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	Wheat amino acid transporters highly expressed in grain cells regulate amino acid accumulation in grain. PLoS ONE, 2021, 16, e0246763.	1.1	11
2	Soybean Yellow Stripe-like 7 is a symbiosome membrane peptide transporter important for nitrogen fixation. Plant Physiology, 2021, 186, 581-598.	2.3	14
3	Nutrient availability regulates proline/alanine transporters in Trypanosoma brucei. Journal of Biological Chemistry, 2021, 296, 100566.	1.6	7
4	Multi-gene metabolic engineering of tomato plants results in increased fruit yield up to 23%. Scientific Reports, 2020, 10, 17219.	1.6	15
5	Transporters of <i>Trypanosoma brucei</i>â€"phylogeny, physiology, pharmacology. FEBS Journal, 2018, 285, 1012-1023.	2.2	16
6	A Critical Role of AMT2;1 in Root-To-Shoot Translocation of Ammonium in Arabidopsis. Molecular Plant, 2017, 10, 1449-1460.	3.9	66
7	Ornithine uptake and the modulation of drug sensitivity in <i>Trypanosoma brucei</i>. FASEB Journal, 2017, 31, 4649-4660.	0.2	12
8	Arginine and Lysine Transporters Are Essential for Trypanosoma brucei. PLoS ONE, 2017, 12, e0168775.	1.1	24
9	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
10	An Arginine Deprivation Response Pathway Is Induced in Leishmania during Macrophage Invasion. PLoS Pathogens, 2016, 12, e1005494.	2.1	86
11	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
12	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
13	Amino Acid Export in Developing Arabidopsis Seeds Depends on UmamiT Facilitators. Current Biology, 2015, 25, 3126-3131.	1.8	90
14	<i>Trypanosoma brucei</i> eflornithine transporter AAT6 is a low-affinity low-selective transporter for neutral amino acids. Biochemical Journal, 2014, 463, 9-18.	1.7	16
15	A unified nomenclature of NITRATE TRANSPORTER 1/PEPTIDE TRANSPORTER family members in plants. Trends in Plant Science, 2014, 19, 5-9.	4.3	581
16	Isolation and functional characterization of a high affinity urea transporter from roots of Zea mays. BMC Plant Biology, 2014, 14, 222.	1.6	39
17	Organic nitrogen. New Phytologist, 2014, 203, 29-31.	3.5	15
18	Effects of externally supplied protein on root morphology and biomass allocation in Arabidopsis. Scientific Reports, 2014, 4, 5055.	1.6	29

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19	Traffic Routes and Signals for the Tonoplast. Traffic, 2013, 14, 622-628.	1.3	58
20	Altered expression of the <i><scp>PTR</scp>/<scp>NRT</scp>1</i> homologue <i>Os<scp>PTR</scp>9</i> affects nitrogen utilization efficiency, growth and grain yield in rice. Plant Biotechnology Journal, 2013, 11, 446-458.	4.1	131
21	Characterization of choline uptake in Trypanosoma brucei procyclic and bloodstream forms. Molecular and Biochemical Parasitology, 2013, 190, 16-22.	0.5	13
22	A versatile proline/alanine transporter in the unicellular pathogen <i>Leishmania donovani</i> regulates amino acid homoeostasis and osmotic stress responses. Biochemical Journal, 2013, 449, 555-566.	1.7	42
23	Detoxification of succinate semialdehyde in <i>Arabidopsis</i> glyoxylate reductase and NAD kinase mutants subjected to submergence stress. Botany, 2012, 90, 51-61.	0.5	23
24	Nonredundant Regulation of Rice Arbuscular Mycorrhizal Symbiosis by Two Members of the <i>PHOSPHATE TRANSPORTER1</i> Gene Family. Plant Cell, 2012, 24, 4236-4251.	3.1	306
25	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
26	Determinants for <i>Arabidopsis</i> Peptide Transporter Targeting to the Tonoplast or Plasma Membrane. Traffic, 2012, 13, 1090-1105.	1.3	48
27	Lysine transporters in human trypanosomatid pathogens. Amino Acids, 2012, 42, 347-360.	1.2	34
28	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
29	Arabidopsis and Lobelia anceps access small peptides as a nitrogen source for growth. Functional Plant Biology, 2011, 38, 788.	1.1	39
30	In planta function of compatible solute transporters of the AtProT family. Journal of Experimental Botany, 2011, 62, 787-796.	2.4	100
31	Characterization of a transport activity for long-chain peptides in barley mesophyll vacuoles. Journal of Experimental Botany, 2011, 62, 2403-2410.	2.4	16
32	Organic Carbon and Nitrogen Transporters. Plant Cell Monographs, 2011, , 331-352.	0.4	8
33	Proline metabolism and transport in plant development. Amino Acids, 2010, 39, 949-962.	1.2	290
34	Turning the Table: Plants Consume Microbes as a Source of Nutrients. PLoS ONE, 2010, 5, e11915.	1.1	136
35	Arsenic tolerance in <i>Arabidopsis</i> 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
36	Uptake and Partitioning of Amino Acids and Peptides. Molecular Plant, 2010, 3, 997-1011.	3.9	246

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37	Functional Properties of the Arabidopsis Peptide Transporters AtPTR1 and AtPTR5*. Journal of Biological Chemistry, 2010, 285, 39710-39717.	1.6	37
38	Arginine Homeostasis and Transport in the Human Pathogen Leishmania donovani. Journal of Biological Chemistry, 2009, 284, 19800-19807.	1.6	61
39	Nitrogen affects cluster root formation and expression of putative peptide transporters. Journal of Experimental Botany, 2009, 60, 2665-2676.	2.4	55
40	Characterization and expression of French bean amino acid transporter PvAAP1. Plant Science, 2008, 174, 348-356.	1.7	39
41	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
42	AtPTR1 and AtPTR5 Transport Dipeptides in Planta. Plant Physiology, 2008, 148, 856-869.	2.3	175
43	Transporters for uptake and allocation of organic nitrogen compounds in plants. FEBS Letters, 2007, 581, 2281-2289.	1.3	323
44	A novel highâ€affinity arginine transporter from the human parasitic protozoan Leishmania donovani. Molecular Microbiology, 2006, 60, 30-38.	1.2	79
45	AtGAT1, a High Affinity Transporter for Î³-Aminobutyric Acid in Arabidopsis thaliana. Journal of Biological Chemistry, 2006, 281, 7197-7204.	1.6	115
46	The AtProT Family. Compatible Solute Transporters with Similar Substrate Specificity But Differential Expression Patterns. Plant Physiology, 2005, 137, 117-126.	2.3	161
47	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
48	A Novel Family of Transporters Mediating the Transport of Glutathione Derivatives in Plants. Plant Physiology, 2004, 134, 482-491.	2.3	96
49	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
50	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
51	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
52	Conservation of amino acid transporters in fungi, plants and animals. Trends in Biochemical Sciences, 2002, 27, 139-147.	3.7	210
53	Rhesus factors and ammonium: a function in efflux?. Genome Biology, 2001, 2, reviews1010.1.	13.9	40
54	A New Family of High-Affinity Transporters for Adenine, Cytosine, and Purine Derivatives in Arabidopsis. Plant Cell, 2000, 12, 291-300.	3.1	190

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55	Hypersensitivity of an Arabidopsis Sugar Signaling Mutant toward Exogenous Proline Application. Plant Physiology, 2000, 123, 779-789.	2.3	162
56	Hypersensitivity of an Arabidopsis Sugar Signaling Mutant toward Exogenous Proline Application. Plant Physiology, 2000, 122, 357-368.	2.3	65
57	LeProT1, a Transporter for Proline, Glycine Betaine, and g-Amino Butyric Acid in Tomato Pollen. Plant Cell, 1999, 11, 377.	3.1	14
58	LeProT1, a Transporter for Proline, Glycine Betaine, and Î³-Amino Butyric Acid in Tomato Pollen. Plant Cell, 1999, 11, 377-391.	3.1	245
59	PLANT BIOLOGY:Enhanced: Taking Transgenic Plants with a Pinch of Salt. Science, 1999, 285, 1222-1223.	6.0	74
60	Identification and characterization of GABA, proline and quaternary ammonium compound transporters fromArabidopsis thaliana. FEBS Letters, 1999, 450, 280-284.	1.3	104
61	Developmental control of H+/amino acid permease gene expression during seed development of Arabidopsis. Plant Journal, 1998, 14, 535-544.	2.8	163
62	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
63	The Tonoplast-associated Citrate Binding Protein (CBP) of Hevea brasiliensis. Journal of Biological Chemistry, 1995, 270, 30525-30531.	1.6	12
64	NTR1encodes a high affinity oligopeptide transporter inArabidopsis. FEBS Letters, 1995, 370, 264-268.	1.3	308
65	Cloning of anArabidopsishistidine transporting protein related to nitrate and peptide transporters. FEBS Letters, 1994, 347, 185-189.	1.3	111
66	Functional reconstitution of the malate carrier of barley mesophyll vacuoles in liposomes. Biochimica Et Biophysica Acta - Biomembranes, 1991, 1062, 271-278.	1.4	36
67	Citrate transport into barley mesophyll vacuoles ? comparison with malate-uptake activity. Planta, 1991, 184, 532-7.	1.6	75
68	Transport of Arginine and Aspartic Acid into Isolated Barley Mesophyll Vacuoles. Plant Physiology, 1991, 97, 644-650.	2.3	26
69	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
70	Phytol and the Breakdown of Chlorophyll in Senescent Leaves. Journal of Plant Physiology, 1989, 135, 428-432.	1.6	55