Wolfgang Schmidt

List of Publications by Year
in descending order

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117	7,548	53751 45	58549 82
papers	citations	h-index	g-index
136	136	136	6654
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Dissecting iron deficiencyâ€induced proton extrusion in Arabidopsis roots. New Phytologist, 2009, 183, 1072-1084.	3.5	510
2	Mechanisms and regulation of reduction-based iron uptake in plants. New Phytologist, 1999, 141, 1-26.	3.5	343
3	Complementary Proteome and Transcriptome Profiling in Phosphate-deficient Arabidopsis Roots Reveals Multiple Levels of Gene Regulation. Molecular and Cellular Proteomics, 2012, 11, 1156-1166.	2.5	266
4	Environmentally Induced Plasticity of Root Hair Development in Arabidopsis. Plant Physiology, 2004, 134, 409-419.	2.3	264
5	Central Amazonian Floodplain Forests: Tree Adaptations in a Pulsing System. Botanical Review, The, 2004, 70, 357-380.	1.7	245
6	iTRAQ Protein Profile Analysis of Arabidopsis Roots Reveals New Aspects Critical for Iron Homeostasis Â Â. Plant Physiology, 2011, 155, 821-834.	2.3	233
7	Iron solutions: acquisition strategies and signaling pathways in plants. Trends in Plant Science, 2003, 8, 188-193.	4.3	213
8	Mutually Exclusive Alterations in Secondary Metabolism Are Critical for the Uptake of Insoluble Iron Compounds by Arabidopsis and Medicago truncatula. Plant Physiology, 2013, 162, 1473-1485.	2.3	212
9	Role of Hormones in the Induction of Iron Deficiency Responses in Arabidopsis Roots. Plant Physiology, 2000, 122, 1109-1118.	2.3	202
10	Different Pathways Are Involved in Phosphate and Iron Stress-Induced Alterations of Root Epidermal Cell Development. Plant Physiology, 2001, 125, 2078-2084.	2.3	199
11	IRON MAN is a ubiquitous family of peptides that control iron transport in plants. Nature Plants, 2018, 4, 953-963.	4.7	186
12	Early iron-deficiency-induced transcriptional changes in Arabidopsis roots as revealed by microarray analyses. BMC Genomics, 2009, 10, 147.	1.2	160
13	The regulation and plasticity of root hair patterning and morphogenesis. Development (Cambridge), 2016, 143, 1848-1858.	1.2	159
14	Mobilization of Iron by Plant-Borne Coumarins. Trends in Plant Science, 2017, 22, 538-548.	4.3	156
15	The transcriptional response of Arabidopsis leaves to Fe deficiency. Frontiers in Plant Science, 2013, 4, 276.	1.7	152
16	Expression changes of ribosomal proteins in phosphate- and iron-deficient Arabidopsis roots predict stress-specific alterations in ribosome composition. BMC Genomics, 2013, 14, 783.	1.2	150
17	Fe homeostasis in plant cells: Does nicotianamine play multiple roles in the regulation of cytoplasmic Fe concentration?. Planta, 2001, 213, 967-976.	1.6	149
18	Transcriptional Profiling of the Arabidopsis Iron Deficiency Response Reveals Conserved Transition Metal Homeostasis Networks. Plant Physiology, 2010, 152, 2130-2141.	2.3	146

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19	Scopoletin 8-Hydroxylase-Mediated Fraxetin Production Is Crucial for Iron Mobilization. Plant Physiology, 2018, 177, 194-207.	2.3	124
20	Coexpression-Based Clustering of Arabidopsis Root Genes Predicts Functional Modules in Early Phosphate Deficiency Signaling Â Â. Plant Physiology, 2011, 155, 1383-1402.	2.3	114
21	Iron Stress-Induced Changes in Root Epidermal Cell Fate Are Regulated Independently from Physiological Responses to Low Iron Availability. Plant Physiology, 2001, 125, 1679-1687.	2.3	113
22	Genome-Wide Detection of Condition-Sensitive Alternative Splicing in Arabidopsis Roots. Plant Physiology, 2013, 162, 1750-1763.	2.3	113
23	A lysine-63-linked ubiquitin chain-forming conjugase, UBC13, promotes the developmental responses to iron deficiency in Arabidopsis roots. Plant Journal, 2010, 62, 330-343.	2.8	112
24	<scp>ALFIN</scp>â€‹<scp>LIKE</scp> 6 is involved in root hair elongation during phosphate deficiency in Arabidopsis. New Phytologist, 2013, 198, 709-720.	3.5	109
25	A MYB/ZML Complex Regulates Wound-Induced Lignin Genes in Maize. Plant Cell, 2015, 27, 3245-3259.	3.1	104
26	<scp>PFT</scp>1, a transcriptional <scp>M</scp>ediator complex subunit, controls root hair differentiation through reactive oxygen species (<scp>ROS</scp>) distribution in <scp>A</scp>rabidopsis. New Phytologist, 2013, 197, 151-161.	3.5	95
27	Regulation of flowering time by the histone deacetylase <scp>HDA</scp>5 in <scp>A</scp>rabidopsis. Plant Journal, 2015, 82, 925-936.	2.8	94
28	Manganese deficiency alters the patterning and development of root hairs in Arabidopsis. Journal of Experimental Botany, 2008, 59, 3453-3464.	2.4	93
29	Apoplasmic Barriers and Oxygen Transport Properties of Hypodermal Cell Walls in Roots from Four Amazonian Tree Species. Plant Physiology, 2003, 132, 206-217.	2.3	90
30	Mapping gene activity of Arabidopsis root hairs. Genome Biology, 2013, 14, R67.	3.8	89
31	Vacuolar-Iron-Transporter1-Like Proteins Mediate Iron Homeostasis in Arabidopsis. PLoS ONE, 2014, 9, e110468.	1.1	89
32	Iron in seeds â€“ loading pathways and subcellular localization. Frontiers in Plant Science, 2014, 4, 535.	1.7	83
33	Laser microdissection-assisted analysis of the functional fate of iron deficiency-induced root hairs in cucumber. Journal of Experimental Botany, 2008, 59, 697-704.	2.4	76
34	Editorial: Iron Nutrition and Interactions in Plants. Frontiers in Plant Science, 2019, 10, 1670.	1.7	75
35	Quantitative Phosphoproteome Profiling of Iron-Deficient Arabidopsis Roots Â Â. Plant Physiology, 2012, 159, 403-417.	2.3	74
36	COSY catalyses transâ€“cis isomerization and lactonization in the biosynthesis of coumarins. Nature Plants, 2019, 5, 1066-1075.	4.7	64

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37	Water-extractable humic substances alter root development and epidermal cell pattern in Arabidopsis. Plant and Soil, 2007, 300, 259-267.	1.8	61
38	One way. Or another? Iron uptake in plants. New Phytologist, 2017, 214, 500-505.	3.5	60
39	Positional Signaling and Expression of ENHANCER OF TRY AND CPC1 Are Tuned to Increase Root Hair Density in Response to Phosphate Deficiency in Arabidopsis thaliana. PLoS ONE, 2013, 8, e75452.	1.1	59
40	Formation of transfer cells and H + -ATPase expression in tomato roots under P and Fe deficiency. Planta, 2002, 215, 304-311.	1.6	57
41	Ubiquitin-Specific Protease 14 (UBP14) Is Involved in Root Responses to Phosphate Deficiency in Arabidopsis. Molecular Plant, 2010, 3, 212-223.	3.9	57
42	Iron acquisition strategies in land plants: not so different after all. New Phytologist, 2019, 224, 11-18.	3.5	57
43	The histone deacetylase HDA19 controls root cell elongation and modulates a subset of phosphate starvation responses in Arabidopsis. Scientific Reports, 2015, 5, 15708.	1.6	55
44	Exchange fluxes of NO2and O3at soil and leaf surfaces in an Amazonian rain forest. Journal of Geophysical Research, 2002, 107, LBA 27-1.	3.3	53
45	Genes of ACYL CARRIER PROTEIN Family Show Different Expression Profiles and Overexpression of ACYL CARRIER PROTEIN 5 Modulates Fatty Acid Composition and Enhances Salt Stress Tolerance in Arabidopsis. Frontiers in Plant Science, 2017, 8, 987.	1.7	52
46	The enigma of environmental pH sensing in plants. Nature Plants, 2021, 7, 106-115.	4.7	52
47	A hitchhikerâ€™s guide to the Arabidopsis ferrome. Plant Physiology and Biochemistry, 2011, 49, 462-470.	2.8	50
48	Proton pumping by tomato roots. Effect of Fe deficiency and hormones on the activity and distribution of plasma membrane H+ -ATPase in rhizodermal cells. Plant, Cell and Environment, 2003, 26, 361-370.	2.8	49
49	Members of a small family of nodulin-like genes are regulated under iron deficiency in roots of Arabidopsis thaliana. Plant Physiology and Biochemistry, 2011, 49, 557-564.	2.8	49
50	Impact of root morphology on metabolism and oxygen distribution in roots and rhizosphere from two Central Amazon floodplain tree species. Functional Plant Biology, 2002, 29, 1025.	1.1	48
51	The conundrum of discordant protein and mRNA expression. Are plants special?. Frontiers in Plant Science, 2014, 5, 619.	1.7	44
52	The paralogous R3 MYB proteins CAPRICE, TRIPTYCHON and ENHANCER OF TRY AND CPC1 play pleiotropic and partly non-redundant roles in the phosphate starvation response of<i>Arabidopsis</i>roots. Journal of Experimental Botany, 2015, 66, 4821-4834.	2.4	44
53	Influence of chromium(III) on root-associated Fe(III) reductase inPlantago lanceolataL.. Journal of Experimental Botany, 1996, 47, 805-810.	2.4	43
54	Post-Transcriptional Coordination of the Arabidopsis Iron Deficiency Response is Partially Dependent on the E3 Ligases RING DOMAIN LIGASE1 (RGLG1) and RING DOMAIN LIGASE2 (RGLG2)*. Molecular and Cellular Proteomics, 2015, 14, 2733-2752.	2.5	39

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55	Iron Homeostasis in Plants: Sensing and Signaling Pathways. Journal of Plant Nutrition, 2003, 26, 2211-2230.	0.9	37
56	Genome-wide co-expression analysis predicts protein kinases as important regulators of phosphate deficiency-induced root hair remodeling in Arabidopsis. BMC Genomics, 2013, 14, 210.	1.2	34
57	From faith to fate: Ethylene signaling in morphogenic responses to P and Fe deficiency. Journal of Plant Nutrition and Soil Science, 2001, 164, 147-154.	1.1	33
58	An Inventory of Nutrient-Responsive Genes in Arabidopsis Root Hairs. Frontiers in Plant Science, 2016, 7, 237.	1.7	32
59	Reduction-based iron uptake revisited. Plant Signaling and Behavior, 2013, 8, e26116.	1.2	31
60	Reduction of root iron in Plantago lanceolata during recovery from Fe deficiency. Physiologia Plantarum, 1996, 98, 587-593.	2.6	30
61	Root-mediated ferric reduction-responses to iron deficiency, exogenously induced changes in hormonal balance and inhibition of protein synthesis. Journal of Experimental Botany, 1994, 45, 725-731.	2.4	29
62	IRONMAN tunes responses to iron deficiency in concert with environmental pH. Plant Physiology, 2021, 187, 1728-1745.	2.3	29
63	Central Amazon Floodplain Forests: Root Adaptations to Prolonged Flooding. Russian Journal of Plant Physiology, 2003, 50, 848-855.	0.5	26
64	Deubiquitinating Enzyme OTU5 Contributes to DNA Methylation Patterns and Is Critical for Phosphate Nutrition Signals. Plant Physiology, 2017, 175, 1826-1838.	2.3	26
65	Fe-EDTA Reduction in Roots of Plantago lanceolata by a NADH-dependent Plasma Membrane-bound Redox System. Journal of Plant Physiology, 1990, 136, 51-55.	1.6	25
66	Pyridine nucleotide pool size changes in iron-deficient Plantago lanceolata roots during reduction of external oxidants. Physiologia Plantarum, 1996, 98, 215-221.	2.6	24
67	pH-dependent transcriptional profile changes in iron-deficient Arabidopsis roots. BMC Genomics, 2020, 21, 694.	1.2	24
68	Reprogramming of root epidermal cells in response to nutrient deficiency. Biochemical Society Transactions, 2007, 35, 161-163.	1.6	22
69	Functional implications of K63-linked ubiquitination in the iron deficiency response of Arabidopsis roots. Frontiers in Plant Science, 2014, 4, 542.	1.7	22
70	A PHD in histone language. Plant Signaling and Behavior, 2013, 8, e24381.	1.2	21
71	Discriminative gene co-expression network analysis uncovers novel modules involved in the formation of phosphate deficiency-induced root hairs in Arabidopsis. Scientific Reports, 2016, 6, 26820.	1.6	21
72	Iron stress-induced redox reactions in bean roots. Physiologia Plantarum, 1993, 89, 448-452.	2.6	20

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73	Internal oxygen transport in cuttings from flood-adapted varzea tree species. Tree Physiology, 2003, 23, 1069-1076.	1.4	20
74	Iron Stress Responses in Roots of Strategy I Plants. , 2006, , 229-250.		20
75	The Deubiquitinase OTU5 Regulates Root Responses to Phosphate Starvation. Plant Physiology, 2018, 176, 2441-2455.	2.3	19
76	â€˜Candidatus Phytoplasma solaniâ€™ interferes with the distribution and uptake of iron in tomato. BMC Genomics, 2019, 20, 703.	1.2	19
77	The multiple facets of root iron reduction. Journal of Experimental Botany, 2017, 68, 5021-5027.	2.4	18
78	Spatial and temporal patterns of net nitrate uptake regulation and kinetics along the tap root of Citrus aurantium. Acta Physiologiae Plantarum, 2010, 32, 683-693.	1.0	17
79	Systems-wide analysis of manganese deficiency-induced changes in gene activity of Arabidopsis roots. Scientific Reports, 2016, 6, 35846.	1.6	17
80	How Plants Recalibrate Cellular Iron Homeostasis. Plant and Cell Physiology, 2022, 63, 154-162.	1.5	17
81	Specificity of the Electron Donor for Transmembrane Redox Systems in Bean (Phaseolus vulgaris L.) Roots. Journal of Plant Physiology, 1991, 138, 450-453.	1.6	16
82	Sensitivity to and requirement for iron in Plantago species. New Phytologist, 1998, 138, 639-651.	3.5	16
83	Sensing Ironâ€"A Whole Plant Approach. Annals of Botany, 2000, 86, 589-593.	1.4	16
84	Expression, localization, and regulation of the iron transporter LeIRT1 in tomato roots. Plant and Soil, 2006, 284, 101-108.	1.8	16
85	Ferric reduction by<i>geum urbanum</i>: A kinetic study. Journal of Plant Nutrition, 1991, 14, 1023-1034.	0.9	15
86	Isobaric Tag for Relative and Absolute Quantitation (iTRAQ)-Based Protein Profiling in Plants. Methods in Molecular Biology, 2016, 1450, 213-221.	0.4	15
87	The enigma of eIF5A in the iron deficiency response of Arabidopsis. Plant Signaling and Behavior, 2011, 6, 528-530.	1.2	14
88	Iron stress-induced redox reactions in bean roots. Physiologia Plantarum, 1993, 89, 448-452.	2.6	13
89	Effects of various inhibitors on in vivo reduction by Plantago lanceolata L. roots. Plant and Soil, 1994, 165, 207-212.	1.8	13
90	Phosphate deficiency-induced cell wall remodeling. Plant Signaling and Behavior, 2011, 6, 700-702.	1.2	12

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91	PFT1-controlled ROS balance is critical for multiple stages of root hair development in Arabidopsis. Plant Signaling and Behavior, 2013, 8, e24066.	1.2	12
92	From priming to plasticity: the changing fate of rhizodermic cells. BioEssays, 2008, 30, 75-81.	1.2	11
93	A Digital Compendium of Genes Mediating the Reversible Phosphorylation of Proteins in Fe-Deficient Arabidopsis Roots. Frontiers in Plant Science, 2013, 4, 173.	1.7	11
94	Orientation of NAHD-linked ferric chelate (turbo) reductase in plasma membranes from roots ofPlantago lanceolata. Protoplasma, 1998, 203, 186-193.	1.0	10
95	Non-proteolytic protein ubiquitination is crucial for iron deficiency signaling. Plant Signaling and Behavior, 2010, 5, 561-563.	1.2	10
96	Effects of various inhibitors on in vivo reduction by Plantago lanceolata L. roots. , 1995, , 77-82.		9
97	Chromatin enrichment for proteomics in plants (ChEP-P) implicates the histone reader ALFIN-LIKE 6 in jasmonate signalling. BMC Genomics, 2021, 22, 845.	1.2	9
98	Genomically Hardwired Regulation of Gene Activity Orchestrates Cellular Iron Homeostasis in Arabidopsis. RNA Biology, 2022, 19, 143-161.	1.5	9
99	Infection by phloem-limited phytoplasma affects mineral nutrient homeostasis in tomato leaf tissues. Journal of Plant Physiology, 2022, 271, 153659.	1.6	9
100	Iron distribution in three central Amazon tree species from whitewater-inundation areas (vÃ¡rzea) subjected to different iron regimes. Trees - Structure and Function, 2003, 17, 535-541.	0.9	8
101	Inner voices meet outer signals: The plasticity of rhizodermic cells. Plant Science, 2008, 174, 239-245.	1.7	8
102	Reduction of extracytoplasmic acceptors by roots of Plantago lanceolata L. Evidence for enzyme heterogeneity. Plant Science, 1994, 100, 139-146.	1.7	7
103	Root systems biology. Frontiers in Plant Science, 2014, 5, 215.	1.7	7
104	Ethylene Response Factor109 Attunes Immunity, Photosynthesis, and Iron Homeostasis in Arabidopsis Leaves. Frontiers in Plant Science, 2022, 13, 841366.	1.7	7
105	Modulation of the root epidermal phenotype by hormones, inhibitors and iron regime. Plant and Soil, 2002, 241, 87-96.	1.8	5
106	Reduction of root iron in Plantago lanceolata during recovery from Fe deficiency. Physiologia Plantarum, 1996, 98, 587-593.	2.6	4
107	The Yin and Yang of Iron in Plants and Beyond: 19th International Symposium on Iron Nutrition and Interactions in Plants (ISINIP) in Taiwan. Plant and Cell Physiology, 2019, 60, 1401-1404.	1.5	2
108	A Quick Method to Quantify Iron in Arabidopsis Seedlings. Bio-protocol, 2022, 12, e4342.	0.2	2

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109	OTU5 tunes environmental responses by sustaining chromatin structure. Plant Signaling and Behavior, 2018, 13, e1435963.	1.2	1
110	Characterization of Root Epidermal Cell Patterning and Differentiation in Arabidopsis. Methods in Molecular Biology, 2018, 1761, 85-93.	0.4	1
111	Nutrients as Regulators of Root Morphology and Architecture. Books in Soils, Plants, and the Environment, 2007, , 135-150.	0.1	1
112	Editorial: Peptide Signaling in Plants. Frontiers in Plant Science, 2022, 13, 843918.	1.7	1
113	Protein and antibody purification followed by immunoprecipitation of MYB and GATA zinc finger-type maize proteins with magnetic beads. STAR Protocols, 2022, 3, 101449.	0.5	1
114	Root development: Pulse control. Nature Plants, 2015, 1, .	4.7	0
115	Itâ€™s all in the title. FEBS Letters, 2021, 595, 2641-2643.	1.3	0
116	Minor Nutrients. , 2004, , 726-728.		0
117	Plasticity of Root Architecture: Developmental and Nutritional Aspects. , 2004, , 1-4.		0