Omar Pantoja

List of Publications by Year
in descending order

57 papers	3,201 citations	136950 32 h-index	155660 55 g-index
60 all docs	60 docs citations	60 times ranked	3405 citing authors

#	Article	IF	Citations
1	Nomenclature for HKT transporters, key determinants of plant salinity tolerance. Trends in Plant Science, 2006, 11, 372-374.	8.8	329
2	Electrical measurements on endomembranes. Science, 1992, 258, 873-874.	12.6	189
3	Novel Regulation of Aquaporins during Osmotic Stress. Plant Physiology, 2004, 135, 2318-2329.	4.8	185
4	Salt Stress in Thellungiella halophila Activates Na+ Transport Mechanisms Required for Salinity Tolerance. Plant Physiology, 2005, 139, 1507-1517.	4.8	176
5	PHYSIOLOGY OF ION TRANSPORT ACROSS THE TONOPLAST OF HIGHER PLANTS. Annual Review of Plant Biology, 1996, 47, 159-184.	14.3	142
6	Characterization of a HKT-type transporter in rice as a general alkali cation transporter. Plant Journal, 2002, 31, 529-542.	5.7	139
7	CORNICHON sorting and regulation of GLR channels underlie pollen tube Ca ²⁺ homeostasis. Science, 2018, 360, 533-536.	12.6	117
8	Quantitative Proteomics of the Tonoplast Reveals a Role for Glycolytic Enzymes in Salt Tolerance Â. Plant Cell, 2010, 21, 4044-4058.	6.6	112
9	Cell typeâ€specific responses to salinity â€" the epidermal bladder cell transcriptome of <i>Mesembryanthemum crystallinum</i>. New Phytologist, 2015, 207, 627-644.	7.3	102
10	Salt stress in Mesembryanthemum crystallinum L. cell suspensions activates adaptive mechanisms similar to those observed in the whole plant. Planta, 1999, 207, 426-435.	3.2	93
11	Expression of the cation transporter McHKT1 in a halophyte. Plant Molecular Biology, 2003, 52, 967-980.	3.9	92
12	Voltage-Dependent Calcium Channels in Plant Vacuoles. Science, 1992, 255, 1567-1570.	12.6	84
13	Abscisic Acid Induction of Vacuolar H+-ATPase Activity in Mesembryanthemum crystallinum Is Developmentally Regulated1. Plant Physiology, 1999, 120, 811-820.	4.8	82
14	Electrophysiological and ultrastructural study of the atrioventricular canal during the development of the chick embryo. Journal of Molecular and Cellular Cardiology, 1986, 18, 499-510.	1.9	81
15	Progress and challenges for abiotic stress proteomics of crop plants. Proteomics, 2013, 13, 1801-1815.	2.2	76
16	Aquaporin localization â€" how valid are the TIP and PIP labels?. Trends in Plant Science, 1999, 4, 86-88.	8.8	68
17	Identification of a Crucial Histidine Involved in Metal Transport Activity in the Arabidopsis Cation/H+ Exchanger CAX1. Journal of Biological Chemistry, 2005, 280, 30136-30142.	3.4	63
18	PvAMT1;1, a Highly Selective Ammonium Transporter That Functions as H+/NH4+ Symporter. Journal of Biological Chemistry, 2011, 286, 31113-31122.	3.4	63

#	Article	IF	Citations
19	Pore Mutations in Ammonium Transporter AMT1 with Increased Electrogenic Ammonium Transport Activity. Journal of Biological Chemistry, 2009, 284, 24988-24995.	3.4	56
20	Phosphorus remobilization from rice flag leaves during grain filling: an <scp>RNA</scp>â€seq study. Plant Biotechnology Journal, 2017, 15, 15-26.	8.3	55
21	Na+/H+ exchange in the halophyte Mesembryanthemum crystallinum is associated with cellular sites of Na+ storage. Functional Plant Biology, 2002, 29, 1017.	2.1	55
22	Malate transport and vacuolar ion channels in CAM plants. Journal of Experimental Botany, 1997, 48, 623-631.	4.8	49
23	Cell Penetrating Peptides and Cationic Antibacterial Peptides. Journal of Biological Chemistry, 2014, 289, 14448-14457.	3.4	49
24	Identification of rice cornichon as a possible cargo receptor for the Golgi-localized sodium transporter OsHKT1;3. Journal of Experimental Botany, 2015, 66, 2733-2748.	4.8	47
25	High Affinity Ammonium Transporters: Molecular Mechanism of Action. Frontiers in Plant Science, 2012, 3, 34.	3.6	45
26	Redox activity and peroxidase activity associated with the plasma membrane of guard-cell protoplasts. Planta, 1988, 174, 44-50.	3.2	43
27	Protein profiling of epidermal bladder cells from the halophyte <i>Mesembryanthemum crystallinum</i>. Proteomics, 2012, 12, 2862-2865.	2.2	42
28	Ion channels in vacuoles from halophytes and glycophytes. FEBS Letters, 1989, 255, 92-96.	2.8	40
29	Cytoplasmic chloride regulates cation channels in the vacuolar membrane of plant cells. Journal of Membrane Biology, 1992, 125, 219-29.	2.1	39
30	Characterization of Vacuolar Malate and K+ Channels under Physiological Conditions. Plant Physiology, 1992, 100, 1137-1141.	4.8	38
31	Comparative 2D-DIGE analysis of salinity responsive microsomal proteins from leaves of salt-sensitive Arabidopsis thaliana and salt-tolerant Thellungiella salsuginea. Journal of Proteomics, 2014, 111, 113-127.	2.4	37
32	Sensitivity of the Plant Vacuolar Malate Channel to pH, Ca2+ and Anion-Channel Blockers. Journal of Membrane Biology, 2002, 186, 31-42.	2.1	35
33	Cadmium and zinc activate adaptive mechanisms in Nicotiana tabacum similar to those observed in metal tolerant plants. Planta, 2017, 246, 433-451.	3.2	33
34	Recent Advances in the Physiology of Ion Channels in Plants. Annual Review of Plant Biology, 2021, 72, 463-495.	18.7	33
35	Transport Across the Vacuolar Membrane in CAM Plants. Ecological Studies, 1996, , 53-71.	1.2	33
36	Remobilisation of phosphorus fractions in rice flag leaves during grain filling: Implications for photosynthesis and grain yields. PLoS ONE, 2017, 12, e0187521.	2.5	28

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37	Enhanced Separation of Membranes during Free Flow Zonal Electrophoresis in Plants. Analytical Chemistry, 2007, 79, 5181-5187.	6.5	27
38	Day/night regulation of aquaporins during the CAM cycle in <i>Mesembryanthemum crystallinum</i>. Plant, Cell and Environment, 2012, 35, 485-501.	5.7	24
39	Pressure Effects on Membrane Potentials of Mesophyll Cell Protoplasts and Epidermal Cell Protoplasts ofCommelina communisL.. Journal of Experimental Botany, 1986, 37, 315-320.	4.8	19
40	Plasma Membrane and Abiotic Stress. Plant Cell Monographs, 2011, , 457-470.	0.4	19
41	Tonoplast Ion Channels from Sugar Beet Cell Suspensions. Plant Physiology, 1990, 94, 1788-1794.	4.8	17
42	Quantitative proteomics of heavy metal exposure in Arabidopsis thaliana reveals alterations in one-carbon metabolism enzymes upon exposure to zinc. Journal of Proteomics, 2014, 111, 128-138.	2.4	17
43	Erv14 cargo receptor participates in regulation of plasma-membrane potential, intracellular pH and potassium homeostasis via its interaction with K+-specific transporters Trk1 and Tok1. Biochimica Et Biophysica Acta - Molecular Cell Research, 2019, 1866, 1376-1388.	4.1	15
44	Ser123 Is Essential for the Water Channel Activity of McPIP2;1 from Mesembryanthemum crystallinum. Journal of Biological Chemistry, 2010, 285, 16739-16747.	3.4	14
45	Plant and yeast cornichon possess a conserved acidic motif required for correct targeting of plasma membrane cargos. Biochimica Et Biophysica Acta - Molecular Cell Research, 2017, 1864, 1809-1818.	4.1	14
46	Membrane Proteomic Insights into the Physiology and Taxonomy of an Oleaginous Green Microalga. Plant Physiology, 2017, 173, 390-416.	4.8	14
47	Ferricyanide Reduction by Guard Cell Protoplasts. Journal of Experimental Botany, 1991, 42, 323-329.	4.8	12
48	Erv14 cargo receptor participates in yeast salt tolerance via its interaction with the plasma-membrane Nha1 cation/proton antiporter. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 67-74.	2.6	10
49	The Gating Kinetics of the Slow Vacuolar Channel. A Novel Mechanism for SV Channel Functioning?. Journal of Membrane Biology, 2003, 194, 11-20.	2.1	9
50	Towards the Production of Salt-Tolerant Crops. Advances in Experimental Medicine and Biology, 1999, 464, 77-89.	1.6	8
51	Growing Arabidopsis In Vitro: Cell Suspensions, In Vitro Culture, and Regeneration. Methods in Molecular Biology, 2014, 1062, 53-62.	0.9	8
52	Transcriptional response of rice flag leaves to restricted external phosphorus supply during grain filling in rice cv. IR64. PLoS ONE, 2018, 13, e0203654.	2.5	7
53	Anion Modulation of the Slowly Activating Vacuolar Channel. Journal of Membrane Biology, 2001, 183, 137-145.	2.1	5
54	Current Oscillations Under Voltage-Clamp Conditions: An Interplay of Series Resistance and Negative Slope Conductance. Journal of Membrane Biology, 2000, 173, 31-37.	2.1	4

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55	Aquaporin Regulation Under Salt and Osmotic Stress in the Halophyte Mesembryanthemum Crystallinum L.. , 2000, , 339-346.		4
56	A differential subcellular localization of two copper transporters from the COPT family suggests distinct roles in copper homeostasis in Physcomitrium patens. Plant Physiology and Biochemistry, 2021, 167, 459-469.	5.8	3
57	Ultrastructural Changes in The Cell Wall Of Erv14 Mutants From The YeastSaccharomyces cerevisiae. Microscopy and Microanalysis, 2020, 26, 201-202.	0.4	0