Leon V Kochian

List of Publications by Year in Descending Order

255 papers	25,920 citations	89 h-index	156 g-index
269 ext. papers	28,512 ext. citations	6.7 avg, IF	6.91 L-index

#	Paper	IF	Citations
255	Evolutionary divergence in embryo and seed coat development of UB Triangle Brassica species illustrated by a spatiotemporal transcriptome atlas. *New Phytologist*, **2022**, 233, 30-51	9.8	0
254	Alternative splicing dynamics and evolutionary divergence during embryogenesis in wheat species. *Plant Biotechnology Journal*, **2021**, 19, 1624-1643	11.6	2
253	Integrative Modeling of Gene Expression and Metabolic Networks of Embryos for Identification of Seed Oil Causal Genes. *Frontiers in Plant Science*, **2021**, 12, 642938	6.2	1
252	Genetic architecture of root and shoot ionomes in rice (Oryza sativa L.). *Theoretical and Applied Genetics*, **2021**, 134, 2613-2637	6	1
251	Association mapping and genomic selection for sorghum adaptation to tropical soils of Brazil in a sorghum multiparental random mating population. *Theoretical and Applied Genetics*, **2021**, 134, 295-312	6	4
250	Developmental and genomic architecture of plant embryogenesis: from model plant to crops. *Plant Communications*, **2021**, 2, 100136	9	3
249	High affinity promoter binding of STOP1 is essential for early expression of novel aluminum-induced resistance genes GDH1 and GDH2 in Arabidopsis. *Journal of Experimental Botany* , **2021**, 72, 2769-2789	7	10
248	Aluminium is essential for root growth and development of tea plants (Camellia sinensis). *Journal of Integrative Plant Biology*, **2020**, 62, 984-997	8.3	26
247	Low phosphate represses histone deacetylase complex1 to regulate root system architecture remodeling in Arabidopsis. *New Phytologist*, **2020**, 225, 1732-1745	9.8	6
246	Root Adaptation via Common Genetic Factors Conditioning Tolerance to Multiple Stresses for Crops Cultivated on Acidic Tropical Soils. *Frontiers in Plant Science*, **2020**, 11, 565339	6.2	7
245	A single-population GWAS identified expression level polymorphism caused by promoter variants is associated with variation in aluminum tolerance in a local population. *Plant Direct*, **2020**, 4, e00250	3.3	4
244	The genetic architecture of phosphorus efficiency in sorghum involves pleiotropic QTL for root morphology and grain yield under low phosphorus availability in the soil. *BMC Plant Biology*, **2019**, 19, 87	5.3	21
243	AhFRDL1-mediated citrate secretion contributes to adaptation to iron deficiency and aluminum stress in peanuts. *Journal of Experimental Botany*, **2019**, 70, 2873-2886	7	11
242	The Transcriptional Landscape of Polyploid Wheats and Their Diploid Ancestors during Embryogenesis and Grain Development. *Plant Cell*, **2019**, 31, 2888-2911	11.6	25
241	Adaption of Roots to Nitrogen Deficiency Revealed by 3D Quantification and Proteomic Analysis. *Plant Physiology*, **2019**, 179, 329-347	6.6	38
240	Repeat variants for the SbMATE transporter protect sorghum roots from aluminum toxicity by transcriptional interplay in and. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 313-318	11.5	25
239	Two citrate transporters coordinately regulate citrate secretion from rice bean root tip under aluminum stress. *Plant, Cell and Environment*, **2018**, 41, 809-822	8.4	39

238	Mechanisms of Micronutrient Uptake and Translocation in Plants. *Soil Science Society of America Book Series*, **2018**, 229-296		29
237	LeSPL-CNR negatively regulates Cd acquisition through repressing nitrate reductase-mediated nitric oxide production in tomato. *Planta*, **2018**, 248, 893-907	4.7	12
236	Exploiting sorghum genetic diversity for enhanced aluminum tolerance: Allele mining based on the Alt locus. *Scientific Reports*, **2018**, 8, 10094	4.9	8
235	Genomic regions responsible for seminal and crown root lengths identified by 2D & 3D root system image analysis. *BMC Genomics*, **2018**, 19, 273	4.5	10
234	Emerging Pleiotropic Mechanisms Underlying Aluminum Resistance and Phosphorus Acquisition on Acidic Soils. *Frontiers in Plant Science*, **2018**, 9, 1420	6.2	16
233	Loss-of-function mutation of the calcium sensor CBL1 increases aluminum sensitivity in Arabidopsis. *New Phytologist*, **2017**, 214, 830-841	9.8	28
232	NIP1;2 is a plasma membrane-localized transporter mediating aluminum uptake, translocation, and tolerance in. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 5047-5052	11.5	84
231	Identification and characterization of suppressor mutants of stop1. *BMC Plant Biology*, **2017**, 17, 128	5.3	9
230	() contributes to natural variation in aluminum resistance in diverse genetic backgrounds of rice (). *Plant Direct*, **2017**, 1, e00014	3.3	14
229	Arabidopsis Pollen Fertility Requires the Transcription Factors CITF1 and SPL7 That Regulate Copper Delivery to Anthers and Jasmonic Acid Synthesis. *Plant Cell*, **2017**, 29, 3012-3029	11.6	39
228	An Arabidopsis ABC Transporter Mediates Phosphate Deficiency-Induced Remodeling of Root Architecture by Modulating Iron Homeostasis in Roots. *Molecular Plant*, **2017**, 10, 244-259	14.4	79
227	Functional characterization and discovery of modulators of SbMATE, the agronomically important aluminium tolerance transporter from Sorghum bicolor. *Scientific Reports*, **2017**, 7, 17996	4.9	17
226	The role of root morphology and architecture in phosphorus acquisition: physiological, genetic, and molecular basis **2017**, 123-147		7
225	Vascular-mediated signalling involved in early phosphate stress response in plants. *Nature Plants*, **2016**, 2, 16033	11.5	80
224	How high do ion fluxes go? A re-evaluation of the two-mechanism model of K(+) transport in plant roots. *Plant Science*, **2016**, 243, 96-104	5.3	18
223	Quantitative iTRAQ Proteomics Revealed Possible Roles for Antioxidant Proteins in Sorghum Aluminum Tolerance. *Frontiers in Plant Science*, **2016**, 7, 2043	6.2	21
222	The ALMT Family of Organic Acid Transporters in Plants and Their Involvement in Detoxification and Nutrient Security. *Frontiers in Plant Science*, **2016**, 7, 1488	6.2	65
221	The Raf-like Kinase ILK1 and the High Affinity K+ Transporter HAK5 Are Required for Innate Immunity and Abiotic Stress Response. *Plant Physiology*, **2016**, 171, 1470-84	6.6	38

220	Redefining Bstress resistance genesP and why it matters. *Journal of Experimental Botany*, **2016**, 67, 5588-5591	7	3
219	Evolving technologies for growing, imaging and analyzing 3D root system architecture of crop plants. *Journal of Integrative Plant Biology*, **2016**, 58, 230-41	8.3	30
218	Identification of Black Bean (Phaseolus vulgaris L.) Polyphenols That Inhibit and Promote Iron Uptake by Caco-2 Cells. *Journal of Agricultural and Food Chemistry*, **2015**, 63, 5950-6	5.7	71
217	Photochemical properties in flag leaves of a super-high-yielding hybrid rice and a traditional hybrid rice (Oryza sativa L.) probed by chlorophyll a fluorescence transient. *Photosynthesis Research*, **2015**, 126, 275-84	3.7	14
216	Back to Acid Soil Fields: The Citrate Transporter SbMATE Is a Major Asset for Sustainable Grain Yield for Sorghum Cultivated on Acid Soils. *G3: Genes, Genomes, Genetics*, **2015**, 6, 475-84	3.2	16
215	Retraction Note: High bioavailablilty iron maize (Zea mays L.) developed through molecular breeding provides more absorbable iron in vitro (Caco-2 model) and in vivo (Gallus gallus). *Nutrition Journal*, **2015**, 14, 126	4.3	1
214	Plant Adaptation to Acid Soils: The Molecular Basis for Crop Aluminum Resistance. *Annual Review of Plant Biology*, **2015**, 66, 571-98	30.7	474
213	Identification of a novel pathway involving a GATA transcription factor in yeast and possibly in plant Zn uptake and homeostasis. *Journal of Integrative Plant Biology*, **2014**, 56, 271-80	8.3	3
212	Genotypic variation of zinc and selenium concentration in grains of Brazilian wheat lines. *Plant Science*, **2014**, 224, 27-35	5.3	22
211	Root and shoot transcriptome analysis of two ecotypes of Noccaea caerulescens uncovers the role of NcNramp1 in Cd hyperaccumulation. *Plant Journal*, **2014**, 78, 398-410	6.9	71
210	Phosphate transporters OsPHT1;9 and OsPHT1;10 are involved in phosphate uptake in rice. *Plant, Cell and Environment*, **2014**, 37, 1159-70	8.4	91
209	Molecular and physiological mechanisms of plant tolerance to toxic metals **2014**, 179-201		0
208	Natural variation underlies alterations in Nramp aluminum transporter (NRAT1) expression and function that play a key role in rice aluminum tolerance. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 6503-8	11.5	104
207	Duplicate and conquer: multiple homologs of PHOSPHORUS-STARVATION TOLERANCE1 enhance phosphorus acquisition and sorghum performance on low-phosphorus soils. *Plant Physiology*, **2014**, 166, 659-77	6.6	83
206	OPT3 Is a Phloem-Specific Iron Transporter That Is Essential for Systemic Iron Signaling and Redistribution of Iron and Cadmium in Arabidopsis. *Plant Cell*, **2014**, 26, 2249-2264	11.6	152
205	The roots of future rice harvests. *Rice*, **2014**, 7, 29	5.8	38
204	Genetic dissection of Al tolerance QTLs in the maize genome by high density SNP scan. *BMC Genomics*, **2014**, 15, 153	4.5	23
203	The role of aluminum sensing and signaling in plant aluminum resistance. *Journal of Integrative Plant Biology*, **2014**, 56, 221-30	8.3	105

202	Physiological and molecular analysis of aluminum tolerance in selected Kenyan maize lines. *Plant and Soil*, **2014**, 377, 357-367	4.2	13
201	Association mapping provides insights into the origin and the fine structure of the sorghum aluminum tolerance locus, AltSB. *PLoS ONE*, **2014**, 9, e87438	3.7	34
200	Targeted expression of SbMATE in the root distal transition zone is responsible for sorghum aluminum resistance. *Plant Journal*, **2013**, 76, 297-307	6.9	63
199	Functional, structural and phylogenetic analysis of domains underlying the Al sensitivity of the aluminum-activated malate/anion transporter, TaALMT1. *Plant Journal*, **2013**, 76, 766-80	6.9	43
198	The CTR/COPT-dependent copper uptake and SPL7-dependent copper deficiency responses are required for basal cadmium tolerance in A. thaliana. *Metallomics*, **2013**, 5, 1262-75	4.5	54
197	High-throughput two-dimensional root system phenotyping platform facilitates genetic analysis of root growth and development. *Plant, Cell and Environment*, **2013**, 36, 454-66	8.4	133
196	Genotypic recognition and spatial responses by rice roots. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 2670-5	11.5	103
195	Incomplete transfer of accessory loci influencing SbMATE expression underlies genetic background effects for aluminum tolerance in sorghum. *Plant Journal*, **2013**, 73, 276-88	6.9	27
194	High bioavailability iron maize (Zea mays L.) developed through molecular breeding provides more absorbable iron in vitro (Caco-2 model) and in vivo (Gallus gallus). *Nutrition Journal*, **2013**, 12, 3	4.3	40
193	Using membrane transporters to improve crops for sustainable food production. *Nature*, **2013**, 497, 60-65	50.4	336
192	Aluminum Tolerance in Sorghum and Maize **2013**, 83-98		1
191	Transport properties of members of the ZIP family in plants and their role in Zn and Mn homeostasis. *Journal of Experimental Botany*, **2013**, 64, 369-81	7	277
190	Proteomic analysis of chromoplasts from six crop species reveals insights into chromoplast function and development. *Journal of Experimental Botany*, **2013**, 64, 949-61	7	73
189	Low pH, aluminum, and phosphorus coordinately regulate malate exudation through GmALMT1 to improve soybean adaptation to acid soils. *Plant Physiology*, **2013**, 161, 1347-61	6.6	153
188	Molecular and physiological analysis of Al□+ and H+ rhizotoxicities at moderately acidic conditions. *Plant Physiology*, **2013**, 163, 180-92	6.6	49
187	Aluminum tolerance in maize is associated with higher MATE1 gene copy number. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 5241-6	11.5	199
186	A promoter-swap strategy between the AtALMT and AtMATE genes increased Arabidopsis aluminum resistance and improved carbon-use efficiency for aluminum resistance. *Plant Journal*, **2012**, 71, 327-37	6.9	46
185	Characterization of the high affinity Zn transporter from Noccaea caerulescens, NcZNT1, and dissection of its promoter for its role in Zn uptake and hyperaccumulation. *New Phytologist*, **2012**, 195, 113-23	9.8	49

184	A role for root morphology and related candidate genes in P acquisition efficiency in maize. *Functional Plant Biology*, **2012**, 39, 925-935	2.7	36
183	Envisioning the transition to a next-generation biofuels industry in the US Midwest. *Biofuels, Bioproducts and Biorefining*, **2012**, 6, 376-386	5.3	18
182	Maize ZmALMT2 is a root anion transporter that mediates constitutive root malate efflux. *Plant, Cell and Environment*, **2012**, 35, 1185-200	8.4	55
181	COPT6 is a plasma membrane transporter that functions in copper homeostasis in Arabidopsis and is a novel target of SQUAMOSA promoter-binding protein-like 7. *Journal of Biological Chemistry*, **2012**, 287, 33252-67	5.4	66
180	Biofortified maize (Zea mays L.) provides more bioavailable iron than standard maize: Studies in poultry (Gallus gallus) and an in vitro digestion/Caco-2 model. *FASEB Journal*, **2012**, 26, 1019.1	0.9	
179	Genetic and physiological analysis of iron biofortification in maize kernels. *PLoS ONE*, **2011**, 6, e20429	3.7	59
178	A de novo synthesis citrate transporter, Vigna umbellata multidrug and toxic compound extrusion, implicates in Al-activated citrate efflux in rice bean (Vigna umbellata) root apex. *Plant, Cell and Environment*, **2011**, 34, 2138-48	8.4	74
177	Elevated expression of TcHMA3 plays a key role in the extreme Cd tolerance in a Cd-hyperaccumulating ecotype of Thlaspi caerulescens. *Plant Journal*, **2011**, 66, 852-62	6.9	170
176	Three-dimensional root phenotyping with a novel imaging and software platform. *Plant Physiology*, **2011**, 156, 455-65	6.6	306
175	Iron biofortification of maize grain. *Plant Genetic Resources: Characterisation and Utilisation*, **2011**, 9, 327-329	1	12
174	Genetic architecture of aluminum tolerance in rice (Oryza sativa) determined through genome-wide association analysis and QTL mapping. *PLoS Genetics*, **2011**, 7, e1002221	6	278
173	The relationship between population structure and aluminum tolerance in cultivated sorghum. *PLoS ONE*, **2011**, 6, e20830	3.7	27
172	Transcriptional regulation of metal transport genes and mineral nutrition during acclimatization to cadmium and zinc in the Cd/Zn hyperaccumulator, Thlaspi caerulescens (Ganges population). *New Phytologist*, **2010**, 185, 114-29	9.8	146
171	Two functionally distinct members of the MATE (multi-drug and toxic compound extrusion) family of transporters potentially underlie two major aluminum tolerance QTLs in maize. *Plant Journal*, **2010**, 61, 728-40	6.9	222
170	Association and linkage analysis of aluminum tolerance genes in maize. *PLoS ONE*, **2010**, 5, e9958	3.7	75
169	Development of a novel aluminum tolerance phenotyping platform used for comparisons of cereal aluminum tolerance and investigations into rice aluminum tolerance mechanisms. *Plant Physiology*, **2010**, 153, 1678-91	6.6	143
168	GEOCHEM-EZ: a chemical speciation program with greater power and flexibility. *Plant and Soil*, **2010**, 330, 207-214	4.2	157
167	Genetic variation for root architecture, nutrient uptake and mycorrhizal colonisation in Medicago truncatula accessions. *Plant and Soil*, **2010**, 336, 113-128	4.2	11

166	Iron bioavailability from maize-based diets fed to iron deficient broiler chickens. *FASEB Journal*, **2010**, 24, 208.8	0.9	1
165	Drosophila ABC transporter, DmHMT-1, confers tolerance to cadmium. DmHMT-1 and its yeast homolog, SpHMT-1, are not essential for vacuolar phytochelatin sequestration. *Journal of Biological Chemistry*, **2009**, 284, 354-362	5.4	50
164	Involvement of a broccoli COQ5 methyltransferase in the production of volatile selenium compounds. *Plant Physiology*, **2009**, 151, 528-40	6.6	20
163	Generation of Arabidopsis Mutants by Heterologous Expression of a Full-Length cDNA Library from Tomato Fruits. *Plant Molecular Biology Reporter*, **2009**, 27, 454-461	1.7	5
162	Aluminum-activated citrate and malate transporters from the MATE and ALMT families function independently to confer Arabidopsis aluminum tolerance. *Plant Journal*, **2009**, 57, 389-99	6.9	360
161	Phosphorylation at S384 regulates the activity of the TaALMT1 malate transporter that underlies aluminum resistance in wheat. *Plant Journal*, **2009**, 60, 411-23	6.9	46
160	Maize Al Tolerance **2009**, 367-380		2
159	Transcriptional profiling of aluminum toxicity and tolerance responses in maize roots. *New Phytologist*, **2008**, 179, 116-128	9.8	111
158	Novel properties of the wheat aluminum tolerance organic acid transporter (TaALMT1) revealed by electrophysiological characterization in Xenopus Oocytes: functional and structural implications. *Plant Physiology*, **2008**, 147, 2131-46	6.6	89
157	Investigation of heavy metal hyperaccumulation at the cellular level: development and characterization of Thlaspi caerulescens suspension cell lines. *Plant Physiology*, **2008**, 147, 2006-16	6.6	23
156	Investigating heavy-metal hyperaccumulation using Thlaspi caerulescens as a model system. *Annals of Botany*, **2008**, 102, 3-13	4.1	241
155	Not all ALMT1-type transporters mediate aluminum-activated organic acid responses: the case of ZmALMT1 - an anion-selective transporter. *Plant Journal*, **2008**, 53, 352-67	6.9	83
154	Biochemical and molecular characterization of the homocysteine S-methyltransferase from broccoli (Brassica oleracea var. italica). *Phytochemistry*, **2007**, 68, 1112-9	4	39
153	A gene in the multidrug and toxic compound extrusion (MATE) family confers aluminum tolerance in sorghum. *Nature Genetics*, **2007**, 39, 1156-61	36.3	561
152	A method for cellular localization of gene expression via quantitative in situ hybridization in plants. *Plant Journal*, **2007**, 50, 159-75	6.9	36
151	Plant Cd2+ and Zn2+ status effects on root and shoot heavy metal accumulation in Thlaspi caerulescens. *New Phytologist*, **2007**, 175, 51-58	9.8	73
150	Genetic diversity for aluminum tolerance in sorghum. *Theoretical and Applied Genetics*, **2007**, 114, 863-76	6	57
149	Characterization of AtALMT1 expression in aluminum-inducible malate release and its role for rhizotoxic stress tolerance in Arabidopsis. *Plant Physiology*, **2007**, 145, 843-52	6.6	150

148	A native Zn/Cd pumping P(1B) ATPase from natural overexpression in a hyperaccumulator plant. *Biochemical and Biophysical Research Communications*, **2007**, 363, 51-6	3.4	25
147	Phosphorus and aluminum interactions in soybean in relation to aluminum tolerance. Exudation of specific organic acids from different regions of the intact root system. *Plant Physiology*, **2006**, 141, 674-84	6.6	183
146	AtALMT1, which encodes a malate transporter, is identified as one of several genes critical for aluminum tolerance in Arabidopsis. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 9738-43	11.5	420
145	The cauliflower Or gene encodes a DnaJ cysteine-rich domain-containing protein that mediates high levels of beta-carotene accumulation. *Plant Cell*, **2006**, 18, 3594-605	11.6	392
144	Characterization of cadmium uptake, translocation and storage in near-isogenic lines of durum wheat that differ in grain cadmium concentration. *New Phytologist*, **2006**, 172, 261-71	9.8	79
143	Spatial coordination of aluminium uptake, production of reactive oxygen species, callose production and wall rigidification in maize roots. *Plant, Cell and Environment*, **2006**, 29, 1309-18	8.4	205
142	Genetic and Biochemical Analysis of Iron Bioavailability in Maize. *FASEB Journal*, **2006**, 20, A623	0.9	2
141	Molecular and biochemical characterization of the selenocysteine Se-methyltransferase gene and Se-methylselenocysteine synthesis in broccoli. *Plant Physiology*, **2005**, 138, 409-20	6.6	123
140	Molecular characterization and mapping of ALMT1, the aluminium-tolerance gene of bread wheat (Triticum aestivum L.). *Genome*, **2005**, 48, 781-91	2.4	141
139	Zinc effects on cadmium accumulation and partitioning in near-isogenic lines of durum wheat that differ in grain cadmium concentration. *New Phytologist*, **2005**, 167, 391-401	9.8	89
138	The Physiology, Genetics and Molecular Biology of Plant Aluminum Resistance and Toxicity. *Plant and Soil*, **2005**, 274, 175-195	4.2	530
137	Aluminum resistance in maize cannot be solely explained by root organic acid exudation. A comparative physiological study. *Plant Physiology*, **2005**, 137, 231-41	6.6	127
136	The physiology, genetics and molecular biology of plant aluminum resistance and toxicity. *Plant Ecophysiology*, **2005**, 175-195		24
135	Focus on plant nutrition. *Plant Physiology*, **2004**, 136, 2437	6.6	7
134	Comparative mapping of a major aluminum tolerance gene in sorghum and other species in the poaceae. *Genetics*, **2004**, 167, 1905-14	4	114
133	Identification of Thlaspi caerulescens genes that may be involved in heavy metal hyperaccumulation and tolerance. Characterization of a novel heavy metal transporting ATPase. *Plant Physiology*, **2004**, 136, 3814-23	6.6	265
132	Genotypic variation in common bean in response to zinc deficiency in calcareous soil. *Plant and Soil*, **2004**, 259, 71-83	4.2	48
131	How do crop plants tolerate acid soils? Mechanisms of aluminum tolerance and phosphorous efficiency. *Annual Review of Plant Biology*, **2004**, 55, 459-93	30.7	1220

130	The role of shoot-localized processes in the mechanism of Zn efficiency in common bean. *Planta*, **2004**, 218, 704-11	4.7	25
129	Kinetic properties of a micronutrient transporter from Pisum sativum indicate a primary function in Fe uptake from the soil. *Planta*, **2004**, 218, 784-92	4.7	102
128	Mechanisms of arsenic hyperaccumulation in Pteris species: root As influx and translocation. *Planta*, **2004**, 219, 1080-8	4.7	110
127	Phytofiltration of arsenic from drinking water using arsenic-hyperaccumulating ferns. *Environmental Science & Technology*, **2004**, 38, 3412-7	10.3	95
126	Uptake and release of cesium-137 by five plant species as influenced by soil amendments in field experiments. *Journal of Environmental Quality*, **2003**, 32, 2272-9	3.4	33
125	Two tomato non-symbiotic haemoglobin genes are differentially expressed in response to diverse changes in mineral nutrient status. *Plant, Cell and Environment*, **2003**, 26, 673-680	8.4	24
124	How do some plants tolerate low levels of soil zinc? Mechanisms of zinc efficiency in crop plants. *New Phytologist*, **2003**, 159, 341-350	9.8	184
123	Shoot biomass and zinc/cadmium uptake for hyperaccumulator and non-accumulator Thlaspi species in response to growth on a zinc-deficient calcareous soil. *Plant Science*, **2003**, 164, 1095-1101	5.3	46
122	Identification and characterization of aluminum tolerance loci in Arabidopsis (Landsberg erecta x Columbia) by quantitative trait locus mapping. A physiologically simple but genetically complex trait. *Plant Physiology*, **2003**, 132, 936-48	6.6	134
121	Zinc efficiency is correlated with enhanced expression and activity of zinc-requiring enzymes in wheat. *Plant Physiology*, **2003**, 131, 595-602	6.6	125
120	Differences in whole-cell and single-channel ion currents across the plasma membrane of mesophyll cells from two closely related Thlaspi species. *Plant Physiology*, **2003**, 131, 583-94	6.6	21
119	Development and allele diversity of microsatellite markers linked to the aluminium tolerance gene Alp in barley. *Australian Journal of Agricultural Research*, **2003**, 54, 1315		30
118	Uptake of cesium-137 and strontium-90 from contaminated soil by three plant species; application to phytoremediation. *Journal of Environmental Quality*, **2002**, 31, 904-9	3.4	43
117	Measurement of thiol-containing amino acids and phytochelatin (PC2) via capillary electrophoresis with laser-induced fluorescence detection. *Electrophoresis*, **2002**, 23, 81-7	3.6	27
116	Phytochelatin synthesis is not responsible for Cd tolerance in the Zn/Cd hyperaccumulator Thlaspi caerulescens (J. & C. Presl). *Planta*, **2002**, 214, 635-40	4.7	176
115	Transport interactions between cadmium and zinc in roots of bread and durum wheat seedlings. *Physiologia Plantarum*, **2002**, 116, 73-78	4.6	241
114	Mechanisms of metal resistance in plants: aluminum and heavy metals. *Plant and Soil*, **2002**, 247, 109-119	4.2	61
113	The physiology and biophysics of an aluminum tolerance mechanism based on root citrate exudation in maize. *Plant Physiology*, **2002**, 129, 1194-206	6.6	170

112	Rapid induction of regulatory and transporter genes in response to phosphorus, potassium, and iron deficiencies in tomato roots. Evidence for cross talk and root/rhizosphere-mediated signals. *Plant Physiology*, **2002**, 130, 1361-70	6.6	239
111	Trehalose accumulation in rice plants confers high tolerance levels to different abiotic stresses. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 15898-903	11.5	953
110	H+ Currents around Plant Roots **2002**,		1
109	Uptake of Cesium-137 and Strontium-90 from Contaminated Soil by Three Plant Species; Application to Phytoremediation. *Journal of Environmental Quality*, **2002**, 31, 904	3.4	46
108	Physiological Genetics of Aluminum Tolerance in the Wheat Cultivar Atlas 66. *Crop Science*, **2002**, 42, 1541-1546	2.4	50
107	Mechanisms of metal resistance in plants: aluminum and heavy metals **2002**, 109-119		2
106	Physiological basis of reduced AL tolerance in ditelosomic lines of Chinese Spring wheat. *Planta*, **2001**, 212, 829-34	4.7	67
105	A patch-clamp study on the physiology of aluminum toxicity and aluminum tolerance in maize. Identification and characterization of Al(3+)-induced anion channels. *Plant Physiology*, **2001**, 125, 292-305	6.6	158
104	Uranium Speciation, Plant Uptake, and Phytoremediation. *Practice Periodical of Hazardous, Toxic and Radioactive Waste Management*, **2001**, 5, 130-135		12
103	High- and low-affinity zinc transport systems and their possible role in zinc efficiency in bread wheat. *Plant Physiology*, **2001**, 125, 456-63	6.6	104
102	Zinc Phytoextraction in Thlaspi caerulescens. *International Journal of Phytoremediation*, **2001**, 3, 129-144	3.9	10
101	Nitrate-induced genes in tomato roots. Array analysis reveals novel genes that may play a role in nitrogen nutrition. *Plant Physiology*, **2001**, 127, 345-59	6.6	209
100	Identification of RFLP Markers Linked to the Barley Aluminum Tolerance Gene Alp. *Crop Science*, **2000**, 40, 778-782	2.4	84
99	Influence of varied zinc supply on re-translocation of cadmium (109Cd) and rubidium (86Rb) applied on mature leaf of durum wheat seedlings. *Plant and Soil*, **2000**, 219, 279-284	4.2	48
98	Molecular physiology of zinc transport in the Zn hyperaccumulator Thlaspi caerulescens. *Journal of Experimental Botany*, **2000**, 51, 71-79	7	249
97	Uptake and retranslocation of leaf-applied cadmium (109Cd) in diploid, tetraploid and hexaploid wheats. *Journal of Experimental Botany*, **2000**, 51, 221-6	7	76
96	The molecular physiology of heavy metal transport in the Zn/Cd hyperaccumulator Thlaspi caerulescens. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 4956-60	11.5	623
95	Molecular physiology of zinc transport in the Zn hyperaccumulator Thlaspi caerulescens. *Journal of Experimental Botany*, **2000**, 51, 71-79	7	58

94	Agricultural approaches to improving phytonutrient content in plants: an overview. *Nutrition Reviews*, **1999**, 57, S13-8	6.4	17
93	Early copper-induced leakage of K(+) from Arabidopsis seedlings is mediated by ion channels and coupled to citrate efflux. *Plant Physiology*, **1999**, 121, 1375-82	6.6	131
92	Effects of nutrient solution zinc activity on net uptake, translocation, and root export of cadmium and zinc by separated sections of intact durum wheat (Triticum turgidum L. var durum) seedling roots. *Plant and Soil*, **1999**, 208, 243-250	4.2	55
91	Physiology of Zn Hyperaccumulation in Thlaspi caerulescens **1999**,		2
90	Selectivity of Liquid Membrane Cadmium Microelectrodes Based on the Ionophore N,N,N?,N?-Tetrabutyl-3,6-dioxaoctanedithioamide. *Electroanalysis*, **1998**, 10, 937-941	3	21
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88	Phytoextraction of Zinc by Oat (Avena sativa), Barley (Hordeum vulgare), and Indian Mustard (Brassica juncea). *Environmental Science & Technology*, **1998**, 32, 802-806	10.3	266
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