Nathalie Leonhardt

List of Publications by Year
in descending order

57	9,416	81839	155592
papers	citations	39 h-index	55 g-index

58	58	58	10091
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Plastidial and cytosolic thiol reductases participate in the control of stomatal functioning. Plant, Cell and Environment, 2021, 44, 1417-1435.	2.8	7
2	Disruption of <scp>AtHAK</scp>/<scp>KT</scp>/<scp>KUP9</scp> enhances plant cesium accumulation under low potassium supply. Physiologia Plantarum, 2021, 173, 1230-1243.	2.6	6
3	Root responses to aluminium and iron stresses require the SIZ1 SUMO ligase to modulate the STOP1 transcription factor. Plant Journal, 2021, 108, 1507-1521.	2.8	13
4	Tissueâ€specific inactivation by cytosine deaminase/uracil phosphoribosyl transferase as a tool to study plant biology. Plant Journal, 2020, 101, 731-741.	2.8	2
5	Arabidopsis ALIX Regulates Stomatal Aperture and Turnover of Abscisic Acid Receptors. Plant Cell, 2019, 31, 2411-2429.	3.1	40
6	ABA signaling in guard cells. Advances in Botanical Research, 2019, , 115-170.	0.5	7
7	Mangroves in the Leaves: Anatomy, Physiology, and Immunity of Epithemal Hydathodes. Annual Review of Phytopathology, 2019, 57, 91-116.	3.5	28
8	Ectosymbiotic bacteria at the origin of magnetoreception in a marine protist. Nature Microbiology, 2019, 4, 1088-1095.	5.9	57
9	Root-derived GA12 contributes to temperature-induced shoot growth in Arabidopsis. Nature Plants, 2019, 5, 1216-1221.	4.7	28
10	Design of a bacterial speck resistant tomato by <scp>CRISPR</scp>/Cas9â€mediated editing of Sl<scp>JAZ</scp>2. Plant Biotechnology Journal, 2019, 17, 665-673.	4.1	215
11	The Regulation of Ion Channels and Transporters in the Guard Cell. Advances in Botanical Research, 2018, 87, 171-214.	0.5	8
12	Immunity at Cauliflower Hydathodes Controls Systemic Infection by Xanthomonas campestris pv campestris. Plant Physiology, 2017, 174, 700-716.	2.3	56
13	The Arabidopsis guard cell outward potassium channel <scp>GORK</scp> is regulated by <scp>CPK</scp>33. FEBS Letters, 2017, 591, 1982-1992.	1.3	40
14	Uptake and translocation of cesium by Arabidopsis thaliana in hydroponics conditions: Links between kinetics and molecular mechanisms. Environmental and Experimental Botany, 2017, 138, 164-172.	2.0	15
15	Aquaporins facilitate hydrogen peroxide entry into guard cells to mediate ABA- and pathogen-triggered stomatal closure. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9200-9205.	3.3	281
16	Blue Light Induces a Distinct Starch Degradation Pathway in Guard Cells for Stomatal Opening. Current Biology, 2016, 26, 362-370.	1.8	155
17	The Arabidopsis root stele transporter NPF2.3 contributes to nitrate translocation to shoots under salt stress. Plant Journal, 2015, 83, 466-479.	2.8	107
18	OPEN ALL NIGHT LONG: The Dark Side of Stomatal Control. Plant Physiology, 2015, 167, 289-294.	2.3	49

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19	Aquaporins Contribute to ABA-Triggered Stomatal Closure through OST1-Mediated Phosphorylation. Plant Cell, 2015, 27, 1945-1954.	3.1	261
20	Identification and characterization of an <scp>ABA</scp>â€activated <scp>MAP</scp> kinase cascade in Arabidopsis thaliana. Plant Journal, 2015, 82, 232-244.	2.8	187
21	14-3-3 Proteins in Guard Cell Signaling. Frontiers in Plant Science, 2015, 6, 1210.	1.7	48
22	Modulation of Zn/Cd P_{1B2}-ATPase activities in Arabidopsis impacts differently on Zn and Cd contents in shoots and seeds. Metallomics, 2014, 6, 2109-2116.	1.0	32
23	Acetylated 1,3â€diaminopropane antagonizes abscisic acidâ€mediated stomatal closing in <scp>A</scp>rabidopsis. Plant Journal, 2014, 79, 322-333.	2.8	43
24	Phosphorylation of the vacuolar anion exchanger AtCLCa is required for the stomatal response to abscisic acid. Science Signaling, 2014, 7, ra65.	1.6	74
25	Uranium perturbs signaling and iron uptake response in Arabidopsis thaliana roots. Metallomics, 2014, 6, 809-821.	1.0	38
26	CPK13, a Noncanonical Ca2+-Dependent Protein Kinase, Specifically Inhibits KAT2 and KAT1 Shaker K+ Channels and Reduces Stomatal Opening Â Â. Plant Physiology, 2014, 166, 314-326.	2.3	100
27	Exploring emergent properties in cellular homeostasis using OnGuard to model K+ and other ion transport in guard cells. Journal of Plant Physiology, 2014, 171, 770-778.	1.6	49
28	An Abscisic Acid-Independent Oxylipin Pathway Controls Stomatal Closure and Immune Defense in Arabidopsis. PLoS Biology, 2013, 11, e1001513.	2.6	239
29	Vacuolar CAX1 and CAX3 Influence Auxin Transport in Guard Cells via Regulation of Apoplastic pH Â Â. Plant Physiology, 2012, 160, 1293-1302.	2.3	64
30	Constitutively Active Mitogen-Activated Protein Kinase Versions Reveal Functions of Arabidopsis MPK4 in Pathogen Defense Signaling. Plant Cell, 2012, 24, 4281-4293.	3.1	163
31	Evidence for functional interaction between brassinosteroids and cadmium response in Arabidopsis thaliana. Journal of Experimental Botany, 2012, 63, 1185-1200.	2.4	57
32	Zn/Cd/Co/Pb P1b-ATPases in Plants, Physiological Roles and Biological Interest. , 2012, , 227-248.		3
33	Exploring the Plant Response to Cadmium Exposure by Transcriptomic, Proteomic and Metabolomic Approaches: Potentiality of High-Throughput Methods, Promises of Integrative Biology. , 2012, , 119-142.		3
34	MATH/BTB CRL3 Receptors Target the Homeodomain-Leucine Zipper ATHB6 to Modulate Abscisic Acid Signaling. Developmental Cell, 2011, 21, 1116-1128.	3.1	134
35	The Cytosolic/Nuclear HSC70 and HSP90 Molecular Chaperones Are Important for Stomatal Closure and Modulate Abscisic Acid-Dependent Physiological Responses in Arabidopsis Â. Plant Physiology, 2011, 156, 1481-1492.	2.3	113
36	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.	2.8	169

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37	A Novel Pathway for Sesquiterpene Biosynthesis fromZ,Z-Farnesyl Pyrophosphate in the Wild TomatoSolanum habrochaitesÂ. Plant Cell, 2009, 21, 301-317.	3.1	273
38	Altered expression of cytosolic/nuclear HSC70-1 molecular chaperone affects development and abiotic stress tolerance in Arabidopsis thaliana. Journal of Experimental Botany, 2009, 60, 2653-2664.	2.4	85
39	AtHMA3, a P1B-ATPase Allowing Cd/Zn/Co/Pb Vacuolar Storage in Arabidopsis Â. Plant Physiology, 2009, 149, 894-904.	2.3	556
40	MAP kinases MPK9 and MPK12 are preferentially expressed in guard cells and positively regulate ROS-mediated ABA signaling. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20520-20525.	3.3	368
41	AtMRP6/AtABCC6, an ATP-Binding Cassette transporter gene expressed during early steps of seedling development and up-regulated by cadmium in Arabidopsis thaliana. BMC Plant Biology, 2008, 8, 22.	1.6	75
42	Isolation of a strong Arabidopsis guard cell promoter and its potential as a research tool. Plant Methods, 2008, 4, 6.	1.9	295
43	Plant adaptation to fluctuating environment and biomass production are strongly dependent on guard cell potassium channels. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5271-5276.	3.3	138
44	The ATP Binding Cassette Transporter AtMRP5 Modulates Anion and Calcium Channel Activities in Arabidopsis Guard Cells. Journal of Biological Chemistry, 2007, 282, 1916-1924.	1.6	117
45	Constitutive activation of a plasma membrane H+-ATPase prevents abscisic acid-mediated stomatal closure. EMBO Journal, 2007, 26, 3216-3226.	3.5	279
46	Genome-wide transcriptome profiling ofÂtheÂearly cadmium response ofÂArabidopsis roots andÂshoots. Biochimie, 2006, 88, 1751-1765.	1.3	335
47	A Guard-Cell-Specific MYB Transcription Factor Regulates Stomatal Movements and Plant Drought Tolerance. Current Biology, 2005, 15, 1196-1200.	1.8	484
48	Microarray Expression Analyses of Arabidopsis Guard Cells and Isolation of a Recessive Abscisic Acid Hypersensitive Protein Phosphatase 2C Mutant[W]. Plant Cell, 2004, 16, 596-615.	3.1	508
49	Overexpression of AtHMA4 enhances root-to-shoot translocation of zinc and cadmium and plant metal tolerance. FEBS Letters, 2004, 576, 306-312.	1.3	477
50	NADPH oxidase AtrbohD and AtrbohF genes function in ROS-dependent ABA signaling in Arabidopsis. EMBO Journal, 2003, 22, 2623-2633.	3.5	1,474
51	Disruption of a Guard Cellâ€“Expressed Protein Phosphatase 2A Regulatory Subunit, RCN1, Confers Abscisic Acid Insensitivity in Arabidopsis. Plant Cell, 2002, 14, 2849-2861.	3.1	192
52	Heavy metal toxicity: cadmium permeates through calcium channels and disturbs the plant water status. Plant Journal, 2002, 32, 539-548.	2.8	665
53	Antibodies to the CFTR modulate the turgor pressure of guard cell protoplasts via slow anion channels. FEBS Letters, 2001, 494, 15-18.	1.3	14
54	ATP Binding Cassette Modulators Control Abscisic Acidâ€“Regulated Slow Anion Channels in Guard Cells. Plant Cell, 1999, 11, 1141-1151.	3.1	76

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55	Pharmacological properties of slow anion currents in intact guard cells of Arabidopsis . Application of the discontinuous single-electrode voltage-clamp to different species. Pflugers Archiv European Journal of Physiology, 1998, 436, 920-927.	1.3	38
56	Cloning of AtMRP1, an Arabidopsis thaliana cDNA encoding a homologue of the mammalian multidrug resistance-associated protein. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1369, 7-13.	1.4	13
57	Evidence for the existence of a sulfonylurea-receptor-like protein in plants: Modulation of stomatal movements and guard cell potassium channels by sulfonylureas and potassium channel openers. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 14156-14161.	3.3	63