

# Herbert J Kronzucker

## List of Publications by Year in descending order

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144  
papers

12,717  
citations

26630

56  
h-index

25787

108  
g-index

149  
all docs

149  
docs citations

149  
times ranked

9032  
citing authors

#	ARTICLE	IF	CITATIONS
1	NH <sub>4</sub> <sup>+</sup> toxicity in higher plants: a critical review. <i>Journal of Plant Physiology</i> , 2002, 159, 567-584.	3.5	1,409
2	Futile transmembrane NH <sub>4</sub> <sup>+</sup> cycling: A cellular hypothesis to explain ammonium toxicity in plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 4255-4258.	7.1	481
3	Conifer root discrimination against soil nitrate and the ecology of forest succession. <i>Nature</i> , 1997, 385, 59-61.	27.8	439
4	The controversies of silicon's role in plant biology. <i>New Phytologist</i> , 2019, 221, 67-85.	7.3	439
5	Sodium transport in plants: a critical review. <i>New Phytologist</i> , 2011, 189, 54-81.	7.3	399
6	The regulation of nitrate and ammonium transport systems in plants. <i>Journal of Experimental Botany</i> , 2002, 53, 855-864.	4.8	391
7	Nitrogen transformations in modern agriculture and the role of biological nitrification inhibition. <i>Nature Plants</i> , 2017, 3, 17074.	9.3	376
8	How Plant Root Exudates Shape the Nitrogen Cycle. <i>Trends in Plant Science</i> , 2017, 22, 661-673.	8.8	322
9	Sodium as nutrient and toxicant. <i>Plant and Soil</i> , 2013, 369, 1-23.	3.7	289
10	Energy costs of salt tolerance in crop plants. <i>New Phytologist</i> , 2020, 225, 1072-1090.	7.3	284
11	Nitrate-Ammonium Synergism in Rice. A Subcellular Flux Analysis <sup>1</sup> . <i>Plant Physiology</i> , 1999, 119, 1041-1046.	4.8	260
12	The Role of Silicon in Higher Plants under Salinity and Drought Stress. <i>Frontiers in Plant Science</i> , 2016, 7, 1072.	3.6	259
13	AtAMT1 gene expression and NH <sub>4</sub> <sup>+</sup> uptake in roots of <i>Arabidopsis thaliana</i> : evidence for regulation by root glutamine levels. <i>Plant Journal</i> , 1999, 19, 143-152.	5.7	234
14	The Potential for Nitrification and Nitrate Uptake in the Rhizosphere of Wetland Plants: A Modelling Study. <i>Annals of Botany</i> , 2005, 96, 639-646.	2.9	234
15	Ecological significance and complexity of N-source preference in plants. <i>Annals of Botany</i> , 2013, 112, 957-963.	2.9	232
16	K <sup>+</sup> transport in plants: Physiology and molecular biology. <i>Journal of Plant Physiology</i> , 2009, 166, 447-466.	3.5	214
17	Ammonium stress in <i>Arabidopsis</i> : signaling, genetic loci, and physiological targets. <i>Trends in Plant Science</i> , 2014, 19, 107-114.	8.8	204
18	Ammonium toxicity and the real cost of transport. <i>Trends in Plant Science</i> , 2001, 6, 335-337.	8.8	200

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19	Cellular mechanisms of potassium transport in plants. <i>Physiologia Plantarum</i> , 2008, 133, 637-650.	5.2	197
20	Futile cycling at the plasma membrane: a hallmark of low-affinity nutrient transport. <i>Trends in Plant Science</i> , 2006, 11, 529-534.	8.8	182
21	Kinetics of NO <sub>3</sub> - Influx in Spruce. <i>Plant Physiology</i> , 1995, 109, 319-326.	4.8	175
22	Comparative kinetic analysis of ammonium and nitrate acquisition by tropical lowland rice: implications for rice cultivation and yield potential. <i>New Phytologist</i> , 2000, 145, 471-476.	7.3	174
23	Biological nitrification inhibition by rice root exudates and its relationship with nitrogen-use efficiency. <i>New Phytologist</i> , 2016, 212, 646-656.	7.3	159
24	Nitrogen acquisition, PEP carboxylase, and cellular pH homeostasis: new views on old paradigms. <i>Plant, Cell and Environment</i> , 2005, 28, 1396-1409.	5.7	152
25	Root growth inhibition by NH <sub>4</sub> <sup>+</sup> in Arabidopsis is mediated by the root tip and is linked to NH <sub>4</sub> <sup>+</sup> efflux and GMPase activity. <i>Plant, Cell and Environment</i> , 2010, 33, no-no.	5.7	140
26	Inhibition of Nitrate Uptake by Ammonium in Barley. Analysis of Component Fluxes <sup>1</sup> . <i>Plant Physiology</i> , 1999, 120, 283-292.	4.8	136
27	Optimization of ammonium acquisition and metabolism by potassium in rice ( <i>Oryza sativa</i> L. cv.) Tj ETQq1 1.0,784314,rgBT/O 123	5.7	123
28	The intersection of nitrogen nutrition and water use in plants: new paths toward improved crop productivity. <i>Journal of Experimental Botany</i> , 2020, 71, 4452-4468.	4.8	119
29	Membrane fluxes, bypass flows, and sodium stress in rice: the influence of silicon. <i>Journal of Experimental Botany</i> , 2018, 69, 1679-1692.	4.8	102
30	The nitrogen-potassium intersection: membranes, metabolism, and mechanism. <i>Plant, Cell and Environment</i> , 2017, 40, 2029-2041.	5.7	99
31	Nitrogen transport in plants, with an emphasis on the regulation of fluxes to match plant demand. <i>Journal of Plant Nutrition and Soil Science</i> , 2001, 164, 199-207.	1.9	97
32	Root ammonium transport efficiency as a determinant in forest colonization patterns: an hypothesis. <i>Physiologia Plantarum</i> , 2003, 117, 164-170.	5.2	97
33	Alleviation of rapid, futile ammonium cycling at the plasma membrane by potassium reveals K <sup>+</sup> -sensitive and -insensitive components of NH <sub>4</sub> <sup>+</sup> transport. <i>Journal of Experimental Botany</i> , 2008, 59, 303-313.	4.8	96
34	Selenium Biofortification and Interaction With Other Elements in Plants: A Review. <i>Frontiers in Plant Science</i> , 2020, 11, 586421.	3.6	96
35	Rapid Ammonia Gas Transport Accounts for Futile Transmembrane Cycling under NH <sub>3</sub> /NH <sub>4</sub> <sup>+</sup> Toxicity in Plant Roots. <i>Plant Physiology</i> , 2013, 163, 1859-1867.	4.8	95
36	Futile Na <sup>+</sup> cycling at the root plasma membrane in rice ( <i>Oryza sativa</i> L.): kinetics, energetics, and relationship to salinity tolerance. <i>Journal of Experimental Botany</i> , 2008, 59, 4109-4117.	4.8	93

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37	Arabidopsis Plastid AMOS1/EGY1 Integrates Abscisic Acid Signaling to Regulate Global Gene Expression Response to Ammonium Stress. <i>Plant Physiology</i> , 2012, 160, 2040-2051.	4.8	92
38	Shoot-supplied ammonium targets the root auxin influx carrier AUX1 and inhibits lateral root emergence in <i>Arabidopsis</i> . <i>Plant, Cell and Environment</i> , 2011, 34, 933-946.	5.7	90
39	Sodium-potassium synergism in <i>Theobroma cacao</i> : stimulation of photosynthesis, water-use efficiency and mineral nutrition. <i>Physiologia Plantarum</i> , 2012, 146, 350-362.	5.2	86
40	The cytosolic Na <sup>+</sup> :K <sup>+</sup> ratio does not explain salinity-induced growth impairment in barley: a dual-tracer study using <sup>42</sup> K <sup>+</sup> and <sup>24</sup> Na <sup>+</sup> . <i>Plant, Cell and Environment</i> , 2006, 29, 2228-2237.	5.7	84
41	Induction of nitrate uptake and nitrate reductase activity in trembling aspen and lodgepole pine. <i>Plant, Cell and Environment</i> , 1998, 21, 1039-1046.	5.7	80
42	NH <sub>4</sub> <sup>+</sup> -stimulated and -inhibited components of K <sup>+</sup> transport in rice ( <i>Oryza sativa</i> L.). <i>Journal of Experimental Botany</i> , 2008, 59, 3415-3423.	4.8	80
43	Compartmentation and flux characteristics of ammonium in spruce. <i>Planta</i> , 1995, 196, 691-698.	3.2	77
44	Nitrogen use efficiency (NUE) in rice links to NH <sub>4</sub> <sup>+</sup> toxicity and futile NH <sub>4</sub> <sup>+</sup> cycling in roots. <i>Plant and Soil</i> , 2013, 369, 351-363.	3.7	76
45	Compartmentation and flux characteristics of nitrate in spruce. <i>Planta</i> , 1995, 196, 674-682.	3.2	74
46	N and P runoff losses in China's vegetable production systems: Loss characteristics, impact, and management practices. <i>Science of the Total Environment</i> , 2019, 663, 971-979.	8.0	74
47	Effects of Hypoxia on <sup>13</sup> NH <sub>4</sub> <sup>+</sup> Fluxes in Rice Roots <sup>1</sup> . <i>Plant Physiology</i> , 1998, 116, 581-587.	4.8	69
48	A comparative kinetic analysis of nitrate and ammonium influx in two early-successional tree species of temperate and boreal forest ecosystems. <i>Plant, Cell and Environment</i> , 2000, 23, 321-328.	5.7	68
49	A comparative study of fluxes and compartmentation of nitrate and ammonium in early-successional tree species. <i>Plant, Cell and Environment</i> , 1999, 22, 821-830.	5.7	67
50	The Tomato 14-3-3 Protein TFT4 Modulates H <sup>+</sup> Efflux, Basipetal Auxin Transport, and the PKS5-J3 Pathway in the Root Growth Response to Alkaline Stress. <i>Plant Physiology</i> , 2013, 163, 1817-1828.	4.8	66
51	Cellular and whole-plant chloride dynamics in barley: insights into chloride-nitrogen interactions and salinity responses. <i>Planta</i> , 2004, 218, 615-622.	3.2	64
52	Nitrate induction in spruce: an approach using compartmental analysis. <i>Planta</i> , 1995, 196, 683-690.	3.2	62
53	Effects of the biological nitrification inhibitor 1,9-decanediol on nitrification and ammonia oxidizers in three agricultural soils. <i>Soil Biology and Biochemistry</i> , 2019, 129, 48-59.	8.8	61
54	Cytosolic potassium homeostasis revisited: <sup>42</sup> K-tracer analysis in <i>Hordeum vulgare</i> L. reveals set-point variations in [K <sup>+</sup> ]. <i>Planta</i> , 2003, 217, 540-546.	3.2	60

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55	Ethylene is critical to the maintenance of primary root growth and Fe homeostasis under Fe stress in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2015, 66, 2041-2054.	4.8	60
56	Overexpression of rice aquaporin <i>OsPIP1;2</i> improves yield by enhancing mesophyll CO <sub>2</sub> conductance and phloem sucrose transport. <i>Journal of Experimental Botany</i> , 2019, 70, 671-681.	4.8	60
57	Capacity and Plasticity of Potassium Channels and High-Affinity Transporters in Roots of Barley and <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2013, 162, 496-511.	4.8	59
58	Mechanical side-deep fertilization mitigates ammonia volatilization and nitrogen runoff and increases profitability in rice production independent of fertilizer type and split ratio. <i>Journal of Cleaner Production</i> , 2021, 316, 128370.	9.3	58
59	Non-reciprocal interactions between K <sup>+</sup> and Na <sup>+</sup> ions in barley ( <i>Hordeum vulgare</i> L.). <i>Journal of Experimental Botany</i> , 2008, 59, 2793-2801.	4.8	56
60	<sup>42</sup> K analysis of sodium-induced potassium efflux in barley: mechanism and relevance to salt tolerance. <i>New Phytologist</i> , 2010, 186, 373-384.	7.3	56
61	Rapid, Futile K <sup>+</sup> Cycling and Pool-Size Dynamics Define Low-Affinity Potassium Transport in Barley. <i>Plant Physiology</i> , 2006, 141, 1494-1507.	4.8	55
62	Stimulation of nitrogen removal in the rhizosphere of aquatic duckweed by root exudate components. <i>Planta</i> , 2014, 239, 591-603.	3.2	53
63	Cytosolic Concentrations and Transmembrane Fluxes of NH <sub>4</sub> <sup>+</sup> /NH <sub>3</sub> . An Evaluation of Recent Proposals: Fig. 1.. <i>Plant Physiology</i> , 2001, 125, 523-526.	4.8	52
64	Comprehensive assessment of the effects of nitrification inhibitor application on reactive nitrogen loss in intensive vegetable production systems. <i>Agriculture, Ecosystems and Environment</i> , 2021, 307, 107227.	5.3	52
65	Constancy of nitrogen turnover kinetics in the plant cell: insights into the integration of subcellular N fluxes. <i>Planta</i> , 2001, 213, 175-181.	3.2	51
66	Ammonium-induced loss of root gravitropism is related to auxin distribution and TRH1 function, and is uncoupled from the inhibition of root elongation in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2012, 63, 3777-3788.	4.8	51
67	Ammonium-induced shoot ethylene production is associated with the inhibition of lateral root formation in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2013, 64, 1413-1425.	4.8	50
68	Bioengineering nitrogen acquisition in rice: can novel initiatives in rice genomics and physiology contribute to global food security?. <i>BioEssays</i> , 2004, 26, 683-692.	2.5	48
69	Spatio-temporal dynamics in global rice gene expression ( <i>Oryza sativa</i> L.) in response to high ammonium stress. <i>Journal of Plant Physiology</i> , 2017, 212, 94-104.	3.5	48
70	Excess iron stress reduces root tip zone growth through nitric oxide-mediated repression of potassium homeostasis in <i>Arabidopsis</i> . <i>New Phytologist</i> , 2018, 219, 259-274.	7.3	48
71	Can unidirectional influx be measured in higher plants? A mathematical approach using parameters from efflux analysis. <i>New Phytologist</i> , 2001, 150, 37-47.	7.3	47
72	Comparative Analysis of <i>Arabidopsis</i> Ecotypes Reveals a Role for Brassinosteroids in Root Hydrotropism. <i>Plant Physiology</i> , 2018, 176, 2720-2736.	4.8	46

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73	K <sup>+</sup> Efflux and Retention in Response to NaCl Stress Do Not Predict Salt Tolerance in Contrasting Genotypes of Rice ( <i>Oryza sativa</i> L.). PLoS ONE, 2013, 8, e57767.	2.5	46
74	AUX1 and PIN2 Protect Lateral Root Formation in Arabidopsis under Fe Stress. Plant Physiology, 2015, 169, pp.00904.2015.	4.8	45
75	TaANR1-TaBG1 and TaWabi5-TaNRT2s/NARs Link ABA Metabolism and Nitrate Acquisition in Wheat Roots. Plant Physiology, 2020, 182, 1440-1453.	4.8	43
76	Regulation and mechanism of potassium release from barley roots: an <i>in planta</i> analysis. New Phytologist, 2010, 188, 1028-1038.	7.3	41
77	Quantification and enzyme targets of fatty acid amides from duckweed root exudates involved in the stimulation of denitrification. Journal of Plant Physiology, 2016, 198, 81-88.	3.5	41
78	Silver ions disrupt K <sup>+</sup> homeostasis and cellular integrity in intact barley ( <i>Hordeum vulgare</i> L.) roots. Journal of Experimental Botany, 2012, 63, 151-162.	4.8	40
79	Ammonium fluxes into plant roots: Energetics, kinetics and regulation. Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science, 1997, 160, 261-268.	0.4	39
80	Sodium efflux in plant roots: What do we really know?. Journal of Plant Physiology, 2015, 186-187, 1-12.	3.5	39
81	The Arabidopsis <i>AMOT1/EIN3</i> gene plays an important role in the amelioration of ammonium toxicity. Journal of Experimental Botany, 2019, 70, 1375-1388.	4.8	39
82	Isolation and characterization of a novel ammonium overly sensitive mutant, amos2, in Arabidopsis thaliana. Planta, 2012, 235, 239-252.	3.2	38
83	Nutrient constraints on terrestrial carbon fixation: The role of nitrogen. Journal of Plant Physiology, 2016, 203, 95-109.	3.5	38
84	WRKY46 promotes ammonium tolerance in Arabidopsis by repressing NUDX9 and indoleacetic acid-conjugating genes and by inhibiting ammonium efflux in the root elongation zone. New Phytologist, 2021, 232, 190-207.	7.3	38
85	<i>GSA</i> and <i>ARG1</i> protects root gravitropism in Arabidopsis under ammonium stress. New Phytologist, 2013, 200, 97-111.	7.3	35
86	Root-Apex Proton Fluxes at the Centre of Soil-Stress Acclimation. Trends in Plant Science, 2020, 25, 794-804.	8.8	35
87	Ussing's conundrum and the search for transport mechanisms in plants. New Phytologist, 2009, 183, 243-246.	7.3	33
88	A pharmacological analysis of high-affinity sodium transport in barley ( <i>Hordeum vulgare</i> L.): a 24Na <sup>+</sup> /42K <sup>+</sup> study. Journal of Experimental Botany, 2012, 63, 2479-2489.	4.8	33
89	Endogenous ABA alleviates rice ammonium toxicity by reducing ROS and free ammonium via regulation of the SAPK9/bZIP20 pathway. Journal of Experimental Botany, 2020, 71, 4562-4577.	4.8	33
90	Root developmental adaptation to Fe toxicity: Mechanisms and management. Plant Signaling and Behavior, 2016, 11, e1117722.	2.4	32

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91	Involvement of auxin in the regulation of ammonium tolerance in rice ( <i>Oryza sativa</i> L.). <i>Plant and Soil</i> , 2018, 432, 373-387.	3.7	30
92	Ion fluxes and cytosolic pool sizes: examining fundamental relationships in transmembrane flux regulation. <i>Planta</i> , 2003, 217, 490-497.	3.2	28
93	The Chloroplast Protease AMOS1/EGY1 Affects Phosphate Homeostasis under Phosphate Stress. <i>Plant Physiology</i> , 2016, 172, 1200-1208.	4.8	26
94	Factors influencing the release of the biological nitrification inhibitor 1,9-decanediol from rice ( <i>Oryza sativa</i> L.) roots. <i>Plant and Soil</i> , 2019, 436, 253-265.	3.7	26
95	The physiology of channel-mediated $K^{+}$ acquisition in roots of higher plants. <i>Physiologia Plantarum</i> , 2014, 151, 305-312.	5.2	24
96	Drought stress obliterates the preference for ammonium as an N source in the C 4 plant <i>Spartina alterniflora</i> . <i>Journal of Plant Physiology</i> , 2017, 213, 98-107.	3.5	24
97	Superior growth, N uptake and $NH_4^{+}$ tolerance in the giant bamboo <i>Phyllostachys edulis</i> over the broad-leaved tree <i>Castanopsis fargesii</i> at elevated $NH_4^{+}$ may underlie community succession and favor the expansion of bamboo. <i>Tree Physiology</i> , 2020, 40, 1606-1622.	3.1	23
98	Transcriptome analysis of rice ( <i>Oryza sativa</i> L.) in response to ammonium resupply reveals the involvement of phytohormone signaling and the transcription factor OsJAZ9 in reprogramming of nitrogen uptake and metabolism. <i>Journal of Plant Physiology</i> , 2020, 246-247, 153137.	3.5	23
99	High ammonium inhibits root growth in <i>Arabidopsis thaliana</i> by promoting auxin conjugation rather than inhibiting auxin biosynthesis. <i>Journal of Plant Physiology</i> , 2021, 261, 153415.	3.5	23
100	Compartmentation and flux characteristics of nitrate in spruce. <i>Planta</i> , 1995, 196, 674.	3.2	22
101	How high do ion fluxes go? A re-evaluation of the two-mechanism model of $K^{+}$ transport in plant roots. <i>Plant Science</i> , 2016, 243, 96-104.	3.6	21
102	Induction of <i>S</i> -nitrosoglutathione reductase protects root growth from ammonium toxicity by regulating potassium homeostasis in <i>Arabidopsis</i> and rice. <i>Journal of Experimental Botany</i> , 2021, 72, 4548-4564.	4.8	21
103	Potassium physiology from Archean to Holocene: A higher-plant perspective. <i>Journal of Plant Physiology</i> , 2021, 262, 153432.	3.5	21
104	The case for cytosolic $NO_3^{-}$ heterostasis: a critique of a recently proposed model. <i>Plant, Cell and Environment</i> , 2003, 26, 183-188.	5.7	20
105	Plant Nitrogen Transport and Its Regulation in Changing Soil Environments. <i>Journal of Crop Improvement</i> , 2006, 15, 1-23.	1.7	20
106	Measurement of Differential $Na^{+}$ $Ei^{-}$ ,ux from Apical and Bulk Root Zones of Intact Barley and <i>Arabidopsis</i> Plants. <i>Frontiers in Plant Science</i> , 2016, 7, 272.	3.6	20
107	Subcellular $NH_4^{+}$ flux analysis in leaf segments of wheat ( <i>Triticum aestivum</i> ). <i>New Phytologist</i> , 2002, 155, 373-380.	7.3	19
108	Potassium and nitrogen poisoning: Physiological changes and biomass gains in rice and barley. <i>Canadian Journal of Plant Science</i> , 2014, 94, 1085-1089.	0.9	19

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109	Trans-stimulation of $^{13}\text{NH}_4^+$ efflux provides evidence for the cytosolic origin of tracer in the compartmental analysis of barley roots. <i>Functional Plant Biology</i> , 2003, 30, 1233.	2.1	19
110	OsEIL1 protects rice growth under $\text{NH}_4^+$ nutrition by regulating OsVTC1-dependent N-glycosylation and root $\text{NH}_4^+$ efflux. <i>Plant, Cell and Environment</i> , 2022, 45, 1537-1553.	5.7	18
111	Nitrate induction in spruce: an approach using compartmental analysis. <i>Planta</i> , 1995, 196, 683.	3.2	17
112	The Response of the Root Apex in Plant Adaptation to Iron Heterogeneity in Soil. <i>Frontiers in Plant Science</i> , 2016, 7, 344.	3.6	17
113	Tomato plants ectopically expressing <i>Arabidopsis</i> GRF9 show enhanced resistance to phosphate deficiency and improved fruit production in the field. <i>Journal of Plant Physiology</i> , 2018, 226, 31-39.	3.5	17
114	Stigmasterol root exudation arising from <i>Pseudomonas</i> inoculation of the duckweed rhizosphere enhances nitrogen removal from polluted waters. <i>Environmental Pollution</i> , 2021, 287, 117587.	7.5	17
115	Coordination of nitrogen uptake and assimilation favours the growth and competitiveness of moso bamboo over native tree species in high- $\text{NH}_4^+$ environments. <i>Journal of Plant Physiology</i> , 2021, 266, 153508.	3.5	17
116	A new, non-perturbing, sampling procedure in tracer exchange measurements. <i>Journal of Experimental Botany</i> , 2006, 57, 1309-1314.	4.8	16
117	The face value of ion fluxes: the challenge of determining influx in the low-affinity transport range. <i>Journal of Experimental Botany</i> , 2006, 57, 3293-3300.	4.8	16
118	Microprofiling of nitrogen patches in paddy soil: Analysis of spatiotemporal nutrient heterogeneity at the microscale. <i>Scientific Reports</i> , 2016, 6, 27064.	3.3	16
119	Higher nitrogen use efficiency (NUE) in hybrid "super rice" links to improved morphological and physiological traits in seedling roots. <i>Journal of Plant Physiology</i> , 2020, 251, 153191.	3.5	16
120	Compartmentation and flux characteristics of ammonium in spruce. <i>Planta</i> , 1995, 196, 691.	3.2	15
121	Dynamic analysis of the impact of free-air $\text{CO}_2$ enrichment (FACE) on biomass and N uptake in two contrasting genotypes of rice. <i>Functional Plant Biology</i> , 2018, 45, 696.	2.1	15
122	Comparative analysis reveals gravity is involved in the MIZ1-regulated root hydrotropism. <i>Journal of Experimental Botany</i> , 2020, 71, 7316-7330.	4.8	12
123	Syringic acid from rice as a biological nitrification and urease inhibitor and its synergism with 1,9-decanediol. <i>Biology and Fertility of Soils</i> , 2022, 58, 277-289.	4.3	11
124	Continuous monitoring of plant sodium transport dynamics using clinical PET. <i>Plant Methods</i> , 2021, 17, 8.	4.3	11
125	Molecular components of stress-responsive plastid retrograde signaling networks and their involvement in ammonium stress. <i>Plant Signaling and Behavior</i> , 2013, 8, e23107.	2.4	10
126	Plasma-membrane electrical responses to salt and osmotic gradients contradict radiotracer kinetics, and reveal $\text{Na}^+$ -transport dynamics in rice ( <i>Oryza sativa</i> L.). <i>Planta</i> , 2019, 249, 1037-1051.	3.2	10



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127	In defence of the selective transport and role of silicon in plants. <i>New Phytologist</i> , 2019, 223, 514-516.	7.3	9
128	Cytosolic ion exchange dynamics: insights into the mechanisms of component ion fluxes and their measurement. <i>Functional Plant Biology</i> , 2003, 30, 355.	2.1	8
129	Roles of abscisic acid and auxin in shoot-supplied ammonium inhibition of root system development. <i>Plant Signaling and Behavior</i> , 2011, 6, 1451-1453.	2.4	7
130	From aquaporin to ecosystem: Plants in the water cycle. <i>Journal of Plant Physiology</i> , 2018, 227, 1-2.	3.5	7
131	<a href="#">Nitrogen depletion enhances endodermal suberization without restricting transporter-mediated root</a> $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msubsup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi mathvariant="normal"} \rangle \text{N} \langle \text{mml:mi mathvariant="normal"} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \hat{\wedge} \langle \text{mml:mo} \rangle \langle \text{mml:ms}$ <a href="#">influx. Journal of Plant Physiology</a> , 2021, 257, 153334.	3.5	7
132	Complexity of potassium acquisition: How much flows through channels?. <i>Plant Signaling and Behavior</i> , 2013, 8, e24799.	2.4	6
133	Measuring Fluxes of Mineral Nutrients and Toxicants in Plants with Radioactive Tracers. <i>Journal of Visualized Experiments</i> , 2014, , .	0.3	4
134	Flux Measurements of Cations Using Radioactive Tracers. , 2013, 953, 161-170.		4
135	Characterization and comparison of nitrate fluxes in <i>Tamarix ramosissima</i> and cotton roots under simulated drought conditions. <i>Tree Physiology</i> , 2019, 39, 628-640.	3.1	3
136	Isotope Techniques to Study Kinetics of Na <sup>+</sup> and K <sup>+</sup> Transport Under Salinity Conditions. <i>Methods in Molecular Biology</i> , 2012, 913, 389-398.	0.9	3
137	Inorganic Nitrogen Absorption by Plant Roots. , 1999, , 1-16.		3
138	The Role of Plant Growth Regulators in Modulating Root Architecture and Tolerance to High-Nitrate Stress in Tomato. <i>Frontiers in Plant Science</i> , 2022, 13, 864285.	3.6	3
139	Genes do not form channels. <i>Plant and Soil</i> , 2011, 346, 15-17.	3.7	2
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141	From biochemical pathways to the agro-ecological scale: Carbon capture in a changing climate. <i>Journal of Plant Physiology</i> , 2016, 203, 1-2.	3.5	1
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143	vaCATE: A Platform for Automating Data Output from Compartmental Analysis by Tracer Efflux. <i>Journal of Open Research Software</i> , 2018, 6, .	5.9	0
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