Nandula Raghuram

List of Publications by Year
in descending order

60 papers	1,251 citations	471509 17 h-index	434195 31 g-index
62 all docs	62 docs citations	62 times ranked	1253 citing authors

#	Article	IF	Citations
1	Oxidative damage and altered antioxidant enzyme activities in the small intestine of streptozotocin-induced diabetic rats. International Journal of Biochemistry and Cell Biology, 2004, 36, 89-97.	2.8	167
2	Oxidative stress and gene expression of antioxidant enzymes in the renal cortex of streptozotocin-induced diabetic rats. Molecular and Cellular Biochemistry, 2003, 243, 147-152.	3.1	129
3	Microarray Analysis of Rice d1 (RGA1) Mutant Reveals the Potential Role of G-Protein Alpha Subunit in Regulating Multiple Abiotic Stresses Such as Drought, Salinity, Heat, and Cold. Frontiers in Plant Science, 2016, 7, 11.	3.6	67
4	The nitrogen decade: mobilizing global action on nitrogen to 2030 and beyond. One Earth, 2021, 4, 10-14.	6.8	66
5	Low degree metabolites explain essential reactions and enhance modularity in biological networks. BMC Bioinformatics, 2006, 7, 118.	2.6	56
6	A Research Road Map for Responsible Use of Agricultural Nitrogen. Frontiers in Sustainable Food Systems, 2021, 5, .	3.9	48
7	G-protein Î±-subunit (GPA1) regulates stress, nitrate and phosphate response, flavonoid biosynthesis, fruit/seed development and substantially shares GCR1 regulation in A. thaliana. Plant Molecular Biology, 2015, 89, 559-576.	3.9	47
8	G-protein Signaling Components GCR1 and GPA1 Mediate Responses to Multiple Abiotic Stresses in Arabidopsis. Frontiers in Plant Science, 2015, 6, 1000.	3.6	37
9	Evidence for some common signal transduction events for opposite regulation of nitrate reductase and phytochrome-I gene expression by light. Plant Molecular Biology, 1995, 29, 25-35.	3.9	36
10	Phenotyping for Nitrogen Use Efficiency: Rice Genotypes Differ in N-Responsive Germination, Oxygen Consumption, Seed Urease Activities, Root Growth, Crop Duration, and Yield at Low N. Frontiers in Plant Science, 2018, 9, 1452.	3.6	32
11	Transcriptome Analysis of Arabidopsis GCR1 Mutant Reveals Its Roles in Stress, Hormones, Secondary Metabolism and Phosphate Starvation. PLoS ONE, 2015, 10, e0117819.	2.5	32
12	A framework for nitrogen futures in the shared socioeconomic pathways. Global Environmental Change, 2020, 61, 102029.	7.8	30
13	Nitrogen Challenges and Opportunities for Agricultural and Environmental Science in India. Frontiers in Sustainable Food Systems, 2021, 5, .	3.9	29
14	GCR1 and GPA1 coupling regulates nitrate, cell wall, immunity and light responses in Arabidopsis. Scientific Reports, 2019, 9, 5838.	3.3	23
15	Nitrogen Use Efficiency Phenotype and Associated Genes: Roles of Germination, Flowering, Root/Shoot Length and Biomass. Frontiers in Plant Science, 2020, 11, 587464.	3.6	23
16	Meta-Analysis of Yield-Related and N-Responsive Genes Reveals Chromosomal Hotspots, Key Processes and Candidate Genes for Nitrogen-Use Efficiency in Rice. Frontiers in Plant Science, 2021, 12, 627955.	3.6	22
17	Investigations on the nature of the phytochrome-induced transmitter for the regulation of nitrate reductase in etiolated leaves of maize. Journal of Experimental Botany, 1994, 45, 485-490.	4.8	21
18	Light Regulation of Nitrate Reductase Gene Expression in Maize Involves a G-Protein. Molecular Cell Biology Research Communications: MCBRC: Part B of Biochemical and Biophysical Research Communications, 1999, 2, 86-90.	1.6	21

#	Article	IF	Citations
19	From South Asia to the world: embracing the challenge of global sustainable nitrogen management. One Earth, 2021, 4, 22-27.	6.8	21
20	Regulation of activity and transcript levels of NR in rice (Oryza sativa): Roles of protein kinase and G-proteins. Plant Science, 2007, 172, 406-413.	3.6	20
21	Improving Plant Nitrogen-Use Efficiency. , 2011, , 209-218.		19
22	The Indian Nitrogen Challenge in a Global Perspective. , 2017, , 9-28.		16
23	Improving Crop Nitrogen Use Efficiency. , 2019, , 211-220.		16
24	Transcriptomic and network analyses reveal distinct nitrate responses in light and dark in rice leaves (Oryza sativa Indica var. Panvel1). Scientific Reports, 2020, 10, 12228.	3.3	15
25	Heterotrimeric G-protein Î± subunit (RGA1) regulates tiller development, yield, cell wall, nitrogen response and biotic stress in rice. Scientific Reports, 2021, 11, 2323.	3.3	14
26	Rapid production of ethanol in high concentration by immobilized cells of Saccharomyces cerevisiae through soya flour supplementation. Biotechnology Letters, 1988, 10, 217-220.	2.2	13
27	Molecular Targets for Improvement of Crop Nitrogen Use Efficiency: Current and Emerging Options. , 2018, , 77-93.		13
28	India joins the GM club. Trends in Plant Science, 2002, 7, 322-323.	8.8	12
29	Genomewide computational analysis of nitrate response elements in rice and Arabidopsis. Molecular Genetics and Genomics, 2007, 278, 519-525.	2.1	12
30	Spirulina nitrate-assimilating enzymes (NR, NiR, GS) have higher specific activities and are more stable than those of rice. Physiology and Molecular Biology of Plants, 2008, 14, 179-182.	3.1	12
31	Biological Determinants of Crop Nitrogen Use Efficiency and Biotechnological Avenues for Improvement. , 2020, , 157-171.		12
32	India's declining ranking. Nature, 1996, 383, 572-572.	27.8	11
33	Nitrate-responsive transcriptome analysis reveals additional genes/processes and associated traits viz. height, tillering, heading date, stomatal density and yield in japonica rice. Planta, 2022, 255, 42.	3.2	11
34	Flux-based classification of reactions reveals a functional bow-tie organization of complex metabolic networks. Physical Review E, 2013, 87, 052708.	2.1	10
35	The pleasure of excellence-led growth and the pain of enforcing publishing ethics: the experience of PMBP. Physiology and Molecular Biology of Plants, 2017, 23, 1-3.	3.1	10
36	Indian publishing: enduring the boom. Trends in Plant Science, 2004, 9, 9-12.	8.8	9

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37	Roles of nitrate, nitrite and ammonium ion in phytochrome regulation of nitrate reductase gene expression in maize. IUBMB Life, 1999, 47, 239-249.	3.4	8
38	Indian plant biology enters the biotechnology era. Trends in Plant Science, 2002, 7, 92-94.	8.8	8
39	The INI South Asian Regional Nitrogen Centre: Capacity Building for Regional Nitrogen Assessment and Management. , 2020, , 467-479.		8
40	Policies to combat nitrogen pollution in South Asia: gaps and opportunities. Environmental Research Letters, 2022, 17, 025007.	5.2	8
41	Molecular characterization of nitrate uptake and assimilatory pathway in Arthrospira platensis reveals nitrate induction and differential regulation. Archives of Microbiology, 2014, 196, 385-394.	2.2	7
42	Method for Preparation of Nutrient-depleted Soil for Determination of Plant Nutrient Requirements. Communications in Soil Science and Plant Analysis, 2019, 50, 1878-1886.	1.4	7
43	Protein Phosphatases in N Response and NUE in Crops. , 2020, , 233-244.		7
44	Issues and Policies for Reactive Nitrogen Management in the Indian Region. , 2017, , 491-513.		7
45	Nitrogen and Stress. , 2015, , 323-339.		6
46	Nitrogen and the food system. One Earth, 2021, 4, 3-7.	6.8	6
47	Crop nitrogen use efficiency for sustainable food security and climate change mitigation. , 2022, , 47-72.		6
48	Editorial: Nitrogen Use Efficiency and Sustainable Nitrogen Management in Crop Plants. Frontiers in Plant Science, 2022, 13, 862091.	3.6	6
49	Genomewide bioinformatic analysis negates any specific role for Dof, GATA and Ag/cTCA motifs in nitrate responsive gene expression in Arabidopsis. Physiology and Molecular Biology of Plants, 2009, 15, 145-150.	3.1	5
50	Comparative Transcriptomic Analyses of Nitrate-Response in Rice Genotypes With Contrasting Nitrogen Use Efficiency Reveals Common and Genotype-Specific Processes, Molecular Targets and Nitrogen Use Efficiency-Candidates. Frontiers in Plant Science, 0, 13, .	3.6	5
51	Nitrate assimilatory enzymes of Spirulina (Arthospira) platensis are more thermotolerant than those of rice. Physiology and Molecular Biology of Plants, 2009, 15, 277-280.	3.1	4
52	Nurturing growth with excellence: PMBP goes monthly in its Silver Jubilee year!. Physiology and Molecular Biology of Plants, 2020, 26, 1-2.	3.1	3
53	Concerns around the human papilloma virus (HPV) vaccine. Indian Journal of Medical Ethics, 2010, 7, 38-41.	0.4	3
54	Long-term trends of direct nitrous oxide emission from fuel combustion in South Asia. Environmental Research Letters, 2022, 17, 045028.	5.2	3

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55	Focus on reactive nitrogen and the UN sustainable development goals. Environmental Research Letters, 2022, 17, 050401.	5.2	3
56	A universal power law and proportionate change process characterize the evolution of metabolic networks. European Physical Journal B, 2007, 57, 75-80.	1.5	2
57	Just Enough Nitrogen: Summary and Synthesis of Outcomes. , 2020, , 1-25.		2
58	Global Challenges for Nitrogen Science-Policy Interactions: Towards the International Nitrogen Management System (INMS) and Improved Coordination Between Multi-lateral Environmental Agreements. , 2020, , 517-560.		2
59	The Kampala Statement-for-Action on Reactive Nitrogen in Africa and Globally. , 2020, , 583-593.		2
60	Nutrient Perception and Signaling in Plants. , 2019, , 59-77.		1