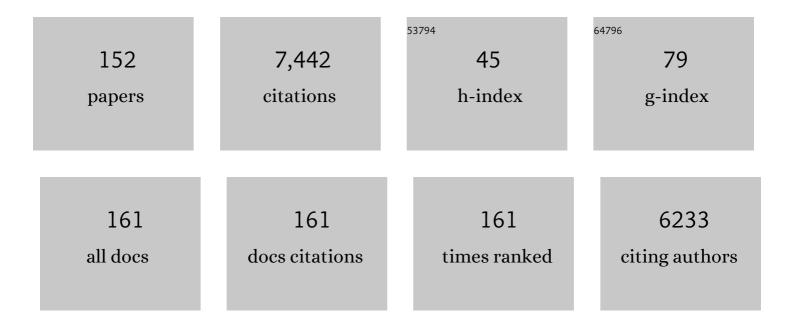
## Sneh Lata Singla-Pareek

List of Publications by Year in descending order

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| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Transcription Factors and Plants Response to Drought Stress: Current Understanding and Future<br>Directions. Frontiers in Plant Science, 2016, 7, 1029.  | 3.6 | 611       |
| 2  | Methylglyoxal levels in plants under salinity stress are dependent on glyoxalase I and glutathione.<br>Biochemical and Biophysical Research Communications, 2005, 337, 61-67.  | 2.1 | 388       |
| 3  | Redox homeostasis, antioxidant defense, and methylglyoxal detoxification as markers for salt tolerance in Pokkali rice. Protoplasma, 2010, 245, 85-96.   | 2.1 | 242       |
| 4  | Transgenic Tobacco Overexpressing Glyoxalase Pathway Enzymes Grow and Set Viable Seeds in<br>Zinc-Spiked Soils. Plant Physiology, 2006, 140, 613-623.  | 4.8 | 237       |
| 5  | Transgenic tobacco plants overexpressing glyoxalase enzymes resist an increase in methylglyoxal and<br>maintain higher reduced glutathione levels under salinity stress. FEBS Letters, 2005, 579, 6265-6271.                               | 2.8 | 221       |
| 6  | Engineering abiotic stress tolerance via CRISPR/ Cas-mediated genome editing. Journal of Experimental<br>Botany, 2020, 71, 470-479.  | 4.8 | 184       |
| 7  | Enhancing salt tolerance in a crop plant by overexpression of glyoxalase II. Transgenic Research, 2008, 17, 171-180.   | 2.4 | 168       |
| 8  | Genome-wide analysis of rice and Arabidopsis identifies two glyoxalase genes that are highly expressed in abiotic stresses. Functional and Integrative Genomics, 2011, 11, 293-305.  | 3.5 | 146       |
| 9  | Transcriptome map for seedling stage specific salinity stress response indicates a specific set of genes<br>as candidate for saline tolerance in Oryza sativa L Functional and Integrative Genomics, 2009, 9,<br>109-123.                  | 3.5 | 140       |
| 10 | An improved protocol for efficient transformation and regeneration of diverse indica rice cultivars.<br>Plant Methods, 2011, 7, 49.  | 4.3 | 136       |
| 11 | Whole-Genome Analysis of Oryza sativa Reveals Similar Architecture of Two-Component Signaling<br>Machinery with Arabidopsis. Plant Physiology, 2006, 142, 380-397.   | 4.8 | 130       |
| 12 | Knockdown of an inflorescence meristemâ€specific cytokinin oxidase – OsCKX2 in rice reduces yield<br>penalty under salinity stress condition. Plant, Cell and Environment, 2018, 41, 936-946.  | 5.7 | 122       |
| 13 | Physiological responses among Brassica species under salinity stress show strong correlation with<br>transcript abundance for SOS pathway-related genes. Journal of Plant Physiology, 2009, 166, 507-520.                                  | 3.5 | 120       |
| 14 | Glyoxalase and Methylglyoxal as Biomarkers for Plant Stress Tolerance. Critical Reviews in Plant<br>Sciences, 2014, 33, 429-456.   | 5.7 | 120       |
| 15 | Cyclophilins: Proteins in search of function. Plant Signaling and Behavior, 2013, 8, e22734.   | 2.4 | 113       |
| 16 | A unique <scp>N</scp> i <sup>2</sup> <sup>+</sup> Ââ€dependent and methylglyoxalâ€inducible rice<br>glyoxalaseÂ <scp>I</scp> possesses a single active site and functions in abiotic stress response. Plant<br>Journal, 2014, 78, 951-963. | 5.7 | 113       |
| 17 | Functional validation of a novel isoform of Na+/H+ antiporter from Pennisetum glaucum for enhancing salinity tolerance in rice. Journal of Biosciences, 2007, 32, 621-628.   | 1.1 | 109       |
| 18 | Genome wide expression analysis of CBS domain containing proteins in Arabidopsis thaliana (L.) Heynh<br>and Oryza sativa L. reveals their developmental and stress regulation. BMC Genomics, 2009, 10, 200.                                | 2.8 | 105       |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | A glutathione responsive rice glyoxalase <scp>II</scp> , Os <scp>GLYII</scp> â€2, functions in salinity<br>adaptation by maintaining better photosynthesis efficiency and antiâ€oxidant pool. Plant Journal, 2014,<br>80, 93-105.                        | 5.7 | 102       |
| 20 | Presence of unique glyoxalase III proteins in plants indicates the existence of shorter route for methylglyoxal detoxification. Scientific Reports, 2016, 6, 18358.  | 3.3 | 100       |
| 21 | Glyoxalases and stress tolerance in plants. Biochemical Society Transactions, 2014, 42, 485-490.   | 3.4 | 97        |
| 22 | Manipulation of glyoxalase pathway confers tolerance to multiple stresses in rice. Plant, Cell and Environment, 2018, 41, 1186-1200.   | 5.7 | 95        |
| 23 | AN OVERVIEW ON THE ROLE OF METHYLGLYOXAL AND GLYOXALASES IN PLANTS. Drug Metabolism and Drug Interactions, 2008, 23, 51-68.  | 0.3 | 94        |
| 24 | Overexpression of Rice CBS Domain Containing Protein Improves Salinity, Oxidative, and Heavy Metal<br>Tolerance in Transgenic Tobacco. Molecular Biotechnology, 2012, 52, 205-216.   | 2.4 | 90        |
| 25 | Histidine kinases in plants. Plant Signaling and Behavior, 2012, 7, 1230-1237.   | 2.4 | 87        |
| 26 | Understanding salinity responses and adopting â€~omics-based' approaches to generate salinity tolerant cultivars of rice. Frontiers in Plant Science, 2015, 6, 712.  | 3.6 | 86        |
| 27 | Abiotic Stresses Cause Differential Regulation of Alternative Splice Forms of GATA Transcription Factor in Rice. Frontiers in Plant Science, 2017, 8, 1944.  | 3.6 | 86        |
| 28 | Pennisetum glaucum Na+/H+ antiporter confers high level of salinity tolerance in transgenic Brassica<br>juncea. Molecular Breeding, 2007, 19, 137-151.   | 2.1 | 85        |
| 29 | Enhancing trehalose biosynthesis improves yield potential in marker-free transgenic rice under drought, saline, and sodic conditions. Journal of Experimental Botany, 2020, 71, 653-668.   | 4.8 | 82        |
| 30 | Towards salinity tolerance in Brassica: an overview. Physiology and Molecular Biology of Plants, 2008, 14, 39-49.  | 3.1 | 81        |
| 31 | Ectopic expression of Pokkali phosphoglycerate kinase-2 (OsPGK2-P) improves yield in tobacco plants under salinity stress. Plant Cell Reports, 2016, 35, 27-41.  | 5.6 | 72        |
| 32 | A suite of new genes defining salinity stress tolerance in seedlings of contrasting rice genotypes.<br>Functional and Integrative Genomics, 2013, 13, 351-365.   | 3.5 | 71        |
| 33 | Oxidative environment and redox homeostasis in plants: dissecting out significant contribution of major cellular organelles. Frontiers in Environmental Science, 2015, 2, .  | 3.3 | 71        |
| 34 | A nuclear-localized histone-gene binding protein from rice (OsHBP1b) functions in salinity and<br>drought stress tolerance by maintaining chlorophyll content and improving the antioxidant<br>machinery. Journal of Plant Physiology, 2015, 176, 36-46. | 3.5 | 70        |
| 35 | Analysis of global gene expression profile of rice in response to methylglyoxal indicates its possible role as a stress signal molecule. Frontiers in Plant Science, 2015, 6, 682.   | 3.6 | 68        |
| 36 | Membrane dynamics during individual and combined abiotic stresses in plants and tools to study the same. Physiologia Plantarum, 2021, 171, 653-676.  | 5.2 | 68        |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Genomics Approaches For Improving Salinity Stress Tolerance in Crop Plants. Current Genomics, 2016, 17, 343-357.   | 1.6 | 66        |
| 38 | Characterization of stress and methylglyoxal inducible triose phosphate isomerase (OscTPI) from rice. Plant Signaling and Behavior, 2012, 7, 1337-1345.  | 2.4 | 56        |
| 39 | Deciphering the Role of Trehalose in Tripartite Symbiosis Among Rhizobia, Arbuscular Mycorrhizal<br>Fungi, and Legumes for Enhancing Abiotic Stress Tolerance in Crop Plants. Frontiers in Microbiology,<br>2020, 11, 509919.                  | 3.5 | 55        |
| 40 | Heterologous Expression of a Salinity and Developmentally Regulated Rice Cyclophilin Gene (OsCyp2)<br>in E. coli and S. cerevisiae Confers Tolerance Towards Multiple Abiotic Stresses. Molecular<br>Biotechnology, 2009, 42, 195-204.         | 2.4 | 53        |
| 41 | Methylglyoxal detoxification in plants: Role of glyoxalase pathway. Indian Journal of Plant<br>Physiology, 2016, 21, 377-390.  | 0.8 | 52        |
| 42 | Proteomics of contrasting rice genotypes: Identification of potential targets for raising crops for saline environment. Plant, Cell and Environment, 2018, 41, 947-969.  | 5.7 | 51        |
| 43 | Silicon-mediated abiotic and biotic stress mitigation in plants: Underlying mechanisms and potential for stress resilient agriculture. Plant Physiology and Biochemistry, 2021, 163, 15-25.  | 5.8 | 51        |
| 44 | Histidine kinase and response regulator genes as they relate to salinity tolerance in rice. Functional and Integrative Genomics, 2009, 9, 411-417.   | 3.5 | 50        |
| 45 | A unique bZIP transcription factor imparting multiple stress tolerance in Rice. Rice, 2019, 12, 58.  | 4.0 | 50        |
| 46 | Rice intermediate filament, OsIF, stabilizes photosynthetic machinery and yield under salinity and heat stress. Scientific Reports, 2018, 8, 4072.   | 3.3 | 49        |
| 47 | Episodes of horizontal gene-transfer and gene-fusion led to co-existence of different metal-ion specific glyoxalase I. Scientific Reports, 2013, 3, 3076.  | 3.3 | 48        |
| 48 | Functional screening of cDNA library from a salt tolerant rice genotype Pokkali identifies<br>mannose-1-phosphate guanyl transferase gene (OsMPG1) as a key member of salinity stress response.<br>Plant Molecular Biology, 2012, 79, 555-568. | 3.9 | 47        |
| 49 | Narrowing down the targets for yield improvement in rice under normal and abiotic stress conditions via expression profiling of yield-related genes. Rice, 2012, 5, 37.  | 4.0 | 45        |
| 50 | De Novo Assembly and Characterization of Stress Transcriptome in a Salinity-Tolerant Variety CS52 of<br>Brassica juncea. PLoS ONE, 2015, 10, e0126783.   | 2.5 | 45        |
| 51 | Histone chaperones in Arabidopsis and rice: genome-wide identification, phylogeny, architecture and transcriptional regulation. BMC Plant Biology, 2015, 15, 42.   | 3.6 | 44        |
| 52 | A NAP-Family Histone Chaperone Functions in Abiotic Stress Response and Adaptation. Plant<br>Physiology, 2016, 171, 2854-2868.   | 4.8 | 44        |
| 53 | Engineering abiotic stress response in plants for biomass production. Journal of Biological Chemistry, 2018, 293, 5035-5043.   | 3.4 | 43        |
| 54 | Tissue specific and abiotic stress regulated transcription of histidine kinases in plants is also<br>influenced by diurnal rhythm. Frontiers in Plant Science, 2015, 6, 711.   | 3.6 | 42        |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Genome-wide investigation and expression analysis of Sodium/Calcium exchanger gene family in rice and Arabidopsis. Rice, 2015, 8, 54.   | 4.0 | 41        |
| 56 | Expression of a cyclophilin OsCyp2-P isolated from a salt-tolerant landrace of rice in tobacco alleviates stress via ion homeostasis and limiting ROS accumulation. Functional and Integrative Genomics, 2015, 15, 395-412. | 3.5 | 41        |
| 57 | Mapping the â€~Two-component system' network in rice. Scientific Reports, 2017, 7, 9287.  | 3.3 | 41        |
| 58 | Raising salinity tolerant rice: recent progress and future perspectives. Physiology and Molecular<br>Biology of Plants, 2008, 14, 137-154.  | 3.1 | 40        |
| 59 | Characterization and Functional Validation of Tobacco PLC Delta for Abiotic Stress Tolerance. Plant<br>Molecular Biology Reporter, 2012, 30, 488-497.   | 1.8 | 39        |
| 60 | Integrating the dynamics of yield traits in rice in response to environmental changes. Journal of<br>Experimental Botany, 2020, 71, 490-506.  | 4.8 | 39        |
| 61 | Drought and High Temperature Stress in Sorghum: Physiological, Genetic, and Molecular Insights and<br>Breeding Approaches. International Journal of Molecular Sciences, 2021, 22, 9826.                                     | 4.1 | 39        |
| 62 | Shaping the root system architecture in plants for adaptation to drought stress. Physiologia Plantarum, 2022, 174, e13651.  | 5.2 | 39        |
| 63 | Metabolic Engineering of Glyoxalase Pathway for Enhancing Stress Tolerance in Plants. Methods in<br>Molecular Biology, 2010, 639, 95-118.   | 0.9 | 37        |
| 64 | The Saltol QTL-localized transcription factor OsCATA8 plays an important role in stress tolerance and seed development in Arabidopsis and rice. Journal of Experimental Botany, 2020, 71, 684-698.                          | 4.8 | 37        |
| 65 | Mapping the â€~early salinity response' triggered proteome adaptation in contrasting rice genotypes<br>using iTRAQ approach. Rice, 2019, 12, 3.   | 4.0 | 37        |
| 66 | The quest for osmosensors in plants. Journal of Experimental Botany, 2020, 71, 595-607.   | 4.8 | 37        |
| 67 | Elucidating the Response of Crop Plants towards Individual, Combined and Sequentially Occurring<br>Abiotic Stresses. International Journal of Molecular Sciences, 2021, 22, 6119.   | 4.1 | 37        |
| 68 | A nuclearâ€localized rice glyoxalase I enzyme, OsGLYIâ€8, functions in the detoxification of methylglyoxal<br>in the nucleus. Plant Journal, 2017, 89, 565-576.   | 5.7 | 36        |
| 69 | Characterization and functional validation of glyoxalase II from rice. Protein Expression and Purification, 2007, 51, 126-132.  | 1.3 | 35        |
| 70 | Evidence for nuclear interaction of a cytoskeleton protein (OsIFL) with metallothionein and its role in salinity stress tolerance. Scientific Reports, 2016, 6, 34762.  | 3.3 | 35        |
| 71 | Reassessing plant glyoxalases: large family and expanding functions. New Phytologist, 2020, 227, 714-721.   | 7.3 | 35        |
| 72 | Gaining Acceptance of Novel Plant Breeding Technologies. Trends in Plant Science, 2021, 26, 575-587.  | 8.8 | 34        |

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| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Expression of abiotic stress inducible ETHE1-like protein from rice is higher in roots and is regulated by calcium. Physiologia Plantarum, 2014, 152, 1-16.   | 5.2 | 33        |
| 74 | MATH-Domain Family Shows Response toward Abiotic Stress in Arabidopsis and Rice. Frontiers in Plant Science, 2016, 7, 923.  | 3.6 | 33        |
| 75 | Metabolic shift in sugars and amino acids regulates sprouting in Saffron corm. Scientific Reports, 2017, 7, 11904.  | 3.3 | 32        |
| 76 | How doÂrice seedlings of landrace Pokkali survive in saline fields after transplantation? Physiology,<br>biochemistry, and photosynthesis. Photosynthesis Research, 2021, 150, 117-135.   | 2.9 | 32        |
| 77 | Transcription dynamics of Saltol QTL localized genes encoding transcription factors, reveals their<br>differential regulation in contrasting genotypes of rice. Functional and Integrative Genomics, 2017, 17,<br>69-83.            | 3.5 | 31        |
| 78 | Salt Overly Sensitive pathway members are influenced by diurnal rhythm in rice. Plant Signaling and Behavior, 2013, 8, e24738.  | 2.4 | 28        |
| 79 | Forward and reverse genetics approaches for combined stress tolerance in rice. Indian Journal of Plant Physiology, 2018, 23, 630-646.   | 0.8 | 27        |
| 80 | CO2 uptake and chlorophyll a fluorescence of Suaeda fruticosa grown under diurnal rhythm and after transfer to continuous dark. Photosynthesis Research, 2019, 142, 211-227.  | 2.9 | 27        |
| 81 | Stacking for future: Pyramiding genes to improve drought and salinity tolerance in rice. Physiologia<br>Plantarum, 2021, 172, 1352-1362.  | 5.2 | 27        |
| 82 | Serotonin and Melatonin Biosynthesis in Plants: Genome-Wide Identification of the Genes and Their<br>Expression Reveal a Conserved Role in Stress and Development. International Journal of Molecular<br>Sciences, 2021, 22, 11034. | 4.1 | 26        |
| 83 | Characteristic Variations and Similarities in Biochemical, Molecular, and Functional Properties of<br>Glyoxalases across Prokaryotes and Eukaryotes. International Journal of Molecular Sciences, 2017, 18,<br>250.                 | 4.1 | 25        |
| 84 | From methylglyoxal to pyruvate: a genome-wide study for the identification of glyoxalases and D-lactate dehydrogenases in Sorghum bicolor. BMC Genomics, 2020, 21, 145.   | 2.8 | 24        |
| 85 | Dynamic role of aquaporin transport system under drought stress in plants. Environmental and Experimental Botany, 2021, 184, 104367.  | 4.2 | 24        |
| 86 | Silicon nutrition stimulates Salt-Overly Sensitive (SOS) pathway to enhance salinity stress tolerance and yield in rice. Plant Physiology and Biochemistry, 2021, 166, 593-604.   | 5.8 | 24        |
| 87 | The chloride channels: Silently serving the plants. Physiologia Plantarum, 2021, 171, 688-702.  | 5.2 | 23        |
| 88 | Rewilding staple crops for the lost halophytism: Toward sustainability and profitability of agricultural production systems. Molecular Plant, 2022, 15, 45-64.  | 8.3 | 23        |
| 89 | Unraveling the contribution of <scp> <i>OsSOS2</i> </scp> in conferring salinity and drought tolerance in a highâ€yielding rice. Physiologia Plantarum, 2022, 174, e13638.  | 5.2 | 23        |
| 90 | Molecular cloning and characterization of salt overly sensitive gene promoter from Brassica juncea<br>(BjSOS2). Molecular Biology Reports, 2015, 42, 1139-1148.   | 2.3 | 22        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 91  | OsSRO1a Interacts with RNA Binding Domain-Containing Protein (OsRBD1) and Functions in Abiotic Stress Tolerance in Yeast. Frontiers in Plant Science, 2016, 7, 62.  | 3.6 | 22        |
| 92  | <i>DPS1</i> regulates cuticle development and leaf senescence in rice. Food and Energy Security, 2021, 10, e273.  | 4.3 | 20        |
| 93  | Analysis of a salinity induced BjSOS3 protein from Brassica indicate it to be structurally and functionally related to its ortholog from Arabidopsis. Plant Physiology and Biochemistry, 2011, 49, 996-1004.                        | 5.8 | 17        |
| 94  | A Salt Overly Sensitive Pathway Member from Brassica juncea BjSOS3 Can Functionally Complement<br>ΔAtsos3 in Arabidopsis. Current Genomics, 2017, 19, 60-69.  | 1.6 | 17        |
| 95  | Physiological characterization of gamma-ray induced mutant population of rice to facilitate biomass and yield improvement under salinity stress. Indian Journal of Plant Physiology, 2016, 21, 545-555.                             | 0.8 | 16        |
| 96  | Overview of Methods for Assessing Salinity and Drought Tolerance of Transgenic Wheat Lines.<br>Methods in Molecular Biology, 2017, 1679, 83-95.   | 0.9 | 16        |
| 97  | Maintenance of stress related transcripts in tolerant cultivar at a level higher than sensitive one appears to be a conserved salinity response among plants. Plant Signaling and Behavior, 2009, 4, 431-434.                       | 2.4 | 15        |
| 98  | Plant Metallothioneins. , 2016, , 239-261.  |     | 15        |
| 99  | Enhanced salinity tolerance and improved yield properties in Bangladeshi rice Binnatoa through<br>Agrobacterium-mediated transformation of PgNHX1 from Pennisetum glaucum. Acta Physiologiae<br>Plantarum, 2010, 32, 657-663.       | 2.1 | 14        |
| 100 | Putative osmosensor – OsHK3b – a histidine kinase protein from rice shows high structural<br>conservation with its ortholog AtHK1 from <i>Arabidopsis</i> . Journal of Biomolecular Structure<br>and Dynamics, 2014, 32, 1318-1332. | 3.5 | 14        |
| 101 | Towards Understanding Abiotic Stress Signaling in Plants: Convergence of Genomic, Transcriptomic,<br>Proteomic, and Metabolomic Approaches. , 2015, , 3-40.   |     | 13        |
| 102 | Designing Climate-Smart Future Crops Employing Signal Transduction Components. , 2015, , 393-413.   |     | 13        |
| 103 | The Journey from Two-Step to Multi-Step Phosphorelay Signaling Systems. Current Genomics, 2021, 22, 59-74.  | 1.6 | 13        |
| 104 | Methylglyoxal, Triose Phosphate Isomerase, and Glyoxalase Pathway: Implications in Abiotic Stress and Signaling in Plants. , 2015, , 347-366.   |     | 12        |
| 105 | Pre-Field Screening Protocols for Heat-Tolerant Mutants in Rice. , 2018, , .  |     | 12        |
| 106 | Genetic Conservation of CBS Domain Containing Protein Family in Oryza Species and Their Association with Abiotic Stress Responses. International Journal of Molecular Sciences, 2022, 23, 1687.                                     | 4.1 | 12        |
| 107 | Physiological and molecular signatures reveal differential response of rice genotypes to drought and drought combination with heat and salinity stress. Physiology and Molecular Biology of Plants, 2022, 28, 899-910.              | 3.1 | 12        |
| 108 | OsCBSCBSPB4 is a Two Cystathionine-β-Synthase Domain-containing Protein from Rice that Functions in Abiotic Stress Tolerance. Current Genomics, 2017, 19, 50-59.  | 1.6 | 11        |

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| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 109 | What signals the glyoxalase pathway in plants?. Physiology and Molecular Biology of Plants, 2021, 27, 2407-2420.   | 3.1 | 11        |
| 110 | Tracing the Evolution of Plant Glyoxalase III Enzymes for Structural and Functional Divergence.<br>Antioxidants, 2021, 10, 648.  | 5.1 | 10        |
| 111 | Dissecting Out the Crosstalk Between Salinity and Hormones in Roots of <i>Arabidopsis</i> . OMICS A<br>Journal of Integrative Biology, 2011, 15, 913-924.  | 2.0 | 9         |
| 112 | Mapping the microRNA Expression Profiles in Glyoxalase Overexpressing Salinity Tolerant Rice.<br>Current Genomics, 2017, 19, 21-35.  | 1.6 | 9         |
| 113 | Biodiesel production from camelina oil: Present status and future perspectives. Food and Energy Security, 2023, 12, e340.  | 4.3 | 9         |
| 114 | Biomass production and salinity response in plants: role of MicroRNAs. Indian Journal of Plant<br>Physiology, 2017, 22, 448-457.   | 0.8 | 8         |
| 115 | Molecular Mechanism and Signaling Response of Heavy Metal Stress Tolerance in Plants. , 2019, , 29-47.   |     | 8         |
| 116 | Raising Climate-Resilient Crops: Journey From the Conventional Breeding to New Breeding Approaches.<br>Current Genomics, 2021, 22, 450-467.  | 1.6 | 7         |
| 117 | Transgenic Plants for Dry and Saline Environments. , 2007, , 501-530.  |     | 6         |
| 118 | Signaling cross talk between biotic and abiotic stress responses in soybean. , 2016, , 27-52.  |     | 6         |
| 119 | Sensing and signalling in plant stress responses: ensuring sustainable food security in an era of climate change. New Phytologist, 2020, 228, 823-827.   | 7.3 | 6         |
| 120 | Two-component signaling system in plants: interaction network and specificity in response to stress and hormones. Plant Cell Reports, 2021, 40, 2037-2046.   | 5.6 | 6         |
| 121 | How to survive in a salty desert: An adventure study with Suaeda fruticosa. The Journal of Plant<br>Science Research, 2019, 35, 257-261.   | 0.1 | 6         |
| 122 | Genetic diversity reveals synergistic interaction between yield components could improve the sink size and yield in rice. Food and Energy Security, 2022, 11, .  | 4.3 | 6         |
| 123 | <i><scp>OsCyp2â€P</scp></i> , an auxinâ€responsive cyclophilin, regulates Ca <sup>2+</sup> calmodulin<br>interaction for an ionâ€mediated stress response in rice. Physiologia Plantarum, 2022, 174, e13631. | 5.2 | 6         |
| 124 | Seedlingâ€stage salinity tolerance in rice: Decoding the role of transcription factors. Physiologia<br>Plantarum, 2022, 174, e13685.   | 5.2 | 6         |
| 125 | Glyoxalase <scp>III</scp> enhances salinity tolerance through reactive oxygen species scavenging and reduced glycation. Physiologia Plantarum, 2022, 174, e13693.  | 5.2 | 6         |
| 126 | TUNEL Assay to Assess Extent of DNA Fragmentation and Programmed Cell Death in Root Cells under<br>Various Stress Conditions. Bio-protocol, 2017, 7, e2502.  | 0.4 | 5         |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 127 | Glyoxalase Pathway and Drought Stress Tolerance in Plants. , 2016, , 379-399.   |      | 4         |
| 128 | Expression dynamics of glyoxalase genes under high temperature stress in plants. Plant Physiology<br>Reports, 2020, 25, 533-548.  | 1.5  | 4         |
| 129 | Innovative plant breeding could deliver crop revolution. Nature, 2020, 577, 622-622.  | 27.8 | 4         |
| 130 | Microbial methylglyoxal metabolism contributes towards growth promotion and stress tolerance in plants. Environmental Microbiology, 2022, 24, 2817-2836.  | 3.8  | 4         |
| 131 | The Two-Component System: Transducing Environmental and Hormonal Signals. , 2019, , 247-278.  |      | 4         |
| 132 | <scp>DTH8</scp> overexpression induces early flowering, boosts yield, and improves stress recovery<br>in rice cv <scp>IR64</scp> . Physiologia Plantarum, 2022, 174, e13691.                        | 5.2  | 4         |
| 133 | Analysis of Salt Stress-Related Transcriptome Fingerprints from Diverse Plant Species. , 2007, , 267-287.   |      | 3         |
| 134 | Transgenic Approaches. , 2009, , 417-450.   |      | 3         |
| 135 | Functional Genomics Approach Towards Dissecting Out Abiotic Stress Tolerance Trait in Plants.<br>Sustainable Development and Biodiversity, 2019, , 1-24.  | 1.7  | 3         |
| 136 | Molecular Chaperones: Key Players of Abiotic Stress Response in Plants. Sustainable Development and Biodiversity, 2019, , 125-165.  | 1.7  | 3         |
| 137 | Recent Advancements in Developing Salinity Tolerant Rice. , 2019, , 87-112.   |      | 3         |
| 138 | Draft Genome Sequence of a Potential Plant Growth-Promoting Rhizobacterium, <i>Pseudomonas</i> sp. Strain CK-NBRI-02. Microbiology Resource Announcements, 2019, 8, .                               | 0.6  | 3         |
| 139 | Methylglyoxal-glyoxalase system as a possible selection module for raising marker-safe plants in rice.<br>Physiology and Molecular Biology of Plants, 2021, 27, 2579-2588.                          | 3.1  | 3         |
| 140 | Glutathione Homeostasis: Crucial for Abiotic Stress Tolerance in Plants. , 2009, , 263-282.   |      | 2         |
| 141 | Investigating Abiotic Stress Response Machinery in Plants: The Metabolomic Approach. , 2016, , 303-319.   |      | 2         |
| 142 | Draft Genome Sequence of Bacillus marisflavi CK-NBRI-03, Isolated from Agricultural Soil.<br>Microbiology Resource Announcements, 2020, 9, .  | 0.6  | 2         |
| 143 | Perception of Stress Environment in Plants. , 2019, , 163-186.  |      | 2         |
| 144 | Agrobacterium-mediated Transformation and Constitutive Expression of PgNHX1 from Pennisetum<br>glaucum L. in Oryza sativa L. cv. Binnatoa. Plant Tissue Culture and Biotechnology, 2010, 19, 25-33. | 0.2  | 2         |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 145 | High lysine and high proteinâ€containing salinityâ€tolerant rice grains ( <i>Oryza sativa cv</i> IR64). Food<br>and Energy Security, 2022, 11, .     | 4.3 | 2         |
| 146 | Stress response of <i>OsETHE1</i> is altered in response to light and dark conditions. Plant Signaling and Behavior, 2014, 9, e973820.               | 2.4 | 1         |
| 147 | Analyses of Old "Prokaryotic―Proteins Indicate Functional Diversification in Arabidopsis and Oryza sativa. Frontiers in Plant Science, 2016, 7, 304. | 3.6 | 1         |
| 148 | Genetic Improvement of Rice for Food and Nutritional Security. , 2021, , 13-32.  |     | 1         |
| 149 | Plant histidine kinases: Targets for crop improvement. , 2020, , 101-109.  |     | 0         |
| 150 | Survival Strategies in Halophytes: Adaptation and Regulation. , 2021, , 1591-1612.   |     | 0         |
| 151 | Survival Strategies in Halophytes: Adaptation and Regulation. , 2020, , 1-22.  |     | 0         |
| 152 | Role of the glyoxalase pathway in delaying plant senescence under stress conditions. SEB<br>Experimental Biology Series, 2009, 62, 171-85.           | 0.1 | 0         |