Charlotte Poschenrieder

List of Publications by Year
in descending order

128 papers	8,188 citations	41258 49 h-index	49773 87 g-index
131 all docs	131 docs citations	131 times ranked	8146 citing authors

#	Article	IF	Citations
1	Evolution of salt tolerance in Arabidopsis thaliana on siliceous soils does not confer tolerance to saline calcareous soils. Plant and Soil, 2022, 476, 455-475.	1.8	4
2	Rhizosphere Acidification as the Main Trait Characterizing the Differential In Vitro Tolerance to Iron Chlorosis in Interspecific Pyrus Hybrids. Horticulturae, 2022, 8, 551.	1.2	0
3	Growth enhancement of Brassica napus under both deficient and adequate iron supply by intercropping with Hordeum vulgare: a hydroponic study. Plant Biosystems, 2021, 155, 632-646.	0.8	3
4	Altitude and fertilization type: concentration of nutrients and production of biomass in <i>Stevia rebaudiana</i> Bertoni. Journal of Plant Nutrition, 2021, 44, 322-336.	0.9	3
5	Transcriptomics Reveals Fast Changes in Salicylate and Jasmonate Signaling Pathways in Shoots of Carbonate-Tolerant Arabidopsis thaliana under Bicarbonate Exposure. International Journal of Molecular Sciences, 2021, 22, 1226.	1.8	10
6	Luxury zinc supply acts as antiaging agent and enhances reproductive fitness in Arabidopsis thaliana. Plant Science, 2021, 304, 110805.	1.7	1
7	A native Zn-solubilising bacterium from mine soil promotes plant growth and facilitates phytoremediation. Journal of Soils and Sediments, 2021, 21, 2301-2314.	1.5	2
8	Adaptation to coastal soils through pleiotropic boosting of ion and stress hormone concentrations in wild <i>Arabidopsis thaliana</i>. New Phytologist, 2021, 232, 208-220.	3.5	9
9	Genome-Wide Association Study Reveals Key Genes for Differential Lead Accumulation and Tolerance in Natural Arabidopsis thaliana Accessions. Frontiers in Plant Science, 2021, 12, 689316.	1.7	3
10	Identifying the Specific Root Microbiome of the Hyperaccumulator Growing in Non-metalliferous Soils. Frontiers in Microbiology, 2021, 12, 639997.	1.5	0
11	Aluminium alters mineral composition and polyphenol metabolism in leaves of tea plants (Camellia) Tj ETQq1 1 0.784314 rgBT /Overloc	1.5	21
12	Contrasting allocation of magnesium, calcium and manganese in leaves of tea (Camellia sinensis (L.)) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Toxicology, 2020, 135, 110974.	1.8	15
13	The arbuscular mycorrhizal mycelium from barley differentially influences various defense parameters in the non-host sugar beet under co-cultivation. Mycorrhiza, 2020, 30, 647-661.	1.3	9
14	Selenium activates components of iron acquisition machinery in oilseed rape roots. Plant and Soil, 2020, 452, 569-586.	1.8	12
15	Arthropod Diversity Influenced by Two Musa-Based Agroecosystems in Ecuador. Agriculture (Switzerland), 2020, 10, 235.	1.4	3
16	Increase in steviol glycosides production from Stevia rebaudiana Bertoni under organo-mineral fertilization. Industrial Crops and Products, 2020, 147, 112220.	2.5	29
17	Snails prefer it sweet: A multifactorial test of the metal defence hypothesis. Physiologia Plantarum, 2019, 165, 209-218.	2.6	5
18	A Role for Zinc in Plant Defense Against Pathogens and Herbivores. Frontiers in Plant Science, 2019, 10, 1171.	1.7	182

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19	How Plants Handle Trivalent (+3) Elements. International Journal of Molecular Sciences, 2019, 20, 3984.	1.8	30
20	Soil carbonate drives local adaptation in <scp><i>Arabidopsis thaliana</i></scp>. Plant, Cell and Environment, 2019, 42, 2384-2398.	2.8	29
21	Arbuscular mycorrhizal fungi alleviate low-temperature stress and increase freezing resistance as a substitute for acclimation treatment in barley. Crop and Pasture Science, 2019, 70, 218.	0.7	49
22	Mechanisms of storage and detoxification of Al in two tropical mistletoes. Environmental and Experimental Botany, 2018, 150, 37-45.	2.0	8
23	Fingerprinting metabolomics in tropical mistletoes: A case study with facultative aluminum-accumulating species. Phytochemistry Letters, 2018, 25, 90-94.	0.6	10
24	A proteomic approach to the mechanisms underlying activation of aluminium resistance in roots of Urochloa decumbens. Journal of Inorganic Biochemistry, 2018, 181, 145-151.	1.5	15
25	Metabolism of carbamazepine in plant roots and endophytic rhizobacteria isolated from Phragmites australis. Journal of Hazardous Materials, 2018, 342, 85-95.	6.5	81
26	Sugar beet profits from intercropping with wheat both under optimum and deficient phosphorus supply. Acta Agriculturae Slovenica, 2018, 111, 85.	0.2	5
27	Fluctuating selection on migrant adaptive sodium transporter alleles in coastal <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12443-E12452.	3.3	44
28	Transport and Use of Bicarbonate in Plants: Current Knowledge and Challenges Ahead. International Journal of Molecular Sciences, 2018, 19, 1352.	1.8	71
29	Salt tolerance mechanisms in three Irano-Turanian Brassicaceae halophytes relatives of Arabidopsis thaliana. Journal of Plant Research, 2018, 131, 1029-1046.	1.2	25
30	Salinity is a prevailing factor for amelioration of wheat blast by biocontrol agents. Biological Control, 2018, 125, 81-89.	1.4	7
31	Aluminium detoxification in facultative (Passovia ovata (Pohl ex DC.) Kuijt and Struthanthus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 58-63.	1.4	6
32	Phytoremediation capability of native plant species living on Pb-Zn and Hg-As mining wastes in the Cantabrian range, north of Spain. Journal of Geochemical Exploration, 2017, 174, 10-20.	1.5	96
33	Cadmium hampers salt tolerance of Sesuvium portulacastrum. Plant Physiology and Biochemistry, 2017, 115, 390-399.	2.8	10
34	Improvement of drought tolerance in Tobacco (<i>Nicotiana rustica</i> L.) plants by Silicon. Journal of Plant Nutrition, 2017, 40, 1661-1676.	0.9	40
35	Root traits and their potential links to plant ideotypes to improve drought resistance in common bean. Theoretical and Experimental Plant Physiology, 2017, 29, 143-154.	1.1	41
36	Zinc hyperaccumulation substitutes for defense failures beyond salicylate and jasmonate signaling pathways of <i>Alternaria brassicicola</i> attack in <i>Noccaea caerulescens</i>. Physiologia Plantarum, 2017, 159, 401-415.	2.6	27

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37	Differential Physiological Responses of Portuguese Bread Wheat (Triticum aestivum L.) Genotypes under Aluminium Stress. Diversity, 2016, 8, 26.	0.7	11
38	Characterization of Zinc and Cadmium Hyperaccumulation in Three Noccaea (Brassicaceae) Populations from Non-metalliferous Sites in the Eastern Pyrenees. Frontiers in Plant Science, 2016, 7, 128.	1.7	19
39	Effective Use of Water and Increased Dry Matter Partitioned to Grain Contribute to Yield of Common Bean Improved for Drought Resistance. Frontiers in Plant Science, 2016, 7, 660.	1.7	129
40	A highly versatile and easily configurable system for plant electrophysiology. MethodsX, 2016, 3, 436-451.	0.7	8
41	Zinc triggers signaling mechanisms and defense responses promoting resistance to Alternaria brassicicola in Arabidopsis thaliana. Plant Science, 2016, 249, 13-24.	1.7	38
42	High salinity helps the halophyte Sesuvium portulacastrum in defense against Cd toxicity by maintaining redox balance and photosynthesis. Planta, 2016, 244, 333-346.	1.6	50
43	Microbial homoserine lactones (AHLs) are effectors of root morphological changes in barley. Plant Science, 2016, 253, 130-140.	1.7	32
44	Cell-Type-Specific H⁺-ATPase Activity in Root Tissues Enables K⁺ Retention and Mediates Acclimation of Barley (<i>Hordeum vulgare</i>) to Salinity Stress. Plant Physiology, 2016, 172, 2445-2458.	2.3	158
45	Estimation of phenotypic variability in symbiotic nitrogen fixation ability of common bean under drought stress using 15N natural abundance in grain. European Journal of Agronomy, 2016, 79, 66-73.	1.9	62
46	Nodulation by Sinorhizobium meliloti originated from a mining soil alleviates Cd toxicity and increases Cd-phytoextraction in Medicago sativa L.. Frontiers in Plant Science, 2015, 6, 863.	1.7	50
47	Differential activation of genes related to aluminium tolerance in two contrasting rice cultivars. Journal of Inorganic Biochemistry, 2015, 152, 160-166.	1.5	27
48	The NPR1-dependent salicylic acid signalling pathway is pivotal for enhanced salt and oxidative stress tolerance in Arabidopsis. Journal of Experimental Botany, 2015, 66, 1865-1875.	2.4	105
49	Interactions between aluminum and boron in tea (Camellia sinensis) plants. Acta Physiologiae Plantarum, 2015, 37, 1.	1.0	28
50	NaCl alleviates Cd toxicity by changing its chemical forms of accumulation in the halophyte Sesuvium portulacastrum. Environmental Science and Pollution Research, 2015, 22, 10769-10777.	2.7	41
51	Breeding for Al Tolerance by Unravelling Genetic Diversity in Bread Wheat. Signaling and Communication in Plants, 2015, , 125-153.	0.5	6
52	Mechanisms of Hyper-resistance and Hyper-tolerance to Aluminum in Plants. Signaling and Communication in Plants, 2015, , 81-98.	0.5	16
53	Salinity Is an Agent of Divergent Selection Driving Local Adaptation of Arabidopsis to Coastal Habitats. Plant Physiology, 2015, 168, 915-929.	2.3	44
54	Both aluminum and ABA induce the expression of an ABC-like transporter gene (FeALS3) in the Al-tolerant species Fagopyrum esculentum. Environmental and Experimental Botany, 2015, 111, 74-82.	2.0	54

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55	Antimony accumulation and toxicity tolerance mechanisms in Trifolium species. Journal of Geochemical Exploration, 2014, 147, 167-172.	1.5	34
56	Membrane transporters mediating root signalling and adaptive responses to oxygen deprivation and soil flooding. Plant, Cell and Environment, 2014, 37, 2216-2233.	2.8	130
57	Growth, physiological, biochemical and ionic responses of pistachio seedlings to mild and high salinity. Trees - Structure and Function, 2014, 28, 1065-1078.	0.9	54
58	Molecular characterization of the citrate transporter gene <i><scp>TaMATE1</scp></i> and expression analysis of upstream genes involved in organic acid transport under Al stress in bread wheat (<i>Triticum aestivum</i>). Physiologia Plantarum, 2014, 152, 441-452.	2.6	40
59	Fractionation of chromium in tannery sludge-amended soil and its availability to fenugreek plants. Journal of Soils and Sediments, 2014, 14, 697-702.	1.5	22
60	Lessons from crop plants struggling with salinity. Plant Science, 2014, 226, 2-13.	1.7	129
61	Kinetics of xylem loading, membrane potential maintenance, and sensitivity of <scp><scp>K⁺</scp></scp>â€permeable channels to reactive oxygen species: physiological traits that differentiate salinity tolerance between pea and barley. Plant, Cell and Environment, 2014, 37, 589-600.	2.8	107
62	Amelioration of iron toxicity: A mechanism for aluminum-induced growth stimulation in tea plants. Journal of Inorganic Biochemistry, 2013, 128, 183-187.	1.5	50
63	Mechanisms of aluminumâ€induced growth stimulation in tea (<i>Camellia sinensis</i>). Journal of Plant Nutrition and Soil Science, 2013, 176, 616-625.	1.1	82
64	Boron re-translocation in tea (Camellia sinensis (L.) O. Kuntze) plants. Acta Physiologiae Plantarum, 2013, 35, 2373-2381.	1.0	19
65	Do toxic ions induce hormesis in plants?. Plant Science, 2013, 212, 15-25.	1.7	219
66	Cadmiumâ€induced changes in glutathione and phenolics of <i>Thlaspi</i> and <i>Noccaea</i> species differing in Cd accumulation. Journal of Plant Nutrition and Soil Science, 2013, 176, 851-858.	1.1	17
67	Signal cross talk in Arabidopsis exposed to cadmium, silicon, and Botrytis cinerea. Planta, 2013, 237, 337-349.	1.6	70
68	Endogenous jasmonic and salicylic acids levels in the Cd-hyperaccumulator Noccaea (Thlaspi) praecox exposed to fungal infection and/or mechanical stress. Plant Cell Reports, 2013, 32, 1243-1249.	2.8	55
69	Calciumâ€and potassiumâ€permeable plasma membrane transporters are activated by copper in <i>Arabidopsis</i> root tips: linking copper transport with cytosolic hydroxyl radical production. Plant, Cell and Environment, 2013, 36, 844-855.	2.8	85
70	Differential aluminum resistance in Brachiaria species. Environmental and Experimental Botany, 2013, 89, 11-18.	2.0	35
71	Transition metals: A double edge sward in ROS generation and signaling. Plant Signaling and Behavior, 2013, 8, e23425.	1.2	57
72	Shoot accumulation of several trace elements in native plant species from contaminated soils in the Peruvian Andes. Journal of Geochemical Exploration, 2012, 113, 106-111.	1.5	65

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73	Cynara cardunculus a potentially useful plant for remediation of soils polluted with cadmium or arsenic. Journal of Geochemical Exploration, 2012, 123, 122-127.	1.5	49
74	Accumulation of Pb and Zn in Bidens triplinervia and Senecio sp. spontaneous species from mine spoils in Peru and their potential use in phytoremediation. Journal of Geochemical Exploration, 2012, 123, 109-113.	1.5	62
75	Smilax aspera L. an evergreen Mediterranean climber for phytoremediation. Journal of Geochemical Exploration, 2012, 123, 41-44.	1.5	18
76	Aluminium-induced alteration of ion homeostasis in root tip vacuoles of two maize varieties differing in Al tolerance. Plant Science, 2011, 180, 709-715.	1.7	42
77	Aluminium-induced changes in root epidermal cell patterning, a distinctive feature of hyperresistance to Al in Brachiaria decumbens. Journal of Inorganic Biochemistry, 2011, 105, 1477-1483.	1.5	41
78	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
79	Hyperaccumulation of trace elements: from uptake and tolerance mechanisms to litter decomposition; selenium as an example. Plant and Soil, 2011, 341, 31-35.	1.8	26
80	Localization of aluminium in tea (Camellia sinensis) leaves using low energy X-ray fluorescence spectro-microscopy. Journal of Plant Research, 2011, 124, 165-172.	1.2	103
81	Colonization with arbuscular mycorrhizal fungi improves salinity tolerance of tomato (Solanum) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.8	387
82	At the Crossroads of Metal Hyperaccumulation and Glucosinolates: Is There Anything Out There?. Soil Biology, 2010, , 139-161.	0.6	6
83	Different Effects of Aluminum on the Actin Cytoskeleton and Brefeldin A-Sensitive Vesicle Recycling in Root Apex Cells of Two Maize Varieties Differing in Root Elongation Rate and Aluminum Tolerance. Plant and Cell Physiology, 2009, 50, 528-540.	1.5	84
84	Trace element behaviour at the rootâ€“soil interface: Implications in phytoremediation. Environmental and Experimental Botany, 2009, 67, 243-259.	2.0	340
85	Copper-induced oxidative damage and enhanced antioxidant defenses in the root apex of maize cultivars differing in Cu tolerance. Environmental and Experimental Botany, 2009, 67, 415-420.	2.0	54
86	Abscisic Acid Decreases Leaf Na+ Exclusion in Salt-Treated Phaseolus vulgaris L.. Journal of Plant Growth Regulation, 2009, 28, 187-192.	2.8	72
87	Characterization of the tolerance to excess manganese in four maize varieties. Soil Science and Plant Nutrition, 2009, 55, 747-753.	0.8	13
88	Constitutive and aluminium-induced patterns of phenolic compounds in two maize varieties differing in aluminium tolerance. Journal of Inorganic Biochemistry, 2009, 103, 1486-1490.	1.5	56
89	Sodiumâ€calcium interactions with growth, water, and photosynthetic parameters in saltâ€treated beans. Journal of Plant Nutrition and Soil Science, 2009, 172, 637-643.	1.1	21
90	Root Behavior in Response to Aluminum Toxicity. Signaling and Communication in Plants, 2009, , 21-43.	0.5	7

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91	Glucosinolate Profiles Change During the Life Cycle and Mycorrhizal Colonization in a Cd/Zn Hyperaccumulator Thlaspi praecox (Brassicaceae). Journal of Chemical Ecology, 2008, 34, 1038-1044.	0.9	27
92	A glance into aluminum toxicity and resistance in plants. Science of the Total Environment, 2008, 400, 356-368.	3.9	349
93	Boron-induced amelioration of aluminium toxicity in a monocot and a dicot species. Journal of Plant Physiology, 2008, 165, 504-513.	1.6	80
94	The effect of silicon on the symptoms of manganese toxicity in maize plants. Acta Biologica Hungarica, 2008, 59, 479-487.	0.7	10
95	Phosphorus Efficiency and Root Exudates in Two Contrasting Tropical Maize Varieties. Journal of Plant Nutrition, 2007, 30, 887-900.	0.9	58
96	Changes in elemental uptake and arbuscular mycorrhizal colonisation during the life cycle of Thlaspi praecox Wulfen. Chemosphere, 2007, 69, 1602-1609.	4.2	50
97	Can metals defend plants against biotic stress?. Trends in Plant Science, 2006, 11, 288-295.	4.3	228
98	Distinctive effects of cadmium on glucosinolate profiles in Cd hyperaccumulator Thlaspi praecox and non-hyperaccumulator Thlaspi arvense. Plant and Soil, 2006, 288, 333-341.	1.8	69
99	A role for cyclic hydroxamates in aluminium resistance in maize?. Journal of Inorganic Biochemistry, 2005, 99, 1830-1836.	1.5	45
100	Relationship between expression of the PM H+-ATPase, growth and ion partitioning in the leaves of salt-treated Medicago species. Planta, 2005, 221, 557-566.	1.6	37
101	Root cell patterning: a primary target for aluminium toxicity in maize. Journal of Experimental Botany, 2005, 56, 1213-1220.	2.4	211
102	Title is missing!. Plant and Soil, 2003, 251, 55-63.	1.8	52
103	Ion allocation in two different salt-tolerant MediterraneanMedicagospecies. Journal of Plant Physiology, 2003, 160, 1361-1365.	1.6	37
104	Influence of the Ca/Mg ratio on Cu resistance in three Silene armeria ecotypes adapted to calcareous soil or to different, Ni- or Cu-enriched, serpentine sites. Journal of Plant Physiology, 2003, 160, 1451-1456.	1.6	27
105	Efficient leaf ion partitioning, an overriding condition for abscisic acidâ€controlled stomatal and leaf growth responses to NaCl salinization in two legumes. Journal of Experimental Botany, 2003, 54, 2111-2119.	2.4	71
106	Fast root growth responses, root exudates, and internal detoxification as clues to the mechanisms of aluminium toxicity and resistance: a review. Environmental and Experimental Botany, 2002, 48, 75-92.	2.0	823
107	Influence of zinc hyperaccumulation on glucosinolates in Thlaspi caerulescens. New Phytologist, 2001, 151, 621-626.	3.5	71
108	Title is missing!. Plant and Soil, 2001, 230, 247-256.	1.8	85

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109	Determination of glucosinolates in rapeseed and Thlaspi caerulescens plants by liquid chromatographyâ€"atmospheric pressure chemical ionization mass spectrometry. Journal of Chromatography A, 2000, 889, 75-81.	1.8	47
110	Relationship between carbon partitioning and Na+, Cl- and ABA allocation in fruits of salt-stressed bean. Journal of Plant Physiology, 2000, 157, 637-642.	1.6	10
111	Callose production as indicator of aluminum toxicity in bean cultivars. Journal of Plant Nutrition, 1999, 22, 1-10.	0.9	58
112	Change in Apoplastic Aluminum during the Initial Growth Response to Aluminum by Roots of a Tolerant Maize Variety1. Plant Physiology, 1999, 119, 435-444.	2.3	145
113	Role of sodium in the ABA-mediated long-term growth response of bean to salt stress. Physiologia Plantarum, 1998, 104, 299-305.	2.6	45
114	Arsenic and heavy metal contamination of soil and vegetation around a copper mine in Northern Peru. Science of the Total Environment, 1997, 203, 83-91.	3.9	171
115	Endogenous abscisic acid levels are linked to decreased growth of bush bean plants treated with NaCl. Physiologia Plantarum, 1997, 101, 17-22.	2.6	58
116	Influence of silicon pretreatment on aluminium toxicity in maize roots. Plant and Soil, 1997, 190, 203-209.	1.8	68
117	Endogenous abscisic acid levels are linked to decreased growth of bush bean plants treated with NaCl. Physiologia Plantarum, 1997, 101, 17-22.	2.6	11
118	Zinc hyperaccumulation in Thlaspi caerulescens. II. Influence on organic acids. Journal of Plant Nutrition, 1996, 19, 1541-1550.	0.9	92
119	Zinc hyperaccumulation in Thlaspi caerulescens. I. Influence on growth and mineral nutrition. Journal of Plant Nutrition, 1996, 19, 1531-1540.	0.9	49
120	Monitoring of aluminium-induced inhibition of root elongation in four maize cultivars differing in tolerance to aluminium and proton toxicity. Physiologia Plantarum, 1995, 93, 265-271.	2.6	112
121	Availability of cu and zn to plants growing on and off a malachite site. Toxicological and Environmental Chemistry, 1995, 52, 143-151.	0.6	2
122	Monitoring of aluminium-induced inhibition of root elongation in four maize cultivars differing in tolerance to aluminium and proton toxicity. Physiologia Plantarum, 1995, 93, 265-271.	2.6	86
123	Aluminium Tolerance of Maize Cultivars as Assessed by Callose Production and Root Elongation. Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science, 1994, 157, 447-451.	0.4	56
124	Chromium-induced inhibition of ethylene evolution in bean (Phaseolus vulgaris) leaves. Physiologia Plantarum, 1993, 89, 404-408.	2.6	17
125	Beneficial and Toxic Effects of Chromium in Plants: Solution Culture, Pot and Field Studies.. Studies in Environmental Science, 1993, , 147-171.	0.0	29
126	Chromium-induced inhibition of ethylene evolution in bean (Phaseolus vulgaris) leaves. Physiologia Plantarum, 1993, 89, 404-408.	2.6	1

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127	Influence of Cadmium on Water Relations, Stomatal Resistance, and Abscisic Acid Content in Expanding Bean Leaves. Plant Physiology, 1989, 90, 1365-1371.	2.3	246
128	Water Relations of Chromium VI Treated Bush Bean Plants (Phaseolus vulgarisL. cv. Contender) under both Normal and Water Stress Conditions. Journal of Experimental Botany, 1986, 37, 178-187.	2.4	96