

R Sathishkumar

List of Publications by Year in descending order

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103
papers

2,556
citations

279798
23
h-index

233421
45
g-index

110
all docs

110
docs citations

110
times ranked

3273
citing authors

#	ARTICLE	IF	CITATIONS
1	DNA barcoding detects contamination and substitution in North American herbal products. BMC Medicine, 2013, 11, 222.	5.5	465
2	Epigenetic silencing in transgenic plants. Frontiers in Plant Science, 2015, 6, 693.	3.6	136
3	Overexpression of membrane-associated acyl-CoA-binding protein ACBP1 enhances lead tolerance in Arabidopsis. Plant Journal, 2008, 54, 141-151.	5.7	121
4	Stress-Induced Accumulation of DcAOX1 and DcAOX2a Transcripts Coincides with Critical Time Point for Structural Biomass Prediction in Carrot Primary Cultures (<i>Daucus carota</i> L.). Frontiers in Genetics, 2016, 7, 1.	2.3	120
5	Indian pulses: A review on nutritional, functional and biochemical properties with future perspectives. Trends in Food Science and Technology, 2019, 88, 228-242.	15.1	76
6	Construction of Novel Chloroplast Expression Vector and Development of an Efficient Transformation System for the Diatom <i>Phaeodactylum tricornutum</i> . Marine Biotechnology, 2014, 16, 538-546.	2.4	65
7	Phylogenetic analysis of chloroplast matK gene from Zingiberaceae for plant DNA barcoding. Bioinformation, 2008, 3, 24-27.	0.5	62
8	Accumulation of Recombinant SARS-CoV Spike Protein in Plant Cytosol and Chloroplasts Indicate Potential for Development of Plant-Derived Oral Vaccines. Experimental Biology and Medicine, 2006, 231, 1346-1352.	2.4	58
9	Realising the value of plant molecular pharming to benefit the poor in developing countries and emerging economies. Plant Biotechnology Journal, 2013, 11, 1029-1033.	8.3	57
10	Anti-chikungunya activity of luteolin and apigenin rich fraction from <i>Cynodon dactylon</i> . Asian Pacific Journal of Tropical Medicine, 2015, 8, 352-358.	0.8	54
11	Estimating Herbal Product Authentication and Adulteration in India Using a Vouchered, DNA-Based Biological Reference Material Library. Drug Safety, 2016, 39, 1211-1227.	3.2	53
12	An agglutinating chitinase with two chitin-binding domains confers fungal protection in transgenic potato. Planta, 2005, 220, 717-730.	3.2	52
13	Antioxidant potentials of skin, pulp, and seed fractions of commercially important tomato cultivars. Food Science and Biotechnology, 2011, 20, 15-21.	2.6	50
14	Assessment of the effects of metal oxide nanoparticles on the growth, physiology and metabolic responses in in vitro grown eggplant (<i>Solanum melongena</i>). 3 Biotech, 2018, 8, 362.	2.2	48
15	Contributions of the international plant science community to the fight against human infectious diseases – part 1: epidemic and pandemic diseases. Plant Biotechnology Journal, 2021, 19, 1901-1920.	8.3	44
16	Cadmium Induced Physio-Biochemical and Molecular Response in <i>Brassica Juncea</i> . International Journal of Phytoremediation, 2013, 15, 206-218.	3.1	39
17	DNA Barcode ITS Effectively Distinguishes the Medicinal Plant <i>Boerhavia diffusa</i> from Its Adulterants. Genomics, Proteomics and Bioinformatics, 2012, 10, 364-367.	6.9	36
18	Comparative analysis of glyoxalase pathway genes in <i>Erianthus arundinaceus</i> and commercial sugarcane hybrid under salinity and drought conditions. BMC Genomics, 2019, 19, 986.	2.8	34

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19	Fluorescence quenching of bovine serum albumin by NNMB. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 108, 146-150.	3.9	32
20	Functional analyses of the chitin-binding domains and the catalytic domain of <i>Brassica juncea</i> chitinase BjCHI1. <i>Plant Molecular Biology</i> , 2004, 56, 285-298.	3.9	31
21	Cadmium Stress and Toxicity in Plants: An Overview. , 2019, , 1-17.		31
22	<i>Brassica juncea</i> HMG-CoA synthase: localization of mRNA and protein. <i>Planta</i> , 2005, 221, 844-856.	3.2	29
23	Influence of Genotypic Variations on Antioxidant Properties in Different Fractions of Tomato. <i>Journal of Food Science</i> , 2012, 77, C1174-8.	3.1	29
24	<i>Brassica juncea</i> chitinase BjCHI1 inhibits growth of fungal phytopathogens and agglutinates Gram-negative bacteria. <i>Journal of Experimental Botany</i> , 2008, 59, 3475-3484.	4.8	28
25	Alternative Oxidase (AOX) Senses Stress Levels to Coordinate Auxin-Induced Reprogramming From Seed Germination to Somatic Embryogenesisâ€”A Role Relevant for Seed Vigor Prediction and Plant Robustness. <i>Frontiers in Plant Science</i> , 2019, 10, 1134.	3.6	26
26	Chikungunya infection: A potential re-emerging global threat. <i>Asian Pacific Journal of Tropical Medicine</i> , 2016, 9, 933-937.	0.8	23
27	Analytical and regulatory considerations to mitigate highly hazardous toxins from environmental matrices. <i>Journal of Hazardous Materials</i> , 2022, 423, 127031.	12.4	23
28	Ectopic expression of DJ-1/Pfpl domain containing <i>Erianthus arundinaceus</i> Glyoxalase III (EaGly III) enhances drought tolerance in sugarcane. <i>Plant Cell Reports</i> , 2020, 39, 1581-1594.	5.6	20
29	InÂvitro symbiotic seed germination of South Indian endemic orchid <i>Coelogyne nervosa</i> . <i>Mycoscience</i> , 2014, 55, 183-189.	0.8	19
30	A comparative study of phytotoxic effects of metal oxide (CuO, ZnO and NiO) nanoparticles on <i>in-vitro</i> grown <i>Abelmoschus esculentus</i>. <i>Plant Biosystems</i> , 2021, 155, 374-383.	1.6	19
31	Heterologous expression of <i>Lolium perenne</i> antifreeze protein confers chilling tolerance in tomato. <i>Journal of Integrative Agriculture</i> , 2018, 17, 1128-1136.	3.5	18
32	Genome-wide analysis of purple acid phosphatase (PAP) family proteins in <i>Jatropha curcas</i> L. <i>International Journal of Biological Macromolecules</i> , 2019, 123, 648-656.	7.5	17
33	Effects of sodium nitroprusside and growth regulators on callus, multiple shoot induction and tissue browning in commercially important <i>Valeriana jatamansi</i> Jones. <i>Plant Cell, Tissue and Organ Culture</i> , 2020, 142, 653-660.	2.3	17
34	Overexpression of Glyoxalase III gene in transgenic sugarcane confers enhanced performance under salinity stress. <i>Journal of Plant Research</i> , 2021, 134, 1083-1094.	2.4	17
35	In vitro antioxidant activity of <i>Barleria noctiflora</i> L. f.. <i>Asian Pacific Journal of Tropical Biomedicine</i> , 2012, 2, S716-S722.	1.2	16
36	Evaluation of DNA barcode candidates for the discrimination of the large plant family Apocynaceae. <i>Plant Systematics and Evolution</i> , 2015, 301, 1263-1273.	0.9	16

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37	A nanocrystalline CdS thin film as a heterogeneous, recyclable catalyst for effective synthesis of dihydropyrimidinones and a new class of carbazolyl dihydropyrimidinones <i>via</i> an improved Biginelli protocol. New Journal of Chemistry, 2019, 43, 10989-11002.	2.8	16
38	Efficient and rapid in-vitro plantlet regeneration via somatic embryogenesis in ornamental bananas (Musa spp.). Biologia (Poland), 2020, 75, 317-326.	1.5	16
39	Identification of microRNAs from Medicinal Plant <i>Murraya koenigii</i> by High-Throughput Sequencing and Their Functional Implications in Secondary Metabolite Biosynthesis. Plants, 2022, 11, 46.	3.5	16
40	Enhancement of α -tocopherol content through transgenic and cell suspension culture systems in tobacco. Acta Physiologiae Plantarum, 2013, 35, 1121-1130.	2.1	15
41	In vitro and in planta nematicidal activity of black pepper (<i>Piper nigrum</i> L.) leaf extracts. Crop Protection, 2017, 100, 1-7.	2.1	15
42	Sodium nitroprusside enhances callus induction and shoot regeneration in high value medicinal plant <i>Canscora diffusa</i> . Plant Cell, Tissue and Organ Culture, 2019, 139, 65-75.	2.3	15
43	Influence of exogenous polyamines and plant growth regulators on high frequency in vitro mass propagation of <i>Gloriosa superba</i> L. and its colchicine content. Biocatalysis and Agricultural Biotechnology, 2019, 18, 101030.	3.1	15
44	Effects of cooking on phytochemical and antioxidant properties of pigmented and non-pigmented rare Indian rice landraces. Biocatalysis and Agricultural Biotechnology, 2021, 32, 101928.	3.1	15
45	Efficient in vitro Callus Induction and Regeneration of Different Tomato Cultivars of India. Asian Journal of Biotechnology, 2010, 2, 178-184.	0.3	15
46	Antihistamine from <i>Tragia involucrata</i> L. leaves. Journal of Complementary and Integrative Medicine, 2015, 12, 217-226.	0.9	14
47	Overexpression of homogentisate phytyltransferase (HPT) and tocopherol cyclase (TC) enhances α -tocopherol content in transgenic tobacco. Biologia Plantarum, 2013, 57, 395-400.	1.9	13
48	Molecular mechanisms in grass-Epichloa interactions: towards endophyte driven farming to improve plant fitness and immunity. World Journal of Microbiology and Biotechnology, 2020, 36, 92.	3.6	13
49	Influence of exogenous polyamines on somatic embryogenesis and regeneration of fresh and long-term cultures of three elite indica rice cultivars. Cereal Research Communications, 2021, 49, 245-253.	1.6	13
50	Green remediation potential of immobilized oxidoreductases to treat halo-organic pollutants persist in wastewater and soil matrices - A way forward. Chemosphere, 2022, 290, 133305.	8.2	13
51	Exploring DNA quantity and quality from raw materials to botanical extracts. Heliyon, 2019, 5, e01935.	3.2	12
52	DNA barcoding detects floral origin of Indian honey samples. Genome, 2019, 62, 341-348.	2.0	12
53	Differential expression of flavonoid biosynthesis genes and biochemical composition in different tissues of pigmented and non-pigmented rice. Journal of Food Science and Technology, 2021, 58, 884-893.	2.8	12
54	Comprehensive in silico and gene expression profiles of MnP family genes in <i>Phanerochaete chrysosporium</i> towards lignin biodegradation. International Biodeterioration and Biodegradation, 2021, 157, 105143.	3.9	12

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55	Enhanced vitamin E content in an Indica rice cultivar harbouring two transgenes from <i>Arabidopsis thaliana</i> involved in tocopherol biosynthesis pathway. <i>Plant Biotechnology Journal</i> , 2021, 19, 1083-1085.	8.3	12
56	Morphological variation in the Indian gooseberries (<i>Phyllanthus emblica</i> and <i>Phyllanthus</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td (i Genetic Resources: Characterisation and Utilisation, 2010, 8, 191-197.	0.8	11
57	Tissue culture and Agrobacterium-mediated genetic transformation studies in four commercially important indica rice cultivars. <i>Journal of Crop Science and Biotechnology</i> , 2017, 20, 175-183.	1.5	11
58	Rapid enhancement of γ -tocopherol content in <i>Nicotiana benthamiana</i> by transient expression of <i>Arabidopsis thaliana</i> Tocopherol cyclase and Homogentisate phytyl transferase genes. <i>3 Biotech</i> , 2018, 8, 485.	2.2	11
59	Molecular identification and evolutionary relationships between the subspecies of <i>Musa</i> by DNA barcodes. <i>BMC Genomics</i> , 2020, 21, 659.	2.8	11
60	From Plant Survival Under Severe Stress to Anti-Viral Human Defense – A Perspective That Calls for Common Efforts. <i>Frontiers in Immunology</i> , 2021, 12, 673723.	4.8	11
61	Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2): An Emerging Zoonotic Respiratory Pathogen in Humans. <i>Journal of Pure and Applied Microbiology</i> , 2020, 14, 931-936.	0.9	11
62	Metabolic Engineering of Isoflavonoid Biosynthesis by Expressing Glycine max Isoflavone Synthase in <i>Allium cepa</i> L. for Genistein Production. <i>Plants</i> , 2021, 10, 52.	3.5	11
63	Isolation and characterization of cold inducible genes in carrot by suppression subtractive hybridization. <i>Biologia Plantarum</i> , 2013, 57, 97-104.	1.9	10
64	Carrot antifreeze protein enhances chilling tolerance in transgenic tomato. <i>Acta Physiologiae Plantarum</i> , 2014, 36, 21-27.	2.1	10
65	Biochemical fingerprint and pharmacological applications of <i>Barleria noctiflora</i> L.f. leaves. <i>Journal of Complementary and Integrative Medicine</i> , 2016, 13, 365-376.	0.9	10
66	Potential of plant biologics to tackle the epidemic like situations - case studies involving viral and bacterial candidates. <i>International Journal of Infectious Diseases</i> , 2018, 73, 363.	3.3	9
67	Consequences of the expression of a bacterial glucokinase in potato tubers, both in combination with and independently of a yeast-derived invertase. <i>Functional Plant Biology</i> , 2000, 27, 827.	2.1	9
68	Utility of DNA Barcoding for Plant Biodiversity Conservation. <i>Plant Breeding and Biotechnology</i> , 2013, 1, 320-332.	0.9	9
69	Elicitation and plant growth hormone-mediated adventitious root cultures for enhanced valepotriates accumulation in commercially important medicinal plant <i>Valeriana jatamansi</i> Jones. <i>Acta Physiologiae Plantarum</i> , 2022, 44, 1.	2.1	9
70	Genomic valorization of the fine scale classification of small millet landraces in southern India. <i>Genome</i> , 2013, 56, 123-127.	2.0	8
71	Antioxidant capacities of <i>Amaranthus tristis</i> and <i>Alternanthera sessilis</i> : A comparative study. <i>Journal of Medicinal Plants Research</i> , 2013, 7, 2230-2235.	0.4	8
72	Health Perspectives of an Isoflavonoid Genistein and its Quantification in Economically Important Plants., 2018,, 353-379.		8

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73	Optimized in vitro micro-tuber production for colchicine biosynthesis in <i>Gloriosa superba</i> L. and its anti-microbial activity against <i>Candida albicans</i> . <i>Plant Cell, Tissue and Organ Culture</i> , 2019, 139, 177-190.	2.3	8
74	In silico characterisation and functional validation of chilling tolerant divergence 1 (COLD1) gene in monocots during abiotic stress. <i>Functional Plant Biology</i> , 2019, 46, 524.	2.1	8
75	Biotechnological perspectives to augment the synthesis of valuable biomolecules from microalgae by employing wastewater. <i>Journal of Water Process Engineering</i> , 2021, 39, 101713.	5.6	8
76	Advances in molecular cloning. <i>Molecular Biology</i> , 2016, 50, 1-6.	1.3	7
77	Phytonutrients analysis in ten popular traditional Indian rice landraces (<i>Oryza sativa</i> L.). <i>Journal of Food Measurement and Characterization</i> , 2018, 12, 2598-2606.	3.2	7
78	Physicochemical factors modulate regeneration and <i>Agrobacterium</i> -mediated genetic transformation of recalcitrant indica rice cultivars - ASD16 and IR64. <i>Biocatalysis and Agricultural Biotechnology</i> , 2020, 24, 101519.	3.1	7
79	Sodium Nitroprusside and Putrescine Mitigate PEG-Induced Drought Stress in Seedlings of <i>Solanum lycopersicum</i> . <i>Journal of Soil Science and Plant Nutrition</i> , 2022, 22, 1019-1032.	3.4	7
80	Nematicidal potential and specific enzyme activity enhancement potential of neem (<i>Azadirachta indica</i>) Tj ETQq0 0.0 rgBT /Oyerlock 10	5.3	6
81	Characterization of microRNAs from neem (<i>Azadirachta indica</i>) and their tissue-specific expression study in leaves and stem. <i>3 Biotech</i> , 2021, 11, 277.	2.2	6
82	Molecular Characterization and Phylogenetic Analysis of BZIP Protein in Plants. <i>Journal of Proteomics and Bioinformatics</i> , 2010, 03, 230-233.	0.4	6
83	Studies on growth dynamics of embryogenic cell suspension cultures of commercially important Indica rice cultivars ASD16 and Pusa basmati. <i>3 Biotech</i> , 2018, 8, 194.	2.2	5
84	Lipid changes due to growth-factor supplements in callus and plasma membrane-enriched fraction of rice cultures. <i>Phytochemistry</i> , 1996, 43, 1171-1174.	2.9	4
85	Antioxidant perspective of selected medicinal herbs in India: A probable source for natural antioxidants. <i>Journal of Pharmacy Research</i> , 2013, 7, 271-274.	0.4	4
86	In vitro asymbiotic seed germination, mycorrhization and seedling development of <i>Acampae praemorsa</i> (Roxb.) Blatt. & Mc Cann, a common south Indian orchid. <i>Asian Pacific Journal of Reproduction</i> , 2013, 2, 114-118.	0.4	4
87	DNA record of some traditional small millet landraces in India and Nepal. <i>3 Biotech</i> , 2016, 6, 133.	2.2	4
88	Rapid production of therapeutic proteins using plant system. <i>Defence Life Science Journal</i> , 2017, 2, 95.	0.3	4
89	Epidemiology, clinical features and transmission of re-emerging arboviral infection chikungunya. <i>Asian Pacific Journal of Tropical Biomedicine</i> , 2019, 9, 135.	1.2	4
90	Comparison of Cytokine Expression Profile in Chikungunya and Dengue Co-Infected and Mono-Infected Patients's™ Samples. <i>Pathogens</i> , 2021, 10, 166.	2.8	3

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91	Emerging mosquito-borne arboviral infection Zika - An epidemiological review. Asian Pacific Journal of Tropical Biomedicine, 2020, 10, 193.	1.2	3
92	Production of Genistein in <i>Amaranthus tricolor</i> var. <i>tristis</i> and <i>Spinacia oleracea</i> by Expression of Glycine max Isoflavone Synthase. Plants, 2021, 10, 2311.	3.5	3
93	Genome wide survey, and expression analysis of Ornithine decarboxylase gene associated with alkaloid biosynthesis in plants. Genomics, 2022, 114, 84-94.	2.9	3
94	Growth modulation by nitric oxide donor sodium nitroprusside in in vitro plant tissue cultures – A review. Biologia (Poland), 0, , 1.	1.5	3
95	An immunoinformatics approach to define T cell epitopes from polyketide and non-ribosomal peptide synthesis proteins of <i>Mycobacterium tuberculosis</i> as potential vaccine candidates. Journal of Molecular Recognition, 2018, 31, e2685.	2.1	2
96	Optimizing culture conditions for high frequency somatic embryogenesis and plantlet conversion in <i>Daucus carota</i> L. Biologia (Poland), 2019, 74, 695-707.	1.5	2
97	Taxonomic delimitation of endemic <i>Ficus amplocarpa</i> and <i>Ficus dalhousiae</i> Complexes (Moraceae) by DNA barcoding . Phytotaxa, 2020, 436, 21-35.	0.3	2
98	Targeting the ENV spike protein of HIV with naturally occurring compounds: an in-silico study for drug designing. Advances in Traditional Medicine, 0, , 1.	2.0	2
99	Particle mediated DNA delivery and transient expression of GUS gene in plated cells of rice. Biologia Plantarum, 1997, 39, 305-309.	1.9	1
100	Micropropagation and DNA delivery studies in onion cultivars of Bellary, CO3. Journal of Crop Science and Biotechnology, 2015, 18, 37-43.	1.5	1
101	Transgenic Plants and Antioxidative Defense: Present and Future?. , 2015, , 353-370.		1
102	Exogenous supplementation with sodium nitroprusside, a nitric oxide donor, mitigates the effects of salinity in <i>Abelmoschus esculentus</i> L. seedlings. Horticulture Environment and Biotechnology, 0, , 1.	2.1	1
103	Confirmation of black nightshade species through DNA barcoding. Medicinal Plants - International Journal of Phytomedicines and Related Industries, 2017, 9, 41.	0.2	0