Doris Rentsch

List of Publications by Year
in descending order

70 papers	7,146 citations	76196 40 h-index	88477 70 g-index
70 all docs	70 docs citations	70 times ranked	6983 citing authors

#	Article	IF	Citations
1	A unified nomenclature of NITRATE TRANSPORTER 1/PEPTIDE TRANSPORTER family members in plants. Trends in Plant Science, 2014, 19, 5-9.	4.3	581
2	Arsenic tolerance in Arabidopsis is mediated by two ABCC-type phytochelatin transporters. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21187-21192.	3.3	555
3	Transporters for uptake and allocation of organic nitrogen compounds in plants. FEBS Letters, 2007, 581, 2281-2289.	1.3	323
4	NTR1encodes a high affinity oligopeptide transporter inArabidopsis. FEBS Letters, 1995, 370, 264-268.	1.3	308
5	Nonredundant Regulation of Rice Arbuscular Mycorrhizal Symbiosis by Two Members of the PHOSPHATE TRANSPORTER1 Gene Family. Plant Cell, 2012, 24, 4236-4251.	3.1	306
6	Plants can use protein as a nitrogen source without assistance from other organisms. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4524-4529.	3.3	296
7	Proline metabolism and transport in plant development. Amino Acids, 2010, 39, 949-962.	1.2	290
8	Uptake and Partitioning of Amino Acids and Peptides. Molecular Plant, 2010, 3, 997-1011.	3.9	246
9	LeProT1, a Transporter for Proline, Glycine Betaine, and Î³-Amino Butyric Acid in Tomato Pollen. Plant Cell, 1999, 11, 377-391.	3.1	245
10	Conservation of amino acid transporters in fungi, plants and animals. Trends in Biochemical Sciences, 2002, 27, 139-147.	3.7	210
11	Low and high affinity amino acid H+â€cotransporters for cellular import of neutral and charged amino acids. Plant Journal, 2002, 29, 717-731.	2.8	192
12	A New Family of High-Affinity Transporters for Adenine, Cytosine, and Purine Derivatives in Arabidopsis. Plant Cell, 2000, 12, 291-300.	3.1	190
13	AtPTR1 and AtPTR5 Transport Dipeptides in Planta. Plant Physiology, 2008, 148, 856-869.	2.3	175
14	Developmental control of H+/amino acid permease gene expression during seed development of Arabidopsis. Plant Journal, 1998, 14, 535-544.	2.8	163
15	Hypersensitivity of an Arabidopsis Sugar Signaling Mutant toward Exogenous Proline Application. Plant Physiology, 2000, 123, 779-789.	2.3	162
16	High Affinity Amino Acid Transporters Specifically Expressed in Xylem Parenchyma and Developing Seeds of Arabidopsis. Journal of Biological Chemistry, 2002, 277, 45338-45346.	1.6	162
17	The AtProT Family. Compatible Solute Transporters with Similar Substrate Specificity But Differential Expression Patterns. Plant Physiology, 2005, 137, 117-126.	2.3	161
18	Turning the Table: Plants Consume Microbes as a Source of Nutrients. PLoS ONE, 2010, 5, e11915.	1.1	136

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19	Altered expression of the <scp>PTR</scp>/<scp>NRT</scp>1 homologue Os<scp>PTR</scp>9 affects nitrogen utilization efficiency, growth and grain yield in rice. Plant Biotechnology Journal, 2013, 11, 446-458.	4.1	131
20	AtGAT1, a High Affinity Transporter for Î³-Aminobutyric Acid in Arabidopsis thaliana. Journal of Biological Chemistry, 2006, 281, 7197-7204.	1.6	115
21	Cloning of anArabidopsishistidine transporting protein related to nitrate and peptide transporters. FEBS Letters, 1994, 347, 185-189.	1.3	111
22	Identification and characterization of GABA, proline and quaternary ammonium compound transporters fromArabidopsis thaliana. FEBS Letters, 1999, 450, 280-284.	1.3	104
23	In planta function of compatible solute transporters of the AtProT family. Journal of Experimental Botany, 2011, 62, 787-796.	2.4	100
24	AtPTR1, a plasma membrane peptide transporter expressed during seed germination and in vascular tissue of Arabidopsis. Plant Journal, 2004, 40, 488-499.	2.8	96
25	A Novel Family of Transporters Mediating the Transport of Glutathione Derivatives in Plants. Plant Physiology, 2004, 134, 482-491.	2.3	96
26	Amino Acid Export in Developing Arabidopsis Seeds Depends on UmamiT Facilitators. Current Biology, 2015, 25, 3126-3131.	1.8	90
27	An Arginine Deprivation Response Pathway Is Induced in Leishmania during Macrophage Invasion. PLoS Pathogens, 2016, 12, e1005494.	2.1	86
28	A novel highâ€affinity arginine transporter from the human parasitic protozoan Leishmania donovani. Molecular Microbiology, 2006, 60, 30-38.	1.2	79
29	Citrate transport into barley mesophyll vacuoles ? comparison with malate-uptake activity. Planta, 1991, 184, 532-7.	1.6	75
30	PLANT BIOLOGY:Enhanced: Taking Transgenic Plants with a Pinch of Salt. Science, 1999, 285, 1222-1223.	6.0	74
31	Catabolism of chlorophyll in vivo: significance of polar chlorophyll catabolites in a non-yellowing senescence mutant of Festuca pratensis Huds.. New Phytologist, 1989, 111, 3-8.	3.5	72
32	A Critical Role of AMT2;1 in Root-To-Shoot Translocation of Ammonium in Arabidopsis. Molecular Plant, 2017, 10, 1449-1460.	3.9	66
33	Hypersensitivity of an Arabidopsis Sugar Signaling Mutant toward Exogenous Proline Application. Plant Physiology, 2000, 122, 357-368.	2.3	65
34	Salt Stress-Induced Proline Transporters and Salt Stress-Repressed Broad Specificity Amino Acid Permeases Identified by Suppression of a Yeast Amino Acid Permease-Targeting Mutant. Plant Cell, 1996, 8, 1437.	3.1	64
35	Arginine Homeostasis and Transport in the Human Pathogen Leishmania donovani. Journal of Biological Chemistry, 2009, 284, 19800-19807.	1.6	61
36	Traffic Routes and Signals for the Tonoplast. Traffic, 2013, 14, 622-628.	1.3	58

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37	Peptide and Amino Acid Transporters Are Differentially Regulated during Seed Development and Germination in Faba Bean. Plant Physiology, 2003, 132, 1950-1960.	2.3	57
38	Phytol and the Breakdown of Chlorophyll in Senescent Leaves. Journal of Plant Physiology, 1989, 135, 428-432.	1.6	55
39	Nitrogen affects cluster root formation and expression of putative peptide transporters. Journal of Experimental Botany, 2009, 60, 2665-2676.	2.4	55
40	Determinants for Arabidopsis Peptide Transporter Targeting to the Tonoplast or Plasma Membrane. Traffic, 2012, 13, 1090-1105.	1.3	48
41	AtPTR4 and AtPTR6 are differentially expressed, tonoplast-localized members of the peptide transporter/nitrate transporter 1 (PTR/NRT1) family. Planta, 2012, 235, 311-323.	1.6	44
42	A versatile proline/alanine transporter in the unicellular pathogen Leishmania donovani regulates amino acid homoeostasis and osmotic stress responses. Biochemical Journal, 2013, 449, 555-566.	1.7	42
43	Rhesus factors and ammonium: a function in efflux?. Genome Biology, 2001, 2, reviews1010.1.	13.9	40
44	Characterization and expression of French bean amino acid transporter PvAAP1. Plant Science, 2008, 174, 348-356.	1.7	39
45	Arabidopsis and Lobelia anceps access small peptides as a nitrogen source for growth. Functional Plant Biology, 2011, 38, 788.	1.1	39
46	Isolation and functional characterization of a high affinity urea transporter from roots of Zea mays. BMC Plant Biology, 2014, 14, 222.	1.6	39
47	Functional Properties of the Arabidopsis Peptide Transporters AtPTR1 and AtPTR5*. Journal of Biological Chemistry, 2010, 285, 39710-39717.	1.6	37
48	Functional reconstitution of the malate carrier of barley mesophyll vacuoles in liposomes. Biochimica Et Biophysica Acta - Biomembranes, 1991, 1062, 271-278.	1.4	36
49	Lysine transporters in human trypanosomatid pathogens. Amino Acids, 2012, 42, 347-360.	1.2	34
50	The transporter GAT1 plays an important role in GABA-mediated carbon-nitrogen interactions in Arabidopsis. Frontiers in Plant Science, 2015, 6, 785.	1.7	30
51	Effects of externally supplied protein on root morphology and biomass allocation in Arabidopsis. Scientific Reports, 2014, 4, 5055.	1.6	29
52	Transport of Arginine and Aspartic Acid into Isolated Barley Mesophyll Vacuoles. Plant Physiology, 1991, 97, 644-650.	2.3	26
53	Comparative genomics and functional analysis of the NiaP family uncover nicotinate transporters from bacteria, plants, and mammals. Functional and Integrative Genomics, 2012, 12, 25-34.	1.4	25
54	Arginine and Lysine Transporters Are Essential for Trypanosoma brucei. PLoS ONE, 2017, 12, e0168775.	1.1	24

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55	Detoxification of succinate semialdehyde in Arabidopsis glyoxylate reductase and NAD kinase mutants subjected to submergence stress. Botany, 2012, 90, 51-61.	0.5	23
56	Characterization of a transport activity for long-chain peptides in barley mesophyll vacuoles. Journal of Experimental Botany, 2011, 62, 2403-2410.	2.4	16
57	Trypanosoma brucei eflornithine transporter AAT6 is a low-affinity low-selective transporter for neutral amino acids. Biochemical Journal, 2014, 463, 9-18.	1.7	16
58	Transporters of Trypanosoma bruceiâ€"phylogeny, physiology, pharmacology. FEBS Journal, 2018, 285, 1012-1023.	2.2	16
59	Organic nitrogen. New Phytologist, 2014, 203, 29-31.	3.5	15
60	Multi-gene metabolic engineering of tomato plants results in increased fruit yield up to 23%. Scientific Reports, 2020, 10, 17219.	1.6	15
61	LeProT1, a Transporter for Proline, Glycine Betaine, and g-Amino Butyric Acid in Tomato Pollen. Plant Cell, 1999, 11, 377.	3.1	14
62	Soybean Yellow Stripe-like 7 is a symbiosome membrane peptide transporter important for nitrogen fixation. Plant Physiology, 2021, 186, 581-598.	2.3	14
63	Characterization of choline uptake in Trypanosoma brucei procyclic and bloodstream forms. Molecular and Biochemical Parasitology, 2013, 190, 16-22.	0.5	13
64	The Tonoplast-associated Citrate Binding Protein (CBP) of Hevea brasiliensis. Journal of Biological Chemistry, 1995, 270, 30525-30531.	1.6	12
65	Ornithine uptake and the modulation of drug sensitivity in Trypanosoma brucei. FASEB Journal, 2017, 31, 4649-4660.	0.2	12
66	Wheat amino acid transporters highly expressed in grain cells regulate amino acid accumulation in grain. PLoS ONE, 2021, 16, e0246763.	1.1	11
67	Size does matter: 18 amino acids at the N-terminal tip of an amino acid transporter in Leishmania determine substrate specificity. Scientific Reports, 2015, 5, 16289.	1.6	8
68	Organic Carbon and Nitrogen Transporters. Plant Cell Monographs, 2011, , 331-352.	0.4	8
69	Nutrient availability regulates proline/alanine transporters in Trypanosoma brucei. Journal of Biological Chemistry, 2021, 296, 100566.	1.6	7
70	Identification and characterization of the three members of the CLC family of anion transport proteins in Trypanosoma brucei. PLoS ONE, 2017, 12, e0188219.	1.1	3