafficking during Fruit Development in <i>Arabidopsis</i> . <i>Molecular Plant</i> , 2009, 2, 1095-1106.                          | 8.3  | 64        |
| 51 | <i>NRAMP</i> genes function in <i>Arabidopsis thaliana</i> resistance to <i>Erwinia chrysanthemi</i> infection. <i>Plant Journal</i> , 2009, 58, 195-207.   | 5.7  | 80        |
| 52 | Functional characterization of NRAMP3 and NRAMP4 from the metal hyperaccumulator <i>Thlaspi caerulescens</i> . <i>New Phytologist</i> , 2009, 181, 637-650.   | 7.3  | 244       |
| 53 | Water Balance and the Regulation of Stomatal Movements. , 2009, , 283-305.  |      | 4         |
| 54 | CLC-mediated anion transport in plant cells. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2009, 364, 195-201.  | 4.0  | 81        |

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|----|--|------|-----------|
| 55 | Anion channels and transporters in plant cell membranes. FEBS Letters, 2007, 581, 2367-2374.   | 2.8  | 54        |
| 56 | <sup>15</sup> N-Metabolic labeling for comparative plasma membrane proteomics in Arabidopsis cells. Proteomics, 2007, 7, 750-754.  | 2.2  | 68        |
| 57 | The nitrate/proton antiporter AtCLCa mediates nitrate accumulation in plant vacuoles. Nature, 2006, 442, 939-942.  | 27.8 | 432       |
| 58 | Identification of Features Regulating OST1 Kinase Activity and OST1 Function in Guard Cells. Plant Physiology, 2006, 141, 1316-1327.   | 4.8  | 209       |
| 59 | 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       |
| 60 | 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        |
| 61 | Arabidopsis thaliana MTP1 is a Zn transporter in the vacuolar membrane which mediates Zn detoxification and drives leaf Zn accumulation. FEBS Letters, 2005, 579, 4165-4174.   | 2.8  | 260       |
| 62 | Regulation and function of AtNRAMP4 metal transporter protein. Soil Science and Plant Nutrition, 2004, 50, 1141-1150.  | 1.9  | 56        |
| 63 | AtNRAMP3, a multispecific vacuolar metal transporter involved in plant responses to iron deficiency. Plant Journal, 2003, 34, 685-695.   | 5.7  | 433       |
| 64 | Stressed plants need their vitamins. Trends in Plant Science, 2002, 7, 241.  | 8.8  | 0         |
| 65 | Playing with the switches. Trends in Plant Science, 2002, 7, 524.  | 8.8  | 0         |
| 66 | Molecular Mechanisms that Control Plant Tolerance to Heavy Metals and Possible Roles in Manipulating Metal Accumulation. , 2002, , .   |      | 1         |
| 67 | Mining out for iron. Trends in Plant Science, 2001, 6, 140.  | 8.8  | 1         |
| 68 | Cracking the calcium code. Trends in Plant Science, 2001, 6, 501.  | 8.8  | 2         |
| 69 | Phylogenetic Relationships within Cation Transporter Families of Arabidopsis. Plant Physiology, 2001, 126, 1646-1667.  | 4.8  | 1,110     |
| 70 | 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        |
| 71 | Calcium channels activated by hydrogen peroxide mediate abscisic acid signalling in guard cells. Nature, 2000, 406, 731-734.   | 27.8 | 1,938     |
| 72 | 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       |

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|----|--|-----|-----------|
| 73 | Proteolipids: small hydrophobic peptides in the field of sodium tolerance. Trends in Plant Science, 2000, 5, 322.  | 8.8 | 0         |
| 74 | New ways for old genes. Trends in Plant Science, 2000, 5, 515.   | 8.8 | 0         |
| 75 | 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        |
| 76 | 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        |
| 77 | Anion channels and hormone signalling in plant cells. Plant Physiology and Biochemistry, 1999, 37, 381-392.  | 5.8 | 12        |
| 78 | Elicitor-induced chloride efflux and anion channels in tobacco cell suspensions. Plant Physiology and Biochemistry, 1998, 36, 665-674.   | 5.8 | 33        |
| 79 | Regulation of Acetylcholinesterase Oligomerization in the Muscles by Associated-Acetylcholinesterase Collagen, ColQ. , 1998, , 134-134.  |     | 0         |
| 80 | Anion-Channel Blockers Interfere with Auxin Responses in Dark-Grown Arabidopsis Hypocotyls. Plant Physiology, 1997, 115, 533-542.  | 4.8 | 38        |
| 81 | The Mammalian Gene of Acetylcholinesterase-associated Collagen. Journal of Biological Chemistry, 1997, 272, 22840-22847.   | 3.4 | 158       |
| 82 | Voltage-Dependent Anion Channel of Arabidopsis Hypocotyls: Nucleotide Regulation and Pharmacological Properties. Journal of Membrane Biology, 1997, 159, 71-82.  | 2.1 | 39        |
| 83 | 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        |
| 84 | Cytoplasmic acidification as an early phosphorylation-dependent response of tobacco cells to elicitors. Planta, 1996, 199, 416.  | 3.2 | 77        |
| 85 | Elementary auxin response chains at the plasma membrane involve external abp1 and multiple electrogenic ion transport proteins. , 1996, , 31-36.   |     | 6         |
| 86 | 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        |
| 87 | 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        |
| 88 | Calcium channel antagonists induce direct inhibition of the outward rectifying potassium channel in tobacco protoplasts. FEBS Letters, 1994, 340, 45-50.   | 2.8 | 62        |
| 89 | Wide Cross-Species RNA-Seq Comparison Reveals Convergent Molecular Mechanisms Involved in Nickel Hyperaccumulation Across Angiosperms. SSRN Electronic Journal, 0, , .   | 0.4 | 1         |