

# R Sathishkumar

## List of Publications by Year in descending order

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103  
papers

2,556  
citations

279487

23  
h-index

233125

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.	2.3	465
2	Epigenetic silencing in transgenic plants. Frontiers in Plant Science, 2015, 6, 693.	1.7	136
3	Overexpression of membrane-associated acyl-CoA-binding protein ACBP1 enhances lead tolerance in Arabidopsis. Plant Journal, 2008, 54, 141-151.	2.8	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.	1.1	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.	7.8	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.	1.1	65
7	Phylogenetic analysis of chloroplast matK gene from Zingiberaceae for plant DNA barcoding. Bioinformatics, 2008, 3, 24-27.	0.2	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.	1.1	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.	4.1	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.	0.4	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.	1.4	53
12	An agglutinating chitinase with two chitin-binding domains confers fungal protection in transgenic potato. Planta, 2005, 220, 717-730.	1.6	52
13	Antioxidant potentials of skin, pulp, and seed fractions of commercially important tomato cultivars. Food Science and Biotechnology, 2011, 20, 15-21.	1.2	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.	1.1	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.	4.1	44
16	Cadmium Induced Physio-Biochemical and Molecular Response in <i>Brassica Juncea</i> . International Journal of Phytoremediation, 2013, 15, 206-218.	1.7	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.	3.0	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.	1.2	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.	2.0	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.	2.0	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.	1.6	29
23	Influence of Genotypic Variations on Antioxidant Properties in Different Fractions of Tomato. <i>Journal of Food Science</i> , 2012, 77, C1174-8.	1.5	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.	2.4	28
25	Alternative Oxidase (AOX) Senses Stress Levels to Coordinate Auxin-Induced Reprogramming From Seed Germination to Somatic Embryogenesis—A Role Relevant for Seed Vigor Prediction and Plant Robustness. <i>Frontiers in Plant Science</i> , 2019, 10, 1134.	1.7	26
26	Chikungunya infection: A potential re-emerging global threat. <i>Asian Pacific Journal of Tropical Medicine</i> , 2016, 9, 933-937.	0.4	23
27	Analytical and regulatory considerations to mitigate highly hazardous toxins from environmental matrices. <i>Journal of Hazardous Materials</i> , 2022, 423, 127031.	6.5	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.	2.8	20
29	In vitro symbiotic seed germination of South Indian endemic orchid <i>Coelogyne nervosa</i> . <i>Mycoscience</i> , 2014, 55, 183-189.	0.3	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.	0.8	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.	1.7	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.	3.6	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.	1.2	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.	1.2	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.	0.5	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.	0.3	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. <i>New Journal of Chemistry</i> , 2019, 43, 10989-11002.	1.4	16
38	Efficient and rapid in-vitro plantlet regeneration via somatic embryogenesis in ornamental bananas ( <i>Musa spp.</i> ). <i>Biologia (Poland)</i> , 2020, 75, 317-326.	0.8	16
39	Identification of microRNAs from Medicinal Plant <i>Murraya koenigii</i> by High-Throughput Sequencing and Their Functional Implications in Secondary Metabolite Biosynthesis. <i>Plants</i> , 2022, 11, 46.	1.6	16
40	Enhancement of $\alpha$ -tocopherol content through transgenic and cell suspension culture systems in tobacco. <i>Acta Physiologiae Plantarum</i> , 2013, 35, 1121-1130.	1.0	15
41	In vitro and in planta nematicidal activity of black pepper ( <i>Piper nigrum</i> L.) leaf extracts. <i>Crop Protection</i> , 2017, 100, 1-7.	1.0	15
42	Sodium nitroprusside enhances callus induction and shoot regeneration in high value medicinal plant <i>Canscora diffusa</i> . <i>Plant Cell, Tissue and Organ Culture</i> , 2019, 139, 65-75.	1.2	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. <i>Biocatalysis and Agricultural Biotechnology</i> , 2019, 18, 101030.	1.5	15
44	Effects of cooking on phytochemical and antioxidant properties of pigmented and non-pigmented rare Indian rice landraces. <i>Biocatalysis and Agricultural Biotechnology</i> , 2021, 32, 101928.	1.5	15
45	Efficient in vitro Callus Induction and Regeneration of Different Tomato Cultivars of India. <i>Asian Journal of Biotechnology</i> , 2010, 2, 178-184.	0.3	15
46	Antihistamine from <i>Tragia involucrata</i> L. leaves. <i>Journal of Complementary and Integrative Medicine</i> , 2015, 12, 217-226.	0.4	14
47	Overexpression of homogentisate phytyltransferase (HPT) and tocopherol cyclase (TC) enhances $\alpha$ -tocopherol content in transgenic tobacco. <i>Biologia Plantarum</i> , 2013, 57, 395-400.	1.9	13
48	Molecular mechanisms in grass-Epichloa interactions: towards endophyte driven farming to improve plant fitness and immunity. <i>World Journal of Microbiology and Biotechnology</i> , 2020, 36, 92.	1.7	13
49	Influence of exogenous polyamines on somatic embryogenesis and regeneration of fresh and long-term cultures of three elite indica rice cultivars. <i>Cereal Research Communications</i> , 2021, 49, 245-253.	0.8	13
50	Green remediation potential of immobilized oxidoreductases to treat halo-organic pollutants persist in wastewater and soil matrices - A way forward. <i>Chemosphere</i> , 2022, 290, 133305.	4.2	13
51	Exploring DNA quantity and quality from raw materials to botanical extracts. <i>Heliyon</i> , 2019, 5, e01935.	1.4	12
52	DNA barcoding detects floral origin of Indian honey samples. <i>Genome</i> , 2019, 62, 341-348.	0.9	12
53	Differential expression of flavonoid biosynthesis genes and biochemical composition in different tissues of pigmented and non-pigmented rice. <i>Journal of Food Science and Technology</i> , 2021, 58, 884-893.	1.4	12
54	Comprehensive in silico and gene expression profiles of MnP family genes in <i>Phanerochaete chrysosporium</i> towards lignin biodegradation. <i>International Biodeterioration and Biodegradation</i> , 2021, 157, 105143.	1.9	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.	4.1	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 (f Genetic Resources: Characterisation and Utilisation, 2010, 8, 191-197.	0.4	11
57	Tissue culture and <i>Agrobacterium</i> -mediated genetic transformation studies in four commercially important indica rice cultivars. <i>Journal of Crop Science and Biotechnology</i> , 2017, 20, 175-183.	0.7	11
58	Rapid enhancement of $\gamma$ -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.	1.1	11
59	Molecular identification and evolutionary relationships between the subspecies of <i>Musa</i> by DNA barcodes. <i>BMC Genomics</i> , 2020, 21, 659.	1.2	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.	2.2	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.	0.3	11
62	Metabolic Engineering of Isoflavonoid Biosynthesis by Expressing <i>Glycine max</i> Isoflavone Synthase in <i>Allium cepa</i> L. for Genistein Production. <i>Plants</i> , 2021, 10, 52.	1.6	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.	1.0	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.	0.4	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.	1.5	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.	1.1	9
68	Utility of DNA Barcoding for Plant Biodiversity Conservation. <i>Plant Breeding and Biotechnology</i> , 2013, 1, 320-332.	0.3	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.	1.0	9
70	Genomic valorization of the fine scale classification of small millet landraces in southern India. <i>Genome</i> , 2013, 56, 123-127.	0.9	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.	0.2	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.	1.2	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.	1.1	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.	2.6	8
76	Advances in molecular cloning. <i>Molecular Biology</i> , 2016, 50, 1-6.	0.4	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.	1.6	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.	1.5	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.	1.7	7
80	Nematicidal potential and specific enzyme activity enhancement potential of neem ( <i>Azadirachta indica</i> ) Tj ETQq0 0.0rgBT /Oyerlock 10	2.7	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.	1.1	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.	1.1	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.	1.4	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.	0.2	4
87	DNA record of some traditional small millet landraces in India and Nepal. <i>3 Biotech</i> , 2016, 6, 133.	1.1	4
88	Rapid production of therapeutic proteins using plant system. <i>Defence Life Science Journal</i> , 2017, 2, 95.	0.1	4
89	Epidemiology, clinical features and transmission of re-emerging arboviral infection chikungunya. <i>Asian Pacific Journal of Tropical Biomedicine</i> , 2019, 9, 135.	0.5	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.	1.2	3

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91	Emerging mosquito-borne arboviral infection Zika - An epidemiological review. Asian Pacific Journal of Tropical Biomedicine, 2020, 10, 193.	0.5	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.	1.6	3
93	Genome wide survey, and expression analysis of Ornithine decarboxylase gene associated with alkaloid biosynthesis in plants. Genomics, 2022, 114, 84-94.	1.3	3
94	Growth modulation by nitric oxide donor sodium nitroprusside in in vitro plant tissue cultures – A review. Biologia (Poland), 0, , 1.	0.8	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.	1.1	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.	0.8	2
97	<strong>Taxonomic delimitation of endemic <i>Ficus amplocarpa</i> and <i>Ficus dalhousiae</i> Complexes (Moraceae) by DNA barcoding</strong> . Phytotaxa, 2020, 436, 21-35.	0.1	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.	1.0	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.	0.7	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.	0.7	1
103	Confirmation of black nightshade species through DNA barcoding. Medicinal Plants - International Journal of Phytomedicines and Related Industries, 2017, 9, 41.	0.1	0