Ä°smaÄ°l Ãakmak

List of Publications by Year
in descending order

231 papers	26,834 citations	5891 81 h-index	6831 155 g-index
234 all docs	234 docs citations	234 times ranked	13985 citing authors

#	Article	IF	Citations
1	Enrichment of cereal grains with zinc: Agronomic or genetic biofortification?. Plant and Soil, 2008, 302, 1-17.	1.8	1,553
2	Magnesium Deficiency and High Light Intensity Enhance Activities of Superoxide Dismutase, Ascorbate Peroxidase, and Glutathione Reductase in Bean Leaves. Plant Physiology, 1992, 98, 1222-1227.	2.3	1,435
3	Effect of aluminium on lipid peroxidation, superoxide dismutase, catalase, and peroxidase activities in root tips of soybean (Glycine max). Physiologia Plantarum, 1991, 83, 463-468.	2.6	1,425
4	Tansley Review No. 111. New Phytologist, 2000, 146, 185-205.	3.5	1,047
5	The role of potassium in alleviating detrimental effects of abiotic stresses in plants. Journal of Plant Nutrition and Soil Science, 2005, 168, 521-530.	1.1	901
6	REVIEW: Biofortification of Durum Wheat with Zinc and Iron. Cereal Chemistry, 2010, 87, 10-20.	1.1	599
7	Agronomic biofortification of cereals with zinc: a review. European Journal of Soil Science, 2018, 69, 172-180.	1.8	561
8	Effect of mineral nutritional status on shoot-root partitioning of photoassimilates and cycling of mineral nutrients. Journal of Experimental Botany, 1996, 47, 1255-1263.	2.4	483
9	Biofortification and Localization of Zinc in Wheat Grain. Journal of Agricultural and Food Chemistry, 2010, 58, 9092-9102.	2.4	427
10	Role of magnesium in carbon partitioning and alleviating photooxidative damage. Physiologia Plantarum, 2008, 133, 692-704.	2.6	387
11	Plant nutrition research: Priorities to meet human needs for food in sustainable ways. Plant and Soil, 2002, 247, 3-24.	1.8	383
12	Function of Nutrients. , 2012, , 191-248.		383
13	Activities of Hydrogen Peroxide-Scavenging Enzymes in Germinating Wheat Seeds. Journal of Experimental Botany, 1993, 44, 127-132.	2.4	380
14	Partitioning of shoot and root dry matter and carbohydrates in bean plants suffering from phosphorus, potassium and magnesium deficiency. Journal of Experimental Botany, 1994, 45, 1245-1250.	2.4	370
15	Biofortification strategies to increase grain zinc and iron concentrations in wheat. Journal of Cereal Science, 2014, 59, 365-372.	1.8	339
16	Changes in phloem export of sucrose in leaves in response to phosphorus, potassium and magnesium deficiency in bean plants. Journal of Experimental Botany, 1994, 45, 1251-1257.	2.4	320
17	Boron deficiency-induced impairments of cellular functions in plants. Plant and Soil, 1997, 193, 71-83.	1.8	314
18	Concentration and localization of zinc during seed development and germination in wheat. Physiologia Plantarum, 2006, 128, 144-152.	2.6	314

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19	<i>Triticum dicoccoides</i>: An important genetic resource for increasing zinc and iron concentration in modern cultivated wheat. Soil Science and Plant Nutrition, 2004, 50, 1047-1054.	0.8	298
20	Iron and zinc grain density in common wheat grown in Central Asia. Euphytica, 2007, 155, 193-203.	0.6	284
21	Zinc deficiency as a critical problem in wheat production in Central Anatolia. Plant and Soil, 1996, 180, 165-172.	1.8	282
22	Quantitative trait loci conferring grain mineral nutrient concentrations in durum wheatÂÃ—Âwild emmer wheat RIL population. Theoretical and Applied Genetics, 2009, 119, 353-369.	1.8	264
23	Zinc deficiency as a practical problem in plant and human nutrition in Turkey: A NATO-science for stability project. Field Crops Research, 1999, 60, 175-188.	2.3	259
24	Biofortification of Durum Wheat with Zinc Through Soil and Foliar Applications of Nitrogen. Cereal Chemistry, 2010, 87, 1-9.	1.1	257
25	Multiple QTL-effects of wheat Gpc-B1 locus on grain protein and micronutrient concentrations. Physiologia Plantarum, 2007, 129, 635-643.	2.6	244
26	High Light Intensity Enhances Chlorosis and Necrosis in Leaves of Zinc, Potassium, and Magnesium Deficient Bean (Phaseolus vulgaris) Plants. Journal of Plant Physiology, 1989, 134, 308-315.	1.6	241
27	Activity of ascorbate-dependent H2O2-scavenging enzymes and leaf chlorosis are enhanced in magnesium- and potassium-deficient leaves, but not in phosphorus-deficient leaves. Journal of Experimental Botany, 1994, 45, 1259-1266.	2.4	229
28	Root-induced changes of nutrient availability in the rhizosphere. Journal of Plant Nutrition, 1987, 10, 1175-1184.	0.9	227
29	Increase in Membrane Permeability and Exudation in Roots of Zinc Deficient Plants. Journal of Plant Physiology, 1988, 132, 356-361.	1.6	226
30	Improved nitrogen nutrition enhances root uptake, rootâ€toâ€shoot translocation and remobilization of zinc (⁶⁵Zn) in wheat. New Phytologist, 2011, 189, 438-448.	3.5	221
31	Effect of different zinc application methods on grain yield and zinc concentration in wheat cultivars grown on zincâ€deficient calcareous soils. Journal of Plant Nutrition, 1997, 20, 461-471.	0.9	219
32	Peanut/maize intercropping induced changes in rhizosphere and nutrient concentrations in shoots. Plant Physiology and Biochemistry, 2007, 45, 350-356.	2.8	219
33	Biofortification of wheat with zinc through zinc fertilization in seven countries. Plant and Soil, 2012, 361, 119-130.	1.8	216
34	Biofortification of rice grain with zinc through zinc fertilization in different countries. Plant and Soil, 2012, 361, 131-141.	1.8	213
35	Enrichment of fertilizers with zinc: An excellent investment for humanity and crop production in India. Journal of Trace Elements in Medicine and Biology, 2009, 23, 281-289.	1.5	207
36	Effect of Zinc Nutritional Status on Growth, Protein Metabolism and Levels of Indole-3-acetic Acid and other Phytohormones in Bean (Phaseolus vulgarisL.). Journal of Experimental Botany, 1989, 40, 405-412.	2.4	202

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37	Enhanced Superoxide Radical Production in Roots of Zinc-Deficient Plants. Journal of Experimental Botany, 1988, 39, 1449-1460.	2.4	193
38	Short-term effects of boron, germanium and high light intensity on membrane permeability in boron deficient leaves of sunflower. Physiologia Plantarum, 1995, 95, 11-18.	2.6	186
39	Effect of nitrogen on uptake, remobilization and partitioning of zinc and iron throughout the development of durum wheat. Plant and Soil, 2011, 342, 149-164.	1.8	185
40	Mechanism of phosphorus-induced zinc deficiency in cotton. III. Changes in physiological availability of zinc in plants Is mail. Physiologia Plantarum, 1987, 70, 13-20.	2.6	182
41	Grain zinc, iron and protein concentrations and zinc-efficiency in wild emmer wheat under contrasting irrigation regimes. Plant and Soil, 2008, 306, 57-67.	1.8	181
42	Biofortification of wheat with iron through soil and foliar application of nitrogen and iron fertilizers. Plant and Soil, 2011, 349, 215-225.	1.8	181
43	Title is missing!. Plant and Soil, 1997, 188, 1-10.	1.8	178
44	Variation in phosphorus efficiency among 73 bread and durum wheat genotypes grown in a phosphorus-deficient calcareous soil. Plant and Soil, 2005, 269, 69-80.	1.8	171
45	Glyphosate reduced seed and leaf concentrations of calcium, manganese, magnesium, and iron in non-glyphosate resistant soybean. European Journal of Agronomy, 2009, 31, 114-119.	1.9	168
46	Zinc and Iron Concentrations in Seeds of Wild, Primitive, and Modern Wheats. Food and Nutrition Bulletin, 2000, 21, 401-403.	0.5	162
47	Phytosiderophore release in bread and durum wheat genotypes differing in zinc efficiency. Plant and Soil, 1996, 180, 183-189.	1.8	158
48	Improved nitrogen status enhances zinc and iron concentrations both in the whole grain and the endosperm fraction of wheat. Journal of Cereal Science, 2011, 53, 118-125.	1.8	155
49	Zinc Efficiency Is Correlated with Enhanced Expression and Activity of Zinc-Requiring Enzymes in Wheat. Plant Physiology, 2003, 131, 595-602.	2.3	145
50	Effects of Zinc Deficiency and Drought on Grain Yield of Field-grown Wheat Cultivars in Central Anatolia. Journal of Agronomy and Crop Science, 2007, 193, 198-206.	1.7	143
51	Mechanism of phosphorus-induced zinc deficiency in cotton. I. Zinc deficiency-enhanced uptake rate of phosphorus. Physiologia Plantarum, 1986, 68, 483-490.	2.6	139
52	Morphological and physiological differences in the response of cereals to zinc deficiency. Euphytica, 1998, 100, 349-357.	0.6	138
53	Determination of screening techniques to salinity tolerance in tomatoes and investigation of genotype responses. Plant Science, 2002, 163, 695-703.	1.7	137
54	Antioxidant defense system and cadmium uptake in barley genotypes differing in cadmium tolerance. Journal of Trace Elements in Medicine and Biology, 2006, 20, 181-189.	1.5	137

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55	Zinc biofortification of wheat through fertilizer applications in different locations of China. Field Crops Research, 2012, 125, 1-7.	2.3	137
56	Zinc for better crop production and human health. Plant and Soil, 2017, 411, 1-4.	1.8	133
57	Genetic diversity for grain nutrients in wild emmer wheat: potential for wheat improvement. Annals of Botany, 2010, 105, 1211-1220.	1.4	132
58	Foliar-Applied Glyphosate Substantially Reduced Uptake and Transport of Iron and Manganese in Sunflower (Helianthus annuusL.) Plants. Journal of Agricultural and Food Chemistry, 2006, 54, 10019-10025.	2.4	131
59	Biofortification of wheat, rice and common bean by applying foliar zinc fertilizer along with pesticides in seven countries. Plant and Soil, 2016, 403, 389-401.	1.8	125
60	Zincâ€dependent changes in ESR signals, NADPH oxidase and plasma membrane permeability in cotton roots. Physiologia Plantarum, 1988, 73, 182-186.	2.6	119
61	Short-term Responses of Soybean Roots to Aluminium. Journal of Plant Physiology, 1992, 140, 174-178.	1.6	119
62	Magnesium in crop production, food quality and human health. Plant and Soil, 2013, 368, 1-4.	1.8	118
63	Synergistic and antagonistic interactions between potassium and magnesium in higher plants. Crop Journal, 2021, 9, 249-256.	2.3	116
64	Grain concentrations of protein and mineral nutrients in a large collection of spelt wheat grown under different environments. Journal of Cereal Science, 2010, 52, 342-349.	1.8	112
65	High phosphorus supply reduced zinc concentration of wheat in native soil but not in autoclaved soil or nutrient solution. Plant and Soil, 2015, 393, 147-162.	1.8	112
66	Simultaneous Biofortification of Wheat with Zinc, Iodine, Selenium, and Iron through Foliar Treatment of a Micronutrient Cocktail in Six Countries. Journal of Agricultural and Food Chemistry, 2019, 67, 8096-8106.	2.4	110
67	Involvement of Superoxide Radical in Extracellular Ferric Reduction by Iron-Deficient Bean Roots. Plant Physiology, 1987, 85, 310-314.	2.3	109
68	Effect of zinc fertilization on cadmium toxicity in durum and bread wheat grown in zinc-deficient soil. Environmental Pollution, 2004, 131, 453-459.	3.7	107
69	Genetic variation and environmental stability of grain mineral nutrient concentrations in Triticum dicoccoides under five environments. Euphytica, 2010, 171, 39-52.	0.6	106
70	Adequate magnesium nutrition mitigates adverse effects of heat stress on maize and wheat. Plant and Soil, 2013, 368, 57-72.	1.8	105
71	Effect of seed zinc content on grain yield and zinc concentration of wheat grown in zincâ€deficient calcareous soils. Journal of Plant Nutrition, 1998, 21, 2257-2264.	0.9	103
72	PHYTIC ACID AND PHOSPHORUS CONCENTRATIONS IN SEEDS OF WHEAT CULTIVARS GROWN WITH AND WITHOUT ZINC FERTILIZATION*. Journal of Plant Nutrition, 2002, 25, 113-127.	0.9	103

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73	Genotypic variation in the response of pepper to salinity. Scientia Horticulturae, 2006, 110, 260-266.	1.7	103
74	Grain and shoot zinc accumulation in winter wheat affected by nitrogen management. Plant and Soil, 2012, 361, 153-163.	1.8	103
75	Effect of different foliar zinc application at different growth stages on seed zinc concentration and its impact on seedling vigor in rice. Soil Science and Plant Nutrition, 2013, 59, 180-188.	0.8	103
76	Dry matter production and distribution of zinc in bread and durum wheat genotypes differing in zinc efficiency. Plant and Soil, 1996, 180, 173-181.	1.8	102
77	Quantitative trait loci analysis of zinc efficiency and grain zinc concentration in wheat using whole genome average interval mapping. Plant and Soil, 2009, 314, 49-66.	1.8	101
78	Magnesium applications to growth medium and foliage affect the starch distribution, increase the grain size and improve the seed germination in wheat. Plant and Soil, 2016, 406, 145-156.	1.8	100
79	Grain yield, zinc efficiency and zinc concentration of wheat cultivars grown in a zinc-deficient calcareous soil in field and greenhouse. Field Crops Research, 1999, 63, 87-98.	2.3	97
80	Mechanism of phosphorus-induced zinc deficiency in cotton. II. Evidence for impaired shoot control of phosphorus uptake and translocation under zinc deficiency. Physiologia Plantarum, 1986, 68, 491-496.	2.6	96
81	Contributions of root uptake and remobilization to grain zinc accumulation in wheat depending on post-anthesis zinc availability and nitrogen nutrition. Plant and Soil, 2012, 361, 177-187.	1.8	92
82	QTL mapping for grain zinc and iron concentrations and zinc efficiency in a tetraploid and hexaploid wheat mapping populations. Plant and Soil, 2017, 411, 81-99.	1.8	89
83	Iodine biofortification of wheat, rice and maize through fertilizer strategy. Plant and Soil, 2017, 418, 319-335.	1.8	89
84	Glyphosate-induced impairment of plant growth and micronutrient status in glyphosate-resistant soybean (Glycine max L.). Plant and Soil, 2008, 312, 185-194.	1.8	87
85	Concentration of zinc and activity of copper/zinc-superoxide dismutase in leaves of rye and wheat cultivars differing in sensitivity to zinc deficiency. Journal of Plant Physiology, 1997, 151, 91-95.	1.6	83
86	Zincâ€efficient wild grasses enhance release of phytosiderophores under zinc deficiency. Journal of Plant Nutrition, 1996, 19, 551-563.	0.9	82
87	Uptake and retranslocation of leafâ€applied cadmium (109Cd) in diploid, tetraploid and hexaploid wheats. Journal of Experimental Botany, 2000, 51, 221-226.	2.4	82
88	Differential effects of varied potassium and magnesium nutrition on production and partitioning of photoassimilates in potato plants. Physiologia Plantarum, 2019, 166, 921-935.	2.6	82
89	Effect of zinc nutritional status on activities of superoxide radical and hydrogen peroxide scavenging enzymes in bean leaves. Plant and Soil, 1993, 155-156, 127-130.	1.8	78
90	Harvesting more grain zinc of wheat for human health. Scientific Reports, 2017, 7, 7016.	1.6	78

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91	Molecular speciation and tissue compartmentation of zinc in durum wheat grains with contrasting nutritional status. New Phytologist, 2016, 211, 1255-1265.	3.5	77
92	Title is missing!. Plant and Soil, 2002, 241, 251-257.	1.8	72
93	Beneficial Elements. , 2012, , 249-269.		70
94	Zinc (Zn) concentration of bread wheat grown under Mediterranean conditions as affected by genotype and soil/foliar Zn application. Plant and Soil, 2016, 401, 331-346.	1.8	70
95	Effects of zinc fertilization and irrigation on grain yield and zinc concentration of various cereals grown in zincâ€deficient calcareous soils. Journal of Plant Nutrition, 1998, 21, 2245-2256.	0.9	66
96	Effects of agricultural production systems and their components on protein profiles of potato tubers. Proteomics, 2007, 7, 597-604.	1.3	66
97	Decrease in nitrate uptake and increase in proton release in zinc deficient cotton, sunflower and buckwheat plants. Plant and Soil, 1990, 129, 261-268.	1.8	64
98	Plant nutrition research: Priorities to meet human needs for food in sustainable ways. , 2001, , 4-7.		63
99	Glyphosate in the rhizosphereâ€"Role of waiting times and different glyphosate binding forms in soils for phytotoxicity to non-target plants. European Journal of Agronomy, 2009, 31, 126-132.	1.9	63
100	The effect of organic and conventional management on the yield and quality of wheat grown in a long-term field trial. European Journal of Agronomy, 2013, 51, 71-80.	1.9	63
101	Simultaneous Biofortification of Rice With Zinc, Iodine, Iron and Selenium Through Foliar Treatment of a Micronutrient Cocktail in Five Countries. Frontiers in Plant Science, 2020, 11, 589835.	1.7	63
102	Zinc deficiency enhanced NAD(P)H-dependent superoxider radical production in plasma membrane vesicles isolated from roots of bean plants. Journal of Experimental Botany, 1994, 45, 45-50.	2.4	62
103	Genotypic variation in phosphorus efficiency between wheat cultivars grown under greenhouse and field conditions. Soil Science and Plant Nutrition, 2006, 52, 470-478.	0.8	61
104	Title is missing!. Plant and Soil, 2000, 219, 279-284.	1.8	60
105	Effect of Organic and Conventional Crop Rotation, Fertilization, and Crop Protection Practices on Metal Contents in Wheat (Triticum aestivum). Journal of Agricultural and Food Chemistry, 2011, 59, 4715-4724.	2.4	60
106	Genotypic variation in common bean in response to zinc deficiency in calcareous soil. Plant and Soil, 2004, 259, 71-83.	1.8	59
107	Metabolite and mineral analyses of cotton nearâ€isogenic lines introgressed with QTLs for productivity and droughtâ€related traits. Physiologia Plantarum, 2011, 141, 265-275.	2.6	59
108	Effect of withdrawal of phosphorus on nitrate assimilation and PEP carboxylase activity in tomato. Plant and Soil, 1993, 154, 111-117.	1.8	57

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109	Phytosiderophore release does not relate well with zinc efficiency in different bread wheat genotypes. Journal of Plant Nutrition, 1996, 19, 1569-1580.	0.9	57
110	EFFECTS OF ZINC FERTILIZATION ON GRAIN YIELD AND SHOOT CONCENTRATIONS OF ZINC, BORON, AND PHOSPHORUS OF 25 WHEAT CULTIVARS GROWN ON A ZINC-DEFICIENT AND BORON-TOXIC SOIL. Journal of Plant Nutrition, 2001, 24, 1817-1829.	0.9	57
111	Growth enhancement by silicon in cucumber (Cucumis sativus) plants depends on imbalance in phosphorus and zinc supply. Plant and Soil, 1990, 124, 211-219.	1.8	56
112	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.	1.7	56
113	Soil fertility management effects on maize productivity and grain zinc content in smallholder farming systems of Zimbabwe. Plant and Soil, 2012, 361, 57-69.	1.8	55
114	Triticum durum Metallothionein. Journal of Biological Chemistry, 2005, 280, 13701-13711.	1.6	54
115	Magnesium deficiency decreases biomass water-use efficiency and increases leaf water-use efficiency and oxidative stress in barley plants. Plant and Soil, 2016, 406, 409-423.	1.8	54
116	Zinc priming promotes seed germination and seedling vigor of rice. Journal of Plant Nutrition and Soil Science, 2012, 175, 482-488.	1.1	52
117	Expression and Cellular Localization of ZIP1 Transporter Under Zinc Deficiency in Wild Emmer Wheat. Plant Molecular Biology Reporter, 2011, 29, 582-596.	1.0	50
118	X-ray fluorescence microscopy of zinc localization in wheat grains biofortified through foliar zinc applications at different growth stages under field conditions. Plant and Soil, 2015, 392, 357-370.	1.8	50
119	Differences in Zinc Efficiency among and within Diploid, Tetraploid and Hexaploid Wheats. Annals of Botany, 1999, 84, 163-171.	1.4	48
120	Association of High Light and Zinc Deficiency in Cold-induced Leaf Chlorosis in Grapefruit and Mandarin Trees. Journal of Plant Physiology, 1995, 146, 355-360.	1.6	47
121	Phytosiderophore release in Aegilops tauschii and Triticum species under zinc and iron deficiencies. Journal of Experimental Botany, 2001, 52, 1093-1099.	2.4	46
122	Zinc fortification of whole rice grain through parboiling process. Food Chemistry, 2010, 120, 858-863.	4.2	46
123	Effect of nitrogen on root release of phytosiderophores and root uptake of Fe(III)â€phytosiderophore in Feâ€deficient wheat plants. Physiologia Plantarum, 2011, 142, 287-296.	2.6	46
124	Glyphosate inhibition of ferric reductase activity in iron deficient sunflower roots. New Phytologist, 2008, 177, 899-906.	3.5	45
125	Zinc for the improvement of crop production and human health. Plant and Soil, 2012, 361, 1-2.	1.8	45
126	Effect of Aluminium on net Efflux of Nitrate and Potassium from Root Tips of Soybean (Glycine max L.). Journal of Plant Physiology, 1991, 138, 400-403.	1.6	43

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127	Potassium for better crop production and quality. Plant and Soil, 2010, 335, 1-2.	1.8	43
128	Plant nutrition and soil fertility: synergies for acquiring global green growth and sustainable development. Plant and Soil, 2019, 434, 1-6.	1.8	43
129	Shoot zinc (Zn) concentration varies widely within<i>Brassica oleracea</i>L. and is affected by soil Zn and phosphorus (P) levels. Journal of Horticultural Science and Biotechnology, 2010, 85, 375-380.	0.9	42
130	Studies on differential response of wheat cultivars to boron toxicity. Euphytica, 1998, 100, 123-129.	0.6	41
131	Title is missing!. Plant and Soil, 1999, 215, 203-209.	1.8	41
132	Phytosiderophore release by wheat genotypes differing in zinc deficiency tolerance grown with Zn-free nutrient solution as affected by salinity. Journal of Plant Physiology, 2013, 170, 41-46.	1.6	41
133	Effect of Zinc Humate on Growth of Soybean and Wheat in Zincâ€Deficient Calcareous Soil. Communications in Soil Science and Plant Analysis, 2006, 37, 2769-2778.	0.6	40
134	Natural Variation And Identification Of Microelements Content In Seeds Of Einkorn Wheat (Triticum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.2	40
135	Root Uptake of Lipophilic Zincâˆ'Rhamnolipid Complexes. Journal of Agricultural and Food Chemistry, 2008, 56, 2112-2117.	2.4	40
136	Role of rye chromosomes in improvement of zinc efficiency in wheat and triticale. Plant and Soil, 1997, 196, 249-253.	1.8	39
137	Multi-elemental speciation analysis of barley genotypes differing in tolerance to cadmium toxicity using SEC-ICP-MS and ESI-TOF-MS. Journal of Analytical Atomic Spectrometry, 2006, 21, 996.	1.6	38
138	Historical changes in grain yield and quality of spring wheat varieties cultivated in Siberia from 1900 to 2010. Canadian Journal of Plant Science, 2013, 93, 425-433.	0.3	38
139	Nickel-enriched seed and externally supplied nickel improve growth and alleviate foliar urea damage in soybean. Plant and Soil, 2013, 363, 61-75.	1.8	38
140	Uptake of zinc by rye, bread wheat and durum wheat cultivars differing in zinc efficiency. Plant and Soil, 1999, 209, 245-252.	1.8	37
141	Leaf-applied sodium chloride promotes cadmium accumulation in durum wheat grain. Plant and Soil, 2007, 290, 323-331.	1.8	37
142	Zinc Deficiency in Wheat in Turkey. , 2008, , 181-200.		37
143	Light-mediated release of phytosiderophores in wheat and barley under iron or zinc deficiency. Plant and Soil, 1998, 202, 309-315.	1.8	36
144	The influence of organic and conventional fertilisation and crop protection practices, preceding crop, harvest year and weather conditions on yield and quality of potato (Solanum tuberosum) in a long-term management trial. European Journal of Agronomy, 2013, 49, 83-92.	1.9	36

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145	The effect of agronomic factors on crop health and performance of winter wheat varieties bred for the conventional and the low input farming sector. Field Crops Research, 2020, 254, 107822.	2.3	36
146	Micronutrient homeostasis in plants for more sustainable agriculture and healthier human nutrition. Journal of Experimental Botany, 2022, 73, 1789-1799.	2.4	35
147	TOLERANCE OF 65 DURUM WHEAT GENOTYPES TO ZINC DEFICIENCY IN A CALCAREOUS SOIL. Journal of Plant Nutrition, 2001, 24, 1831-1847.	0.9	34
148	Effect of Zinc Deficiency on Proton Fluxes in Plasma Membrane-Enriched Vesicles Isolated from Bean Roots. Journal of Experimental Botany, 1993, 44, 623-630.	2.4	33
149	Agronomic fortification of rice and wheat grains with zinc for nutritional security. Current Science, 2015, 109, 1171.	0.4	33
150	Quantitative trait loci associated with soybean seed weight and composition under different phosphorus levels. Journal of Integrative Plant Biology, 2018, 60, 232-241.	4.1	32
151	Effects of Agronomic Management and Climate on Leaf Phenolic Profiles, Disease Severity, and Grain Yield in Organic and Conventional Wheat Production Systems. Journal of Agricultural and Food Chemistry, 2018, 66, 10369-10379.	2.4	32
152	Zinc Absorption From Agronomically Biofortified Wheat Is Similar to Post-Harvest Fortified Wheat and Is a Substantial Source of Bioavailable Zinc in Humans. Journal of Nutrition, 2019, 149, 840-846.	1.3	32
153	Effect of zinc nutritional status on activities of superoxide radical and hydrogen peroxide scavenging enzymes in bean leaves. , 1993, , 133-136.		31
154	Screening for zinc efficiency among wheat relatives and their utilisation for alien gene transfer. Euphytica, 1998, 100, 281-286.	0.6	30
155	Phenotypic correlations, GÂÃ—ÂE interactions and broad sense heritability analysis of grain and flour quality characteristics in high latitude spring bread wheats from Kazakhstan and Siberia. Euphytica, 2010, 171, 23-38.	0.6	30
156	Magnesium Deficiency Reduced the Yield and Seed Germination in Wax Gourd by Affecting the Carbohydrate Translocation. Frontiers in Plant Science, 2020, 11, 797.	1.7	30
157	Optimized potassium nutrition improves plant-water-relations of barley under PEG-induced osmotic stress. Plant and Soil, 2018, 430, 23-35.	1.8	29
158	Fate and Bioaccessibility of Iodine in Food Prepared from Agronomically Biofortified Wheat and Rice and Impact of Cofertilization with Zinc and Selenium. Journal of Agricultural and Food Chemistry, 2020, 68, 1525-1535.	2.4	29
159	Effect of iron and zinc deficiency on release of phytosiderophores in barley cultivars differing in zinc efficiency. Journal of Plant Nutrition, 2000, 23, 1645-1656.	0.9	28
160	Differences in shoot growth and zinc concentration of 164 bread wheat genotypes in a zincâ€deficient calcareous soil. Journal of Plant Nutrition, 2000, 23, 1251-1265.	0.9	28
161	Effect of Crop Protection and Fertilization Regimes Used in Organic and Conventional Production Systems on Feed Composition and Physiological Parameters in Rats. Journal of Agricultural and Food Chemistry, 2013, 61, 1017-1029.	2.4	28
162	Reduced root mycorrhizal colonization as affected by phosphorus fertilization is responsible for high cadmium accumulation in wheat. Plant and Soil, 2021, 468, 19-35.	1.8	28

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163	Responsible plant nutrition: A new paradigm to support food system transformation. Global Food Security, 2022, 33, 100636.	4.0	28
164	Turfgrass species response exposed to increasing rates of glyphosate application. European Journal of Agronomy, 2009, 31, 120-125.	1.9	27
165	Differences in Shoot Boron Concentrations, Leaf Symptoms, and Yield of Turkish Barley Cultivars Grown on Boronâ€Toxic Soil in Field. Journal of Plant Nutrition, 2002, 26, 1735-1747.	0.9	26
166	Combined zinc and nitrogen fertilization in different bread wheat genotypes grown under mediterranean conditions. Cereal Research Communications, 2017, 45, 154-165.	0.8	26
167	Zincâ€biofortified seeds improved seedling growth under zinc deficiency and drought stress in durum wheat. Journal of Plant Nutrition and Soil Science, 2018, 181, 388-395.	1.1	26
168	Growth enhancement by silicon in cucumber (Cucumis sativus) plants depends on imbalance in phosphorus and zinc supply. , 1990, , 241-249.		26
169	Effect of magnesium fertilization on seed yield, seed quality, carbon assimilation and nutrient uptake of rapeseed plants. Field Crops Research, 2021, 264, 108082.	2.3	25
170	Plant nutrition research: Priorities to meet human needs for food in sustainable ways. , 2002, , 3-24.		24
171	Effect of zincâ€biofortified seeds on grain yield of wheat, rice, and common bean grown in six countries. Journal of Plant Nutrition and Soil Science, 2019, 182, 791-804.	1.1	24
172	Effects of seed nickel reserves or externally supplied nickel on the growth, nitrogen metabolites and nitrogen use efficiency of urea- or nitrate-fed soybean. Plant and Soil, 2014, 376, 261-276.	1.8	23
173	Differences in uptake and translocation of foliarâ€applied Zn in maize and wheat. Plant and Soil, 2021, 462, 235-244.	1.8	21
174	Magnesium deficiency enhances resistance to paraquat toxicity in bean leaves. Plant, Cell and Environment, 1992, 15, 955-960.	2.8	20
175	Activities of Ironâ€Containing Enzymes in Leaves of Two Tomato Genotypes Differing in Their Resistance to Fe Chlorosis. Journal of Plant Nutrition, 2003, 26, 1997-2007.	0.9	20
176	Differential expression of wheat transcriptomes in response to varying cadmium concentrations. Biologia Plantarum, 2008, 52, 703-708.	1.9	20
177	Foliar Nickel Application Alleviates Detrimental Effects of Glyphosate Drift on Yield and Seed Quality of Wheat. Journal of Agricultural and Food Chemistry, 2013, 61, 8364-8372.	2.4	20
178	Effect of zinc nutrition on salinity-induced oxidative damages in wheat genotypes differing in zinc deficiency tolerance. Acta Physiologiae Plantarum, 2013, 35, 881-889.	1.0	20
179	Variation in zinc efficiency among and within Aegilops species. Journal of Plant Nutrition and Soil Science, 1999, 162, 257-262.	1.1	19
180	An effective strategy to improve grain zinc concentration of winter wheat, Aphids prevention and farmersâ€™ income. Field Crops Research, 2015, 184, 74-79.	2.3	19

#	Article	IF	Citations
181	Planting seeds for the future of food. Journal of the Science of Food and Agriculture, 2016, 96, 1409-1414.	1.7	18
182	Evaluating the effect of agronomic management practices on the performance of differing spelt (Triticum spelta) cultivars in contrasting environments. Field Crops Research, 2020, 255, 107869.	2.3	18
183	Biofortification of Silage Maize with Zinc, Iron and Selenium as Affected by Nitrogen Fertilization. Plants, 2021, 10, 391.	1.6	18
184	Title is missing!. Plant and Soil, 2002, 241, 97-104.	1.8	17
185	Differences in grain zinc are not correlated with root uptake and grain translocation of zinc in wild emmer and durum wheat genotypes. Plant and Soil, 2017, 411, 69-79.	1.8	17
186	Reactive Oxygen Species Production in Wheat Roots Is Not Linked with Changes in H⁺Fluxes During Acidic and Aluminium Stresses. Plant Signaling and Behavior, 2006, 1, 70-75.	1.2	16
187	Inclusion of urea in a <scp>⁵⁹FeEDTA</scp> solution stimulated leaf penetration and translocation of <scp>⁵⁹Fe</scp> within wheat plants. Physiologia Plantarum, 2014, 151, 348-357.	2.6	16
188	Title is missing!. ScienceAsia, 2011, 37, 296.	0.2	16
189	Zinc crops 2007: improving crop production and human health. Plant and Soil, 2008, 306, 1-2.	1.8	15
190	Potential of advanced breeding lines of breadâ€making wheat to accumulate grain minerals (Ca, Fe, Mg) Tj ETQq0 0 0 rgBT /Overlock 10 2019, 205, 341-352.	1.7	15
191	Effect of seed zinc content on grain yield and zinc concentration of wheat grown in zinc-deficient calcareous soils. , 1997, , 283-284.		15
192	Accelerated Hydrolysis Method To Estimate the Amino Acid Content of Wheat (<i>Triticum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 T 59, 2958-2965.	2.4	14
193	Variation in phosphorus and sulfur content shapes the genetic architecture and phenotypic associations within the wheat grain ionome. Plant Journal, 2020, 101, 555-572.	2.8	14
194	Boron deficiency-induced impairments of cellular functions in plants. , 1997, , 71-83.		13
195	Bioavailability of Trace Elements in Beans and Zinc-Biofortified Wheat in Pigs. Biological Trace Element Research, 2012, 150, 147-153.	1.9	12
196	Effects of Foliar Application of Zinc on Grain Yield and Zinc Concentration of Rice in Farmersâ€™ Fields. Chiang Mai University Journal of Natural Sciences, 2018, 17, .	0.1	12
197	Inheritance of tolerance to leaf iron deficiency chlorosis in tomato. Euphytica, 2004, 139, 51-57.	0.6	11
198	Effect of withdrawal of phosphorus on nitrate assimilation and PEP carboxylase activity in tomato. , 1993, , 555-561.		11

#	Article	IF	Citations
199	Biofortification of Diverse Basmati Rice Cultivars with Iodine, Selenium, and Zinc by Individual and Cocktail Spray of Micronutrients. Agronomy, 2022, 12, 49.	1.3	11
200	Role of rye chromosomes in improvement of zinc efficiency in wheat and triticale. , 1997, , 237-241.		10
201	Effects of zinc fertilization and irrigation on grain yield and zinc concentration of various cereals grown in zinc-deficient calcareous soils. , 1997, , 657-658.		10
202	Wheat grain zinc concentration as affected by soil nitrogen and phosphorus availability and root mycorrhizal colonization. European Journal of Agronomy, 2022, 134, 126469.	1.9	10
203	Optimization of Potassium Supply under Osmotic Stress Mitigates Oxidative Damage in Barley. Plants, 2022, 11, 55.	1.6	10
204	The effect of rye genetic information on zinc, copper, manganese and iron concentration of wheat shoots in zinc deficient soil. Cereal Research Communications, 1997, 25, 177-184.	0.8	9
205	Genetic analysis of the effect of zinc deficiency on Arabidopsis growth and mineral concentrations. Plant and Soil, 2012, 361, 227-239.	1.8	9
206	Magnesium in Crop Production, Food Quality and Human Health. Crop and Pasture Science, 2015, 66, i.	0.7	9
207	Shoot and root growth of rice seedlings as affected by soil and foliar zinc applications. Journal of Plant Nutrition, 2020, 43, 1259-1267.	0.9	9
208	Minor cereals exhibit superior antioxidant effects on human epithelial cells compared to common wheat cultivars. Journal of Cereal Science, 2019, 85, 143-152.	1.8	8
209	Comparison and modelling of extraction methods to assess agronomic effectiveness of fertilizer zinc. Journal of Plant Nutrition and Soil Science, 2020, 183, 248-259.	1.1	8
210	Effects of roller and hammer milling on the yield and physicochemical properties of fibre-rich fractions from biofortified and non-biofortified hull-less barley. Journal of Cereal Science, 2020, 92, 102907.	1.8	8
211	Feed Composition Differences Resulting from Organic and Conventional Farming Practices Affect Physiological Parameters in Wistar Ratsâ€"Results from a Factorial, Two-Generation Dietary Intervention Trial. Nutrients, 2021, 13, 377.	1.7	8
212	Screening for zinc efficiency among wheat relatives and their utilisation for alien gene transfer. Developments in Plant Breeding, 1997, , 347-352.	0.2	8
213	Magnesium in crop production and food quality. Plant and Soil, 2020, 457, 1-3.	1.8	7
214	Evaluating the effect of nitrogen fertilizer rate and source on the performance of openâ€pollinated rye (<i>Secale cereale</i> L.) cultivars in contrasting European environments. Crop Science, 2022, 62, 928-946.	0.8	7
215	Influence of Gyttja on Shoot Growth and Shoot Concentrations of Zinc and Boron of Wheat Cultivars Grown on Zincâ€Deficient and Boronâ€Toxic Soil. Journal of Plant Nutrition, 2003, 26, 869-881.	0.9	6
216	Special topics in potassium and magnesium research. Physiologia Plantarum, 2008, 133, 623-623.	2.6	6

#	Article	IF	Citations
217	Comparison of short and long milling flows on yield and physicochemical properties of brans from biofortified and nonbiofortified hullâ€less oats. Cereal Chemistry, 2020, 97, 859-867.	1.1	5
218	Micronutrient availability in soils of Northwest Bosnia and Herzegovina in relation to silage maize production. Acta Agriculturae Scandinavica - Section B Soil and Plant Science, 2018, 68, 301-310.	0.3	4
219	Nano- and Pheroid technologies for development of foliar iron fertilizers and iron biofortification of soybean grown in South Africa. Chemical and Biological Technologies in Agriculture, 2018, 5, .	1.9	4
220	Physical mapping of rye genes determining micronutritional efficiency in wheat. , 1997, , 287-288.		4
221	Feeding Zinc-Biofortified Wheat Improves Performance, Nutrient Digestibility, and Concentrations of Blood and Tissue Minerals in Quails. Biological Trace Element Research, 2022, 200, 3774-3784.	1.9	3
222	Potassium-magnesium imbalance causes detrimental effects on growth, starch allocation and Rubisco activity in sugarcane plants. Plant and Soil, 2022, 472, 225-238.	1.8	3
223	Comparison of Winter Wheat Genotypes Differing in Zinc Efficiency and Origin: The Zinc Uptake and Enzyme Activity. Communications in Soil Science and Plant Analysis, 2013, 44, 2875-2883.	0.6	2
224	An investigation on minerals, arabinoxylans and other fibres of biofortified hull-less barley fractions obtained by two milling systems. Journal of Cereal Science, 2020, 96, 103098.	1.8	2
225	Localisation of Genes for Zinc and Manganese Efficiency in Wheat and Rye. , 1999, , 417-424.		2
226	MINERAL COMPOSITION OF WILD RELATIVES AND INTROGRESSIVE FORMS IN WHEAT SELECTION. Vavilovskii Zhurnal Genetiki I Selektsii, 2018, 22, 88-96.	0.4	2
227	Plant mineral nutrition for nutrient and food security. Physiologia Plantarum, 2014, 151, 199-199.	2.6	1
228	PROTOCOL: Agronomic biofortification strategies to increase grain zinc concentrations for improved nutritional quality of wheat, maize and rice: a systematic review. Campbell Systematic Reviews, 2017, 13, 1-16.	1.2	0
229	Possible role of phytosiderphore release and zinc uptake by roots in zinc efficiency of various cereal genotypes. , 2000, , 153-159.		0
230	GRAIN MINERAL COMPOSITION OF INTROGRESSIVE WHEAT-WILD FORMS IN BREEDING OF SPRING WHEAT ON THE NUTRITIONAL PROPERTIES. The Bulletin, 2019, 377, 27-38.	0.0	0
231	Scientific impact, direction and highlights of Plant and Soil in the 30Âyears since Professor Hans Lambers became Editor in Chief. Plant and Soil, 0, , .	1.8	0