Shao-Jian Zheng

List of Publications by Year
in descending order

123 papers	9,345 citations	28190 55 h-index	42291 92 g-index
125 all docs	125 docs citations	125 times ranked	7345 citing authors

#	Article	IF	Citations
1	Structural basis of ALMT1-mediated aluminum resistance in Arabidopsis. Cell Research, 2022, 32, 89-98.	5.7	27
2	Phloem iron remodels root development in response to ammonium as the major nitrogen source. Nature Communications, 2022, 13, 561.	5.8	28
3	Potential Role of Domains Rearranged Methyltransferase7 in Starch and Chlorophyll Metabolism to Regulate Leaf Senescence in Tomato. Frontiers in Plant Science, 2022, 13, 836015.	1.7	2
4	Ethylene signaling modulates Arabidopsis thaliana nitrate metabolism. Planta, 2022, 255, 94.	1.6	5
5	RINGâ€box proteins regulate leaf senescence and stomatal closure via repression of ABA transporter gene <i>ABCG40</i>. Journal of Integrative Plant Biology, 2022, 64, 979-994.	4.1	12
6	The miR157â€SPLâ€CNR module acts upstream of bHLH101 to negatively regulate iron deficiency responses in tomato. Journal of Integrative Plant Biology, 2022, 64, 1059-1075.	4.1	11
7	A novel kinase subverts aluminium resistance by boosting ornithine decarboxylaseâ€dependent putrescine biosynthesis. Plant, Cell and Environment, 2022, 45, 2520-2532.	2.8	3
8	Abscisic acidâ€dependent <i>PMT1</i> expression regulates salt tolerance by alleviating abscisic acidâ€mediated reactive oxygen species production in <i>Arabidopsis</i>. Journal of Integrative Plant Biology, 2022, 64, 1803-1820.	4.1	4
9	Impacts of elevated CO2 on plant resistance to nutrient deficiency and toxic ions via root exudates: A review. Science of the Total Environment, 2021, 754, 142434.	3.9	38
10	Thermal stress accelerates <i>Arabidopsis thaliana</i> mutation rate. Genome Research, 2021, 31, 40-50.	2.4	40
11	Tease out the future: How tea research might enable crop breeding for acid soil tolerance. Plant Communications, 2021, 2, 100182.	3.6	11
12	Restriction of iron loading into developing seeds by a YABBY transcription factor safeguards successful reproduction in Arabidopsis. Molecular Plant, 2021, 14, 1624-1639.	3.9	21
13	STOP1 activates NRT1.1-mediated nitrate uptake to create a favorable rhizospheric pH for plant adaptation to acidity. Plant Cell, 2021, 33, 3658-3674.	3.1	40
14	A transcription factor STOP1-centered pathway coordinates ammonium and phosphate acquisition in Arabidopsis. Molecular Plant, 2021, 14, 1554-1568.	3.9	41
15	Jasmonic acid alleviates cadmium toxicity in <i>Arabidopsis</i> via suppression of cadmium uptake and translocation. Journal of Integrative Plant Biology, 2020, 62, 218-227.	4.1	87
16	Low phosphate represses histone deacetylase complex1 to regulate root system architecture remodeling in <i>Arabidopsis</i>. New Phytologist, 2020, 225, 1732-1745.	3.5	26
17	A NACâ€type transcription factor confers aluminium resistance by regulating cell wallâ€associated receptor kinase 1 and cell wall pectin. Plant, Cell and Environment, 2020, 43, 463-478.	2.8	63
18	A WRKY transcription factor confers aluminum tolerance via regulation of cell wall modifying genes. Journal of Integrative Plant Biology, 2020, 62, 1176-1192.	4.1	58

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19	Ethylene promotes seed iron storage during<i>Arabidopsis</i>seed maturation via ERF95 transcription factor. Journal of Integrative Plant Biology, 2020, 62, 1193-1212.	4.1	17
20	Genome-wide identification and expression analysis of the NAC transcription factor family in tomato (Solanum lycopersicum) during aluminum stress. BMC Genomics, 2020, 21, 288.	1.2	81
21	Alleviation by abscisic acid of Al toxicity in rice bean is not associated with citrate efflux but depends on ABI5â€mediated signal transduction pathways. Journal of Integrative Plant Biology, 2019, 61, 140-154.	4.1	38
22	FeSTAR2 interacted by FeSTAR1 alters its subcellular location and regulates Al tolerance in buckwheat. Plant and Soil, 2019, 436, 489-501.	1.8	12
23	Mechanisms and regulation of aluminum-induced secretion of organic acid anions from plant roots. Journal of Zhejiang University: Science B, 2019, 20, 513-527.	1.3	53
24	A feedback loop between <i>CaWRKY41</i> and H2O2 coordinates the response to <i>Ralstonia solanacearum</i> and excess cadmium in pepper. Journal of Experimental Botany, 2019, 70, 1581-1595.	2.4	38
25	Transcription factor <scp>WRKY</scp>22 promotes aluminum tolerance via activation of <i>Os<scp>FRDL</scp>4</i> expression and enhancement of citrate secretion in rice (<i>Oryza) Tj ETQq1 1 0.784314 rgBT /Overlock 1	3.5	98
26	Two citrate transporters coordinately regulate citrate secretion from rice bean root tip under aluminum stress. Plant, Cell and Environment, 2018, 41, 809-822.	2.8	45
27	Xyloglucan Fucosylation Modulates Arabidopsis Cell Wall Hemicellulose Aluminium binding Capacity. Scientific Reports, 2018, 8, 428.	1.6	22
28	DNA mismatch repair preferentially protects genes from mutation. Genome Research, 2018, 28, 66-74.	2.4	62
29	Iron Retention in Root Hemicelluloses Causes Genotypic Variability in the Tolerance to Iron Deficiency-Induced Chlorosis in Maize. Frontiers in Plant Science, 2018, 9, 557.	1.7	19
30	<i>PARVUS</i> affects aluminium sensitivity by modulating the structure of glucuronoxylan in <scp><i>Arabidopsis thaliana</i></scp>. Plant, Cell and Environment, 2017, 40, 1916-1925.	2.8	22
31	Regulating cytoplasmic oxalate homeostasis by Acyl activating enzyme3 is critical for plant Al tolerance. Plant Signaling and Behavior, 2017, 12, e1276688.	1.2	9
32	Transcriptome Analysis of Al-Induced Genes in Buckwheat (Fagopyrum esculentum Moench) Root Apex: New Insight into Al Toxicity and Resistance Mechanisms in an Al Accumulating Species. Frontiers in Plant Science, 2017, 8, 1141.	1.7	53
33	Characterization of VuMATE1 Expression in Response to Iron Nutrition and Aluminum Stress Reveals Adaptation of Rice Bean (Vigna umbellata) to Acid Soils through Cis Regulation. Frontiers in Plant Science, 2016, 7, 511.	1.7	13
34	A WRKY Transcription Factor Regulates Fe Translocation under Fe Deficiency. Plant Physiology, 2016, 171, 2017-2027.	2.3	70
35	A Formate Dehydrogenase Confers Tolerance to Aluminum and Low pH. Plant Physiology, 2016, 171, 294-305.	2.3	45
36	Ethylene is involved in root phosphorus remobilization in rice (<i>Oryza sativa</i>) by regulating cell-wall pectin and enhancing phosphate translocation to shoots. Annals of Botany, 2016, 118, 645-653.	1.4	45

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37	An Oxalyl-CoA Synthetase Is Involved in Oxalate Degradation and Aluminum Tolerance. Plant Physiology, 2016, 172, 1679-1690.	2.3	35
38	Alleviation of proton toxicity by nitrate uptake specifically depends on nitrate transporter 1.1 in <i>Arabidopsis</i>. New Phytologist, 2016, 211, 149-158.	3.5	86
39	Increased Sucrose Accumulation Regulates Iron-Deficiency Responses by Promoting Auxin Signaling in Arabidopsis Plants. Plant Physiology, 2016, 170, 907-920.	2.3	79
40	The roles of STOP1-like transcription factors in aluminum and proton tolerance. Plant Signaling and Behavior, 2016, 11, e1131371.	1.2	20
41	Glucose alleviates cadmium toxicity by increasing cadmium fixation in root cell wall and sequestration into vacuole in <i>Arabidopsis</i>. Journal of Integrative Plant Biology, 2015, 57, 830-837.	4.1	48
42	Characterization of an inducible C₂H₂â€type zinc finger transcription factor Vu<scp>STOP</scp>1 in rice bean (<i>Vigna umbellata</i>) reveals differential regulation between low <scp>pH</scp> and aluminum tolerance mechanisms. New Phytologist, 2015, 208, 456-468.	3.5	79
43	An eukaryotic translation initiation factor, <i>AteIF5Aâ€2</i>, affects cadmium accumulation and sensitivity in <i>Arabidopsis</i>. Journal of Integrative Plant Biology, 2015, 57, 848-858.	4.1	8
44	Transcription factor <scp>WRKY</scp>46 modulates the development of Arabidopsis lateral roots in osmotic/salt stress conditions via regulation of <scp>ABA</scp> signaling and auxin homeostasis. Plant Journal, 2015, 84, 56-69.	2.8	207
45	OsTCTP, encoding a translationally controlled tumor protein, plays an important role in mercury tolerance in rice. BMC Plant Biology, 2015, 15, 123.	1.6	34
46	Putrescine Alleviates Iron Deficiency via NO-Dependent Reutilization of Root Cell-Wall Fe in Arabidopsis Â. Plant Physiology, 2015, 170, 558-567.	2.3	71
47	Distinct catalytic capacities of two aluminium-repressed Arabidopsis thaliana xyloglucan endotransglucosylase/hydrolases, XTH15 and XTH31, heterologously produced in Pichia. Phytochemistry, 2015, 112, 160-169.	1.4	35
48	Pectin enhances rice (Oryza sativa) root phosphorus remobilization. Journal of Experimental Botany, 2015, 66, 1017-1024.	2.4	68
49	<i>TRICHOME BIREFRINGENCE-LIKE27</i> Affects Aluminum Sensitivity by Modulating the <i>O</i>-Acetylation of Xyloglucan and Aluminum-Binding Capacity in Arabidopsis Â Â. Plant Physiology, 2014, 166, 181-189.	2.3	50
50	Xyloglucan Endotransglucosylase-Hydrolase17 Interacts with Xyloglucan Endotransglucosylase-Hydrolase31 to Confer Xyloglucan Endotransglucosylase Action and Affect Aluminum Sensitivity in Arabidopsis. Plant Physiology, 2014, 165, 1566-1574.	2.3	87
51	<scp>WRKY</scp>41 controls Arabidopsis seed dormancy via direct regulation of <i><scp>ABI</scp>3</i> transcript levels not downstream of ABA. Plant Journal, 2014, 79, 810-823.	2.8	140
52	Abscisic acid alleviates iron deficiency by promoting root iron reutilization and transport from root to shoot in <i><scp>A</scp>rabidopsis</i>. Plant, Cell and Environment, 2014, 37, 852-863.	2.8	126
53	An underground tale: contribution of microbial activity to plant iron acquisition via ecological processes. Annals of Botany, 2014, 113, 7-18.	1.4	100
54	Transcription factor <scp>WRKY</scp>46 regulates osmotic stress responses and stomatal movement independently in <scp>A</scp>rabidopsis. Plant Journal, 2014, 79, 13-27.	2.8	161

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55	Root proteome of rice studied by iTRAQ provides integrated insight into aluminum stress tolerance mechanisms in plants. Journal of Proteomics, 2014, 98, 189-205.	1.2	116
56	Identification of early <scp><scp>Al</scp></scp>â€responsive genes in rice bean (<scp><i>V</i></scp><i>igna umbellata</i>) roots provides new clues to molecular mechanisms of <scp><scp>Al</scp></scp> toxicity and tolerance. Plant, Cell and Environment, 2014, 37, 1586-1597.	2.8	53
57	The Role of Cell Wall in Plant Resistance to Nutritional Stresses and the Underlying Physiological and Molecular Mechanisms. Scientia Sinica Vitae, 2014, 44, 334-341.	0.1	5
58	Exogenous auxin alleviates cadmium toxicity in Arabidopsis thaliana by stimulating synthesis of hemicellulose 1 and increasing the cadmium fixation capacity of root cell walls. Journal of Hazardous Materials, 2013, 263, 398-403.	6.5	178
59	<scp>WRKY</scp>46 functions as a transcriptional repressor of <i><scp>ALMT</scp>1</i>, regulating aluminumâ€induced malate secretion in <scp>A</scp>rabidopsis. Plant Journal, 2013, 76, 825-835.	2.8	163
60	Rootâ€derived auxin contributes to the phosphorusâ€deficiencyâ€induced clusterâ€root formation in white lupin (<i>Lupinus albus</i>). Physiologia Plantarum, 2013, 148, 481-489.	2.6	24
61	The 14â€3â€3 protein GENERAL REGULATORY FACTOR11 (<scp>GRF</scp>11) acts downstream of nitric oxide to regulate iron acquisition in <i>Arabidopsis thaliana</i>. New Phytologist, 2013, 197, 815-824.	3.5	66
62	The role of VuMATE1 expression in aluminium-inducible citrate secretion in rice bean (Vigna umbellata) roots. Journal of Experimental Botany, 2013, 64, 1795-1804.	2.4	51
63	Association of specific pectin methylesterases withâ€‰Alâ€induced root elongation inhibition in rice. Physiologia Plantarum, 2013, 148, 502-511.	2.6	82
64	Coordination between Apoplastic and Symplastic Detoxification Confers Plant Aluminum Resistance. Plant Physiology, 2013, 162, 1947-1955.	2.3	95
65	Nitric oxide is the shared signalling molecule in phosphorus- and iron-deficiency-induced formation of cluster roots in white lupin (Lupinus albus). Annals of Botany, 2012, 109, 1055-1064.	1.4	64
66	<i>XTH31,</i> Encoding an in Vitro XEH/XET-Active Enzyme, Regulates Aluminum Sensitivity by Modulating in Vivo XET Action, Cell Wall Xyloglucan Content, and Aluminum Binding Capacity in <i>Arabidopsis</i>. Plant Cell, 2012, 24, 4731-4747.	3.1	235
67	Cell wall polysaccharides are involved in P-deficiency-induced Cd exclusion in Arabidopsis thaliana. Planta, 2012, 236, 989-997.	1.6	148
68	Gibberellic acid alleviates cadmium toxicity by reducing nitric oxide accumulation and expression of IRT1 in Arabidopsis thaliana. Journal of Hazardous Materials, 2012, 239-240, 302-307.	6.5	197
69	Nitric oxide exacerbates Al-induced inhibition of root elongation in rice bean by affecting cell wall and plasma membrane properties. Phytochemistry, 2012, 76, 46-51.	1.4	45
70	TcOPT3, a Member of Oligopeptide Transporters from the Hyperaccumulator Thlaspi caerulescens, Is a Novel Fe/Zn/Cd/Cu Transporter. PLoS ONE, 2012, 7, e38535.	1.1	19
71	Cadmiumâ€induced oxalate secretion from root apex is associated with cadmium exclusion and resistance in <i>Lycopersicon esulentum</i>. Plant, Cell and Environment, 2011, 34, 1055-1064.	2.8	122
72	A <i>de novo</i> synthesis citrate transporter, <i>Vigna umbellata</i> multidrug and toxic compound extrusion, implicates in Alâ€activated citrate efflux in rice bean (<i>Vigna umbellata</i>) root apex. Plant, Cell and Environment, 2011, 34, 2138-2148.	2.8	84

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73	Aluminum regulates oxalate secretion and plasma membrane H+-ATPase activity independently in tomato roots. Planta, 2011, 234, 281-291.	1.6	38
74	Dynamics of Carbon Accumulation During the Fast Growth Period of Bamboo Plant. Botanical Review, The, 2011, 77, 287-295.	1.7	29
75	Grape skin extract inhibits mammalian intestinal Î±-glucosidase activity and suppresses postprandial glycemic response in streptozocin-treated mice. Food Chemistry, 2011, 126, 466-471.	4.2	113
76	Genotypic differences in Al resistance and the role of cell-wall pectin in Al exclusion from the root apex in Fagopyrum tataricum. Annals of Botany, 2011, 107, 371-378.	1.4	49
77	Cell Wall Hemicellulose Contributes Significantly to Aluminum Adsorption and Root Growth in Arabidopsis. Plant Physiology, 2011, 155, 1885-1892.	2.3	290
78	Brachypodium as a Model for the Grasses: Today and the Future Â. Plant Physiology, 2011, 157, 3-13.	2.3	243
79	Iron homeostasis and iron acquisition in plants: maintenance, functions and consequences. Annals of Botany, 2010, 105, 1071-1071.	1.4	1
80	Iron homeostasis and iron acquisition in plants: maintenance, functions and consequences. Annals of Botany, 2010, 105, 799-800.	1.4	27
81	Plant Fe status affects the composition of siderophore-secreting microbes in the rhizosphere. Annals of Botany, 2010, 105, 835-841.	1.4	87
82	Crop production on acidic soils: overcoming aluminium toxicity and phosphorus deficiency. Annals of Botany, 2010, 106, 183-184.	1.4	139
83	Nitric Oxide Acts Downstream of Auxin to Trigger Root Ferric-Chelate Reductase Activity in Response to Iron Deficiency in Arabidopsis Â Â Â. Plant Physiology, 2010, 154, 810-819.	2.3	330
84	Elevated Carbon Dioxide Improves Plant Iron Nutrition through Enhancing the Iron-Deficiency-Induced Responses under Iron-Limited Conditions in Tomato. Plant Physiology, 2009, 150, 272-280.	2.3	134
85	Disorganized distribution of homogalacturonan epitopes in cell walls as one possible mechanism for aluminium-induced root growth inhibition in maize. Annals of Botany, 2009, 104, 235-241.	1.4	19
86	Phosphorus deficiency does not enhance proton release by roots of soybean [Glycine max (L.) Murr.]. Environmental and Experimental Botany, 2009, 67, 228-234.	2.0	27
87	Protecting Cell Walls from Binding Aluminum by Organic Acids Contributes to Aluminum Resistance. Journal of Integrative Plant Biology, 2009, 51, 574-580.	4.1	20
88	Effect of aluminum on cell wall, plasma membrane, antioxidants and root elongation in triticale. Biologia Plantarum, 2008, 52, 87-92.	1.9	79
89	Use of the modified viral satellite DNA vector to silence mineral nutrition-related genes in plants: silencing of the tomato ferric chelate reductase gene, FRO1, as an example. Science in China Series C: Life Sciences, 2008, 51, 402-409.	1.3	15
90	Iron Deficiencyâ€induced Increase of Root Branching Contributes to the Enhanced Root Ferric Chelate Reductase Activity. Journal of Integrative Plant Biology, 2008, 50, 1557-1562.	4.1	29

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91	Aluminumâ€activated Oxalate Secretion does not Associate with Internal Content among Some Oxalate Accumulators. Journal of Integrative Plant Biology, 2008, 50, 1103-1107.	4.1	19
92	The iron deficiency-induced phenolics secretion plays multiple important roles in plant iron acquisition underground. Plant Signaling and Behavior, 2008, 3, 60-61.	1.2	24
93	Cell Wall Polysaccharides Are Specifically Involved in the Exclusion of Aluminum from the Rice Root Apex. Plant Physiology, 2008, 146, 602-611.	2.3	345
94	The Iron-Deficiency Induced Phenolics Accumulation May Involve in Regulation of Fe(III) Chelate Reductase in Red Clover. Plant Signaling and Behavior, 2007, 2, 327-332.	1.2	17
95	Genotypic variation in phosphorus utilisation of soybean [Glycine max (L.) Murr.] grown in various sparingly soluble P sources. Australian Journal of Agricultural Research, 2007, 58, 443.	1.5	20
96	Differential Aluminum Resistance and Organic Acid Anions Secretion in Triticale. Communications in Soil Science and Plant Analysis, 2007, 38, 1991-2004.	0.6	5
97	Iron Deficiency-Induced Secretion of Phenolics Facilitates the Reutilization of Root Apoplastic Iron in Red Clover. Plant Physiology, 2007, 144, 278-285.	2.3	244
98	Protein Changes in Response to Pyrene Stress in Maize (Zea mays L.) Leaves. Journal of Integrative Plant Biology, 2007, 49, 187-195.	4.1	8
99	Comparative studies on the effect of a protein-synthesis inhibitor on aluminium-induced secretion of organic acids from Fagopyrum esculentum Moench and Cassia tora L. roots. Plant, Cell and Environment, 2006, 29, 240-246.	2.8	39
100	Mechanisms of microbially enhanced Fe acquisition in red clover (Trifolium pratense L.). Plant, Cell and Environment, 2006, 29, 888-897.	2.8	108
101	Interactions Between High pH and Iron Supply on Nodulation and Iron Nutrition of Lupinus albus L. Genotypes Differing in Sensitivity to Iron Deficiency. Plant and Soil, 2006, 279, 153-162.	1.8	23
102	Citrate Transporters Play a Critical Role in Aluminium-stimulated Citrate Efflux in Rice Bean (Vigna) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.4	80
103	Magnesium Enhances Aluminum-Induced Citrate Secretion in Rice Bean Roots (Vigna umbellata) by Restoring Plasma Membrane H+-ATPase Activity. Plant and Cell Physiology, 2006, 48, 66-73.	1.5	73
104	Target sites of aluminum phytotoxicity. Biologia Plantarum, 2005, 49, 321-331.	1.9	124
105	A copper-deficiency-induced root reductase is different from the iron-deficiency-induced one in red clover (Trifolium pratense L.). Plant and Soil, 2005, 273, 69-76.	1.8	8
106	A Comparison of Aluminum Resistance among Polygonum Species Originating on Strongly Acidic and Neutral Soils. Plant and Soil, 2005, 276, 143-151.	1.8	20
107	Effects of Nitrogen Levels and Nitrate/Ammonium Ratios on Oxalate Concentrations of Different Forms in Edible Parts of Spinach. Journal of Plant Nutrition, 2005, 28, 2011-2025.	0.9	60
108	Immobilization of Aluminum with Phosphorus in Roots Is Associated with High Aluminum Resistance in Buckwheat. Plant Physiology, 2005, 138, 297-303.	2.3	174

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109	Citrate Secretion Coupled with the Modulation of Soybean Root Tip under Aluminum Stress. Up-Regulation of Transcription, Translation, and Threonine-Oriented Phosphorylation of Plasma Membrane H+-ATPase. Plant Physiology, 2005, 138, 287-296.	2.3	146
110	Aluminium resistance requires resistance to acid stress: a case study with spinach that exudes oxalate rapidly when exposed to Al stress. Journal of Experimental Botany, 2005, 56, 1197-1203.	2.4	79
111	Genotypic Differences Among Plant Species in Response to Aluminum Stress. Journal of Plant Nutrition, 2005, 28, 949-961.	0.9	30
112	Lead contamination in tea garden soils and factors affecting its bioavailability. Chemosphere, 2005, 59, 1151-1159.	4.2	113
113	Lead contamination in tea leaves and non-edaphic factors affecting it. Chemosphere, 2005, 61, 726-732.	4.2	36
114	The kinetics of aluminum adsorption and desorption by root cell walls of an aluminum resistant wheat (Triticum aestivum L.) cultivar. Plant and Soil, 2004, 261, 85-90.	1.8	69
115	Fe deficiency induces Cu uptake and accumulation in Commelina communis. Plant Science, 2004, 166, 1371-1377.	1.7	38
116	Effect of cadmium on nodulation and N2-fixation of soybean in contaminated soils. Chemosphere, 2003, 50, 781-787.	4.2	60
117	The responses of red clover (Trifolium pratense L.) to iron deficiency: a root Fe(III) chelate reductase. Plant Science, 2003, 164, 679-687.	1.7	28
118	New approach to studies of heavy metal redistribution in soil. Journal of Environmental Management, 2003, 8, 113-120.	1.7	119
119	Continuous secretion of organic acids is related to aluminium resistance during relatively long-term exposure to aluminium stress. Physiologia Plantarum, 1998, 103, 209-214.	2.6	91
120	High Aluminum Resistance in Buckwheat1. Plant Physiology, 1998, 117, 745-751.	2.3	355
121	Specific Secretion of Citric Acid Induced by Al Stress in Cassia tora L.. Plant and Cell Physiology, 1997, 38, 1019-1025.	1.5	201
122	Detoxifying aluminium with buckwheat. Nature, 1997, 390, 569-570.	13.7	403
123	A rapid hydroponic screening for aluminium tolerance in barley. Plant and Soil, 1997, 191, 133-137.	1.8	75