

Jayakumar Bose

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

52
papers

3,637
citations

29
h-index

58
g-index

58
ext. papers

4,525
ext. citations

5.8
avg, IF

5.59
L-index

#	Paper	IF	Citations
52	Oxygen uptake rates have contrasting responses to temperature in the root meristem and elongation zone.. <i>Physiologia Plantarum</i> , 2022 , e13682	4.6	1
51	Revealing the Role of the Calcineurin B-Like Protein-Interacting Protein Kinase 9 (CIPK9) in Rice Adaptive Responses to Salinity, Osmotic Stress, and K Deficiency. <i>Plants</i> , 2021 , 10,	4.5	1
50	Soybean CHX-type ion transport protein GmSALT3 confers leaf Na exclusion via a root derived mechanism, and Cl ⁻ exclusion via a shoot derived process. <i>Plant, Cell and Environment</i> , 2021 , 44, 856-869	8.4	7
49	Applying both biochar and phosphobacteria enhances <i>Vigna mungo</i> L. growth and yield in acid soils by increasing soil pH, moisture content, microbial growth and P availability. <i>Agriculture, Ecosystems and Environment</i> , 2021 , 308, 107258	5.7	11
48	A single nucleotide substitution in TaHKT1;5-D controls shoot Na accumulation in bread wheat. <i>Plant, Cell and Environment</i> , 2020 , 43, 2158-2171	8.4	11
47	Role of TaALMT1 malate-GABA transporter in alkaline pH tolerance of wheat. <i>Plant, Cell and Environment</i> , 2020 , 43, 2443-2459	8.4	4
46	Rice GWAS reveals key genomic regions essential for salinity tolerance at reproductive stage. <i>Acta Physiologiae Plantarum</i> , 2020 , 42, 1	2.6	9
45	Changes in Expression Level of Alters Activity of Membrane Transporters Involved in K and Ca Acquisition and Homeostasis in Salinized Rice Roots. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	8
44	Energy costs of salt tolerance in crop plants. <i>New Phytologist</i> , 2020 , 225, 1072-1090	9.8	144
43	Chemical Profile and Biological Activities of Essential Oil from <i>L. Cultivated</i> in Brazil. <i>Pharmaceuticals</i> , 2019 , 12,	5.2	16
42	Potassium Uptake and Homeostasis in Plants Grown Under Hostile Environmental Conditions, and Its Regulation by CBL-Interacting Protein Kinases 2018 , 137-158		
41	An Anion Conductance, the Essential Component of the Hydroxyl-Radical-Induced Ion Current in Plant Roots. <i>International Journal of Molecular Sciences</i> , 2018 , 19,	6.3	9
40	Chloroplast function and ion regulation in plants growing on saline soils: lessons from halophytes. <i>Journal of Experimental Botany</i> , 2017 , 68, 3129-3143	7	102
39	Non-selective cation channel activity of aquaporin AtPIP2;1 regulated by Ca and pH. <i>Plant, Cell and Environment</i> , 2017 , 40, 802-815	8.4	108
38	Difference in root K ⁺ retention ability and reduced sensitivity of K ⁺ -permeable channels to reactive oxygen species confer differential salt tolerance in three Brassica species. <i>Journal of Experimental Botany</i> , 2016 , 67, 4611-25	7	84
37	Potassium retention in leaf mesophyll as an element of salinity tissue tolerance in halophytes. <i>Plant Physiology and Biochemistry</i> , 2016 , 109, 346-354	5.4	47
36	Cell-Type-Specific H ⁺ -ATPase Activity in Root Tissues Enables K ⁺ Retention and Mediates Acclimation of Barley (<i>Hordeum vulgare</i>) to Salinity Stress. <i>Plant Physiology</i> , 2016 , 172, 2445-2458	6.6	99

35	Evaluating relative contribution of osmotolerance and tissue tolerance mechanisms toward salinity stress tolerance in three Brassica species. <i>Physiologia Plantarum</i> , 2016 , 158, 135-51	4.6	41
34	On a quest for stress tolerance genes: membrane transporters in sensing and adapting to hostile soils. <i>Journal of Experimental Botany</i> , 2016 , 67, 1015-31	7	102
33	Salinity effects on chloroplast PSII performance in glycophytes and halophytes. <i>Functional Plant Biology</i> , 2016 , 43, 1003-1015	2.7	24
32	Linking salinity stress tolerance with tissue-specific Na(+) sequestration in wheat roots. <i>Frontiers in Plant Science</i> , 2015 , 6, 71	6.2	65
31	GABA signalling modulates plant growth by directly regulating the activity of plant-specific anion transporters. <i>Nature Communications</i> , 2015 , 6, 7879	17.4	192
30	Nitric Oxide in Drought Stress Signalling and Tolerance in Plants 2015 , 95-114		7
29	Salt stress sensing and early signalling events in plant roots: Current knowledge and hypothesis. <i>Plant Science</i> , 2015 , 241, 109-19	5.3	109
28	Magnesium alleviates plant toxicity of aluminium and heavy metals. <i>Crop and Pasture Science</i> , 2015 , 66, 1298	2.2	41
27	The NPR1-dependent salicylic acid signalling pathway is pivotal for enhanced salt and oxidative stress tolerance in Arabidopsis. <i>Journal of Experimental Botany</i> , 2015 , 66, 1865-75	7	80
26	Salicylic acid in plant salinity stress signalling and tolerance. <i>Plant Growth Regulation</i> , 2015 , 76, 25-40	3.2	139
25	Rapid regulation of the plasma membrane H ⁺ -ATPase activity is essential to salinity tolerance in two halophyte species, <i>Atriplex lentiformis</i> and <i>Chenopodium quinoa</i> . <i>Annals of Botany</i> , 2015 , 115, 481-94	4.1	125
24	Heat Shock Protein and Salinity Tolerance in Plants 2015 , 148-157		3
23	Targeting Vacuolar Sodium Sequestration in Plant Breeding for Salinity Tolerance 2015 , 35-50		1
22	Specificity of Ion Uptake and Homeostasis Maintenance During Acid and Aluminium Stresses. <i>Signaling and Communication in Plants</i> , 2015 , 229-251	1	9
21	Cross-talk between reactive oxygen species and polyamines in regulation of ion transport across the plasma membrane: implications for plant adaptive responses. <i>Journal of Experimental Botany</i> , 2014 , 65, 1271-83	7	152
20	ROS homeostasis in halophytes in the context of salinity stress tolerance. <i>Journal of Experimental Botany</i> , 2014 , 65, 1241-57	7	515
19	Kinetics of xylem loading, membrane potential maintenance, and sensitivity of K(+) -permeable channels to reactive oxygen species: physiological traits that differentiate salinity tolerance between pea and barley. <i>Plant, Cell and Environment</i> , 2014 , 37, 589-600	8.4	88
18	Polyamines cause plasma membrane depolarization, activate Ca ²⁺ , and modulate H ⁺ -ATPase pump activity in pea roots. <i>Journal of Experimental Botany</i> , 2014 , 65, 2463-72	7	61

17	Ion transport in broad bean leaf mesophyll under saline conditions. <i>Planta</i> , 2014 , 240, 729-43	4.7	19
16	Salt bladders: do they matter?. <i>Trends in Plant Science</i> , 2014 , 19, 687-91	13.1	186
15	Salicylic acid improves salinity tolerance in Arabidopsis by restoring membrane potential and preventing salt-induced K ⁺ loss via a GORK channel. <i>Journal of Experimental Botany</i> , 2013 , 64, 2255-68	7	171
14	Haem oxygenase modifies salinity tolerance in Arabidopsis by controlling K ⁺ retention via regulation of the plasma membrane H ⁺ -ATPase and by altering SOS1 transcript levels in roots. <i>Journal of Experimental Botany</i> , 2013 , 64, 471-81	7	60
13	Low-pH and aluminum resistance in arabidopsis correlates with high cytosolic magnesium content and increased magnesium uptake by plant roots. <i>Plant and Cell Physiology</i> , 2013 , 54, 1093-104	4.9	53
12	Ion flux measurements using the MIFE technique. <i>Methods in Molecular Biology</i> , 2013 , 953, 171-83	1.4	16
11	Application of Non-invasive Microelectrode Flux Measurements in Plant Stress Physiology 2012 , 91-126		8
10	Calcium efflux systems in stress signaling and adaptation in plants. <i>Frontiers in Plant Science</i> , 2011 , 2, 85	6.2	163
9	Assessing the role of root plasma membrane and tonoplast Na ⁺ /H ⁺ exchangers in salinity tolerance in wheat: in planta quantification methods. <i>Plant, Cell and Environment</i> , 2011 , 34, 947-961	8.4	126
8	Role of magnesium in alleviation of aluminium toxicity in plants. <i>Journal of Experimental Botany</i> , 2011 , 62, 2251-64	7	149
7	Polyamines interact with hydroxyl radicals in activating Ca(2+) and K(+) transport across the root epidermal plasma membranes. <i>Plant Physiology</i> , 2011 , 157, 2167-80	6.6	129
6	Aluminum-dependent dynamics of ion transport in Arabidopsis: specificity of low pH and aluminum responses. <i>Physiologia Plantarum</i> , 2010 , 139, 401-12	4.6	29
5	Aluminium-induced ion transport in Arabidopsis: the relationship between Al tolerance and root ion flux. <i>Journal of Experimental Botany</i> , 2010 , 61, 3163-75	7	43
4	Relationship Between Index Leaf Nitrogen and Leaf Colour Chart (LCC) Values in Direct Wet Seeded Rice (<i>Oryza sativa</i> L.). <i>Asian Journal of Plant Sciences</i> , 2007 , 6, 477-483	0.6	0
3	Effect of Integrated Crop Management Practices on Rice (<i>Oryza sativa</i> L.) Root Volume and Rhizosphere Redox Potential. <i>Journal of Agronomy</i> , 2005 , 4, 311-314	0.4	4
2	A single nucleotide substitution in TaHKT1;5-D controls shoot Na ⁺ accumulation in bread wheat		3
1	Soybean CHX protein GmSALT3 confers leaf Na ⁺ exclusion via a root derived mechanism, and Cl ⁻ exclusion via a shoot derived process		1