Peter M Kopittke

List of Publications by Year
in descending order

199 papers	9,309 citations	43973 48 h-index	51492 86 g-index
206 all docs	206 docs citations	206 times ranked	8939 citing authors

#	Article	IF	Citations
1	Nanotechnology: A New Opportunity in Plant Sciences. Trends in Plant Science, 2016, 21, 699-712.	4.3	690
2	Soil and the intensification of agriculture for global food security. Environment International, 2019, 132, 105078.	4.8	617
3	Cadmium contamination in agricultural soils of China and the impact on food safety. Environmental Pollution, 2019, 249, 1038-1048.	3.7	395
4	Evaluation of extractants for estimation of the phytoavailable trace metals in soils. Environmental Pollution, 2007, 145, 121-130.	3.7	364
5	Fate of ZnO Nanoparticles in Soils and Cowpea (Vigna unguiculata). Environmental Science & Technology, 2013, 47, 13822-13830.	4.6	271
6	Ironâ€“Manganese (Oxyhydro)oxides, Rather than Oxidation of Sulfides, Determine Mobilization of Cd during Soil Drainage in Paddy Soil Systems. Environmental Science & Technology, 2019, 53, 2500-2508.	4.6	236
7	Identification of the Primary Lesion of Toxic Aluminum in Plant Roots Â. Plant Physiology, 2015, 167, 1402-1411.	2.3	194
8	Trace metal phytotoxicity in solution culture: a review. Journal of Experimental Botany, 2010, 61, 945-954.	2.4	166
9	Toxic effects of Pb2+ on growth of cowpea (Vigna unguiculata). Environmental Pollution, 2007, 150, 280-287.	3.7	147
10	Synchrotron-Based X-Ray Fluorescence Microscopy as a Technique for Imaging of Elements in Plants. Plant Physiology, 2018, 178, 507-523.	2.3	134
11	In Situ Distribution and Speciation of Toxic Copper, Nickel, and Zinc in Hydrated Roots of Cowpea Â Â. Plant Physiology, 2011, 156, 663-673.	2.3	130
12	Effect of Cu Toxicity on Growth of Cowpea (Vigna unguiculata). Plant and Soil, 2006, 279, 287-296.	1.8	122
13	Nitrogenâ€rich microbial products provide new organoâ€mineral associations for the stabilization of soil organic matter. Global Change Biology, 2018, 24, 1762-1770.	4.2	113
14	Toxicities of soluble Al, Cu, and La include ruptures to rhizodermal and root cortical cells of cowpea. Plant and Soil, 2008, 303, 217-227.	1.8	109
15	Using Synchrotron-Based Approaches To Examine the Foliar Application of ZnSO₄ and ZnO Nanoparticles for Field-Grown Winter Wheat. Journal of Agricultural and Food Chemistry, 2018, 66, 2572-2579.	2.4	109
16	A Review of the Use of the Basic Cation Saturation Ratio and the â€œIdealâ€• Soil. Soil Science Society of America Journal, 2007, 71, 259-265.	1.2	105
17	Xâ€ray elemental mapping techniques for elucidating the ecophysiology of hyperaccumulator plants. New Phytologist, 2018, 218, 432-452.	3.5	104
18	Soil organic matter is stabilized by organo-mineral associations through two key processes: The role of the carbon to nitrogen ratio. Geoderma, 2020, 357, 113974.	2.3	104

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19	Global changes in soil stocks of carbon, nitrogen, phosphorus, and sulphur as influenced by longâ€term agricultural production. Global Change Biology, 2017, 23, 2509-2519.	4.2	103
20	Nanomaterials as fertilizers for improving plant mineral nutrition and environmental outcomes. Environmental Science: Nano, 2019, 6, 3513-3524.	2.2	99
21	Silver sulfide nanoparticles (Ag₂S-NPs) are taken up by plants and are phytotoxic. Nanotoxicology, 2015, 9, 1041-1049.	1.6	96
22	Foliar application of zinc sulphate and zinc EDTA to wheat leaves: differences in mobility, distribution, and speciation. Journal of Experimental Botany, 2018, 69, 4469-4481.	2.4	95
23	Silver Nanoparticles Entering Soils via the Wastewaterâ€“Sludgeâ€“Soil Pathway Pose Low Risk to Plants but Elevated Cl Concentrations Increase Ag Bioavailability. Environmental Science & Technology, 2016, 50, 8274-8281.	4.6	92
24	Fast X-Ray Fluorescence Microtomography of Hydrated Biological Samples. PLoS ONE, 2011, 6, e20626.	1.1	89
25	Plasma Membrane Surface Potential: Dual Effects upon Ion Uptake and Toxicity. Plant Physiology, 2011, 155, 808-820.	2.3	85
26	Characterizing the uptake, accumulation and toxicity of silver sulfide nanoparticles in plants. Environmental Science: Nano, 2017, 4, 448-460.	2.2	85
27	The effect of salinity on plant-available water. Plant and Soil, 2017, 418, 477-491.	1.8	83
28	In vivo formation of natural HgSe nanoparticles in the liver and brain of pilot whales. Scientific Reports, 2016, 6, 34361.	1.6	82
29	Laterally resolved speciation of arsenic in roots of wheat and rice using fluorescenceâ€<scp>XANES</scp> imaging. New Phytologist, 2014, 201, 1251-1262.	3.5	81
30	Absorption of foliar-applied Zn in sunflower (<i>Helianthus annuus</i>): importance of the cuticle, stomata and trichomes. Annals of Botany, 2019, 123, 57-68.	1.4	81
31	Biochar affects carbon composition and stability in soil: a combined spectroscopy-microscopy study. Scientific Reports, 2016, 6, 25127.	1.6	80
32	Absorption of foliar-applied Zn fertilizers by trichomes in soybean and tomato. Journal of Experimental Botany, 2018, 69, 2717-2729.	2.4	80
33	Cadmium accumulation is enhanced by ammonium compared to nitrate in two hyperaccumulators, without affecting speciation. Journal of Experimental Botany, 2016, 67, 5041-5050.	2.4	78
34	Prediction of Pb speciation in concentrated and dilute nutrient solutions. Environmental Pollution, 2008, 153, 548-554.	3.7	69
35	Kinetics and nature of aluminium rhizotoxic effects: a review. Journal of Experimental Botany, 2016, 67, 4451-4467.	2.4	65
36	Localization and Chemical Speciation of Pb in Roots of Signal Grass (<i>Brachiaria decumbens</i>) and Rhodes Grass (<i>Chloris gayana</i>). Environmental Science & Technology, 2008, 42, 4595-4599.	4.6	63

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37	Synchrotron-based Techniques Shed Light on Mechanisms of Plant Sensitivity and Tolerance to High Manganese in the Root Environment. Plant Physiology, 2015, 169, pp.00726.2015.	2.3	61
38	Microbial energy and matter transformation in agricultural soils. Soil Biology and Biochemistry, 2017, 111, 176-192.	4.2	61
39	Microbial sulfate reduction decreases arsenic mobilization in flooded paddy soils with high potential for microbial Fe reduction. Environmental Pollution, 2019, 251, 952-960.	3.7	61
40	The Voltaic Effect as a Novel Mechanism Controlling the Remobilization of Cadmium in Paddy Soils during Drainage. Environmental Science & Technology, 2021, 55, 1750-1758.	4.6	59
41	Manganese distribution and speciation help to explain the effects of silicate and phosphate on manganese toxicity in four crop species. New Phytologist, 2018, 217, 1146-1160.	3.5	58
42	Alleviation of Cu and Pb Rhizotoxicities in Cowpea (<i>Vigna unguiculata</i>) as Related to Ion Activities at Root-Cell Plasma Membrane Surface. Environmental Science & Technology, 2011, 45, 4966-4973.	4.6	57
43	Bioavailability and movement of hydroxyapatite nanoparticles (HA-NPs) applied as a phosphorus fertiliser in soils. Environmental Science: Nano, 2018, 5, 2888-2898.	2.2	55
44	The within-field spatial variation in rice grain Cd concentration is determined by soil redox status and pH during grain filling. Environmental Pollution, 2020, 261, 114151.	3.7	55
45	Alleviation of Al Toxicity by Si Is Associated with the Formation of Alâ€“Si Complexes in Root Tissues of Sorghum. Frontiers in Plant Science, 2017, 8, 2189.	1.7	54
46	Toxic effects of Cu2+ on growth, nutrition, root morphology, and distribution of Cu in roots of Sabi grass. Science of the Total Environment, 2009, 407, 4616-4621.	3.9	52
47	An empirical model for prediction of wheat yield, using time-integrated Landsat NDVI. International Journal of Applied Earth Observation and Geoinformation, 2018, 72, 99-108.	1.4	52
48	Ensuring planetary survival: the centrality of organic carbon in balancing the multifunctional nature of soils. Critical Reviews in Environmental Science and Technology, 2022, 52, 4308-4324.	6.6	52
49	Metal-induced cell rupture in elongating roots is associated with metal ion binding strengths. Plant and Soil, 2009, 322, 303-315.	1.8	51
50	Tailoring hydroxyapatite nanoparticles to increase their efficiency as phosphorus fertilisers in soils. Geoderma, 2018, 323, 116-125.	2.3	50
51	Soil Organic Carbon Stabilization: Mapping Carbon Speciation from Intact Microaggregates. Environmental Science & Technology, 2018, 52, 12275-12284.	4.6	50
52	Toxic effects of Ni2+ on growth of cowpea (Vigna unguiculata). Plant and Soil, 2007, 292, 283-289.	1.8	48
53	Engineering Crops without Genome Integration Using Nanotechnology. Trends in Plant Science, 2019, 24, 574-577.	4.3	48
54	Toxic effects of low concentrations of Cu on nodulation of cowpea (Vigna unguiculata). Environmental Pollution, 2007, 145, 309-315.	3.7	47

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55	Toxic effects of Pb2+ on the growth and mineral nutrition of signal grass (Brachiaria decumbens) and Rhodes grass (Chloris gayana). Plant and Soil, 2007, 300, 127-136.	1.8	47
56	Synchrotronâ€based Xâ€Ray Approaches for Examining Toxic Trace Metal(loid)s in Soilâ€"Plant Systems. Journal of Environmental Quality, 2017, 46, 1175-1189.	1.0	46
57	Soil carbon and nitrogen dynamics in a Vertisol following 50â€¯years of no-tillage, crop stubble retention and nitrogen fertilization. Geoderma, 2020, 358, 113996.	2.3	46
58	Chemical Speciation and Distribution of Cadmium in Rice Grain and Implications for Bioavailability to Humans. Environmental Science & Technology, 2020, 54, 12072-12080.	4.6	46
59	Theoretical and experimental assessment of nutrient solution composition in short-term studies of aluminium rhizotoxicity. Plant and Soil, 2016, 406, 311-326.	1.8	45
60	Development of ZnO Nanoparticles as an Efficient Zn Fertilizer: Using Synchrotron-Based Techniques and Laser Ablation to Examine Elemental Distribution in Wheat Grain. Journal of Agricultural and Food Chemistry, 2020, 68, 5068-5075.	2.4	45
61	Soil organic carbon is significantly associated with the pore geometry, microbial diversity and enzyme activity of the macro-aggregates under different land uses. Science of the Total Environment, 2021, 778, 146286.	3.9	45
62	Effect of ionic strength and clay mineralogy on Na-Ca exchange and the SAR-ESP relationship. European Journal of Soil Science, 2006, 57, 626-633.	1.8	44
63	Quantifying the economic impact of soil constraints on Australian agriculture: A caseâ€study of wheat. Land Degradation and Development, 2018, 29, 3866-3875.	1.8	44
64	Examination of the Distribution of Arsenic in Hydrated and Fresh Cowpea Roots Using Two- and Three-Dimensional Techniques Â Â. Plant Physiology, 2012, 159, 1149-1158.	2.3	43
65	Synchrotron-based X-ray absorption near-edge spectroscopy imaging for laterally resolved speciation of selenium in fresh roots and leaves of wheat and rice. Journal of Experimental Botany, 2015, 66, 4795-4806.	2.4	41
66	Role of phytohormones in aluminium rhizotoxicity. Plant, Cell and Environment, 2016, 39, 2319-2328.	2.8	41
67	Methods to Visualize Elements in Plants. Plant Physiology, 2020, 182, 1869-1882.	2.3	40
68	Interactions between Ca, Mg, Na and K: alleviation of toxicity in saline solutions. Plant and Soil, 2012, 352, 353-362.	1.8	39
69	Risk of Silver Transfer from Soil to the Food Chain Is Low after Long-Term (20 Years) Field Applications of Sewage Sludge. Environmental Science & Technology, 2018, 52, 4901-4909.	4.6	39
70	Quantitative determination of metal and metalloid spatial distribution in hydrated and fresh roots of cowpea using synchrotron-based X-ray fluorescence microscopy. Science of the Total Environment, 2013, 463-464, 131-139.	3.9	38
71	Effects of graphene oxide and graphite on soil bacterial and fungal diversity. Science of the Total Environment, 2019, 671, 140-148.	3.9	38
72	Plant-Available Phosphorus in Highly Concentrated Fertilizer Bands: Effects of Soil Type, Phosphorus Form, and Coapplied Potassium. Journal of Agricultural and Food Chemistry, 2020, 68, 7571-7580.	2.4	37

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73	Effects of changes in leaf properties mediated by methyl jasmonate (MeJA) on foliar absorption of Zn, Mn and Fe. Annals of Botany, 2017, 120, 405-415.	1.4	36
74	Effects of methyl jasmonate on plant growth and leaf properties. Journal of Plant Nutrition and Soil Science, 2018, 181, 409-418.	1.1	36
75	Increased arsenic mobilization in the rice rhizosphere is mediated by iron-reducing bacteria. Environmental Pollution, 2020, 263, 114561.	3.7	35
76	Probing the nature of soil organic matter. Critical Reviews in Environmental Science and Technology, 2022, 52, 4072-4093.	6.6	35
77	In situ analysis of foliar zinc absorption and short-distance movement in fresh and hydrated leaves of tomato and citrus using synchrotron-based X-ray fluorescence microscopy. Annals of Botany, 2015, 115, 41-53.	1.4	34
78	Toxicity of metals to roots of cowpea in relation to their binding strength. Environmental Toxicology and Chemistry, 2011, 30, 1827-1833.	2.2	32
79	Assessing radiation dose limits for X-ray fluorescence microscopy analysis of plant specimens. Annals of Botany, 2020, 125, 599-610.	1.4	32
80	Fresh Water Leaching of Alkaline Bauxite Residue after Sea Water Neutralization. Journal of Environmental Quality, 2009, 38, 2050-2057.	1.0	31
81	Optimising the foliar uptake of zinc oxide nanoparticles: Do leaf surface properties and particle coating affect absorption?. Physiologia Plantarum, 2020, 170, 384-397.	2.6	31
82	A web-accessible computer program for calculating electrical potentials and ion activities at cell-membrane surfaces. Plant and Soil, 2014, 375, 35-46.	1.8	30
83	Development of an electrostatic model predicting copper toxicity to plants. Journal of Experimental Botany, 2012, 63, 659-668.	2.4	29
84	Effect of pH on Na induced Ca deficiency. Plant and Soil, 2005, 269, 119-129.	1.8	28
85	Separating multiple, shortâ€term, deleterious effects of saline solutions on the growth of cowpea seedlings. New Phytologist, 2011, 189, 1110-1121.	3.5	28
86	Stable isotope fractionation of cadmium in the soil-rice-human continuum. Science of the Total Environment, 2021, 761, 143262.	3.9	28
87	Toxicity of Cd to signal grass (Brachiaria decumbens Stapf.) and Rhodes grass (Chloris gayana Kunth.). Plant and Soil, 2010, 330, 515-523.	1.8	27
88	The rhizotoxicity of metal cations is related to their strength of binding to hard ligands. Environmental Toxicology and Chemistry, 2014, 33, 268-277.	2.2	27
89	Impact of land use change and soil type on total phosphorus and its fractions in soil aggregates. Land Degradation and Development, 2020, 31, 828-841.	1.8	27
90	Widespread Occurrence of the Highly Toxic Dimethylated Monothioarsenate (DMMTA) in Rice Globally. Environmental Science & Technology, 2022, 56, 3575-3586.	4.6	27

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91	Aluminum Complexation with Malate within the Root Apoplast Differs between Aluminum Resistant and Sensitive Wheat Lines. Frontiers in Plant Science, 2017, 8, 1377.	1.7	26
92	Long-term land use change in Australia from native forest decreases all fractions of soil organic carbon, including resistant organic carbon, for cropping but not sown pasture. Agriculture, Ecosystems and Environment, 2021, 311, 107326.	2.5	26
93	Gypsum solubility in seawater, and its application to bauxite residue amelioration. Soil Research, 2004, 42, 953.	0.6	25
94	Ferric minerals and organic matter change arsenic speciation in copper mine tailings. Environmental Pollution, 2016, 218, 835-843.	3.7	25
95	Engineered silver nanoparticles in terrestrial environments: a meta-analysis shows that the overall environmental risk is small. Environmental Science: Nano, 2018, 5, 2531-2544.	2.2	25
96	Producing Cd-safe rice grains in moderately and seriously Cd-contaminated paddy soils. Chemosphere, 2021, 267, 128893.	4.2	25
97	The role of soil in defining planetary boundaries and the safe operating space for humanity. Environment International, 2021, 146, 106245.	4.8	25
98	Dynamics of Dimethylated Monothioarsenate (DMMTA) in Paddy Soils and Its Accumulation in Rice Grains. Environmental Science & Technology, 2021, 55, 8665-8674.	4.6	25
99	Influence of Soil Moisture Content on Soil Solution Composition. Soil Science Society of America Journal, 2008, 72, 355-361.	1.2	24
100	Calculated activity of Mn2+ at the outer surface of the root cell plasma membrane governs Mn nutrition of cowpea seedlings. Journal of Experimental Botany, 2011, 62, 3993-4001.	2.4	24
101	<i>In situ</i>analyses of inorganic nutrient distribution in sweetcorn and maize kernels using synchrotron-based X-ray fluorescence microscopy. Annals of Botany, 2019, 123, 543-556.	1.4	24
102	Interaction of different-sized ZnO nanoparticles with maize (Zea mays): Accumulation, biotransformation and phytotoxicity. Science of the Total Environment, 2021, 796, 148927.	3.9	24
103	Evaluation of an electrostatic toxicity model for predicting Ni2+ toxicity to barley root elongation in hydroponic cultures and in soils. New Phytologist, 2011, 192, 414-427.	3.5	23
104	Management of the major chemical soil constraints affecting yields in the grain growing region of Queensland and New South Wales, Australia â€“ a review. Soil Research, 2018, 56, 765.	0.6	23
105	Growth Response of Various Perennial Grasses to Increasing Salinity. Journal of Plant Nutrition, 2006, 29, 1573-1584.	0.9	22
106	Characterization of Lead Precipitate Following Uptake by Roots of <i>Brassica juncea</i>. Environmental Toxicology and Chemistry, 2009, 28, 2250-2254.	2.2	22
107	Metal ion effects on hydraulic conductivity of bacterial celluloseâ€“pectin composites used as plant cell wall analogs. Physiologia Plantarum, 2010, 138, 205-214.	2.6	22
108	Influence of texture in bauxite residues on void ratio, water holding characteristics, and penetration resistance. Geoderma, 2010, 158, 421-426.	2.3	22

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109	Changes in soil chemistry after the application of gypsum and sulfur and irrigation with coal seam water. Geoderma, 2019, 337, 782-791.	2.3	22
110	Effect of long-term no-tillage and nitrogen fertilization on phosphorus distribution in bulk soil and aggregates of a Vertisol. Soil and Tillage Research, 2021, 205, 104760.	2.6	22
111	Characterizing the uptake, accumulation and toxicity of silver sulfide nanoparticles in plants. Environmental Science: Nano, 2017, 4, 448-460.	2.2	22
112	Distribution and speciation of Mn in hydrated roots of cowpea at levels inhibiting root growth. Physiologia Plantarum, 2013, 147, 453-464.	2.6	21
113	An electrostatic model predicting Cu and Ni toxicity to microbial processes in soils. Soil Biology and Biochemistry, 2013, 57, 720-730.	4.2	21
114	Tools for the Discovery of Hyperaccumulator Plant Species and Understanding Their Ecophysiology. Mineral Resource Reviews, 2018, , 117-133.	1.5	21
115	Absorption of foliar applied Zn is decreased in Zn deficient sunflower (Helianthus annuus) due to changes in leaf properties. Plant and Soil, 2018, 433, 309-322.	1.8	21
116	Effects of carbon nanotubes and derivatives of graphene oxide on soil bacterial diversity. Science of the Total Environment, 2019, 682, 356-363.	3.9	21
117	Long-term changes in land use influence phosphorus concentrations, speciation, and cycling within subtropical soils. Geoderma, 2021, 393, 115010.	2.3	20
118	50 years of continuous no-tillage, stubble retention and nitrogen fertilization enhanced macro-aggregate formation and stabilisation in a Vertisol. Soil and Tillage Research, 2021, 214, 105163.	2.6	20
119	Rhizotoxicity of aluminate and polycationic aluminium at high pH. Plant and Soil, 2005, 266, 177-186.	1.8	19
120	Hydrolysis and Speciation of Al Bound to Pectin and Plant Cell Wall Material and Its Reaction with the Dye Chrome Azurol S. Journal of Agricultural and Food Chemistry, 2010, 58, 5553-5560.	2.4	19
121	The standard electrode potential (EÎ¸) predicts the prooxidant activity and the acute toxicity of metal ions. Journal of Inorganic Biochemistry, 2011, 105, 1438-1445.	1.5	19
122	Investigating the foliar uptake of zinc from conventional and nano-formulations: a methodological study. Environmental Chemistry, 2019, 16, 459.	0.7	19
123	Wastewater Treatment Processing of Silver Nanoparticles Strongly Influences Their Effects on Soil Microbial Diversity. Environmental Science & Technology, 2020, 54, 13538-13547.	4.6	19
124	In Situ Speciation and Distribution of Toxic Selenium in Hydrated Roots of Cowpea. Plant Physiology, 2013, 163, 407-418.	2.3	18
125	Cadmium reduces zinc uptake but enhances its translocation in the cadmium-accumulator, Carpobrotus rossii, without affecting speciation. Plant and Soil, 2018, 430, 219-231.	1.8	18
126	Sulfur dynamics in sub-tropical soils of Australia as influenced by long-term cultivation. Plant and Soil, 2016, 402, 211-219.	1.8	17

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127	Changes in exchangeable cations and micronutrients in soils and grains of long-term, low input cropping systems of subtropical Australia. Geoderma, 2017, 285, 293-300.	2.3	17
128	Time-resolved X-ray fluorescence analysis of element distribution and concentration in living plants: An example using manganese toxicity in cowpea leaves. Environmental and Experimental Botany, 2018, 156, 151-160.	2.0	17
129	Silver Sulfide Nanoparticles Reduce Nitrous Oxide Emissions by Inhibiting Denitrification in the Earthworm Gut. Environmental Science & Technology, 2020, 54, 11146-11154.	4.6	17
130	Phosphorus speciation in the fertosphere of highly concentrated fertilizer bands. Geoderma, 2021, 403, 115208.	2.3	17
131	Use of X-ray tomography for examining root architecture in soils. Geoderma, 2022, 405, 115405.	2.3	17
132	Effect of Mn deficiency and legume inoculation on rhizosphere pH in highly alkaline soils. Plant and Soil, 2004, 262, 13-21.	1.8	16
133	Selection for rapid germination and emergence may improve wheat seedling establishment in the presence of soil surface crusts. Plant and Soil, 2018, 426, 227-239.	1.8	16
134	Biogeochemical cycling of iron oxides in the rhizosphere of plants grown on ferruginous duricrust (canga). Science of the Total Environment, 2020, 713, 136637.	3.9	16
135	Rhizotoxic effects of silver in cowpea seedlings. Environmental Toxicology and Chemistry, 2010, 29, 2072-2078.	2.2	15
136	Metal uptake and organic acid exudation of native Acacia species in mine tailings. Australian Journal of Botany, 2017, 65, 357.	0.3	15
137	Salinity decreases Cd translocation by altering Cd speciation in the halophytic Cd-accumulator<i>Carpobrotus rossii</i>. Annals of Botany, 2019, 123, 121-132.	1.4	15
138	Speciation and accumulation of Zn in sweetcorn kernels for genetic and agronomic biofortification programs. Planta, 2019, 250, 219-227.	1.6	15
139	Non-glandular trichomes of sunflower are important in the absorption and translocation of foliar-applied Zn. Journal of Experimental Botany, 2021, 72, 5079-5092.	2.4	15
140	Control of nutrient solutions for studies at high pH. Plant and Soil, 2005, 266, 343-354.	1.8	14
141	Examination into the Accuracy of Exchangeable Cation Measurement in Saline Soils. Communications in Soil Science and Plant Analysis, 2006, 37, 1819-1832.	0.6	14
142	Identifying the species of copper that are toxic to plant roots in alkaline nutrient solutions. Plant and Soil, 2012, 361, 317-327.	1.8	14
143	Comparison of Zn accumulation and speciation in kernels of sweetcorn and maize differing in maturity. Annals of Botany, 2020, 125, 185-193.	1.4	14
144	Zinc Accumulates in the Nodes of Wheat Following the Foliar Application of ⁶⁵Zn Oxide Nano- and Microparticles. Environmental Science & Technology, 2021, 55, 13523-13531.	4.6	13

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145	Does the APSIM model capture soil phosphorus dynamics? A case study with Vertisols. Field Crops Research, 2021, 273, 108302.	2.3	13
146	Methods for assessing laterally-resolved distribution, speciation and bioavailability of phosphorus in soils. Reviews in Environmental Science and Biotechnology, 2022, 21, 53-74.	3.9	13
147	Recovery of cowpea seedling roots from exposure to toxic concentrations of trace metals. Plant and Soil, 2011, 341, 423-436.	1.8	12
148	Time-resolved laboratory micro-X-ray fluorescence reveals silicon distribution in relation to manganese toxicity in soybean and sunflower. Annals of Botany, 2020, 126, 331-341.	1.4	12
149	Genetic biofortification of wheat with zinc: Opportunities to fineâ€tune zinc uptake, transport and grain loading. Physiologia Plantarum, 2022, 174, e13612.	2.6	12
150	Defining appropriate methods for studying toxicities of trace metals in nutrient solutions. Ecotoxicology and Environmental Safety, 2018, 147, 872-880.	2.9	11
151	Zinc and lead encapsulated in amorphous ferric cements within hardpans in situ formed from sulfidic Cu-Pb-Zn tailings. Environmental Pollution, 2019, 252, 1106-1116.	3.7	11
152	Seawater neutralization and gypsum amelioration of bauxite refining residue to produce a plant growth medium. Science of the Total Environment, 2021, 763, 143046.	3.9	11
153	A study over 33Âyears shows that carbon and nitrogen stocks in a subtropical soil are increasing under native vegetation in a changing climate. Science of the Total Environment, 2021, 772, 145019.	3.9	11
154	Mg induced Ca deficiency under alkaline conditions. Plant and Soil, 2005, 269, 245-250.	1.8	10
155	Mapping Element Distributions in Plant Tissues Using Synchrotron X-ray Fluorescence Techniques. Methods in Molecular Biology, 2013, 953, 143-159.	0.4	10
156	Growth of Eucalyptus species in a Brown Kandosol, and changes in soil phosphorus fractionation following fertilisation. Soil Research, 2007, 45, 190.	0.6	9
157	Comparative hydrolysis and sorption of Al and La onto plant cell wall material and pectic materials. Plant and Soil, 2010, 332, 319-330.	1.8	9
158	Soil chloride content influences the response of bacterial but not fungal diversity to silver nanoparticles entering soil via wastewater treatment processing. Environmental Pollution, 2019, 255, 113274.	3.7	9
159	Chemical and physical influence of sodic soils on the coleoptile length and root growth angle of wheat genotypes. Annals of Botany, 2019, 124, 1043-1052.	1.4	9
160	Application of sewage sludge containing environmentally-relevant silver sulfide nanoparticles increases emissions of nitrous oxide in saline soils. Environmental Pollution, 2020, 265, 114807.	3.7	9
161	The impact, identification and management of dispersive soils in rainfed cropping systems. European Journal of Soil Science, 2021, 72, 1655-1674.	1.8	9
162	Review of cropâ€specific tolerance limits to acidity, salinity, and sodicity for seventeen cereal, pulse, and oilseed crops common to rainfed subtropical cropping systems. Land Degradation and Development, 2021, 32, 2459-2480.	1.8	9

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163	Interaction between Cu toxicity and P deficiency in soil-grown cowpea (Vigna unguiculata (L.) Walp.). Plant and Soil, 2011, 342, 359-367.	1.8	8
164	Engagement and performance in a first year natural resource science course. Journal of Computer Assisted Learning, 2018, 34, 233-242.	3.3	8
165	Evaluating effects of iron on manganese toxicity in soybean and sunflower using synchrotron-based X-ray fluorescence microscopy and X-ray absorption spectroscopy. Metallomics, 2019, 11, 2097-2110.	1.0	8
166	Effect of 50 Years of No-Tillage, Stubble Retention, and Nitrogen Fertilization on Soil Respiration, Easily Extractable Glomalin, and Nitrogen Mineralization. Agronomy, 2022, 12, 151.	1.3	8
167	Tolerance of two perennial grasses to toxic levels of Ni2+. Environmental Chemistry, 2008, 5, 426.	0.7	7
168	Measurement and Interpretation of Salinity Tolerance in Four Perennial Grasses. Journal of Plant Nutrition, 2009, 32, 30-43.	0.9	7
169	Use of Fluoride-Containing Water for the Irrigation of Soilâ€"Plant Systems. Journal of Agricultural and Food Chemistry, 2015, 63, 4737-4745.	2.4	7
170	Greater emergence force and hypocotyl cross sectional area may improve wheat seedling emergence in sodic conditions. Plant Science, 2018, 277, 188-195.	1.7	7
171	Minimizing experimental artefacts in synchrotron-based X-ray analyses of Fe speciation in tissues of rice plants. Journal of Synchrotron Radiation, 2019, 26, 1272-1279.	1.0	7
172	Kinetics of metal toxicity in plant roots and its effects on root morphology. Plant and Soil, 2017, 419, 269-279.	1.8	6
173	Effects of long-term cultivation on phosphorus (P) in five low-input, subtropical Australian soils. Agriculture, Ecosystems and Environment, 2018, 252, 191-199.	2.5	6
174	Land use affects temperature sensitivity of soil organic carbon decomposition in macroaggregates but not in bulk soils in subtropical Oxisols of Queensland, Australia. Soil and Tillage Research, 2020, 198, 104566.	2.6	6
175	High phosphorus fertilization changes the speciation and distribution of manganese in wheat grains grown in a calcareous soil. Science of the Total Environment, 2021, 787, 147608.	3.9	6
176	Tolerance of seven perennial grasses to high nickel in sand culture. Environmental Chemistry, 2010, 7, 279.	0.7	5
177	Evaluation of pyritic mine tailings as a plant growth substrate. Journal of Environmental Management, 2017, 201, 207-214.	3.8	5
178	Release of silver from nanoparticle-based filter paper and the impacts to mouse gut microbiota. Environmental Science: Nano, 2020, 7, 1554-1565.	2.2	5
179	Methods for Visualizing Elemental Distribution in Hyperaccumulator Plants. Mineral Resource Reviews, 2021, , 197-214.	1.5	4
180	Combined Application of Lime and a Nitrification Inhibitor (3,4-Dimethylpyrazole Phosphate) Markedly Decreased Nitrous Oxide Emissions from an Acid Soil. Agronomy, 2022, 12, 1040.	1.3	4

#	Article	IF	Citations
181	Kinetics and mechanisms of cowpea root adaptation to changes in solution calcium. Plant and Soil, 2014, 379, 301-314.	1.8	3
182	Overhead-irrigation with saline and alkaline water: Deleterious effects on foliage of Rhodes grass and leucaena. Agricultural Water Management, 2016, 169, 173-182.	2.4	3
183	Distribution of aluminium in hydrated leaves of tea (<i>Camellia sinensis</i>) using synchrotron- and laboratory-based X-ray fluorescence microscopy. Metallomics, 2020, 12, 1062-1069.	1.0	3
184	Principles of plant-based remediation of contaminated soils.. , 2010, , 446-469.		3
185	Germination of leucaena and Rhodes grass seeds in saline and alkaline conditions. Seed Science and Technology, 2016, 44, 461-474.	0.6	3
186	Tandem Probe Analysis Mode for Synchrotron XFM: Doubling Throughput Capacity. Analytical Chemistry, 2022, 94, 4584-4593.	3.2	3
187	Comment on â€œGraphene oxide regulates the bacterial community and exhibits property changes in soilâ€• by J. Du, X. Hu and Q. Zhou, RSC Advances, 2015, 5, 27009. RSC Advances, 2016, 6, 51203-51204.	1.7	2
188	Understanding the delayed expression of Al resistance in signal grass (Urochloa decumbens). Annals of Botany, 2020, 125, 841-850.	1.4	2
189	Calcium oxalate and calcium cycling in forest ecosystems. Trees - Structure and Function, 2022, 36, 531-536.	0.9	2
190	Translocation of Foliar Absorbed Zn in Sunflower (Helianthus annuus) Leaves. Frontiers in Plant Science, 2022, 13, 757048.	1.7	2
191	Online Engagement during COVID-19: Comparing a Course Previously Delivered Traditionally with Emergency Online Delivery. Human Behavior and Emerging Technologies, 2022, 2022, 1-12.	2.5	2
192	Amelioration of Cadmium Contaminated Soils Using Cation Exchangers. Journal of Plant Nutrition, 2009, 32, 1321-1335.	0.9	1
193	Tolerance of perennial grasses to high copper in sand culture. Environmental Chemistry, 2009, 6, 253.	0.7	1
194	Differential Gene Expression in the Model Actinomycete Streptomyces coelicolor A3(2) Supports Nitrogen Mining Dependent on the Plant Carbon to Nitrogen Ratio. Agriculture (Switzerland), 2018, 8, 192.	1.4	1
195	Improved agronomic biofortification of sweetcorn achieved using foliar rather than soil Zn applications. Cereal Chemistry, 2022, 99, 819-829.	1.1	1
196	Dataset on seed details of wheat genotypes, solution treatments to measure seedling emergence force and the relation between seedling force and strain. Data in Brief, 2018, 21, 1598-1602.	0.5	0
197	Effects of Pesticides on Nitrous Oxide Production in Sugarcane Cropping Soil. Proceedings (mdpi), 2019, 36, 38.	0.2	0
198	Examining a synchrotron-based approach for<i>in situ</i>analyses of Al speciation in plant roots. Journal of Synchrotron Radiation, 2020, 27, 100-109.	1.0	0

#	Article	IF	Citations
199	Avoiding the point of no return: Maintaining infiltration to remediate saline-sodic Vertosols in high rainfall environments. Agricultural Water Management, 2022, 270, 107725.	2.4	0