

Ram Prasad

List of Publications by Year in descending order

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Version: 2024-02-01

97
papers

6,373
citations

117625

34
h-index

88630

70
g-index

103
all docs

103
docs citations

103
times ranked

5834
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanotechnology in Sustainable Agriculture: Recent Developments, Challenges, and Perspectives. <i>Frontiers in Microbiology</i> , 2017, 8, 1014.	3.5	915
2	Biosynthesis of zinc oxide nanoparticles from <i>Azadirachta indica</i> for antibacterial and photocatalytic applications. <i>Materials Science in Semiconductor Processing</i> , 2015, 32, 55-61.	4.0	534
3	Facile Algae-Derived Route to Biogenic Silver Nanoparticles: Synthesis, Antibacterial, and Photocatalytic Properties. <i>Langmuir</i> , 2015, 31, 11605-11612.	3.5	479
4	Engineering tailored nanoparticles with microbes: <i>quo vadis</i> ?. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2016, 8, 316-330.	6.1	389
5	Antioxidant enzymes regulation in plants in reference to reactive oxygen species (ROS) and reactive nitrogen species (RNS). <i>Plant Gene</i> , 2019, 19, 100182.	2.3	280
6	<i>Piriformospora indica</i> : Potential and Significance in Plant Stress Tolerance. <i>Frontiers in Microbiology</i> , 2016, 7, 332.	3.5	272
7	Leveraging the Attributes of <i>Mucor hiemalis</i> -Derived Silver Nanoparticles for a Synergistic Broad-Spectrum Antimicrobial Platform. <i>Frontiers in Microbiology</i> , 2016, 7, 1984.	3.5	269
8	Illuminating the Anticancerous Efficacy of a New Fungal Chassis for Silver Nanoparticle Synthesis. <i>Frontiers in Chemistry</i> , 2019, 7, 65.	3.6	141
9	Biogenic Synthesis of Silver Nanoparticles Using <i>Scenedesmus abundans</i> and Evaluation of Their Antibacterial Activity. <i>Journal of Nanoparticles</i> , 2014, 2014, 1-6.	1.4	140
10	Reactive Oxygen Species Generation-Scavenging and Signaling during Plant-Arbuscular Mycorrhizal and <i>Piriformospora indica</i> Interaction under Stress Condition. <i>Frontiers in Plant Science</i> , 2016, 7, 1574.	3.6	133
11	Antibacterial Activity of Silver Nanoparticles Synthesized by Bark Extract of <i>Syzygium cumini</i> . <i>Journal of Nanoparticles</i> , 2013, 2013, 1-6.	1.4	125
12	Biosorption of arsenite (As ⁺³) and arsenate (As ⁺⁵) from aqueous solution by <i>Arthrobacter</i> sp. biomass. <i>Environmental Technology (United Kingdom)</i> , 2013, 34, 2701-2708.	2.2	121
13	Biosynthesis of silver nanoparticles using <i>Carissa carandas</i> berries and its potential antibacterial activities. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 86, 682-689.	2.4	120
14	Monodehydroascorbate reductase 2 and dehydroascorbate reductase 5 are crucial for a mutualistic interaction between <i>Piriformospora indica</i> and <i>Arabidopsis</i> . <i>Journal of Plant Physiology</i> , 2009, 166, 1263-1274.	3.5	116
15	Understanding the holistic approach to plant-microbe remediation technologies for removing heavy metals and radionuclides from soil. <i>Current Research in Biotechnology</i> , 2021, 3, 84-98.	3.7	112
16	Root endophyte <i>Piriformospora indica</i> DSM 11827 alters plant morphology, enhances biomass and antioxidant activity of medicinal plant <i>Bacopa monniera</i> . <i>Journal of Basic Microbiology</i> , 2013, 53, 1016-1024.	3.3	102
17	Probiotic Beverage From Pineapple Juice Fermented With <i>Lactobacillus</i> and <i>Bifidobacterium</i> Strains. <i>Frontiers in Nutrition</i> , 2019, 6, 54.	3.7	91
18	Biological Nanofactories: Using Living Forms for Metal Nanoparticle Synthesis. <i>Mini-Reviews in Medicinal Chemistry</i> , 2021, 21, 245-265.	2.4	88

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19	Revealing on hydrogen sulfide and nitric oxide signals co-ordination for plant growth under stress conditions. <i>Physiologia Plantarum</i> , 2020, 168, 301-317.	5.2	77
20	Polyindole/cadmium sulphide nanocomposite based turn-on, multi-ion fluorescence sensor for detection of Cr ³⁺ , Fe ³⁺ and Sn ²⁺ ions. <i>Sensors and Actuators B: Chemical</i> , 2018, 269, 195-202.	7.8	72
21	Agricultural Waste and Wastewater as Feedstock for Bioelectricity Generation Using Microbial Fuel Cells: Recent Advances. <i>Fermentation</i> , 2021, 7, 169.	3.0	72
22	Enhanced Tolerance of Transgenic Potato Plants Over-Expressing Non-specific Lipid Transfer Protein-1 (StnsLTP1) against Multiple Abiotic Stresses. <i>Frontiers in Plant Science</i> , 2016, 7, 1228.	3.6	71
23	Microbiome in Crops: Diversity, Distribution, and Potential Role in Crop Improvement. , 2018, , 305-332.		67
24	Bone Marrow-Derived Cells Restore Functional Integrity of the Gut Epithelial and Vascular Barriers in a Model of Diabetes and ACE2 Deficiency. <i>Circulation Research</i> , 2019, 125, 969-988.	4.5	67
25	Environmental antibiotics and resistance genes as emerging contaminants: Methods of detection and bioremediation. <i>Current Research in Microbial Sciences</i> , 2021, 2, 100027.	2.3	67
26	Transcriptional responses of soybean roots to colonization with the root endophytic fungus <i>Piriformospora indica</i> reveals altered phenylpropanoid and secondary metabolism. <i>Scientific Reports</i> , 2018, 8, 10227.	3.3	64
27	Recent trends in nanotechnology applications of bio-based packaging. <i>Journal of Agriculture and Food Research</i> , 2022, 7, 100257.	2.5	64
28	SARS-CoV-2 Infections and ACE2: Clinical Outcomes Linked With Increased Morbidity and Mortality in Individuals With Diabetes. <i>Diabetes</i> , 2020, 69, 1875-1886.	0.6	61
29	Potassium: A key modulator for cell homeostasis. <i>Journal of Biotechnology</i> , 2020, 324, 198-210.	3.8	57
30	Plant microbiome: A reservoir of novel genes and metabolites. <i>Plant Gene</i> , 2019, 18, 100177.	2.3	51
31	A Comprehensive Understanding of Electro-Fermentation. <i>Fermentation</i> , 2020, 6, 92.	3.0	48
32	Influence of culture filtrate of <i>Piriformospora indica</i> on growth and yield of seed oil in <i>Helianthus annuus</i> . <i>Symbiosis</i> , 2011, 53, 83-88.	2.3	47
33	Antibacterial Activity of Cu Nanoparticles against <i>E. coli</i> , <i>Staphylococcus aureus</i> and <i>Pseudomonas aeruginosa</i> . <i>Nano Biomedicine and Engineering</i> , 2017, 9, .	0.9	45
34	Nanobiochar and biochar based nanocomposites: Advances and applications. <i>Journal of Agriculture and Food Research</i> , 2021, 5, 100191.	2.5	39
35	Nanomaterials Act as Plant Defense Mechanism. , 2017, , 253-269.		38
36	Impact of Synergistic Association of ZnO-Nanorods and Symbiotic Fungus <i>Piriformospora indica</i> DSM 11827 on <i>Brassica oleracea</i> var. <i>botrytis</i> (Broccoli). <i>Frontiers in Microbiology</i> , 2017, 8, 1909.	3.5	38

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37	Endolichenic fungi: A hidden source of bioactive metabolites. South African Journal of Botany, 2020, 134, 163-186.	2.5	38
38	The beneficial root endophyte Piriformospora indica reduces egg density of the soybean cyst nematode. Biological Control, 2015, 90, 193-199.	3.0	37
39	Modern Prospects of Nanotechnology in Plant Pathology. , 2017, , 305-317.		37
40	Valorisation of CO ₂ into Value-Added Products via Microbial Electrosynthesis (MES) and Electro-Fermentation Technology. Fermentation, 2021, 7, 291.	3.0	35
41	Techno-economical evaluation and life cycle assessment of microbial electrochemical systems: A review. Current Research in Green and Sustainable Chemistry, 2021, 4, 100111.	5.6	34
42	Kinetic Study of the Biodegradation of Acephate by Indigenous Soil Bacterial Isolates in the Presence of Humic Acid and Metal Ions. Biomolecules, 2020, 10, 433.	4.0	33
43	Nanoagrotechnology for Soil Quality, Crop Performance and Environmental Management. , 2017, , 73-97.		33
44	Production of Bionanomaterials from Agricultural Wastes. , 2017, , 33-58.		31
45	Salt stress triggers augmented levels of Na ⁺ , Ca ²⁺ and ROS and alter stress-responsive gene expression in roots of CBL9 and CIPK23 knockout mutants of Arabidopsis thaliana. Environmental and Experimental Botany, 2019, 161, 265-276.	4.2	30
46	Recent Developments in Lignocellulosic Biofuels, a Renewable Source of Bioenergy. Fermentation, 2022, 8, 161.	3.0	30
47	One-Pot Fabrication and Characterization of Silver Nanoparticles Using <i>Solanum lycopersicum</i> : An Eco-Friendly and Potent Control Tool against Rose Aphid, <i>Macrosiphum rosae</i> . Journal of Nanoscience, 2016, 2016, 1-7.	2.6	28
48	Biogenic silver nanoparticles from Trichodesma indicum aqueous leaf extract against Mythimna separata and evaluation of its larvicidal efficacy. Journal of Plant Protection Research, 2017, 57, 194-200.	1.0	28
49	Introduction to Mycorrhiza: Historical Development. , 2017, , 1-7.		27
50	Fungal Nanoparticles: A Novel Tool for a Green Biotechnology?. , 2018, , 61-87.		27
51	Reactive Oxygen Species (ROS) Metabolism and Signaling in Plant-Mycorrhizal Association Under Biotic and Abiotic Stress Conditions. , 2017, , 223-232.		26
52	Exploring Morphological and Biochemical Linkages in Fungal Growth with Label-Free Light Sheet Microscopy and Raman Spectroscopy. ChemPhysChem, 2017, 18, 72-78.	2.1	26
53	Bioelectricity production using plant-microbial fuel cell: Present state of art. South African Journal of Botany, 2021, 140, 393-408.	2.5	26
54	Assessment of Bioenergy Generation Potential of Agricultural Crop Residues in India. Circular Economy and Sustainability, 2021, 1, 1335-1348.	5.5	25

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55	Current perspectives on integrated approaches to enhance lipid accumulation in microalgae. 3 Biotech, 2021, 11, 303.	2.2	19
56	Microbial Fuel Cell: Sustainable Green Technology for Bioelectricity Generation and Wastewater Treatment. , 2019, , 199-218.		18
57	Microbial Fuel Cell United with Other Existing Technologies for Enhanced Power Generation and Efficient Wastewater Treatment. Applied Sciences (Switzerland), 2021, 11, 10777.	2.5	18
58	Role of plant derived bioactive compounds against cancer. South African Journal of Botany, 2022, 149, 1017-1028.	2.5	17
59	An efficient approach towards the bioremediation of copper, cobalt and nickel contaminated field samples. Journal of Soils and Sediments, 2016, 16, 2118-2127.	3.0	16
60	Mobilization of Micronutrients by Mycorrhizal Fungi. , 2017, , 9-26.		16
61	Arbuscular Mycorrhiza: A Tool for Enhancing Crop Production. , 2017, , 235-250.		16
62	Agricultural Nanotechnology: Concepts, Benefits, and Risks. , 2017, , 1-17.		16
63	A Cell Wall Extract from Piriformospora indica Promotes Tuberization in Potato (Solanum tuberosum) Tj ETQq1 1 0.784314 rgBT /Ove and Biotechnology, 2013, 170, 743-755.	2.9	14
64	Microbial Signatures in The Rodent Eyes With Retinal Dysfunction and Diabetic Retinopathy. , 2022, 63, 5.		14
65	Promising Applications for the Production of Biofuels Through Algae. , 2017, , 81-103.		12
66	Regular Intake of Green Tea Polyphenols Suppresses the Development of Nonmelanoma Skin Cancer through miR-29-Mediated Epigenetic Modifications. Journal of Clinical Medicine, 2022, 11, 398.	2.4	12
67	Microplastics in marine and aquatic habitats: sources, impact, and sustainable remediation approaches. Environmental Sustainability, 2022, 5, 39-49.	2.8	12
68	Physiological and molecular insights into the role of silicon in improving plant performance under abiotic stresses. Plant and Soil, 2023, 486, 25-43.	3.7	12
69	Mechanistic Insight of the Antifungal Potential of Green Synthesized Zinc Oxide Nanoparticles against Alternaria brassicae. Journal of Nanomaterials, 2022, 2022, 1-13.	2.7	12
70	Nitric Oxide: A Ubiquitous Signal Molecule for Enhancing Plant Tolerance to Salinity Stress and Their Molecular Mechanisms. Journal of Plant Growth Regulation, 2021, 40, 2329-2341.	5.1	11
71	Microbe-Mediated Enhancement of Nitrogen and Phosphorus Content for Crop Improvement. , 2018, , 293-304.		10
72	Biotechnological methods for the production of ginsenosides. South African Journal of Botany, 2021, 141, 25-36.	2.5	10

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73	Piriformospora indica (Serendipita indica): The Novel Symbiont. , 2017, , 349-364.		9
74	Physiological responses, tolerance, and remediation strategies in plants exposed to metalloids. Environmental Science and Pollution Research, 2021, 28, 40233-40248.	5.3	9
75	Interaction of Piriformospora indica with Diverse Microorganisms and Plants. , 2008, , 237-265.		8
76	Specific mesoderm subset derived from human pluripotent stem cells ameliorates microvascular pathology in type 2 diabetic mice. Science Advances, 2022, 8, eabm5559.	10.3	8
77	Assessment of bacterial endosymbionts and the host, <i>Bemisia tabaci</i> (Hemiptera: Aleyrodidae), using rRNA and mitochondrial cytochrome oxidase I gene sequences. Communicative and Integrative Biology, 2018, 11, e1433442.	1.4	7
78	Differential regulation of drought stress by biological membrane transporters and channels. Plant Cell Reports, 2021, 40, 1565-1583.	5.6	6
79	Efficient synthesis and characterization of non-toxic glyphosate derivatives as eco-friendly herbicides. Current Research in Green and Sustainable Chemistry, 2021, 4, 100100.	5.6	5
80	Chemical Profiling of Chlorophytum comosum (Thunb.) Jaques by GC-MS/LC-ESIMS and its Antiproliferative Effects on Human Carcinoma Cell Lines. Anti-Cancer Agents in Medicinal Chemistry, 2021, 21, 1697-1707.	1.7	5
81	A Comprehensive Investigation of Potential Novel Marine Psychrotolerant Actinomycetes sp. Isolated from the Bay-of-Bengal. Current Genomics, 2020, 21, 271-282.	1.6	4
82	Endophytic Probiotics and Plant Health: Toward a Balanced Accost. , 2017, , 383-399.		2
83	Distribution frequency of endosymbionts and genetic characterisation of <i>Bemisia tabaci</i> (Hemiptera: Tj ETQq1 1 0.784314 rgBT /Overloc	0.3	2
84	The Biomolecular Spectrum Drives Microbial Biology and Functions in Agri-Food-Environments. Biomolecules, 2020, 10, 401.	4.0	2
85	Power Reservoirs of Jumble-Based Biomass in Asia. , 2015, , 455-470.		2
86	Management of Fungal Pathogens by Mycorrhiza. , 2017, , 179-194.		2
87	Unveiling the Biodiversity of Hyperthermophilic Archaea in Jharia Coal Mines: Potential Threat to Methanogenesis?. Current Genomics, 2020, 21, 363-371.	1.6	2
88	Metabolomics-Mediated Characterization of Endophytic Species in Recalcitrant Tree Species. , 2017, , 251-257.		1
89	The Lychee Fruit: Post Harvest Handling Techniques. , 2017, , 193-211.		1
90	Mycorrhizal Fungi Under Biotic and Abiotic Stress. , 2017, , 57-69.		1

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91	Evaluating bionanoparticle infused fungal metabolites as a novel antimicrobial agent. Journal of Advanced Pharmaceutical Technology and Research, 2016, 7, 110.	1.0	1
92	Mycorrhizas in Forest Tree Health. , 2017, , 177-185.		1
93	Immobilization-Based Bio-formulation of Aspergillus awamori S29 and Evaluation of Its Shelf Life and Re-usability in the Soil-Plant Experiment. Current Microbiology, 2022, 79, 163.	2.2	1
94	Probiotic Microbiome: Potassium Solubilization and Plant Productivity. , 2017, , 451-467.		0
95	The Role of Arbuscular Mycorrhizal Fungi and the Mycorrhizal-Like Fungus Piriformospora indica in Biocontrol of Plant Parasitic Nematodes. , 2017, , 43-56.		0
96	Principles and Application of Confocal Microscopy to Understand Symbiotic Fungi. , 2017, , 341-354.		0
97	Stress Ameliorative Effects of Indole Acetic Acid on Hordeum vulgare L. Seedlings Subjected to Zinc Toxicity. Phytom, 2020, 89, 71-86.	0.7	0