

Jan Kofod Schjoerring

List of Publications by Year in descending order

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Version: 2024-02-01

213
papers

18,264
citations

12328

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16650

123
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213
all docs

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docs citations

213
times ranked

18148
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Specific Aquaporins Facilitate the Diffusion of Hydrogen Peroxide across Membranes. <i>Journal of Biological Chemistry</i> , 2007, 282, 1183-1192. | 3.4 | 1,086 |
| 2 | Reflectance measurement of canopy biomass and nitrogen status in wheat crops using normalized difference vegetation indices and partial least squares regression. <i>Remote Sensing of Environment</i> , 2003, 86, 542-553. | 11.0 | 925 |
| 3 | Membrane transport of hydrogen peroxide. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2006, 1758, 994-1003. | 2.6 | 899 |
| 4 | Atmospheric composition change: Ecosystemsâ€™ Atmosphere interactions. <i>Atmospheric Environment</i> , 2009, 43, 5193-5267. | 4.1 | 609 |
| 5 | Ammonia: emission, atmospheric transport and deposition. <i>New Phytologist</i> , 1998, 139, 27-48. | 7.3 | 489 |
| 6 | Functions of Macronutrients. , 2012, , 135-189. | | 479 |
| 7 | Zinc biofortification of cereals: problems and solutions. <i>Trends in Plant Science</i> , 2008, 13, 464-473. | 8.8 | 446 |
| 8 | Ammonia Emission from Mineral Fertilizers and Fertilized Crops. <i>Advances in Agronomy</i> , 2004, 82, 557-622. | 5.2 | 342 |
| 9 | Iron fortification of rice seeds through activation of the <i>nicotianamine synthase</i> gene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 22014-22019. | 7.1 | 341 |
| 10 | Aquaporin homologues in plants and mammals transport ammonia. <i>FEBS Letters</i> , 2004, 574, 31-36. | 2.8 | 297 |
| 11 | NH ₃ and NH ₄ ⁺ permeability in aquaporin-expressing <i>Xenopus</i> oocytes. <i>Pflügers Archiv European Journal of Physiology</i> , 2005, 450, 415-428. | 2.8 | 229 |
| 12 | Cytosolic glutamine synthetase: a target for improvement of crop nitrogen use efficiency?. <i>Trends in Plant Science</i> , 2014, 19, 656-663. | 8.8 | 227 |
| 13 | Regulation of High-Affinity Nitrate Transporter Genes and High-Affinity Nitrate Influx by Nitrogen Pools in Roots of Barley. <i>Plant Physiology</i> , 2000, 123, 307-318. | 4.8 | 218 |
| 14 | The molecularâ€™ physiological functions of mineral macronutrients and their consequences for deficiency symptoms in plants. <i>New Phytologist</i> , 2021, 229, 2446-2469. | 7.3 | 217 |
| 15 | Elevated Nicotianamine Levels in <i>Arabidopsis halleri</i> Roots Play a Key Role in Zinc Hyperaccumulation. <i>Plant Cell</i> , 2012, 24, 708-723. | 6.6 | 209 |
| 16 | Biorefining in the prevailing energy and materials crisis: a review of sustainable pathways for biorefinery value chains and sustainability assessment methodologies. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 43, 244-263. | 16.4 | 209 |
| 17 | Apoplastic pH and Ammonium Concentration in Leaves of <i>Brassica napus</i> L. <i>Plant Physiology</i> , 1995, 109, 1453-1460. | 4.8 | 207 |
| 18 | Challenges in quantifying biosphereâ€™ atmosphere exchange of nitrogen species. <i>Environmental Pollution</i> , 2007, 150, 125-139. | 7.5 | 203 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Silicon alleviates iron deficiency in cucumber by promoting mobilization of iron in the root apoplast. <i>New Phytologist</i> , 2013, 198, 1096-1107. | 7.3 | 185 |
| 20 | Policies for agricultural nitrogen management—trends, challenges and prospects for improved efficiency in Denmark. <i>Environmental Research Letters</i> , 2014, 9, 115002. | 5.2 | 184 |
| 21 | Manganese Efficiency in Barley: Identification and Characterization of the Metal Ion Transporter HvIRT1. <i>Plant Physiology</i> , 2008, 148, 455-466. | 4.8 | 182 |
| 22 | The Arabidopsis ATP-binding Cassette Protein AtMRP5/AtABCC5 Is a High Affinity Inositol Hexakisphosphate Transporter Involved in Guard Cell Signaling and Phytate Storage. <i>Journal of Biological Chemistry</i> , 2009, 284, 33614-33622. | 3.4 | 177 |
| 23 | Gene expression, cellular localisation and function of glutamine synthetase isozymes in wheat (<i>Triticum aestivum</i> L.). <i>Plant Molecular Biology</i> , 2008, 67, 89-105. | 3.9 | 172 |
| 24 | Bioavailable zinc in rice seeds is increased by activation tagging of <i>nicotianamine synthase</i> . <i>Plant Biotechnology Journal</i> , 2011, 9, 865-873. | 8.3 | 168 |
| 25 | Competition between uptake of ammonium and potassium in barley and Arabidopsis roots: molecular mechanisms and physiological consequences. <i>Journal of Experimental Botany</i> , 2010, 61, 2303-2315. | 4.8 | 157 |
| 26 | The regulation of ammonium translocation in plants. <i>Journal of Experimental Botany</i> , 2002, 53, 883-890. | 4.8 | 153 |
| 27 | Simultaneous iron, zinc, sulfur and phosphorus speciation analysis of barley grain tissues using SEC-ICP-MS and IP-ICP-MS. <i>Metallomics</i> , 2009, 1, 418. | 2.4 | 151 |
| 28 | Effects of elevated atmospheric CO ₂ on physiology and yield of wheat (<i>Triticum aestivum</i> L.): A meta-analytic test of current hypotheses. <i>Agriculture, Ecosystems and Environment</i> , 2013, 178, 57-63. | 5.3 | 145 |
| 29 | Rhizodeposition of nitrogen by red clover, white clover and ryegrass leys. <i>Soil Biology and Biochemistry</i> , 2001, 33, 439-448. | 8.8 | 143 |
| 30 | A critical experimental evaluation of methods for determination of NH ₄ ⁺ in plant tissue, xylem sap and apoplastic fluid. <i>Physiologia Plantarum</i> , 2000, 109, 167-179. | 5.2 | 140 |
| 31 | The Influence of Phosphorus Deficiency on Growth and Nitrogen Fixation of White Clover Plants. <i>Annals of Botany</i> , 2002, 90, 745-753. | 2.9 | 138 |
| 32 | Megapixel imaging of (micro)nutrients in mature barley grains. <i>Journal of Experimental Botany</i> , 2011, 62, 273-282. | 4.8 | 134 |
| 33 | Nitrogen incorporation and remobilization in different shoot components of field-grown winter oilseed rape (<i>Brassica napus</i> L.) as affected by rate of nitrogen application and irrigation. <i>Plant and Soil</i> , 1995, 177, 255-264. | 3.7 | 133 |
| 34 | Post-translational regulation of cytosolic glutamine synthetase by reversible phosphorylation and 14-3-3 protein interaction. <i>Plant Journal</i> , 2000, 24, 171-181. | 5.7 | 133 |
| 35 | Title is missing!. <i>Plant and Soil</i> , 1997, 197, 187-199. | 3.7 | 132 |
| 36 | Resistance modelling of ammonia exchange over oilseed rape. <i>Agricultural and Forest Meteorology</i> , 2000, 105, 405-425. | 4.8 | 131 |

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|----|--|-----|-----------|
| 37 | Ammonia volatilization during storage of cattle and pig slurry: effect of surface cover. <i>Journal of Agricultural Science</i> , 1993, 121, 63-71. | 1.3 | 130 |
| 38 | The use of DGT for prediction of plant available copper, zinc and phosphorus in agricultural soils. <i>Plant and Soil</i> , 2011, 346, 167-180. | 3.7 | 128 |
| 39 | Physiological parameters controlling plant-atmosphere ammonia exchange. <i>Atmospheric Environment</i> , 1998, 32, 491-498. | 4.1 | 120 |
| 40 | Ammonia Flux between Oilseed Rape Plants and the Atmosphere in Response to Changes in Leaf Temperature, Light Intensity, and Air Humidity (Interactions with Leaf Conductance and Apoplastic) <i>Tj ETQq0 0 0 rgBT /Overlook 10 Tf 5</i> | 3.7 | 110 |
| 41 | Micro-scaled high-throughput digestion of plant tissue samples for multi-elemental analysis. <i>Plant Methods</i> , 2009, 5, 12. | 4.3 | 114 |
| 42 | Activation of Rice nicotianamine synthase 2 (OsNAS2) Enhances Iron Availability for Biofortification. <i>Molecules and Cells</i> , 2012, 33, 269-276. | 2.6 | 112 |
| 43 | Effects of Ammonium Toxicity on Nitrogen Metabolism and Elemental Profile of Cucumber Plants. <i>Journal of Plant Nutrition</i> , 2007, 30, 1933-1951. | 1.9 | 111 |
| 44 | Extensive metabolic cross-talk in melon fruit revealed by spatial and developmental combinatorial metabolomics. <i>New Phytologist</i> , 2011, 190, 683-696. | 7.3 | 111 |
| 45 | Measurement of biological dinitrogen fixation in grassland: Comparison of the enriched 15N dilution and the natural 15N abundance methods at different nitrogen application rates and defoliation frequencies. <i>Plant and Soil</i> , 1994, 166, 153-163. | 3.7 | 110 |
| 46 | Multielemental Fingerprinting as a Tool for Authentication of Organic Wheat, Barley, Faba Bean, and Potato. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 4385-4396. | 5.2 | 106 |
| 47 | Title is missing!. <i>Plant and Soil</i> , 2000, 227, 171-183. | 3.7 | 103 |
| 48 | Sources and sinks of ammonia within an oilseed rape canopy. <i>Agricultural and Forest Meteorology</i> , 2000, 105, 385-404. | 4.8 | 99 |
| 49 | Genotypic differences in manganese efficiency: field experiments with winter barley (<i>Hordeum vulgare</i>) <i>Tj ETQq1 1 0.784314 rgBT /</i> | 3.7 | 99 |
| 50 | Cytosolic Glutamine Synthetase Gln1;2 Is the Main Isozyme Contributing to GS1 Activity and Can Be Up-Regulated to Relieve Ammonium Toxicity. <i>Plant Physiology</i> , 2016, 171, 1921-1933. | 4.8 | 99 |
| 51 | Nanomaterials as fertilizers for improving plant mineral nutrition and environmental outcomes. <i>Environmental Science: Nano</i> , 2019, 6, 3513-3524. | 4.3 | 99 |
| 52 | Foliar application of zinc sulphate and zinc EDTA to wheat leaves: differences in mobility, distribution, and speciation. <i>Journal of Experimental Botany</i> , 2018, 69, 4469-4481. | 4.8 | 95 |
| 53 | Field investigations of ammonia exchange between barley plants and the atmosphere. I. Concentration profiles and flux densities of ammonia. <i>Plant, Cell and Environment</i> , 1993, 16, 161-167. | 5.7 | 90 |
| 54 | Regulation of Apoplastic NH ₄ ⁺ Concentration in Leaves of Oilseed Rape. <i>Plant Physiology</i> , 1998, 118, 1361-1368. | 4.8 | 90 |

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|----|--|------|-----------|
| 55 | Photosynthesis in leaves and siliques of winter oilseed rape (<i>Brassica napus</i> L.). <i>Plant and Soil</i> , 1996, 186, 227-236. | 3.7 | 85 |
| 56 | Translocation of NH ₄ ⁺ in oilseed rape plants in relation to glutamine synthetase isogene expression and activity. <i>Physiologia Plantarum</i> , 1999, 105, 469-477. | 5.2 | 82 |
| 57 | Latent manganese deficiency increases transpiration in barley (<i>Hordeum vulgare</i>). <i>Physiologia Plantarum</i> , 2009, 135, 307-316. | 5.2 | 82 |
| 58 | A simple passive sampler for measuring ammonia emission in the field. <i>Water, Air, and Soil Pollution</i> , 1992, 62, 13-24. | 2.4 | 81 |
| 59 | Title is missing!. <i>Plant and Soil</i> , 2001, 228, 105-115. | 3.7 | 80 |
| 60 | Title is missing!. <i>Plant and Soil</i> , 2001, 228, 131-145. | 3.7 | 79 |
| 61 | Dynamic Interactions between Root NH ₄ ⁺ Influx and Long-Distance N Translocation in Rice: Insights into Feedback Processes. <i>Plant and Cell Physiology</i> , 1998, 39, 1287-1293. | 3.1 | 78 |
| 62 | Ammonia emission from young barley plants: influence of N source, light/dark cycles and inhibition of glutamine synthetase. <i>Journal of Experimental Botany</i> , 1996, 47, 477-484. | 4.8 | 77 |
| 63 | Regulation of the <i>hvt1</i> gene encoding a high-affinity sulfate transporter from <i>Hordeum vulgare</i> . <i>Plant Molecular Biology</i> , 1999, 40, 883-892. | 3.9 | 77 |
| 64 | Molecular speciation and tissue compartmentation of zinc in durum wheat grains with contrasting nutritional status. <i>New Phytologist</i> , 2016, 211, 1255-1265. | 7.3 | 77 |
| 65 | Ammonia Volatilization from Pig Slurry Applied with Trail Hoses or Broadcast to Winter Wheat: Effects of Crop Developmental Stage, Microclimate, and Leaf Ammonia Absorption. <i>Journal of Environmental Quality</i> , 1997, 26, 1153-1160. | 2.0 | 75 |
| 66 | Interactions between uptake of amino acids and inorganic nitrogen in wheat plants. <i>Biogeosciences</i> , 2012, 9, 1509-1518. | 3.3 | 75 |
| 67 | Is it really organic? Multi-isotopic analysis as a tool to discriminate between organic and conventional plants. <i>Food Chemistry</i> , 2013, 141, 2812-2820. | 8.2 | 75 |
| 68 | Metabolomic and elemental profiling of melon fruit quality as affected by genotype and environment. <i>Metabolomics</i> , 2013, 9, 57-77. | 3.0 | 74 |
| 69 | Authentication of organically grown plants – advantages and limitations of atomic spectroscopy for multi-element and stable isotope analysis. <i>TrAC - Trends in Analytical Chemistry</i> , 2014, 59, 73-82. | 11.4 | 74 |
| 70 | Differential Capacity for High-Affinity Manganese Uptake Contributes to Differences between Barley Genotypes in Tolerance to Low Manganese Availability. <i>Plant Physiology</i> , 2005, 139, 1411-1420. | 4.8 | 73 |
| 71 | Identification and characterization of zinc-starvation-induced ZIP transporters from barley roots. <i>Plant Physiology and Biochemistry</i> , 2009, 47, 377-383. | 5.8 | 73 |
| 72 | A Combined Zinc/Cadmium Sensor and Zinc/Cadmium Export Regulator in a Heavy Metal Pump. <i>Journal of Biological Chemistry</i> , 2010, 285, 31243-31252. | 3.4 | 73 |

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|----|--|-----|-----------|
| 73 | Influence of nitrogen nutrition and metabolism on ammonia volatilization in plants. <i>Nutrient Cycling in Agroecosystems</i> , 1998, 51, 35-40. | 2.2 | 72 |
| 74 | Two cytosolic glutamine synthetase isoforms play specific roles for seed germination and seed yield structure in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2015, 66, 203-212. | 4.8 | 72 |
| 75 | The effects of the loss of TIP1;1 and TIP1;2 aquaporins in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2008, 56, 756-767. | 5.7 | 71 |
| 76 | Leaf-Atmosphere NH ₃ Exchange in Barley Mutants with Reduced Activities of Glutamine Synthetase. <i>Plant Physiology</i> , 1997, 114, 1307-1312. | 4.8 | 70 |
| 77 | Physiological regulation of plant-atmosphere ammonia exchange. <i>Plant and Soil</i> , 2000, 221, 95-102. | 3.7 | 69 |
| 78 | Stomatal compensation points for ammonia in oilseed rape plants under field conditions. <i>Agricultural and Forest Meteorology</i> , 2000, 105, 371-383. | 4.8 | 68 |
| 79 | Ammonia compensation points in two cultivars of <i>Hordeum vulgare</i> L. during vegetative and generative growth. <i>Plant, Cell and Environment</i> , 1996, 19, 1299-1306. | 5.7 | 67 |
| 80 | Photorespiratory NH ₄ ⁺ Production in Leaves of Wild-Type and Glutamine Synthetase 2 Antisense Oilseed Rape. <i>Plant Physiology</i> , 2002, 130, 989-998. | 4.8 | 67 |
| 81 | Review: The role of atomic spectrometry in plant science. <i>Journal of Analytical Atomic Spectrometry</i> , 2011, 26, 52-79. | 3.0 | 65 |
| 82 | Responses of barley root and shoot proteomes to long-term nitrogen deficiency, short-term nitrogen starvation and ammonium. <i>Plant, Cell and Environment</i> , 2011, 34, 2024-2037. | 5.7 | 65 |
| 83 | Sensitive Detection of Phosphorus Deficiency in Plants Using Chlorophyll <i>a</i> Fluorescence. <i>Plant Physiology</i> , 2015, 169, 353-361. | 4.8 | 65 |
| 84 | Temporal variability in bioassays of the stomatal ammonia compensation point in relation to plant and soil nitrogen parameters in intensively managed grassland. <i>Biogeosciences</i> , 2009, 6, 171-179. | 3.3 | 64 |
| 85 | Nitrogen losses from field-grown spring barley plants as affected by rate of nitrogen application. <i>Plant and Soil</i> , 1989, 116, 167-175. | 3.7 | 63 |
| 86 | Dynamic and Steady-State Responses of Inorganic Nitrogen Pools and NH ₃ Exchange in Leaves of <i>Lolium perenne</i> and <i>Bromus erectus</i> to Changes in Root Nitrogen Supply. <i>Plant Physiology</i> , 2002, 128, 742-750. | 4.8 | 63 |
| 87 | SURFATM-NH ₃ : a model combining the surface energy balance and bi-directional exchanges of ammonia applied at the field scale. <i>Biogeosciences</i> , 2009, 6, 1371-1388. | 3.3 | 61 |
| 88 | Effects of Nitrate and Potassium on Ammonium Toxicity in Cucumber Plants. <i>Journal of Plant Nutrition</i> , 2008, 31, 1270-1283. | 1.9 | 60 |
| 89 | Latent manganese deficiency in barley can be diagnosed and remediated on the basis of chlorophyll <i>a</i> fluorescence measurements. <i>Plant and Soil</i> , 2013, 372, 417-429. | 3.7 | 60 |
| 90 | Golgi Localized Barley MTP8 Proteins Facilitate Mn Transport. <i>PLoS ONE</i> , 2014, 9, e113759. | 2.5 | 60 |

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|-----|--|-----|-----------|
| 91 | Title is missing!. Plant and Soil, 1999, 208, 293-305. | 3.7 | 59 |
| 92 | Senescence-induced changes in apoplastic and bulk tissue ammonia concentrations of ryegrass leaves. New Phytologist, 2003, 160, 489-499. | 7.3 | 59 |
| 93 | Elevated Phosphorus Impedes Manganese Acquisition by Barley Plants. Frontiers in Plant Science, 2011, 2, 37. | 3.6 | 59 |
| 94 | Losses of essential mineral nutrients by polishing of rice differ among genotypes due to contrasting grain hardness and mineral distribution. Journal of Cereal Science, 2012, 56, 307-315. | 3.7 | 59 |
| 95 | A proteomics approach to investigate the process of Zn hyperaccumulation in <i>Nocca caerulea</i> (<sc>J</sc> & <sc>C</sc>. <sc>P</sc>resl) <sc>F</sc>. <sc>K</sc>. <sc>M</sc>eyer. Plant Journal, 2013, 73, 131-142. | 5.7 | 59 |
| 96 | Barley HvHMA1 Is a Heavy Metal Pump Involved in Mobilizing Organellar Zn and Cu and Plays a Role in Metal Loading into Grains. PLoS ONE, 2012, 7, e49027. | 2.5 | 56 |
| 97 | A pulse-labelling method to generate ¹³ C- enriched plant materials. Plant and Soil, 2001, 235, 253-257. | 3.7 | 55 |
| 98 | Dynamics of ammonia exchange with cut grassland: synthesis of results and conclusions of the GRAMINAE Integrated Experiment. Biogeosciences, 2009, 6, 2907-2934. | 3.3 | 55 |
| 99 | Bacterial diversity in Greenlandic soils as affected by potato cropping and inorganic versus organic fertilization. Polar Biology, 2014, 37, 61-71. | 1.2 | 55 |
| 100 | The impact of silicon on cell wall composition and enzymatic saccharification of Brachypodium distachyon. Biotechnology for Biofuels, 2018, 11, 171. | 6.2 | 55 |
| 101 | Regulation of the high-affinity ammonium transporter (BnAMT1;2) in the leaves of Brassica napus by nitrogen status. Plant Molecular Biology, 2002, 49, 483-490. | 3.9 | 53 |
| 102 | Contrasting effects of nicotianamine synthase knockdown on zinc and nickel tolerance and accumulation in the zinc/cadmium hyperaccumulator <i>Arabidopsis halleri</i> . New Phytologist, 2015, 206, 738-750. | 7.3 | 53 |
| 103 | Tonoplast Aquaporins Facilitate Lateral Root Emergence. Plant Physiology, 2016, 170, 1640-1654. | 4.8 | 53 |
| 104 | Cisgenic overexpression of cytosolic glutamine synthetase improves nitrogen utilization efficiency in barley and prevents grain protein decline under elevated CO ₂ . Plant Biotechnology Journal, 2019, 17, 1209-1221. | 8.3 | 52 |
| 105 | Leaf Photosynthesis and Drought Adaptation in Field-Grown Oilseed Rape (Brassica napus L.). Functional Plant Biology, 1996, 23, 631. | 2.1 | 52 |
| 106 | Root Carbon Enrichment Alleviates Ammonium Toxicity in Cucumber Plants. Journal of Plant Nutrition, 2008, 31, 941-958. | 1.9 | 51 |
| 107 | Dynamics of ammonia exchange with cut grassland: strategy and implementation of the GRAMINAE Integrated Experiment. Biogeosciences, 2009, 6, 309-331. | 3.3 | 51 |
| 108 | Silicon enhances leaf remobilization of iron in cucumber under limited iron conditions. Annals of Botany, 2016, 118, 271-280. | 2.9 | 51 |

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|-----|---|-----|-----------|
| 109 | Model of how plants sense zinc deficiency. <i>Metallomics</i> , 2013, 5, 1110. | 2.4 | 50 |
| 110 | Micrometeorological measurements of net ammonia fluxes over oilseed rape during two vegetation periods. <i>Agricultural and Forest Meteorology</i> , 2000, 105, 351-369. | 4.8 | 49 |
| 111 | Barley Metallothioneins: MT3 and MT4 Are Localized in the Grain Aleurone Layer and Show Differential Zinc Binding. <i>Plant Physiology</i> , 2012, 159, 1125-1137. | 4.8 | 49 |
| 112 | Ammonia sources and sinks in an intensively managed grassland canopy. <i>Biogeosciences</i> , 2009, 6, 1903-1915. | 3.3 | 48 |
| 113 | High-throughput analysis of amino acids in plant materials by single quadrupole mass spectrometry. <i>Plant Methods</i> , 2018, 14, 8. | 4.3 | 47 |
| 114 | Suppression of C-Hordein Synthesis in Barley by Antisense Constructs Results in a More Balanced Amino Acid Composition. <i>Journal of Agricultural and Food Chemistry</i> , 2007, 55, 6074-6081. | 5.2 | 46 |
| 115 | Phylogenetic analysis of F-bZIP transcription factors indicates conservation of the zinc deficiency response across land plants. <i>Scientific Reports</i> , 2017, 7, 3806. | 3.3 | 46 |
| 116 | A genomics and multi-platform metabolomics approach to identify new traits of rice quality in traditional and improved varieties. <i>Metabolomics</i> , 2012, 8, 771-783. | 3.0 | 43 |
| 117 | Plant nutrition and soil fertility: synergies for acquiring global green growth and sustainable development. <i>Plant and Soil</i> , 2019, 434, 1-6. | 3.7 | 43 |
| 118 | Effect of NO ₃ - supply on N metabolism of potato plants (<i>Solanum tuberosum</i> L.) with special focus on the tubers. <i>Plant, Cell and Environment</i> , 2002, 25, 999-1009. | 5.7 | 42 |
| 119 | Multielement Plant Tissue Analysis Using ICP Spectrometry. <i>Methods in Molecular Biology</i> , 2013, 953, 121-141. | 0.9 | 42 |
| 120 | Metal Binding in Photosystem II Super- and Subcomplexes from Barley Thylakoids. <i>Plant Physiology</i> , 2015, 168, 1490-1502. | 4.8 | 42 |
| 121 | Phosphorus nutrition of barley, buckwheat and rape seedlings. II. Influx and efflux of phosphorous by intact roots of different P status. <i>Physiologia Plantarum</i> , 1984, 61, 584-590. | 5.2 | 40 |
| 122 | A Passive Flux Sampler for Measuring Ammonia Volatilization from Manure Storage Facilities. <i>Journal of Environmental Quality</i> , 1996, 25, 241-247. | 2.0 | 40 |
| 123 | Zinc fluxes into developing barley grains: use of stable Zn isotopes to separate root uptake from remobilization in plants with contrasting Zn status. <i>Plant and Soil</i> , 2012, 361, 241-250. | 3.7 | 40 |
| 124 | Ammonium fluxes into plant roots: Energetics, kinetics and regulation. <i>Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science</i> , 1997, 160, 261-268. | 0.4 | 39 |
| 125 | Surface/atmosphere exchange and chemical interaction of gases and aerosols over oilseed rape. <i>Agricultural and Forest Meteorology</i> , 2000, 105, 427-445. | 4.8 | 38 |
| 126 | Multi-elemental speciation analysis of barley genotypes differing in tolerance to cadmium toxicity using SEC-ICP-MS and ESI-TOF-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2006, 21, 996. | 3.0 | 38 |

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|-----|--|-----|-----------|
| 127 | Multi-element bioimaging of Arabidopsis thaliana roots. Plant Physiology, 2016, 172, pp.00770.2016. | 4.8 | 38 |
| 128 | Uptake and utilization of atmospheric ammonia in three native Poaceae species: leaf conductances, composition of apoplastic solution and interactions with root nitrogen supply. New Phytologist, 1999, 141, 71-83. | 7.3 | 37 |
| 129 | Title is missing!. Plant and Soil, 2001, 230, 239-246. | 3.7 | 37 |
| 130 | Influence of nitrogen and sulphur form on manganese acquisition by barley (shape Hordeum vulgare). Plant and Soil, 2005, 268, 309-317. | 3.7 | 37 |
| 131 | Responses of cucumber plant to NH ₄ ⁺ and NO ₃ ⁻ nutrition: The relative addition rate technique vs. cultivation at constant nitrogen concentration. Scientia Horticulturae, 2009, 121, 397-403. | 3.6 | 37 |
| 132 | The iron-regulated transporter 1 plays an essential role in uptake, translocation and grain-loading of manganese, but not iron, in barley. New Phytologist, 2018, 217, 1640-1653. | 7.3 | 37 |
| 133 | Multi-elemental fingerprinting of plant tissue by semi-quantitative ICP-MS and chemometrics. Journal of Analytical Atomic Spectrometry, 2009, 24, 1198. | 3.0 | 35 |
| 134 | The Intensity of Manganese Deficiency Strongly Affects Root Endodermal Suberization and Ion Homeostasis. Plant Physiology, 2019, 181, 729-742. | 4.8 | 35 |
| 135 | Comparative Metabolomics and Molecular Phylogenetics of Melon (Cucumis melo, Cucurbitaceae) Biodiversity. Metabolites, 2020, 10, 121. | 2.9 | 35 |
| 136 | Benefits of nitrogen for food, fibre and industrial production. , 2011, , 32-61. | | 34 |
| 137 | Seasonal variation in nitrogen pools and $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ natural abundances in different tissues of grassland plants. Biogeosciences, 2012, 9, 1583-1595. | 3.3 | 34 |
| 138 | Photosystem II Functionality in Barley Responds Dynamically to Changes in Leaf Manganese Status. Frontiers in Plant Science, 2016, 7, 1772. | 3.6 | 34 |
| 139 | Vertical structure and diurnal variability of ammonia exchange potential within an intensively managed grass canopy. Biogeosciences, 2009, 6, 15-23. | 3.3 | 33 |
| 140 | Nitrogen fertilization affects silicon concentration, cell wall composition and biofuel potential of wheat straw. Biomass and Bioenergy, 2014, 64, 291-298. | 5.7 | 33 |
| 141 | Fluxes of ammonia over oilseed rape. Agricultural and Forest Meteorology, 2000, 105, 327-349. | 4.8 | 32 |
| 142 | Root length and phosphorus uptake by four barley cultivars grown under moderate deficiency of phosphorus in field experiments. Journal of Plant Nutrition, 1987, 10, 1289-1295. | 1.9 | 31 |
| 143 | Seasonal variation in ammonia compensation point and nitrogen pools in beech leaves (Fagus) Tj ETQq1 1 0.784314.rgBT /Overlock 10 | 3.7 | 31 |
| 144 | Layered Double Hydroxides: Potential Release-on-Demand Fertilizers for Plant Zinc Nutrition. Journal of Agricultural and Food Chemistry, 2017, 65, 8779-8789. | 5.2 | 31 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
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