Marjan De Mey

List of Publications by Year
in descending order

70 papers	3,578 citations	147801 31 h-index	138484 58 g-index
72 all docs	72 docs citations	72 times ranked	4269 citing authors

#	ARTICLE	IF	CITATIONS
1	Microbial metabolomics: past, present and future methodologies. Biotechnology Letters, 2007, 29, 1-16.	2.2	302
2	The future of metabolic engineering and synthetic biology: Towards a systematic practice. Metabolic Engineering, 2012, 14, 233-241.	7.0	277
3	Microbial succinic acid production: Natural versus metabolic engineered producers. Process Biochemistry, 2010, 45, 1103-1114.	3.7	240
4	Minimizing acetate formation in E. coli fermentations. Journal of Industrial Microbiology and Biotechnology, 2007, 34, 689-700.	3.0	198
5	Overcoming heterologous protein interdependency to optimize P450-mediated Taxol precursor synthesis in <i>Escherichia coli</i>. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3209-3214.	7.1	193
6	Construction and model-based analysis of a promoter library for E. coli: an indispensable tool for metabolic engineering. BMC Biotechnology, 2007, 7, 34.	3.3	152
7	Development and application of a differential method for reliable metabolome analysis in Escherichia coli. Analytical Biochemistry, 2009, 386, 9-19.	2.4	145
8	Multivariate modular metabolic engineering for pathway and strain optimization. Current Opinion in Biotechnology, 2014, 29, 156-162.	6.6	129
9	Biotechnological advances in UDP-sugar based glycosylation of small molecules. Biotechnology Advances, 2015, 33, 288-302.	11.7	128
10	Towards a carbon-negative sustainable bio-based economy. Frontiers in Plant Science, 2013, 4, 174.	3.6	114
11	Effect of iclR and arcA knockouts on biomass formation and metabolic fluxes in Escherichia coli K12 and its implications on understanding the metabolism of Escherichia coli BL21 (DE3). BMC Microbiology, 2011, 11, 70.	3.3	86
12	Biotechnological production of natural zero-calorie sweeteners. Current Opinion in Biotechnology, 2014, 26, 155-161.	6.6	84
13	Tailor-made transcriptional biosensors for optimizing microbial cell factories. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 623-645.	3.0	84
14	Efficient utilization of pentoses for bioproduction of the renewable two-carbon compounds ethylene glycol and glycolate. Metabolic Engineering, 2016, 34, 80-87.	7.0	82
15	A sigma factor toolbox for orthogonal gene expression in Escherichia coli. Nucleic Acids Research, 2018, 46, 2133-2144.	14.5	74
16	Enhancing the Microbial Conversion of Glycerol to 1,3-Propanediol Using Metabolic Engineering. Organic Process Research and Development, 2011, 15, 189-202.	2.7	66
17	Importance of the cytochrome P450 monooxygenase CYP52 family for the sophorolipid-producing yeast<i>Candida bombicola</i>. FEMS Yeast Research, 2009, 9, 87-94.	2.3	64
18	Metabolic engineering of Escherichia coli into a versatile glycosylation platform: production of bio-active quercetin glycosides. Microbial Cell Factories, 2015, 14, 138.	4.0	62

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19	One step DNA assembly for combinatorial metabolic engineering. Metabolic Engineering, 2014, 23, 70-77.	7.0	58
20	Direct Combinatorial Pathway Optimization. ACS Synthetic Biology, 2017, 6, 224-232.	3.8	57
21	Standardization in synthetic biology: an engineering discipline coming of age. Critical Reviews in Biotechnology, 2018, 38, 647-656.	9.0	56
22	Engineering a novel biosynthetic pathway in <i>Escherichia coli</i> for production of renewable ethylene glycol. Biotechnology and Bioengineering, 2016, 113, 376-383.	3.3	54
23	Comparison of Different Strategies to Reduce Acetate Formation in Escherichia coli. Biotechnology Progress, 2007, 23, 0-0.	2.6	47
24	Integrating the Protein and Metabolic Engineering Toolkits for Next-Generation Chemical Biosynthesis. ACS Chemical Biology, 2013, 8, 662-672.	3.4	47
25	Development of an in vivo glucosylation platform by coupling production to growth: Production of phenolic glucosides by a glycosyltransferase of <i>Vitis vinifera</i>. Biotechnology and Bioengineering, 2015, 112, 1594-1603.	3.3	42
26	Comparison of DNA and RNA quantification methods suitable for parameter estimation in metabolic modeling of microorganisms. Analytical Biochemistry, 2006, 353, 198-203.	2.4	36
27	Promoter knock-in: a novel rational method for the fine tuning of genes. BMC Biotechnology, 2010, 10, 26.	3.3	35
28	Changes in substrate availability in Escherichia coli lead to rapid metabolite, flux and growth rate responses. Metabolic Engineering, 2013, 16, 115-129.	7.0	35
29	Orthogonal Assays Clarify the Oxidative Biochemistry of Taxol P450 CYP725A4. ACS Chemical Biology, 2016, 11, 1445-1451.	3.4	35
30	A constitutive expression system for highâ€throughput screening. Engineering in Life Sciences, 2011, 11, 10-19.	3.6	33
31	Chimeric LysR-Type Transcriptional Biosensors for Customizing Ligand Specificity Profiles toward Flavonoids. ACS Synthetic Biology, 2019, 8, 318-331.	3.8	33
32	Modularization and Response Curve Engineering of a Naringenin-Responsive Transcriptional Biosensor. ACS Synthetic Biology, 2018, 7, 1303-1314.	3.8	31
33	Predictive design of sigma factor-specific promoters. Nature Communications, 2020, 11, 5822.	12.8	31
34	Catching prompt metabolite dynamics in Escherichia coli with the BioScope at oxygen rich conditions. Metabolic Engineering, 2010, 12, 477-487.	7.0	30
35	Citrobacter werkmanii, a new candidate for the production of 1,3-propanediol: strain selection and carbon source optimization. Green Chemistry, 2012, 14, 2168.	9.0	30
36	High yield 1,3-propanediol production by rational engineering of the 3-hydroxypropionaldehyde bottleneck in Citrobacter werkmanii. Microbial Cell Factories, 2016, 15, 23.	4.0	30

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37	Effect of iclR and arcA deletions on physiology and metabolic fluxes in Escherichia coli BL21 (DE3). Biotechnology Letters, 2012, 34, 329-337.	2.2	27
38	Increasing recombinant protein production in Escherichia coli K12 through metabolic engineering. New Biotechnology, 2013, 30, 255-261.	4.4	25
39	Development of <i>N</i>â€•acetylneuraminic acid responsive biosensors based on the transcriptional regulator NanR. Biotechnology and Bioengineering, 2018, 115, 1855-1865.	3.3	23
40	Toward Predictable 5â€²UTRs in <i>Saccharomyces cerevisiae</i>: Development of a yUTR Calculator. ACS Synthetic Biology, 2018, 7, 622-634.	3.8	22
41	Modulating transcription through development of semi-synthetic yeast core promoters. PLoS ONE, 2019, 14, e0224476.	2.5	22
42	Unraveling the Leloir Pathway of Bifidobacterium bifidum: Significance of the Uridylyltransferases. Applied and Environmental Microbiology, 2013, 79, 7028-7035.	3.1	21
43	Comparison of protein quantification and extraction methods suitable for E. coli cultures. Biologicals, 2008, 36, 198-202.	1.4	19
44	Putting RNA to work: Translating RNA fundamentals into biotechnological engineering practice. Biotechnology Advances, 2015, 33, 1829-1844.	11.7	19
45	Heterologous expression and characterization of plant Taxadiene-5Î±-Hydroxylase (CYP725A4) in Escherichia coli. Protein Expression and Purification, 2017, 132, 60-67.	1.3	19
46	Metabolic characterisation of E. coli citrate synthase and phosphoenolpyruvate carboxylase mutants in aerobic cultures. Biotechnology Letters, 2006, 28, 1945-1953.	2.2	16
47	1,3-propanediol production with Citrobacter werkmanii DSM17579: effect of a dhaD knock-out. Microbial Cell Factories, 2014, 13, 70.	4.0	16
48	Challenges in the microbial production of flavonoids. Phytochemistry Reviews, 2018, 17, 229-247.	6.5	14
49	Mapping and refactoring pathway control through metabolic and protein engineering: The hexosamine biosynthesis pathway. Biotechnology Advances, 2020, 40, 107512.	11.7	13
50	Cloning, sequence analysis and heterologous expression of theMyrothecium gramineumorotidine-5Ã¢Â€Â²-monophosphate decarboxylase gene. FEMS Microbiology Letters, 2006, 261, 262-271.	1.8	12
51	Comparative fluxome and metabolome analysis for overproduction of succinate in <i>Escherichia coli</i>. Biotechnology and Bioengineering, 2016, 113, 817-829.	3.3	12
52	Recursive DNA Assembly Using Protected Oligonucleotide Duplex Assisted Cloning (PODAC). ACS Synthetic Biology, 2017, 6, 943-949.	3.8	12
53	<i>In Vitro</i> Microbial Metabolism of (+)-Catechin Reveals Fast and Slow Converters with Individual-Specific Microbial and Metabolite Markers. Journal of Agricultural and Food Chemistry, 2022, 70, 10405-10416.	5.2	11
54	Validation study of 24 deepwell microtiterplates to screen libraries of strains in metabolic engineering. Journal of Bioscience and Bioengineering, 2010, 110, 646-652.	2.2	10

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55	Unraveling the dha cluster in Citrobacter werkmanii: comparative genomic analysis of bacterial 1,3-propanediol biosynthesis clusters. Bioprocess and Biosystems Engineering, 2014, 37, 711-718.	3.4	9
56	The Donor-Dependent and Colon-Region-Dependent Metabolism of (+)-Catechin by Colonic Microbiota in the Simulator of the Human Intestinal Microbial Ecosystem. Molecules, 2022, 27, 73.	3.8	9
57	Biosensor-driven, model-based optimization of the orthogonally expressed naringenin biosynthesis pathway. Microbial Cell Factories, 2022, 21, 49.	4.0	8
58	Development of a selection system for the detection of L-ribose isomerase expressing mutants of Escherichia coli. Applied Microbiology and Biotechnology, 2007, 76, 1051-1057.	3.6	7
59	Improving the performance of machine learning models for biotechnology: The quest for deus ex machina. Biotechnology Advances, 2021, 53, 107858.	11.7	7
60	Metabolic engineering for glycoglycerolipids production in E. coli: Tuning phosphatidic acid and UDP-glucose pathways. Metabolic Engineering, 2020, 61, 106-119.	7.0	6
61	Transient metabolic modeling of Escherichia coli MG1655 and MG1655 Î"ackA-pta, Î"poxB Î"pppc ppc-p37 for recombinant Î²-galactosidase production. Journal of Industrial Microbiology and Biotechnology, 2010, 37, 793-803.	3.0	5
62	Transport kinetics of ectoine, an osmolyte produced by Brevibacterium epidermis. Biotechnology Letters, 2006, 28, 1741-1747.	2.2	4
63	Exploring of the feature space of de novo developed post-transcriptional riboregulators. PLoS Computational Biology, 2018, 14, e1006170.	3.2	4
64	Programming Biology: Expanding the Toolset for the Engineering of Transcription. , 2016, , 1-64.		2
65	Combinatorial Assembly of Multigene Pathways by Combining Single-Strand Assembly with Golden Gate Assembly. Methods in Molecular Biology, 2019, 1927, 111-123.	0.9	2
66	Novel DNA and RNA Elements. , 2016, , 65-99.		1
67	Importance of the cytochrome P450 monooxygenase CYP52 family for the sophorolipid-producing yeast Candida bombicola. FEMS Yeast Research, 2010, 10, 791-791.	2.3	0
68	Automated de novo design of ligand responsive RNA devices. New Biotechnology, 2016, 33, S14.	4.4	0
69	Editorial overview: Tissue, cell and pathway engineering. Current Opinion in Biotechnology, 2019, 59, iii-v.	6.6	0
70	Engineering transcriptional regulation in Escherichia coli using an archaeal TetR-family transcription factor. Gene, 2022, 809, 146010.	2.2	0