

# Pramod P Wangikar

## List of Publications by Year in descending order

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Version: 2024-02-01

77  
papers

2,402  
citations

236833

25  
h-index

223716

46  
g-index

81  
all docs

81  
docs citations

81  
times ranked

2739  
citing authors

#	ARTICLE	IF	CITATIONS
1	Extremophilic micro-algae and their potential contribution in biotechnology. <i>Bioresource Technology</i> , 2015, 184, 363-372.	4.8	224
2	Horseradish peroxidase catalyzed degradation of industrially important dyes. <i>Biotechnology and Bioengineering</i> , 2001, 72, 562-567.	1.7	184
3	Cyanobacteria: Promising biocatalysts for sustainable chemical production. <i>Journal of Biological Chemistry</i> , 2018, 293, 5044-5052.	1.6	184
4	Lipase-Catalyzed Esterification. <i>Catalysis Reviews - Science and Engineering</i> , 2000, 42, 439-480.	5.7	147
5	Functional Sites in Protein Families Uncovered via an Objective and Automated Graph Theoretic Approach. <i>Journal of Molecular Biology</i> , 2003, 326, 955-978.	2.0	105
6	Genome Features and Biochemical Characteristics of a Robust, Fast Growing and Naturally Transformable Cyanobacterium <i>Synechococcus elongatus</i> PCC 11801 Isolated from India. <i>Scientific Reports</i> , 2018, 8, 16632.	1.6	91
7	Metabolic model of <i>Synechococcus</i> sp. PCC 7002: Prediction of flux distribution and network modification for enhanced biofuel production. <i>Bioresource Technology</i> , 2016, 213, 190-197.	4.8	80
8	Isolation and biochemical characterisation of two thermophilic green algal species- <i>Asterarcys quadricellulare</i> and <i>Chlorella sorokiniana</i> , which are tolerant to high levels of carbon dioxide and nitric oxide. <i>Algal Research</i> , 2018, 30, 28-37.	2.4	71
9	Rerouting of carbon flux in a glycogen mutant of cyanobacteria assessed via isotopically non-stationary <sup>13</sup> C metabolic flux analysis. <i>Biotechnology and Bioengineering</i> , 2017, 114, 2298-2308.	1.7	66
10	Recent advances in synthetic biology of cyanobacteria. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 5457-5471.	1.7	66
11	A Novel Cyanobacterium <i>Synechococcus elongatus</i> PCC 11802 has Distinct Genomic and Metabolomic Characteristics Compared to its Neighbor PCC 11801. <i>Scientific Reports</i> , 2020, 10, 191.	1.6	54
12	Association of <i>N</i> -acetyltransferase 2 and cytochrome <i>P</i> 450 <i>2E</i> 1 gene polymorphisms with antituberculosis drug-induced hepatotoxicity in <i>Western India</i> . <i>Journal of Gastroenterology and Hepatology (Australia)</i> , 2013, 28, 1368-1374.	1.4	51
13	Challenges and opportunities for microalgae-mediated CO <sub>2</sub> capture and biorefinery. <i>Biotechnology and Bioengineering</i> , 2015, 112, 1281-1296.	1.7	51
14	Studies on toxicity of antitubercular drugs namely isoniazid, rifampicin, and pyrazinamide in an in vitro model of HepG2 cell line. <i>Medicinal Chemistry Research</i> , 2011, 20, 1611-1615.	1.1	50
15	Optimization of high cell density fermentation process for recombinant nitrilase production in <i>E. coli</i> . <i>Bioresource Technology</i> , 2015, 188, 202-208.	4.8	42
16	Metabolic flux analysis of <i>Cyanothece</i> sp. ATCC 51142 under mixotrophic conditions. <i>Photosynthesis Research</i> , 2013, 118, 191-198.	1.6	41
17	Photosynthetic Co-production of Succinate and Ethylene in a Fast-Growing Cyanobacterium, <i>Synechococcus elongatus</i> PCC 11801. <i>Metabolites</i> , 2020, 10, 250.	1.3	35
18	Real time phase detection based online monitoring of batch fermentation processes. <i>Process Biochemistry</i> , 2009, 44, 799-811.	1.8	33

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19	Effect of high CO <sub>2</sub> concentrations on the growth and macromolecular composition of a heat- and high-light-tolerant microalga. <i>Journal of Applied Phycology</i> , 2016, 28, 2631-2640.	1.5	33
20	Structured kinetic model to represent the utilization of multiple substrates in complex media during rifamycin B fermentation. <i>Biotechnology and Bioengineering</i> , 2006, 93, 779-790.	1.7	32
21	Detection of phase shifts in batch fermentation via statistical analysis of the online measurements: A case study with rifamycin B fermentation. <i>Journal of Biotechnology</i> , 2007, 132, 156-166.	1.9	31
22	SWATH Tandem Mass Spectrometry Workflow for Quantification of Mass Isotopologue Distribution of Intracellular Metabolites and Fragments Labeled with Isotopic <sup>13</sup> C Carbon. <i>Analytical Chemistry</i> , 2018, 90, 6486-6493.	3.2	31
23	An improved method for extraction of polar and charged metabolites from cyanobacteria. <i>PLoS ONE</i> , 2018, 13, e0204273.	1.1	31
24	Metabolic engineering of a fast-growing cyanobacterium <i>Synechococcus elongatus</i> PCC 11801 for photoautotrophic production of succinic acid. <i>Biotechnology for Biofuels</i> , 2020, 13, 89.	6.2	31
25	Association of GST null genotypes with anti-tuberculosis drug induced hepatotoxicity in Western Indian population. <i>Annals of Hepatology</i> , 2013, 12, 959-965.	0.6	27
26	A global analysis of adaptive evolution of operons in cyanobacteria. <i>Antonie Van Leeuwenhoek</i> , 2013, 103, 331-346.	0.7	26
27	Fine-Tuning Native Promoters of <i>Synechococcus elongatus</i> PCC 7942 To Develop a Synthetic Toolbox for Heterologous Protein Expression. <i>ACS Synthetic Biology</i> , 2019, 8, 1219-1223.	1.9	26
28	Cyanobacteria as cell factories: the roles of host and pathway engineering and translational research. <i>Current Opinion in Biotechnology</i> , 2022, 73, 314-322.	3.3	26
29	The effect of CO <sub>2</sub> in enhancing photosynthetic cofactor recycling for alcohol dehydrogenase mediated chiral synthesis in cyanobacteria. <i>Journal of Biotechnology</i> , 2019, 289, 1-6.	1.9	25
30	The role of systems biology in developing non-model cyanobacteria as hosts for chemical production. <i>Current Opinion in Biotechnology</i> , 2020, 64, 62-69.	3.3	25
31	Model based optimization of high cell density cultivation of nitrogen-fixing cyanobacteria. <i>Bioresource Technology</i> , 2013, 148, 228-233.	4.8	23
32	A Library of Tunable, Portable, and Inducer-Free Promoters Derived from Cyanobacteria. <i>ACS Synthetic Biology</i> , 2020, 9, 1790-1801.	1.9	23
33	Multi-objective optimization of glycopeptide antibiotic production in batch and fed batch processes. <i>Bioresource Technology</i> , 2011, 102, 6951-6958.	4.8	22
34	Rhythm of carbon and nitrogen fixation in unicellular cyanobacteria under turbulent and highly aerobic conditions. <i>Biotechnology and Bioengineering</i> , 2013, 110, 2371-2379.	1.7	22
35	Development of biotransformation process for asymmetric reduction with novel anti-Prelog NADH-dependent alcohol dehydrogenases. <i>Process Biochemistry</i> , 2018, 70, 71-78.	1.8	22
36	Elevated carbon dioxide levels lead to proteome-wide alterations for optimal growth of a fast-growing cyanobacterium, <i>Synechococcus elongatus</i> PCC 11801. <i>Scientific Reports</i> , 2019, 9, 6257.	1.6	21

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37	Metabolic modeling for multi-objective optimization of ethanol production in a <i>Synechocystis</i> mutant. <i>Photosynthesis Research</i> , 2013, 118, 155-165.	1.6	19
38	Effect of elevated carbon dioxide and nitric oxide on the physiological responses of two green algae, <i>Asterarcys quadricellulare</i> and <i>Chlorella sorokiniana</i> . <i>Journal of Applied Phycology</i> , 2020, 32, 189-204.	1.5	18
39	Dynamic Inventory of Intermediate Metabolites of Cyanobacteria in a Diurnal Cycle. <i>IScience</i> , 2020, 23, 101704.	1.9	18
40	Hierarchical amino acid utilization and its influence on fermentation dynamics: rifamycin B fermentation using <i>Amycolatopsis mediterranei</i> S699, a case study. <i>Microbial Cell Factories</i> , 2006, 5, 32.	1.9	16
41	Adaptive laboratory evolution of the fast-growing cyanobacterium <i>Synechococcus elongatus</i> PCC 11801 for improved solvent tolerance. <i>Journal of Bioscience and Bioengineering</i> , 2021, 131, 491-500.	1.1	15
42	Sequential utilization of substrates by <i>Pseudomonas putida</i> CSV86: Signatures of intermediate metabolites and online measurements. <i>Microbiological Research</i> , 2009, 164, 429-437.	2.5	14
43	Correlation between pellet morphology and glycopeptide antibiotic balhimycin production by <i>Amycolatopsis balhimycina</i> DSM 5908. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2012, 39, 27-35.	1.4	14
44	Rhythmic and sustained oscillations in metabolism and gene expression of <i>Cyanothece</i> sp. ATCC 51142 under constant light. <i>Frontiers in Microbiology</i> , 2013, 4, 374.	1.5	14
45	Association of genetic variants with anti-tuberculosis drug induced hepatotoxicity: A high resolution melting analysis. <i>Infection, Genetics and Evolution</i> , 2014, 23, 42-48.	1.0	14
46	A cybernetic model to predict the effect of freely available nitrogen substrate on rifamycin B production in complex media. <i>Applied Microbiology and Biotechnology</i> , 2006, 72, 662-670.	1.7	13
47	Assessment of the metabolic capacity and adaptability of aromatic hydrocarbon degrading strain <i>Pseudomonas putida</i> CSV86 in aerobic chemostat culture. <i>Bioresource Technology</i> , 2012, 114, 484-491.	4.8	13
48	Diurnal rhythm of a unicellular diazotrophic cyanobacterium under mixotrophic conditions and elevated carbon dioxide. <i>Photosynthesis Research</i> , 2013, 118, 51-57.	1.6	13
49	Phase shifts in the stoichiometry of rifamycin B fermentation and correlation with the trends in the parameters measured online. <i>Journal of Biotechnology</i> , 2006, 127, 115-128.	1.9	12
50	Gene essentiality, conservation index and co-evolution of genes in cyanobacteria. <i>PLoS ONE</i> , 2017, 12, e0178565.	1.1	11
51	Drug discovery against H1N1 virus (influenza A virus) via computational virtual screening approach. <i>Medicinal Chemistry Research</i> , 2011, 20, 1445-1449.	1.1	10
52	High cell density cultivation of <i>E. coli</i> in shake flasks for the production of recombinant proteins. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2022, 33, e00694.	2.1	10
53	Combined effects of carbon, nitrogen and phosphorus substrates on D-ribose production via transketolase deficient strain of <i>Bacillus pumilus</i> . <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 1110-1119.	1.6	9
54	Mass Isotopologue Distribution of dimer ion adducts of intracellular metabolites for potential applications in <sup>13</sup> C Metabolic Flux Analysis. <i>PLoS ONE</i> , 2019, 14, e0220412.	1.1	9

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55	Characterization and Application of a Robust Glucose Dehydrogenase from <i>Paenibacillus pini</i> for Cofactor Regeneration in Biocatalysis. <i>Indian Journal of Microbiology</i> , 2020, 60, 87-95.	1.5	9
56	Megacell phenotype and its relation to metabolic alterations in transketolase deficient strain of <i>Bacillus pumilus</i> . <i>Biotechnology and Bioengineering</i> , 2009, 102, 1387-1397.	1.7	8
57	Coupling of Cellular Processes and Their Coordinated Oscillations under Continuous Light in <i>Cyanothece</i> sp. ATCC 51142, a Diazotrophic Unicellular Cyanobacterium. <i>PLoS ONE</i> , 2015, 10, e0125148.	1.1	7
58	SHARP: genome-scale identification of gene-protein-reaction associations in cyanobacteria. <i>Photosynthesis Research</i> , 2013, 118, 181-190.	1.6	6
59	Evaluation of freely available software tools for untargeted quantification of <sup>13</sup> C isotopic enrichment in cellular metabolome from HR-LC/MS data. <i>Metabolic Engineering Communications</i> , 2020, 10, e00120.	1.9	6
60	Transporter engineering for the development of cyanobacteria as cell factories: A text analytics guided survey. <i>Biotechnology Advances</i> , 2022, 54, 107816.	6.0	6
61	Probing the metabolism of <sup>13</sup> C-glutamyl peptides in cyanobacteria via metabolite profiling and <sup>13</sup> C labeling. <i>Plant Journal</i> , 2022, 109, 708-726.	2.8	6
62	Influence of mixotrophic growth on rhythmic oscillations in expression of metabolic pathways in diazotrophic cyanobacterium <i>Cyanothece</i> sp. ATCC 51142. <i>Bioresource Technology</i> , 2015, 188, 145-152.	4.8	5
63	Rhythmic oscillations in KaiC1 phosphorylation and ATP/ADP ratio in nitrogen-fixing cyanobacterium <i>Cyanothece</i> sp. ATCC 51142. <i>Biological Rhythm Research</i> , 2016, 47, 285-301.	0.4	5
64	Local and Global Algorithms for Learning Dynamic Bayesian Networks. , 2012, , .		4
65	Liquid Chromatography Methods for Separation of Polar and Charged Intracellular Metabolites for <sup>13</sup> C Metabolic Flux Analysis. <i>Methods in Molecular Biology</i> , 2020, 2088, 33-50.	0.4	4
66	SWATH: A Data-Independent Tandem Mass Spectrometry Method to Quantify <sup>13</sup> C Enrichment in Cellular Metabolites and Fragments. <i>Methods in Molecular Biology</i> , 2020, 2088, 189-204.	0.4	4
67	Dynamics of rate limiting enzymes involved in the sequential substrate uptake by <i>Pseudomonas putida</i> CSV86: Modeling and experimental validation. <i>Process Biochemistry</i> , 2011, 46, 701-708.	1.8	3
68	A model of the circadian clock in the cyanobacterium <i>Cyanothece</i> sp. ATCC 51142. <i>BMC Bioinformatics</i> , 2013, 14, S14.	1.2	3
69	Expanding the repertoire of nitrilases with broad substrate specificity and high substrate tolerance for biocatalytic applications. <i>Process Biochemistry</i> , 2020, 94, 289-296.	1.8	3
70	CFD analysis of the flow dynamics of microorganisms in dilute cultures in stirred tank photobioreactors. <i>Bioresource Technology Reports</i> , 2018, 3, 238-246.	1.5	2
71	A method to compute instantaneous oxygen evolution rates in cyanobacterial cultures grown in shake flasks. <i>Engineering Reports</i> , 2020, 2, e12094.	0.9	2
72	Role of extracellular protease in nitrogen substrate management during antibiotic fermentation: a process model and experimental validation. <i>Applied Microbiology and Biotechnology</i> , 2011, 91, 1019-1028.	1.7	1

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73	Editorial: Bioconversion and Biorefinery of C1 Compounds. <i>Frontiers in Microbiology</i> , 2021, 12, 778962.	1.5	1
74	Metabolic engineering of cyanobacteria for production of platform chemicals: A synthetic biology approach. , 2020, , 127-145.		1
75	Protein Structure Classification Using Geometric Invariants and Dynamic Programming. <i>Protein and Peptide Letters</i> , 2007, 14, 658-664.	0.4	0
76	Microfluidic device optimization for cell growth. , 2013, , .		0
77	Cyanobacteria as a renewable resource for biofuel production. , 2022, , 475-499.		0