Emmanuel Delhaize

List of Publications by Year
in descending order

61 papers	8,716 citations	71102 41 h-index	128289 60 g-index
62 all docs	62 docs citations	62 times ranked	6408 citing authors

#	Article	IF	Citations
1	Aluminium tolerance in plants and the complexing role of organic acids. Trends in Plant Science, 2001, 6, 273-278.	8.8	1,127
2	A wheat gene encoding an aluminum-activated malate transporter. Plant Journal, 2004, 37, 645-653.	5.7	858
3	Plant and microbial strategies to improve the phosphorus efficiency of agriculture. Plant and Soil, 2011, 349, 121-156.	3.7	678
4	AtALMT1, which encodes a malate transporter, is identified as one of several genes critical for aluminum tolerance in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9738-9743.	7.1	509
5	Using membrane transporters to improve crops for sustainable food production. Nature, 2013, 497, 60-66.	27.8	440
6	Characterisation of Al-stimulated efflux of malate from the apices of Al-tolerant wheat roots. Planta, 1995, 196, 103.	3.2	387
7	Engineering high-level aluminum tolerance in barley with the ALMT1 gene. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 15249-15254.	7.1	359
8	Strategies and agronomic interventions to improve the phosphorus-use efficiency of farming systems. Plant and Soil, 2011, 349, 89-120.	3.7	343
9	A Second Mechanism for Aluminum Resistance in Wheat Relies on the Constitutive Efflux of Citrate from Roots Â Â. Plant Physiology, 2009, 149, 340-351.	4.8	248
10	A role for theAtMTP11gene of Arabidopsis in manganese transport and tolerance. Plant Journal, 2007, 51, 198-210.	5.7	235
11	Transcriptional regulation of aluminium tolerance genes. Trends in Plant Science, 2012, 17, 341-348.	8.8	233
12	Improving phosphorus use efficiency: a complex trait with emerging opportunities. Plant Journal, 2017, 90, 868-885.	5.7	229
13	The roles of organic anion permeases in aluminium resistance and mineral nutrition. FEBS Letters, 2007, 581, 2255-2262.	2.8	225
14	Expression of a Pseudomonas aeruginosa Citrate Synthase Gene in Tobacco Is Not Associated with Either Enhanced Citrate Accumulation or Efflux. Plant Physiology, 2001, 125, 2059-2067.	4.8	178
15	Molecular characterization and mapping of<i>ALMT1</i>, the aluminium-tolerance gene of bread wheat (<i>Triticum aestivum</i>L.). Genome, 2005, 48, 781-791.	2.0	149
16	Transgenic barley (<i>Hordeum vulgare</i> L.) expressing the wheat aluminium resistance gene (<i>TaALMT1</i>) shows enhanced phosphorus nutrition and grain production when grown on an acid soil. Plant Biotechnology Journal, 2009, 7, 391-400.	8.3	149
17	Sequence Upstream of the Wheat (Triticum aestivum L.) ALMT1 Gene and its Relationship to Aluminum Resistance. Plant and Cell Physiology, 2006, 47, 1343-1354.	3.1	135
18	Transposon-Mediated Alteration of <i>TaMATE1B</i> Expression in Wheat Confers Constitutive Citrate Efflux from Root Apices. Plant Physiology, 2013, 161, 880-892.	4.8	127

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19	High-resolution mapping of the Alp locus and identification of a candidate gene HvMATE controlling aluminium tolerance in barley (Hordeum vulgare L.). Theoretical and Applied Genetics, 2007, 115, 265-276.	3.6	123
20	Root hairs enable high transpiration rates in drying soils. New Phytologist, 2017, 216, 771-781.	7.3	123
21	The convergent evolution of aluminium resistance in plants exploits a convenient currency. Functional Plant Biology, 2010, 37, 275.	2.1	109
22	The barley MATE gene, HvAACT1, increases citrate efflux and Al3+ tolerance when expressed in wheat and barley. Annals of Botany, 2013, 112, 603-612.	2.9	96
23	Aluminium tolerance of root hairs underlies genotypic differences in rhizosheath size of wheat (<i>Triticum aestivum</i>) grown on acid soil. New Phytologist, 2012, 195, 609-619.	7.3	95
24	HvALMT1 from barley is involved in the transport of organic anions. Journal of Experimental Botany, 2010, 61, 1455-1467.	4.8	92
25	Engineering greater aluminium resistance in wheat by over-expressing TaALMT1. Annals of Botany, 2010, 106, 205-214.	2.9	88
26	Quantitative trait loci for salinity tolerance in barley (Hordeum vulgare L.). Molecular Breeding, 2012, 29, 427-436.	2.1	87
27	Effect of lime on root growth, morphology and the rhizosheath of cereal seedlings growing in an acid soil. Plant and Soil, 2010, 327, 199-212.	3.7	84
28	A Higher Plant Î”8 Sphingolipid Desaturase with a Preference for (Z)-Isomer Formation Confers Aluminum Tolerance to Yeast and Plants. Plant Physiology, 2007, 144, 1968-1977.	4.8	78
29	The multiple origins of aluminium resistance in hexaploid wheat include Aegilops tauschii and more recent cis mutations to TaALMT1. Plant Journal, 2010, 64, 446-455.	5.7	75
30	The genetics of rhizosheath size in a multiparent mapping population of wheat. Journal of Experimental Botany, 2015, 66, 4527-4536.	4.8	73
31	Analysis of TaALMT1 traces the transmission of aluminum resistance in cultivated common wheat (Triticum aestivum L.). Theoretical and Applied Genetics, 2008, 116, 343-354.	3.6	71
32	Can citrate efflux from roots improve phosphorus uptake by plants? Testing the hypothesis with nearâ€isogenic lines of wheat. Physiologia Plantarum, 2014, 151, 230-242.	5.2	71
33	Genome-wide association analyses of common wheat (Triticum aestivum L.) germplasm identifies multiple loci for aluminium resistanceThis article is one of a selection of papers from the conference â€œExploiting Genome-wide Association in Oilseed Brassicas: a model for genetic improvement of major OECD crops for sustainable farmingâ€ Genome, 2010, 53, 957-966.	2.0	70
34	Do longer root hairs improve phosphorus uptake? Testing the hypothesis with transgenic <i>Brachypodium distachyon</i> lines overexpressing endogenous <i><scp>RSL</scp></i> genes. New Phytologist, 2018, 217, 1654-1666.	7.3	68
35	Enhancing the aluminium tolerance of barley by expressing the citrate transporter genes SbMATE and FRD3. Journal of Experimental Botany, 2014, 65, 2381-2390.	4.8	58
36	Plant roots: understanding structure and function in an ocean of complexity. Annals of Botany, 2016, 118, 555-559.	2.9	55

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37	Variation in early phosphorus-uptake efficiency among wheat genotypes grown on two contrasting Australian soils. Australian Journal of Agricultural Research, 2008, 59, 157.	1.5	53
38	Effects of altered citrate synthase and isocitrate dehydrogenase expression on internal citrate concentrations and citrate efflux from tobacco (Nicotiana tabacum L.) roots. Plant and Soil, 2003, 248, 137-144.	3.7	46
39	Early vigour improves phosphate uptake in wheat. Journal of Experimental Botany, 2015, 66, 7089-7100.	4.8	46
40	An extracellular hydrophilic carboxy-terminal domain regulates the activity of TaALMT1, the aluminum-activated malate transport protein of wheat. Plant Journal, 2010, 64, no-no.	5.7	45
41	Manipulating exudate composition from root apices shapes the microbiome throughout the root system. Plant Physiology, 2021, 187, 2279-2295.	4.8	44
42	Rhizosheaths on wheat grown in acid soils: phosphorus acquisition efficiency and genetic control. Journal of Experimental Botany, 2016, 67, 3709-3718.	4.8	42
43	The barley anion channel, <scp>HvALMT1</scp>, has multiple roles in guard cell physiology and grain metabolism. Physiologia Plantarum, 2015, 153, 183-193.	5.2	40
44	Introgression of genes from bread wheat enhances the aluminium tolerance of durum wheat. Theoretical and Applied Genetics, 2016, 129, 729-739.	3.6	37
45	Characterisation of HvALMT1 function in transgenic barley plants. Functional Plant Biology, 2011, 38, 163.	2.1	35
46	Altered Expression of a Malate-Permeable Anion Channel, OsALMT4, Disrupts Mineral Nutrition. Plant Physiology, 2017, 175, 1745-1759.	4.8	27
47	A sterile hydroponic system for characterising root exudates from specific root types and whole-root systems of large crop plants. Plant Methods, 2018, 14, 114.	4.3	25
48	Biotechnological Solutions for Enhancing the Aluminium Resistance of Crop Plants. , 2011, , .		19
49	Impact of the TaMATE1B gene on above and below-ground growth of durum wheat grown on an acid and Al3+-toxic soil. Plant and Soil, 2020, 447, 73-84.	3.7	19
50	Introgression of a 4D chromosomal fragment into durum wheat confers aluminium tolerance. Annals of Botany, 2014, 114, 135-144.	2.9	17
51	Does the major aluminium-resistance gene in wheat, TaALMT1, also confer tolerance to alkaline soils?. Plant and Soil, 2018, 424, 451-462.	3.7	15
52	Analysis of aneuploid lines of bread wheat to map chromosomal locations of genes controlling root hair length. Annals of Botany, 2017, 119, 1333-1341.	2.9	13
53	Organic anions facilitate the mobilization of soil organic phosphorus and its subsequent lability to phosphatases. Plant and Soil, 2022, 476, 161-180.	3.7	11
54	Altered Expression of the Malate-Permeable Anion Channel OsALMT4 Reduces the Growth of Rice Under Low Radiance. Frontiers in Plant Science, 2018, 9, 542.	3.6	10

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55	Assessing How the Aluminum-Resistance Traits in Wheat and Rye Transfer to Hexaploid and Octoploid Triticale. Frontiers in Plant Science, 2018, 9, 1334.	3.6	9
56	The impact of elevated CO2 on acid-soil tolerance of hexaploid wheat (Triticum aestivum L.) genotypes varying in organic anion efflux. Plant and Soil, 2018, 428, 401-413.	3.7	8
57	Screening of Diverse Ethiopian Durum Wheat Accessions for Aluminum Tolerance. Agronomy, 2019, 9, 440.	3.0	7
58	Elevated CO2 (free-air CO2 enrichment) increases grain yield of aluminium-resistant but not aluminium-sensitive wheat (<i>Triticum aestivum</i>) grown in an acid soil. Annals of Botany, 2019, 123, 461-468.	2.9	6
59	Selection for early shoot vigour in wheat increases root hair length but reduces epidermal cell size of roots and leaves. Journal of Experimental Botany, 2022, 73, 2499-2510.	4.8	6
60	Conventional and transgenic strategies to enhance the acid soil tolerance of barley. Molecular Breeding, 2018, 38, 1.	2.1	5
61	Durum wheat with the introgressed TaMATE1B gene shows resistance to terminal drought by ensuring deep root growth in acidic and Al3+-toxic subsoils. Plant and Soil, 2022, 478, 311-324.	3.7	5