Daniel M Roberts

List of Publications by Year
in descending order

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53 papers	3,434 citations	147786 31 h-index	206102 48 g-index
57 all docs	57 docs citations	57 times ranked	2281 citing authors

#	Article	IF	Citations
1	Aquaporin family lactic acid channel NIP2;1 promotes plant survival under low oxygen stress in Arabidopsis. Plant Physiology, 2021, 187, 2262-2278.	4.8	16
2	Arabidopsis CALMODULIN-LIKE 38 Regulates Hypoxia-Induced Autophagy of SUPPRESSOR OF GENE SILENCING 3 Bodies. Frontiers in Plant Science, 2021, 12, 722940.	3.6	7
3	Arabidopsis PIC30 encodes a major facilitator superfamily transporter responsible for the uptake of picolinate herbicides. Plant Journal, 2020, 102, 18-33.	5.7	2
4	An Iron-Activated Citrate Transporter, MtMATE67, Is Required for Symbiotic Nitrogen Fixation. Plant Physiology, 2018, 176, 2315-2329.	4.8	55
5	Nodulin Intrinsic Protein 7;1 Is a Tapetal Boric Acid Channel Involved in Pollen Cell Wall Formation. Plant Physiology, 2018, 178, 1269-1283.	4.8	39
6	The Nodulin 26 Intrinsic Protein Subfamily. Signaling and Communication in Plants, 2017, , 267-296.	0.7	17
7	Arabidopsis CML38, a Calcium Sensor That Localizes to Ribonucleoprotein Complexes under Hypoxia Stress. Plant Physiology, 2016, 170, 1046-1059.	4.8	87
8	Making an Aquaporin Water-Tight: Structural Basis of Selectivity in Plant Nodulin 26 Intrinsic Proteins. Biophysical Journal, 2015, 108, 438a-439a.	0.5	0
9	Glutamine synthetase isoforms in nitrogenâ€fixing soybean nodules: Distinct oligomeric structures and thiolâ€based regulation. FEBS Letters, 2015, 589, 215-221.	2.8	10
10	An Unusual Aquaporin-Like Metalloid Boric Acid Channel in Arabidopsis. Biophysical Journal, 2013, 104, 633a.	0.5	0
11	Acyrthosiphon pisum AQP2: A multifunctional insect aquaglyceroporin. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 627-635.	2.6	34
12	<i>Arabidopsis thaliana</i>NIP7;1: An Anther-Specific Boric Acid Transporter of the Aquaporin Superfamily Regulated by an Unusual Tyrosine in Helix 2 of the Transport Pore. Biochemistry, 2011, 50, 6633-6641.	2.5	78
13	Ammonia permeability of the soybean nodulin 26 channel. FEBS Letters, 2010, 584, 4339-4343.	2.8	64
14	Interaction of Cytosolic Glutamine Synthetase of Soybean Root Nodules with the C-terminal Domain of the Symbiosome Membrane Nodulin 26 Aquaglyceroporin. Journal of Biological Chemistry, 2010, 285, 23880-23888.	3.4	59
15	Strategies for Adaptation to Waterlogging and Hypoxia in Nitrogen Fixing Nodules of Legumes. , 2010, , 37-59.		8
16	NIP6;1 Is a Boric Acid Channel for Preferential Transport of Boron to Growing Shoot Tissues in<i>Arabidopsis</i>. Plant Cell, 2008, 20, 2860-2875.	6.6	277
17	Arabidopsis NIP2;1, a Major Intrinsic Protein Transporter of Lactic Acid Induced by Anoxic Stress. Journal of Biological Chemistry, 2007, 282, 24209-24218.	3.4	157
18	The structure, function and regulation of the nodulin 26-like intrinsic protein family of plant aquaglyceroporins. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1165-1175.	2.6	159

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19	Extra- and intra-cellular ice formation in Stage I and II Xenopus laevis oocytes. Cryobiology, 2006, 52, 401-416.	0.7	37
20	GmN70 and LjN70. Anion Transporters of the Symbiosome Membrane of Nodules with a Transport Preference for Nitrate. Plant Physiology, 2005, 137, 1435-1444.	4.8	45
21	Distinct Transport Selectivity of Two Structural Subclasses of the Nodulin-like Intrinsic Protein Family of Plant Aquaglyceroporin Channels. Biochemistry, 2005, 44, 16826-16834.	2.5	146
22	Homology Modeling of Representative Subfamilies of Arabidopsis Major Intrinsic Proteins. Classification Based on the Aromatic/Arginine Selectivity Filter. Plant Physiology, 2004, 135, 1059-1068.	4.8	202
23	Phosphorylation of Soybean Nodulin 26 on Serine 262 Enhances Water Permeability and Is Regulated Developmentally and by Osmotic Signals. Plant Cell, 2003, 15, 981-991.	6.6	159
24	Voltage-Dependent Cation Channels Permeable to NH4+, K+, and Ca2+ in the Symbiosome Membrane of the Model Legume Lotus japonicus. Plant Physiology, 2002, 128, 370-378.	4.8	41
25	Functional selectivity for glycerol of the nodulin 26 subfamily of plant membrane intrinsic proteins. FEBS Letters, 2002, 523, 109-112.	2.8	58
26	Water-selective and multifunctional aquaporins from Lotus japonicus nodules. Planta, 2000, 210, 741-748.	3.2	70
27	Structural Requirements for N-Trimethylation of Lysine 115 of Calmodulin. Journal of Biological Chemistry, 2000, 275, 18969-18975.	3.4	17
28	Purification and Functional Reconstitution of Soybean Nodulin 26. An Aquaporin with Water and Glycerol Transport Propertiesâ€. Biochemistry, 1999, 38, 347-353.	2.5	195
29	Soybean Nodule Sucrose Synthase (Nodulin-100): Further Analysis of Its Phosphorylation Using Recombinant and Authentic Root-Nodule Enzymes. Archives of Biochemistry and Biophysics, 1999, 371, 70-82.	3.0	58
30	Structural elements within the methylation loop (residues 112â€“117) and EF hands III and IV of calmodulin are required for Lys115 trimethylation. Biochemical Journal, 1999, 340, 417-424.	3.7	7
31	Structural elements within the methylation loop (residues 112â€'117) and EF hands III and IV of calmodulin are required for Lys115 trimethylation. Biochemical Journal, 1999, 340, 417.	3.7	4
32	Incompatible pathogen infection results in enhanced reactive oxygen and cell death responses in transgenic tobacco expressing a hyperactive mutant calmodulin. Planta, 1998, 206, 253-258.	3.2	44
33	Functional Analysis of Nodulin 26, an Aquaporin in Soybean Root Nodule Symbiosomes. Journal of Biological Chemistry, 1997, 272, 16256-16261.	3.4	174
34	Altered Methylation Substrate Kinetics and Calcium Binding of a Calmodulin with a Val136Thr Substitution. FEBS Journal, 1997, 244, 904-912.	0.2	5
35	Phosphorylation of Nodulin 26 on Serine 262 Affects Its Voltage-sensitive Channel Activity in Planar Lipid Bilayers. Journal of Biological Chemistry, 1995, 270, 27051-27057.	3.4	63
36	Isolation and kinetic characterization of the calmodulin methyltransferase from sheep brain. Biochemistry, 1993, 32, 13974-13980.	2.5	13

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37	Protein kinases with calmodulin-like domains: novel targets of calcium signals in plants. Current Opinion in Cell Biology, 1993, 5, 242-246.	5.4	69
38	Determination of the site of phosphorylation of nodulin 26 by the calcium-dependent protein kinase from soybean nodules. Biochemistry, 1992, 31, 8954-8959.	2.5	98
39	Modulation of calmodulin levels, calmodulin methylation, and calmodulin binding proteins during carrot cell growth and embryogenesis. Archives of Biochemistry and Biophysics, 1992, 297, 28-34.	3.0	30
40	Protein phosphorylation stimulates the rate of malate uptake across the peribacteroid membrane of soybean nodules. FEBS Letters, 1991, 293, 188-190.	2.8	75
41	Calcium-Dependent Phosphorylation of Symbiosome Membrane Proteins from Nitrogen-Fixing Soybean Nodules. Plant Physiology, 1991, 95, 222-227.	4.8	138
42	Analysis of the State of Posttranslational Calmodulin Methylation in Developing Pea Plants. Plant Physiology, 1990, 93, 880-887.	4.8	40
43	Detection of a Calcium-Activated Protein Kinase in Mougeotia by Using Synthetic Peptide Substrates. Plant Physiology, 1989, 91, 1613-1619.	4.8	32
44	Fluorescence characterization of VU-9 calmodulin, an engineered calmodulin with one tryptophan in calcium binding domain III. Biochemistry, 1989, 28, 6086-6092.	2.5	23
45	[24] The use of synthetic oligodeoxyribonucleotides in the examination of calmodulin gene and protein structure and function. Methods in Enzymology, 1987, 139, 290-303.	1.0	18
46	AN INTERDISCIPLINARY APPROACH TO THE MOLECULAR MECHANISMS OF CALMODULIN ACTION: COMPARATIVE BIOCHEMISTRY, SITE-SPECIFIC MUTAGENESIS, AND PROTEIN ENGINEERING. , 1987, , 533-543.		9
47	Structure, function, and mechanism of action of Calmodulin. Critical Reviews in Plant Sciences, 1986, 4, 311-339.	5.7	78
48	Molecular Mechanisms of Calmodulin Action. , 1986, , 11-18.		3
49	Chemical synthesis and expression of a calmodulin gene designed for site-specific mutagenesis. Biochemistry, 1985, 24, 5090-5098.	2.5	159
50	Comparison of the NAD Kinase and Myosin Light Chain Kinase Activator Properties of Vertebrate, Higher Plant, and Algal Calmodulins. Plant Physiology, 1984, 75, 796-798.	4.8	59
51	Structural and functional properties of calmodulin from the eukaryotic microorganism Dictyostelium discoideum. Biochemistry, 1984, 23, 2891-2899.	2.5	128
52	Development and Distribution of a Lectin from the Stems and Leaves of Dolichos biflorus. Plant Physiology, 1984, 76, 879-884.	4.8	29
53	A Structural comparison of the subunits of the Dolichos biflorus seed lectin by peptide mapping and carboxyl terminal amino acid analysis. Archives of Biochemistry and Biophysics, 1982, 218, 213-219.	3.0	24