Rajeev Arora

List of Publications by Year
in descending order

66 papers	3,978 citations	101543 36 h-index	118850 62 g-index
68 all docs	68 docs citations	68 times ranked	3241 citing authors

#	Article	IF	Citations
1	Priming memory invokes seed stress-tolerance. Environmental and Experimental Botany, 2013, 94, 33-45.	4.2	301
2	Deacclimation and reacclimation of cold-hardy plants: Current understanding and emerging concepts. Plant Science, 2006, 171, 3-16.	3.6	287
3	Induction and Release of Bud Dormancy in Woody Perennials: A Science Comes of Age. Hortscience: A Publication of the American Society for Hortcultural Science, 2003, 38, 911-921.	1.0	271
4	Overexpression of a Panax ginseng tonoplast aquaporin alters salt tolerance, drought tolerance and cold acclimation ability in transgenic Arabidopsis plants. Planta, 2007, 226, 729-740.	3.2	201
5	Cold Acclimation in Genetically Related (Sibling) Deciduous and Evergreen Peach (<i>Prunus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	4.8	188
6	Dynamics of the antioxidant system during seed osmopriming, post-priming germination, and seedling establishment in Spinach (Spinacia oleracea). Plant Science, 2011, 180, 212-220.	3.6	158
7	Functional dissection of Hydrophilins during <i>in vitro</i> freeze protection. Plant, Cell and Environment, 2008, 31, 1781-1790.	5.7	125
8	Comparing Gompertz and Richards Functions to Estimate Freezing Injury in Rhododendron Using Electrolyte Leakage. Journal of the American Society for Horticultural Science, 1998, 123, 246-252.	1.0	111
9	Winter survival and deacclimation of perennials under warming climate: physiological perspectives. Physiologia Plantarum, 2013, 147, 75-87.	5.2	102
10	Seasonal patterns of dehydrins and 70-kDa heat-shock proteins in bark tissues of eight species of woody plants. Physiologia Plantarum, 1996, 96, 496-505.	5.2	95
11	Mechanism of freeze-thaw injury and recovery: A cool retrospective and warming up to new ideas. Plant Science, 2018, 270, 301-313.	3.6	86
12	Identification of cold acclimation-responsive Rhododendron genes for lipid metabolism, membrane transport and lignin biosynthesis: importance of moderately abundant ESTs in genomic studies. Plant, Cell and Environment, 2006, 29, 558-570.	5.7	85
13	Chill-responsive dehydrins in blueberry: Are they associated with cold hardiness or dormancy transitions?. Physiologia Plantarum, 1997, 101, 8-16.	5.2	84
14	Comparative analysis of expressed sequence tags from cold-acclimated and non-acclimated leaves of Rhododendron catawbiense Michx. Planta, 2005, 221, 406-416.	3.2	81
15	Isolation and functional characterization of PgTIP1, a hormone-autotrophic cells-specific tonoplast aquaporin in ginseng*. Journal of Experimental Botany, 2007, 58, 947-956.	4.8	79
16	RcDhn5, a cold acclimationâ€responsive dehydrin from <i>Rhododendron catawbiense </i>rescues enzyme activity from dehydration effects in vitro and enhances freezing tolerance in <i>RcDhn5</i>â€overexpressing <i>Arabidopsis </i>plants. Physiologia Plantarum, 2008, 134, 583-597.	5.2	78
17	Seasonal patterns of dehydrins and 70-kDa heat-shock proteins in bark tissues of eight species of woody plants. Physiologia Plantarum, 1996, 96, 496-505.	5.2	77
18	Relative Sensitivity of Photosynthesis and Respiration to Freeze-Thaw Stress in Herbaceous Species. Plant Physiology, 1989, 89, 1372-1379.	4.8	76

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19	Major differences observed in transcript profiles of blueberry during cold acclimation under field and cold room conditions. Planta, 2007, 225, 735-751.	3.2	68
20	Dehydrin variability among rhododendron species: a 25â€kDa dehydrin is conserved and associated with cold acclimation across diverse species. New Phytologist, 2004, 161, 773-780.	7.3	67
21	A Loss in the Plasma Membrane ATPase Activity and Its Recovery Coincides with Incipient Freeze-Thaw Injury and Postthaw Recovery in Onion Bulb Scale Tissue. Plant Physiology, 1991, 95, 846-852.	4.8	65
22	Intron-flanking ESTâ€“PCR markers: from genetic marker development to gene structure analysis in Rhododendron. Theoretical and Applied Genetics, 2005, 111, 1347-1356.	3.6	63
23	Changes in carbohydrates, ABA and bark proteins during seasonal cold acclimation and deacclimation in <i>Hydrangea </i>species differing in cold hardiness. Physiologia Plantarum, 2008, 134, 473-485.	5.2	63
24	<i>Rhododendron catawbiense</i> plasma membrane intrinsic proteins are aquaporins, and their overâ€expression compromises constitutive freezing tolerance and cold acclimation ability of transgenic <i>Arabidopsis</i> plants. Plant, Cell and Environment, 2008, 31, 1275-1289.	5.7	57
25	Dehydrin metabolism is altered during seed osmopriming and subsequent germination under chilling and desiccation in Spinacia oleracea L. cv. Bloomsdale: Possible role in stress tolerance. Plant Science, 2012, 183, 27-36.	3.6	56
26	Cold Hardiness in Trees: A Mini-Review. Frontiers in Plant Science, 2018, 9, 1394.	3.6	56
27	In Vivo Perturbation of Membrane-Associated Calcium by Freeze-Thaw Stress in Onion Bulb Cells. Plant Physiology, 1988, 87, 622-628.	4.8	55
28	Identification of quantitative trait loci controlling winter hardiness in an annualÂÃ—Âperennial ryegrass interspecific hybrid population. Molecular Breeding, 2007, 19, 125-136.	2.1	54
29	Complementary DNA cloning, sequencing and expression of an unusual dehydrin from blueberry floral buds. Physiologia Plantarum, 1999, 107, 98-109.	5.2	49
30	Deacclimation kinetics and carbohydrate changes in stem tissues of Hydrangea in response to an experimental warm spell. Plant Science, 2011, 180, 140-148.	3.6	48
31	Dehardening Kinetics, Bud Development, and Dehydrin Metabolism in Blueberry Cultivars during Deacclimation at Constant, Warm Temperatures. Journal of the American Society for Horticultural Science, 2004, 129, 667-674.	1.0	48
32	Seasonal changes in photosynthesis, antioxidant systems and ELIP expression in a thermonastic and non-thermonastic Rhododendron species: A comparison of photoprotective strategies in overwintering plants. Plant Science, 2009, 177, 607-617.	3.6	45
33	Frost dehardening and rehardening of floral buds of deciduous azaleas are influenced by genotypic biogeography. Environmental and Experimental Botany, 2007, 59, 264-275.	4.2	44
34	Quantitative and qualitative changes in carbohydrates associated with spring deacclimation in contrasting Hydrangea species. Environmental and Experimental Botany, 2011, 72, 358-367.	4.2	40
35	Effect of short-term versus prolonged freezing on freezeâ€“thaw injury and post-thaw recovery in spinach: Importance in laboratory freezeâ€“thaw protocols. Environmental and Experimental Botany, 2014, 106, 124-131.	4.2	39
36	An apple rootstock overexpressing a peach CBF gene alters growth and flowering in the scion but does not impact cold hardiness or dormancy. Horticulture Research, 2016, 3, 16006.	6.3	39

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37	Increased Risk of Freeze Damage in Woody Perennials VIS-Ã€-VIS Climate Change: Importance of Deacclimation and Dormancy Response. Frontiers in Environmental Science, 2016, 4, .	3.3	38
38	Structural Adaptations in Overwintering Leaves of Thermonastic and Nonthermonastic Rhododendron Species. Journal of the American Society for Horticultural Science, 2008, 133, 768-776.	1.0	37
39	Phylogenetic analysis and seasonal cold acclimation-associated expression of early light-induced protein genes of Rhododendron catawbiense. Physiologia Plantarum, 2007, 132, 071202165636003-???.	5.2	34
40	Proteomic changes associated with freezeâ€‐thaw injury and postâ€‐thaw recovery in onion (<i>Allium) Tj ETQq0 0 0 rgBT /Overlock 10 T	5.7	34
41	Exogenous salicylic acid improves freezing tolerance of spinach (Spinacia oleracea L.) leaves. Cryobiology, 2018, 81, 192-200.	0.7	34
42	Selection of Reference Genes for Normalizing Gene Expression During Seed Priming and Germination Using qPCR in Zea mays and Spinacia oleracea. Plant Molecular Biology Reporter, 2012, 30, 478-487.	1.8	33
43	Utility of Blueberry-derived EST-PCR Primers in Related Ericaceae Species. Hortscience: A Publication of the American Society for Hortcultural Science, 2003, 38, 1428-1432.	1.0	32
44	Factors affecting freezing tolerance: a comparative transcriptomics study between field and artificial cold acclimations in overwintering evergreens. Plant Journal, 2020, 103, 2279-2300.	5.7	29
45	Understanding the cellular mechanism of recovery from freezeâ€"thaw injury in spinach: possible role of aquaporins, heat shock proteins, dehydrin and antioxidant system. Physiologia Plantarum, 2014, 150, 374-387.	5.2	26
46	Salicylic acid-induced freezing tolerance in spinach (Spinacia oleracea L.) leaves explored through metabolite profiling. Environmental and Experimental Botany, 2018, 156, 214-227.	4.2	24
47	A metabolomics study of ascorbic acidâ€‐induced in situ freezing tolerance in spinach (<i>Spinacia) Tj ETQq1 1 0.784314 rgBT /Overlock	1.9	24
48	Isolation and characterization of three cold acclimation-responsive dehydrin genes from Eucalyptus globulus. Tree Genetics and Genomes, 2012, 8, 149-162.	1.6	21
49	Protoplasmic Swelling as a Symptom of Freezing Injury in Onion Bulb Cells. Plant Physiology, 1986, 82, 625-629.	4.8	19
50	Cold hardiness increases with age in juvenile Rhododendron populations. Frontiers in Plant Science, 2014, 5, 542.	3.6	19
51	Post-translational activation of CBF for inducing freezing tolerance. Trends in Plant Science, 2022, 27, 415-417.	8.8	17
52	Identification and Characterization of Five Cold Stress-Related Rhododendron Dehydrin Genes: Spotlight on a FSK-Type Dehydrin With Multiple F-Segments. Frontiers in Bioengineering and Biotechnology, 2019, 7, 30.	4.1	16
53	Proteome dynamics of cold-acclimating Rhododendron species contrasting in their freezing tolerance and thermonasty behavior. PLoS ONE, 2017, 12, e0177389.	2.5	16
54	Seasonal responses to cold and light stresses by two elevational ecotypes of Rhododendron catawbiense: A comparative study of overwintering strategies. Environmental and Experimental Botany, 2019, 163, 86-96.	4.2	15

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55	Comparative Physiology of Natural Deacclimation in Ten Azalea Cultivars. Hortscience: A Publication of the American Society for Hortcultural Science, 2017, 52, 1451-1457.	1.0	12
56	Global patterns of protein abundance during the development of cold hardiness in blueberry. Environmental and Experimental Botany, 2016, 124, 11-21.	4.2	11
57	Inheritance of Cold Hardiness and Dehydrin Genes in Diploid Mapping Populations of Blueberry. Journal of Crop Improvement, 2004, 10, 37-52.	1.7	8
58	Short versus prolonged freezing differentially impacts freezeÂâ€“Âthaw injury in spinach leaves: mechanistic insights through metabolite profiling. Physiologia Plantarum, 2020, 168, 777-789.	5.2	8
59	Repair of sub-lethal freezing damage in leaves of Arabidopsis thaliana. BMC Plant Biology, 2020, 20, 35.	3.6	8
60	Is expression of aquaporins (plasma membrane intrinsic protein 2s, PIP2s) associated with thermonasty (leaf-curling) in Rhododendron?. Journal of Plant Physiology, 2013, 170, 1447-1454.	3.5	6
61	Supplemental calcium improves freezing tolerance of spinach (Spinacia oleracea L.) by mitigating membrane and photosynthetic damage, and bolstering anti-oxidant and cell-wall status. Scientia Horticulturae, 2021, 288, 110212.	3.6	6
62	Proline accumulation and related gene expression during spring regrowth in three rosaceae species. Horticulture Environment and Biotechnology, 2017, 58, 21-26.	2.1	5
63	The relationship of cold acclimation and extracellular ice formation to winter thermonasty in two <i>Rhododendron</i> species and their F₁ hybrid. American Journal of Botany, 2021, 108, 1946-1956.	1.7	3
64	A 27 kDaRhododendronprotein is associated with constitutive freezing tolerance and is related to the ABA / water deficit stress-inducible family of proteins. Journal of Horticultural Science and Biotechnology, 2005, 80, 171-176.	1.9	2
65	Antioxidant enzyme responses of Kentucky bluegrass to simulated athletic traffic stress. Itsrj, 0, , .	0.3	0
66	(435) Physiological Study of Deacclimation and Reacclimation in Deciduous Azalea (Rhododendron) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Science, 2005, 40, 1076E-1077.	1.0	0