Avinash Mishra

List of Publications by Year
in descending order

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103	5,126	57758	98798
papers	citations	44 h-index	67 g-index

111	111	111	5211
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Isolation and characterization of extracellular polymeric substances from micro-algae Dunaliella salina under salt stress. Bioresource Technology, 2009, 100, 3382-3386.	9.6	264
2	Halophytes: Potential Resources for Salt Stress Tolerance Genes and Promoters. Frontiers in Plant Science, 2017, 8, 829.	3.6	214
3	Nutraceutical Potential of Seaweed Polysaccharides: Structure, Bioactivity, Safety, and Toxicity. Comprehensive Reviews in Food Science and Food Safety, 2019, 18, 817-831.	11.7	190
4	Characterization of extracellular polymeric substances produced by micro-algae Dunaliella salina. Carbohydrate Polymers, 2011, 83, 852-857.	10.2	166
5	Expression of SbGSTU (tau class glutathione S-transferase) gene isolated from Salicornia brachiata in tobacco for salt tolerance. Molecular Biology Reports, 2011, 38, 4823-4832.	2.3	154
6	Isolation and characterization of exopolysaccharides from seaweed associated bacteria Bacillus licheniformis. Carbohydrate Polymers, 2011, 84, 1019-1026.	10.2	154
7	Characterisation and anti-biofilm activity of extracellular polymeric substances from Oceanobacillus iheyensis. Carbohydrate Polymers, 2014, 101, 29-35.	10.2	148
8	Over-expression of the Peroxisomal Ascorbate Peroxidase (SbpAPX) Gene Cloned from Halophyte Salicornia brachiata Confers Salt and Drought Stress Tolerance in Transgenic Tobacco. Marine Biotechnology, 2014, 16, 321-332.	2.4	99
9	Microbial population index and community structure in salineâ€“alkaline soil using gene targeted metagenomics. Microbiological Research, 2013, 168, 165-173.	5.3	98
10	Cloning and transcript analysis of type 2 metallothionein gene (SbMT-2) from extreme halophyte Salicornia brachiata and its heterologous expression in E. coli. Gene, 2012, 499, 280-287.	2.2	93
11	The SbMT-2 Gene from a Halophyte Confers Abiotic Stress Tolerance and Modulates ROS Scavenging in Transgenic Tobacco. PLoS ONE, 2014, 9, e111379.	2.5	93
12	Developing Transgenic Jatropha Using the SbNHX1 Gene from an Extreme Halophyte for Cultivation in Saline Wasteland. PLoS ONE, 2013, 8, e71136.	2.5	90
13	Metabolites Unravel Nutraceutical Potential of Edible Seaweeds: An Emerging Source of Functional Food. Comprehensive Reviews in Food Science and Food Safety, 2018, 17, 1613-1624.	11.7	90
14	Isolation and physico-chemical characterisation of extracellular polymeric substances produced by the marine bacteriumVibrio parahaemolyticus. Biofouling, 2011, 27, 309-317.	2.2	89
15	Anti-quorum Sensing and Anti-biofilm Activity of Delftia tsuruhatensis Extract by Attenuating the Quorum Sensing-Controlled Virulence Factor Production in Pseudomonas aeruginosa. Frontiers in Cellular and Infection Microbiology, 2017, 7, 337.	3.9	89
16	Non-targeted metabolomics and scavenging activity of reactive oxygen species reveal the potential of Salicornia brachiata as a functional food. Journal of Functional Foods, 2015, 13, 21-31.	3.4	88
17	Extracellular polymeric substances from two biofilm forming Vibrio species: Characterization and applications. Carbohydrate Polymers, 2013, 94, 882-888.	10.2	87
18	Overexpression of a Cytosolic Abiotic Stress Responsive Universal Stress Protein (SbUSP) Mitigates Salt and Osmotic Stress in Transgenic Tobacco Plants. Frontiers in Plant Science, 2016, 7, 518.	3.6	87

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19	Introgression of the SbASR-1 Gene Cloned from a Halophyte Salicornia brachiata Enhances Salinity and Drought Endurance in Transgenic Groundnut (Arachis hypogaea) and Acts as a Transcription Factor. PLoS ONE, 2015, 10, e0131567.	2.5	86
20	Antibacterial Activities of Crude Extract of Aloe barbadensis to Clinically Isolated Bacterial Pathogens. Applied Biochemistry and Biotechnology, 2010, 160, 1356-1361.	2.9	84
21	Ectopic over-expression of peroxisomal ascorbate peroxidase (SbpAPX) gene confers salt stress tolerance in transgenic peanut (Arachis hypogaea). Gene, 2014, 547, 119-125.	2.2	82
22	Physiological characterization and stress-induced metabolic responses of Dunaliella salina isolated from salt pan. Journal of Industrial Microbiology and Biotechnology, 2008, 35, 1093-1101.	3.0	81
23	Isolation and structural characterization of biosurfactant produced by an alkaliphilic bacterium Cronobacter sakazakii isolated from oil contaminated wastewater. Carbohydrate Polymers, 2012, 87, 2320-2326.	10.2	76
24	Application of targeted metagenomics to explore abundance and diversity of CO2-fixing bacterial community using cbbL gene from the rhizosphere of Arachis hypogaea. Gene, 2012, 506, 18-24.	2.2	72
25	Functional Characterization of the Tau Class Glutathione-S-Transferases Gene (SbGSTU) Promoter of Salicornia brachiata under Salinity and Osmotic Stress. PLoS ONE, 2016, 11, e0148494.	2.5	70
26	Physicochemical, scavenging and anti-proliferative analyses of polysaccharides extracted from psyllium (Plantago ovata Forssk) husk and seeds. International Journal of Biological Macromolecules, 2019, 133, 190-201.	7.5	68
27	Physicochemical characterization of biosurfactant and its potential to remove oil from soil and cotton cloth. Carbohydrate Polymers, 2012, 89, 1110-1116.	10.2	67
28	Physicochemical characterization, antioxidant and anti-proliferative activities of a polysaccharide extracted from psyllium (P. ovata) leaves. International Journal of Biological Macromolecules, 2018, 118, 976-987.	7.5	65
29	Ectopic expression of SbNHX1 gene in transgenic castor (Ricinus communis L.) enhances salt stress by modulating physiological process. Plant Cell, Tissue and Organ Culture, 2015, 122, 477-490.	2.3	64
30	Physio-Biochemical Composition and Untargeted Metabolomics of Cumin (Cuminum cyminum L.) Make It Promising Functional Food and Help in Mitigating Salinity Stress. PLoS ONE, 2015, 10, e0144469.	2.5	64
31	Metabolite profiling, antioxidant, scavenging and anti-proliferative activities of selected tropical green seaweeds reveal the nutraceutical potential of Caulerpa spp.. Algal Research, 2018, 36, 96-105.	4.6	63
32	Effect of unconventional carbon sources on biosurfactant production and its application in bioremediation. International Journal of Biological Macromolecules, 2013, 62, 52-58.	7.5	62
33	Nutrients, microbial community structure and functional gene abundance of rhizosphere and bulk soils of halophytes. Applied Soil Ecology, 2015, 91, 16-26.	4.3	62
34	Halotolerant PGPR Stenotrophomonas maltophilia BJ01 Induces Salt Tolerance by Modulating Physiology and Biochemical Activities of Arachis hypogaea. Frontiers in Microbiology, 2020, 11, 568289.	3.5	62
35	Production and structural characterization of biosurfactant produced by an alkaliphilic bacterium, Klebsiella sp.: Evaluation of different carbon sources. Colloids and Surfaces B: Biointerfaces, 2013, 108, 199-204.	5.0	61
36	Heterologous expression of an uncharacterized universal stress protein gene (SbUSP) from the extreme halophyte, Salicornia brachiata, which confers salt and osmotic tolerance to E. coli. Gene, 2014, 536, 163-170.	2.2	61

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37	Edible Seaweeds: A Potential Novel Source of Bioactive Metabolites and Nutraceuticals With Human Health Benefits. Frontiers in Marine Science, 2021, 8, .	2.5	58
38	Efficient genetic transformation of Jatropha curcas L. by microprojectile bombardment using embryo axes. Industrial Crops and Products, 2011, 33, 67-77.	5.2	56
39	The Transcriptional Regulatory Mechanism of the Peroxisomal Ascorbate Peroxidase (pAPX) Gene Cloned from an Extreme Halophyte, Salicornia brachiata. Plant and Cell Physiology, 2014, 55, 201-217.	3.1	54
40	In planta Transformed Cumin (Cuminum cyminum L.) Plants, Overexpressing the SbNHX1 Gene Showed Enhanced Salt Endurance. PLoS ONE, 2016, 11, e0159349.	2.5	53
41	The abundance of functional genes, cbbL, nifH, amoA and apsA, and bacterial community structure of intertidal soil from Arabian Sea. Microbiological Research, 2015, 175, 57-66.	5.3	50
42	Plant growth promoting rhizobacterium Stenotrophomonas maltophilia BJ01 augments endurance against N2 starvation by modulating physiology and biochemical activities of Arachis hypogea. PLoS ONE, 2019, 14, e0222405.	2.5	49
43	Non-targeted Metabolite Profiling and Scavenging Activity Unveil the Nutraceutical Potential of Psyllium (Plantago ovata Forsk). Frontiers in Plant Science, 2016, 7, 431.	3.6	48
44	Antibacterial and Antioxidant Activities of Novel Actinobacteria Strain Isolated from Gulf of Khambhat, Gujarat. Frontiers in Microbiology, 2017, 8, 2420.	3.5	48
45	A novel transcription factor-like gene SbSDR1 acts as a molecular switch and confers salt and osmotic endurance to transgenic tobacco. Scientific Reports, 2016, 6, 31686.	3.3	47
46	Microbial Exopolysaccharides. , 2013, , 179-192.		44
47	Phenolic, flavonoid, and amino acid compositions reveal that selected tropical seaweeds have the potential to be functional food ingredients. Journal of Food Processing and Preservation, 2019, 43, e14266.	2.0	44
48	Oligosaccharide mass profiling of nutritionally important Salicornia brachiata, an extreme halophyte. Carbohydrate Polymers, 2013, 92, 1942-1945.	10.2	42
49	Proteome Profiling of Seed Storage Proteins Reveals the Nutritional Potential of Salicornia brachiata Roxb., an Extreme Halophyte. Journal of Agricultural and Food Chemistry, 2012, 60, 4320-4326.	5.2	41
50	Plant aquaporins alleviate drought tolerance in plants by modulating cellular biochemistry, rootâ€architecture, and photosynthesis. Physiologia Plantarum, 2021, 172, 1030-1044.	5.2	41
51	Differential distribution and abundance of diazotrophic bacterial communities across different soil niches using a gene-targeted clone library approach. FEMS Microbiology Letters, 2014, 360, 117-125.	1.8	40
52	Overexpression of a Plasma Membrane-Localized SbSRP-Like Protein Enhances Salinity and Osmotic Stress Tolerance in Transgenic Tobacco. Frontiers in Plant Science, 2017, 8, 582.	3.6	39
53	Microprojectile bombardment mediated genetic transformation of embryo axes and plant regeneration in cumin (Cuminum cyminum L.). Plant Cell, Tissue and Organ Culture, 2010, 103, 1-6.	2.3	38
54	NaCl plays a key role for in vitro micropropagation of Salicornia brachiata, an extreme halophyte. Industrial Crops and Products, 2012, 35, 313-316.	5.2	37

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55	Cloning and functional characterization of the Na+/H+ antiporter (NHX1) gene promoter from an extreme halophyte Salicornia brachiata. Gene, 2019, 683, 233-242.	2.2	34
56	An Efficient Method for Agrobacterium-Mediated Genetic Transformation and Plant Regeneration in Cumin (Cuminum cyminum L.). Applied Biochemistry and Biotechnology, 2013, 171, 1-9.	2.9	33
57	Lipid content and fatty acid profile of selected halophytic plants reveal a promising source of renewable energy. Biomass and Bioenergy, 2019, 124, 25-32.	5.7	32
58	Anti-proliferative and ROS-inhibitory activities reveal the anticancer potential of Caulerpa species. Molecular Biology Reports, 2020, 47, 7403-7411.	2.3	32
59	Purification and characterization of cellulase from a marine Bacillus sp. H1666: A potential agent for single step saccharification of seaweed biomass. Journal of Molecular Catalysis B: Enzymatic, 2013, 93, 51-56.	1.8	31
60	3-Benzyl-Hexahydro-Pyrrolo[1,2-a]Pyrazine-1,4-Dione Extracted From Exiguobacterium indicum Showed Anti-biofilm Activity Against Pseudomonas aeruginosa by Attenuating Quorum Sensing. Frontiers in Microbiology, 2019, 10, 1269.	3.5	28
61	Differential Physio-Biochemical and Metabolic Responses of Peanut (Arachis hypogaea L.) under Multiple Abiotic Stress Conditions. International Journal of Molecular Sciences, 2022, 23, 660.	4.1	26
62	Ectopic expression of C4 photosynthetic pathway genes improves carbon assimilation and alleviate stress tolerance for future climate change. Physiology and Molecular Biology of Plants, 2020, 26, 195-209.	3.1	25
63	Unravelling the Carbon and Sulphur Metabolism in Coastal Soil Ecosystems Using Comparative Cultivation-Independent Genome-Level Characterisation of Microbial Communities. PLoS ONE, 2014, 9, e107025.	2.5	25
64	Bacterial community structure and functional diversity in subsurface seawater from the western coastal ecosystem of the Arabian Sea, India. Gene, 2019, 701, 55-64.	2.2	24
65	The Pyruvate-Phosphate Dikinase (C4-SmPPDK) Gene From Suaeda monoica Enhances Photosynthesis, Carbon Assimilation, and Abiotic Stress Tolerance in a C3 Plant Under Elevated CO2 Conditions. Frontiers in Plant Science, 2020, 11, 345.	3.6	23
66	Elevated CO2 leads to carbon sequestration by modulating C4 photosynthesis pathway enzyme (PPDK) in Suaeda monoica and S. fruticosa. Journal of Photochemistry and Photobiology B: Biology, 2018, 178, 310-315.	3.8	22
67	Bacterial extracellular polymeric substances and their effect on settlement of zoospore of Ulva fasciata. Colloids and Surfaces B: Biointerfaces, 2013, 103, 223-230.	5.0	21
68	An Efficient Method of Agrobacterium-Mediated Genetic Transformation and Regeneration in Local Indian Cultivar of Groundnut (Arachis hypogaea) Using Grafting. Applied Biochemistry and Biotechnology, 2015, 175, 436-453.	2.9	21
69	Insights from a Pan India Sero-Epidemiological survey (Phenome-India Cohort) for SARS-CoV2. ELife, 2021, 10, .	6.0	21
70	Metabolic profiling and scavenging activities of developing circumscissile fruit of psyllium (Plantago) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.6	20
71	Introgression of a novel cold and drought regulatoryâ€protein encoding <scp>CORA</scp>â€like gene, <scp>SbCDR</scp>, induced osmotic tolerance in transgenic tobacco. Physiologia Plantarum, 2021, 172, 1170-1188.	5.2	20
72	Overexpression of differentially expressed AhCytb6 gene during plant-microbe interaction improves tolerance to N2 deficit and salt stress in transgenic tobacco. Scientific Reports, 2021, 11, 13435.	3.3	19

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73	Antioxidant response of the microalga Dunaliella salina under salt stress. Botanica Marina, 2011, 54, .	1.2	18
74	Metabolomics of Seaweeds. , 2018, , 37-52.		17
75	Metabolite profiling identified pipecolic acid as an important component of peanut seed resistance against Aspergillus flavus infection. Journal of Hazardous Materials, 2021, 404, 124155.	12.4	17
76	Differential Accumulation of Metabolites in Suaeda Species Provides New Insights into Abiotic Stress Tolerance in C4-Halophytic Species in Elevated CO2 Conditions. Agronomy, 2021, 11, 131.	3.0	17
77	Analysis of functional traits in female gametophytic and tetrasporophytic life phases of industrially important red alga Gracilaria dura (Rhodophyta: Gracilariacae). Journal of Applied Phycology, 2020, 32, 1961-1969.	2.8	15
78	Untargeted Metabolomics of Halophytes. , 2016, , 307-325.		14
79	Introgression of halophytic salt stress-responsive genes for developing stress tolerance in crop plants.. , 2019, , 275-286.		13
80	Antioxidant, Scavenging, Reducing, and Anti-Proliferative Activities of Selected Tropical Brown Seaweeds Confirm the Nutraceutical Potential of Spatoglossum asperum. Foods, 2021, 10, 2482.	4.3	13
81	MOLECULAR PHYLOGENY OF GRACILARIA SPECIES INFERRED FROM MOLECULAR MARKERS BELONGING TO THREE DIFFERENT GENOMES¹. Journal of Phycology, 2010, 46, 1322-1328.	2.3	12
82	Interaction of the novel bacterium Brachybacterium saurashtrense JG06 with Arachis hypogaea leads to changes in physio-biochemical activity of plants to cope with nitrogen starvation conditions. Plant Physiology and Biochemistry, 2021, 166, 974-984.	5.8	11
83	Temporal and spatial expression analysis of gamma kafirin promoter from Sorghum (Sorghum bicolor) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.3	10
84	Halotolerant Rhizobacteria: A Promising Probiotic for Saline Soil-Based Agriculture. , 2019, , 53-73.		10
85	A type 2 metallothionein (SbMT-2) gene cloned from Salicornia brachiata confers enhanced Zn stress-tolerance in transgenic tobacco by transporting Zn2+ and maintaining photosynthesis efficacy. Environmental and Experimental Botany, 2021, 191, 104626.	4.2	10
86	Isolation and temporal endospermal expression of Î³-kafirin gene of grain sorghum (Sorghum bicolor L.) Tj ETQq0 0 0 rgBT /Overlock 10 808-815.	3.7	9
87	Introgression of SbERD4 Gene Encodes an Early-Responsive Dehydration-Stress Protein That Confers Tolerance against Different Types of Abiotic Stresses in Transgenic Tobacco. Cells, 2022, 11, 62.	4.1	9
88	Plant promoter driven heterologous expression of HMW glutenin gene(s) subunit in E.Âcoli. Molecular Biology Reports, 2008, 35, 153-162.	2.3	8
89	Green-synthesized, pH-stable and biocompatible carbon nanosensor for Fe3+: An experimental and computational study. Heliyon, 2022, 8, e09259.	3.2	8
90	Biochemical and Anti-proliferative activities of seven abundant tropical red seaweeds confirm nutraceutical potential of Grateloupia indica. Arabian Journal of Chemistry, 2022, 15, 103868.	4.9	8

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91	A machine learning-based approach to determine infection status in recipients of BBV152 (Covaxin) whole-virion inactivated SARS-CoV-2 vaccine for serological surveys. Computers in Biology and Medicine, 2022, 146, 105419.	7.0	8
92	Cloning differentially expressed salt induced cDNAs from Dunaliella salina under super saturated salt stress using subtractive hybridization. Botanica Marina, 2011, 54, .	1.2	5
93	Genome Editing: Advances and Prospects. , 2019, , 147-174.		5
94	Exploring Human Bacterial Diversity Toward Prevention of Infectious Disease and Health Promotion. , 2019, , 519-533.		4
95	DES-N-doped oxygenated carbon dot colloidal solutions for light harvesting and bio-imaging applications. Materials Advances, 2020, 1, 3476-3482.	5.4	4
96	Role of sodium proton antiporters in cellular homeostasis of plants under abiotic stress conditions. , 2021, , 273-290.		4
97	Engineering Stress Tolerance in Peanut (Arachis hypogaea L.). , 2016, , 305-311.		3
98	Phylogenetic Relationship to Study the Ploidy Status and Resistance to Karnal Bunt in Indian Wheat Cultivars Using RAPD Technique. Biotechnology, 2008, 7, 430-438.	0.1	3
99	Genetic Assessment of Traits and Genetic Relationship in Blackgram (Vigna mungo) Revealed by Isoenzymes. Biochemical Genetics, 2009, 47, 471-485.	1.7	2
100	Development of instant paneer type product from groundnut using microwave dehydration. Food Science and Nutrition, 2022, 10, 1520-1526.	3.4	2
101	Heterologous Expression of Legumin Gene in E. coli Isolated from cDNA Clones of Immature Seeds of Pigeonpea (Cajanus cajan L.). Applied Biochemistry and Biotechnology, 2009, 157, 377-394.	2.9	1
102	De novo transcriptome analysis of industrially important agarophyte Gracilaria dura (Rhodophyta:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Algal Research, 2022, 65, 102712.	4.6	1
103	Gene-Targeted Metagenomics for the Study of Biogeochemical Cycling from Coastal-Saline Ecosystems. , 2016, , 197-217.		0