

# Hal S Alper

## List of Publications by Year in descending order

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159  
papers

12,905  
citations

22099

59  
h-index

25716

108  
g-index

167  
all docs

167  
docs citations

167  
times ranked

8065  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tuning genetic control through promoter engineering. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12678-12683.	3.3	775
2	Engineering Yeast Transcription Machinery for Improved Ethanol Tolerance and Production. Science, 2006, 314, 1565-1568.	6.0	730
3	Harnessing <i>Yarrowia lipolytica</i> lipogenesis to create a platform for lipid and biofuel production. Nature Communications, 2014, 5, 3131.	5.8	488
4	Identifying gene targets for the metabolic engineering of lycopene biosynthesis in <i>Escherichia coli</i> . Metabolic Engineering, 2005, 7, 155-164.	3.6	422
5	Construction of lycopene-overproducing <i>E. coli</i> strains by combining systematic and combinatorial gene knockout targets. Nature Biotechnology, 2005, 23, 612-616.	9.4	406
6	Global transcription machinery engineering: A new approach for improving cellular phenotype. Metabolic Engineering, 2007, 9, 258-267.	3.6	398
7	Machine learning-aided engineering of hydrolases for PET depolymerization. Nature, 2022, 604, 662-667.	13.7	396
8	Engineering for biofuels: exploiting innate microbial capacity or importing biosynthetic potential?. Nature Reviews Microbiology, 2009, 7, 715-723.	13.6	352
9	Promoter engineering: Recent advances in controlling transcription at the most fundamental level. Biotechnology Journal, 2013, 8, 46-58.	1.8	277
10	Tuning Gene Expression in <i>Yarrowia lipolytica</i> by a Hybrid Promoter Approach. Applied and Environmental Microbiology, 2011, 77, 7905-7914.	1.4	274
11	Metabolic engineering of muconic acid production in <i>Saccharomyces cerevisiae</i> . Metabolic Engineering, 2013, 15, 55-66.	3.6	251
12	Controlling promoter strength and regulation in <i>Saccharomyces cerevisiae</i> using synthetic hybrid promoters. Biotechnology and Bioengineering, 2012, 109, 2884-2895.	1.7	247
13	The development and characterization of synthetic minimal yeast promoters. Nature Communications, 2015, 6, 7810.	5.8	201
14	Engineering of Promoter Replacement Cassettes for Fine-Tuning of Gene Expression in <i>Saccharomyces cerevisiae</i> . Applied and Environmental Microbiology, 2006, 72, 5266-5273.	1.4	200
15	Expanding the metabolic engineering toolbox: more options to engineer cells. Trends in Biotechnology, 2007, 25, 132-137.	4.9	200
16	Characterization of plasmid burden and copy number in <i>Saccharomyces cerevisiae</i> for optimization of metabolic engineering applications. FEMS Yeast Research, 2013, 13, 107-116.	1.1	185
17	Short Synthetic Terminators for Improved Heterologous Gene Expression in Yeast. ACS Synthetic Biology, 2015, 4, 824-832.	1.9	174
18	Use of expression-enhancing terminators in <i>Saccharomyces cerevisiae</i> to increase mRNA half-life and improve gene expression control for metabolic engineering applications. Metabolic Engineering, 2013, 19, 88-97.	3.6	171

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19	Exploiting biological complexity for strain improvement through systems biology. <i>Nature Biotechnology</i> , 2004, 22, 1261-1267.	9.4	166
20	Synthetic biology and molecular genetics in non-conventional yeasts: Current tools and future advances. <i>Fungal Genetics and Biology</i> , 2016, 89, 126-136.	0.9	166
21	Metabolic engineering in the host <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2018, 50, 192-208.	3.6	157
22	Linking high-resolution metabolic flux phenotypes and transcriptional regulation in yeast modulated by the global regulator Gcn4p. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 6477-6482.	3.3	154
23	Rewiring yeast sugar transporter preference through modifying a conserved protein motif. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 131-136.	3.3	151
24	Optimizing pentose utilization in yeast: the need for novel tools and approaches. <i>Biotechnology for Biofuels</i> , 2010, 3, 24.	6.2	146
25	Rewiring <i>Yarrowia lipolytica</i> toward triacetic acid lactone for materials generation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2096-2101.	3.3	144
26	Directed Evolution of Xylose Isomerase for Improved Xylose Catabolism and Fermentation in the Yeast <i>Saccharomyces cerevisiae</i> . <i>Applied and Environmental Microbiology</i> , 2012, 78, 5708-5716.	1.4	136
27	Compartmentalized microbes and co-cultures in hydrogels for on-demand bioproduction and preservation. <i>Nature Communications</i> , 2020, 11, 563.	5.8	134
28	Improvement of Xylose Uptake and Ethanol Production in Recombinant <i>Saccharomyces cerevisiae</i> through an Inverse Metabolic Engineering Approach. <i>Applied and Environmental Microbiology</i> , 2005, 71, 8249-8256.	1.4	133
29	Expanding the chemical palate of cells by combining systems biology and metabolic engineering. <i>Metabolic Engineering</i> , 2012, 14, 289-297.	3.6	131
30	Functional Survey for Heterologous Sugar Transport Proteins, Using <i>Saccharomyces cerevisiae</i> as a Host. <i>Applied and Environmental Microbiology</i> , 2011, 77, 3311-3319.	1.4	130
31	An evolutionary metabolic engineering approach for enhancing lipogenesis in <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2015, 29, 36-45.	3.6	126
32	Design of synthetic yeast promoters via tuning of nucleosome architecture. <i>Nature Communications</i> , 2014, 5, 4002.	5.8	123
33	Systems metabolic engineering: Genome-scale models and beyond. <i>Biotechnology Journal</i> , 2010, 5, 647-659.	1.8	122
34	Metabolic engineering of <i>Yarrowia lipolytica</i> for itaconic acid production. <i>Metabolic Engineering</i> , 2015, 32, 66-73.	3.6	119
35	A molecular transporter engineering approach to improving xylose catabolism in <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , 2012, 14, 401-411.	3.6	116
36	Engineering 4-coumaroyl-CoA derived polyketide production in <i>Yarrowia lipolytica</i> through a $\beta^2$ -oxidation mediated strategy. <i>Metabolic Engineering</i> , 2020, 57, 174-181.	3.6	115

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37	RNA-aptamers-in-droplets (RAPID) high-throughput screening for secretory phenotypes. <i>Nature Communications</i> , 2017, 8, 332.	5.8	112
38	Generalizing a hybrid synthetic promoter approach in <i>Yarrowia lipolytica</i> . <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 3037-3052.	1.7	107
39	Synthetic Biology Expands the Industrial Potential of <i>Yarrowia lipolytica</i> . <i>Trends in Biotechnology</i> , 2018, 36, 1085-1095.	4.9	107
40	In vivo continuous evolution of genes and pathways in yeast. <i>Nature Communications</i> , 2016, 7, 13051.	5.8	106
41	Frontiers of yeast metabolic engineering: diversifying beyond ethanol and <i>Saccharomyces</i> . <i>Current Opinion in Biotechnology</i> , 2013, 24, 1023-1030.	3.3	98
42	Biosensor-Enabled Directed Evolution to Improve Muconic Acid Production in <i>Saccharomyces cerevisiae</i> . <i>Biotechnology Journal</i> , 2017, 12, 1600687.	1.8	98
43	Enabling tools for high-throughput detection of metabolites: Metabolic engineering and directed evolution applications. <i>Biotechnology Advances</i> , 2017, 35, 950-970.	6.0	97
44	Heterologous production of pentane in the oleaginous yeast <i>Yarrowia lipolytica</i> . <i>Journal of Biotechnology</i> , 2013, 165, 184-194.	1.9	95
45	Systematic testing of enzyme perturbation sensitivities via graded dCas9 modulation in <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , 2017, 40, 14-22.	3.6	95
46	Applications, challenges, and needs for employing synthetic biology beyond the lab. <i>Nature Communications</i> , 2021, 12, 1390.	5.8	94
47	Metabolic engineering of microbial cell factories for production of nutraceuticals. <i>Microbial Cell Factories</i> , 2019, 18, 46.	1.9	91
48	Enabling xylose utilization in <i>Yarrowia lipolytica</i> for lipid production. <i>Biotechnology Journal</i> , 2016, 11, 1230-1240.	1.8	90
49	Metabolic engineering of <i>Saccharomyces cerevisiae</i> for itaconic acid production. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 8155-8164.	1.7	87
50	A condition-specific codon optimization approach for improved heterologous gene expression in <i>Saccharomyces cerevisiae</i> . <i>BMC Systems Biology</i> , 2014, 8, 33.	3.0	83
51	<i>Yarrowia lipolytica</i> : more than an oleaginous workhorse. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 9251-9262.	1.7	80
52	Characterization of lycopene-overproducing <i>E. coli</i> strains in high cell density fermentations. <i>Applied Microbiology and Biotechnology</i> , 2006, 72, 968-974.	1.7	74
53	Validating genome-wide CRISPR-Cas9 function improves screening in the oleaginous yeast <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2019, 55, 102-110.	3.6	70
54	Optimization of a Yeast RNA Interference System for Controlling Gene Expression and Enabling Rapid Metabolic Engineering. <i>ACS Synthetic Biology</i> , 2014, 3, 307-313.	1.9	67

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55	Surveying the lipogenesis landscape in <i>Yarrowia lipolytica</i> through understanding the function of a Mga2p regulatory protein mutant. <i>Metabolic Engineering</i> , 2015, 31, 102-111.	3.6	66
56	A comparative analysis of single cell and droplet-based FACS for improving production phenotypes: Riboflavin overproduction in <i>Yarrowia lipolytica</i> . <i>Metabolic Engineering</i> , 2018, 47, 346-356.	3.6	66
57	Enabling glucose/xylose co-transport in yeast through the directed evolution of a sugar transporter. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 10215-10223.	1.7	65
58	Systematic and evolutionary engineering of a xylose isomerase-based pathway in. <i>Biotechnology for Biofuels</i> , 2014, 7, 122.	6.2	65
59	De novo resveratrol production through modular engineering of an <i>Escherichia coli</i> – <i>Saccharomyces cerevisiae</i> co-culture. <i>Microbial Cell Factories</i> , 2020, 19, 143.	1.9	63
60	Development of a growth coupled and multi-layered dynamic regulation network balancing malonyl-CoA node to enhance (2S)-naringenin biosynthesis in <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2021, 67, 41-52.	3.6	63
61	Developing a <i>piggyBac</i> Transposon System and Compatible Selection Markers for Insertional Mutagenesis and Genome Engineering in <i>Yarrowia lipolytica</i> . <i>Biotechnology Journal</i> , 2018, 13, e1800022.	1.8	62
62	Systematic and evolutionary engineering of a xylose isomerase-based pathway in <i>Saccharomyces cerevisiae</i> for efficient conversion yields. <i>Biotechnology for Biofuels</i> , 2014, 7, 122.	6.2	61
63	Draft Genome Sequence of the Oleaginous Yeast <i>Yarrowia lipolytica</i> PO1f, a Commonly Used Metabolic Engineering Host. <i>Genome Announcements</i> , 2014, 2, .	0.8	59
64	The synthetic biology toolbox for tuning gene expression in yeast. <i>FEMS Yeast Research</i> , 2014, 15, n/a-n/a.	1.1	56
65	Uncovering the gene knockout landscape for improved lycopene production in <i>E. coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2008, 78, 801-810.	1.7	54
66	Advances and current limitations in transcript-level control of gene expression. <i>Current Opinion in Biotechnology</i> , 2015, 34, 98-104.	3.3	54
67	A high-throughput screen for hyaluronic acid accumulation in recombinant <i>Escherichia coli</i> transformed by libraries of engineered sigma factors. <i>Biotechnology and Bioengineering</i> , 2008, 101, 788-796.	1.7	53
68	Enabling Graded and Large-Scale Multiplex of Desired Genes Using a Dual-Mode dCas9 Activator in <i>Saccharomyces cerevisiae</i> . <i>ACS Synthetic Biology</i> , 2017, 6, 1931-1943.	1.9	53
69	Production of $\gamma$ -linolenic acid in <i>Yarrowia lipolytica</i> using low-temperature fermentation. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 8809-8816.	1.7	52
70	Metabolic engineering of strains: from industrial-scale to lab-scale chemical production. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2015, 42, 423-436.	1.4	50
71	T7 Polymerase Expression of Guide RNAs <i>in vivo</i> Allows Exportable CRISPR-Cas9 Editing in Multiple Yeast Hosts. <i>ACS Synthetic Biology</i> , 2018, 7, 1075-1084.	1.9	50
72	Valorization of pelagic sargassum biomass into sustainable applications: Current trends and challenges. <i>Journal of Environmental Management</i> , 2021, 283, 112013.	3.8	50

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73	Engineering a Glucosamine-6-phosphate Responsive <i>glmS</i> Ribozyme Switch Enables Dynamic Control of Metabolic Flux in <i>Bacillus subtilis</i> for Overproduction of <i>N</i> -Acetylglucosamine. ACS Synthetic Biology, 2018, 7, 2423-2435.	1.9	49
74	Bio-synthesis of food additives and colorants-a growing trend in future food. Biotechnology Advances, 2021, 47, 107694.	6.0	47
75	Evolution of an alkane-inducible biosensor for increased responsiveness to short-chain alkanes. Journal of Biotechnology, 2012, 158, 75-79.	1.9	46
76	Systems Metabolic Engineering Meets Machine Learning: A New Era for Data-Driven Metabolic Engineering. Biotechnology Journal, 2019, 14, e1800416.	1.8	45
77	Microdroplet-Assisted Screening of Biomolecule Production for Metabolic Engineering Applications. Trends in Biotechnology, 2020, 38, 701-714.	4.9	45
78	Expanding the metabolic engineering toolbox with directed evolution. Biotechnology Journal, 2013, 8, 1397-1410.	1.8	43
79	Increasing expression level and copy number of a <i>Yarrowia lipolytica</i> plasmid through regulated centromere function. FEMS Yeast Research, 2014, 14, n/a-n/a.	1.1	43
80	Condition-specific promoter activities in <i>Saccharomyces cerevisiae</i> . Microbial Cell Factories, 2018, 17, 58.	1.9	39
81	Recent advancements in fungal-derived fuel and chemical production and commercialization. Current Opinion in Biotechnology, 2019, 57, 1-9.	3.3	39
82	Re-engineering multicloning sites for function and convenience. Nucleic Acids Research, 2011, 39, e92-e92.	6.5	38
83	Direct production of fatty alcohols from glucose using engineered strains of <i>Yarrowia lipolytica</i> . Metabolic Engineering Communications, 2020, 10, e00105.	1.9	37
84	Evaluating the influence of selection markers on obtaining selected pools and stable cell lines in human cells. Biotechnology Journal, 2013, 8, 811-821.	1.8	36
85	Coordinated transcription factor and promoter engineering to establish strong expression elements in <i>Saccharomyces cerevisiae</i> . Biotechnology Journal, 2016, 11, 866-876.	1.8	36
86	Largely enhanced bioethanol production through the combined use of lignin-modified sugarcane and xylose fermenting yeast strain. Bioresource Technology, 2018, 256, 312-320.	4.8	35
87	Using fungible biosensors to evolve improved alkaloid biosyntheses. Nature Chemical Biology, 2022, 18, 981-989.	3.9	35
88	Expanding the Chemical Palette of Industrial Microbes: Metabolic Engineering for Type III PKS-Derived Polyketides. Biotechnology Journal, 2019, 14, e1700463.	1.8	34
89	The genome editing toolbox: a spectrum of approaches for targeted modification. Current Opinion in Biotechnology, 2014, 30, 87-94.	3.3	31
90	Modular Ligation Extension of Guide RNA Operons (LEGO) for Multiplexed dCas9 Regulation of Metabolic Pathways in <i>Saccharomyces cerevisiae</i> . Biotechnology Journal, 2018, 13, e1700582.	1.8	31

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91	Evolving a Generalist Biosensor for Bicyclic Monoterpenes. <i>ACS Synthetic Biology</i> , 2022, 11, 265-272.	1.9	31
92	Central metabolic nodes for diverse biochemical production. <i>Current Opinion in Chemical Biology</i> , 2016, 35, 37-42.	2.8	30
93	Valorizing a hydrothermal liquefaction aqueous phase through co-production of chemicals and lipids using the oleaginous yeast <i>Yarrowia lipolytica</i> . <i>Bioresource Technology</i> , 2020, 313, 123639.	4.8	30
94	Innovation at the intersection of synthetic and systems biology. <i>Current Opinion in Biotechnology</i> , 2012, 23, 712-717.	3.3	29
95	Producing Biochemicals in <i>Yarrowia lipolytica</i> from Xylose through a Strain Mating Approach. <i>Biotechnology Journal</i> , 2020, 15, e1900304.	1.8	28
96	Yeast Terminator Function Can Be Modulated and Designed on the Basis of Predictions of Nucleosome Occupancy. <i>ACS Synthetic Biology</i> , 2017, 6, 2086-2095.	1.9	26
97	Promoter and Terminator Discovery and Engineering. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2016, 162, 21-44.	0.6	25
98	Synthetic Biology for Specialty Chemicals. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2015, 6, 35-52.	3.3	24
99	Transcriptomics-Guided Design of Synthetic Promoters for a Mammalian System. <i>ACS Synthetic Biology</i> , 2016, 5, 1455-1465.	1.9	24
100	Identifying Functionally Important Mutations from Phenotypically Diverse Sequence Data. <i>Applied and Environmental Microbiology</i> , 2006, 72, 3696-3701.	1.4	23
101	Production of optically pure (+)-lactic acid from waste plywood chips using an isolated thermotolerant <i>Enterococcus faecalis</i> SI at a pilot scale. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2018, 45, 961-970.	1.4	23
102	Using the Cre/lox system for targeted integration into the human genome: FAS-LoxP pairing and delayed introduction of Cre DNA improve gene swapping efficiency. <i>Biotechnology Journal</i> , 2012, 7, 898-908.	1.8	22
103	Non-conventional hosts for the production of fuels and chemicals. <i>Current Opinion in Chemical Biology</i> , 2020, 59, 15-22.	2.8	22
104	Identifying and retargeting transcriptional hot spots in the human genome. <i>Biotechnology Journal</i> , 2016, 11, 1100-1109.	1.8	21
105	Identification of gene knockdown targets conferring enhanced isobutanol and 1-butanol tolerance to <i>Saccharomyces cerevisiae</i> using a tunable RNAi screening approach. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 10005-10018.	1.7	21
106	Improvement of lactic acid production in <i>Saccharomyces cerevisiae</i> by a deletion of <i>ssb1</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 2016, 43, 87-96.	1.4	20
107	Ameliorating the Metabolic Burden of the Co-expression of Secreted Fungal Cellulases in a High Lipid-Accumulating <i>Yarrowia lipolytica</i> Strain by Medium C/N Ratio and a Chemical Chaperone. <i>Frontiers in Microbiology</i> , 2018, 9, 3276.	1.5	20
108	Engineering <i>Yarrowia lipolytica</i> for the production of cyclopropanated fatty acids. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2018, 45, 881-888.	1.4	19

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109	Bidirectional titration of yeast gene expression using a pooled CRISPR guide RNA approach. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18424-18430.	3.3	19
110	Model-based design of synthetic, biological systems. Chemical Engineering Science, 2013, 103, 2-11.	1.9	18
111	Strategies for directed and adapted evolution as part of microbial strain engineering. Journal of Chemical Technology and Biotechnology, 2019, 94, 366-376.	1.6	18
112	Improving ionic liquid tolerance in <i>Saccharomyces cerevisiae</i> through heterologous expression and directed evolution of an <i>ILT1</i> homolog from <i>Yarrowia lipolytica</i> . Journal of Industrial Microbiology and Biotechnology, 2019, 46, 1715-1724.	1.4	17
113	Progress in the metabolic engineering of bio-based lactams and their $\gamma$ -amino acids precursors. Biotechnology Advances, 2020, 43, 107587.	6.0	17
114	Mapping enzyme catalysis with metabolic biosensing. Nature Communications, 2021, 12, 6803.	5.8	17
115	An enzyme-coupled assay enables rapid protein engineering for geraniol production in yeast. Biochemical Engineering Journal, 2018, 139, 95-100.	1.8	16
116	An integrated in vivo/in vitro framework to enhance cell-free biosynthesis with metabolically rewired yeast extracts. Nature Communications, 2021, 12, 5139.	5.8	16
117	Metabolic pathway engineering. Synthetic and Systems Biotechnology, 2018, 3, 1-2.	1.8	15
118	High-efficiency transformation of <i>Yarrowia lipolytica</i> using electroporation. FEMS Yeast Research, 2018, 18, .	1.1	15
119	Sorting for secreted molecule production using a biosensor-in-microdroplet approach. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
120	Opportunities Surrounding the Use of <i>Sargassum</i> Biomass as Precursor of Biogas, Bioethanol, and Biodiesel Production. Frontiers in Marine Science, 2022, 8, .	1.2	15
121	Metabolic engineering challenges in the post-genomic era. Chemical Engineering Science, 2004, 59, 5009-5017.	1.9	13
122	Bioproduced Proteins On Demand (Bio-POD) in hydrogels using <i>Pichia pastoris</i> . Bioactive Materials, 2021, 6, 2390-2399.	8.6	13
123	Microbial valorization of underutilized and nonconventional waste streams. Journal of Industrial Microbiology and Biotechnology, 2022, 49, .	1.4	13
124	Linking Yeast Gcn5p Catalytic Function and Gene Regulation Using a Quantitative, Graded Dominant Mutant Approach. PLoS ONE, 2012, 7, e36193.	1.1	12
125	Expanding beyond canonical metabolism: Interfacing alternative elements, synthetic biology, and metabolic engineering. Synthetic and Systems Biotechnology, 2018, 3, 20-33.	1.8	12
126	Bioprospecting and evolving alternative xylose and arabinose pathway enzymes for use in <i>Saccharomyces cerevisiae</i> . Applied Microbiology and Biotechnology, 2016, 100, 2487-2498.	1.7	11



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127	Enhanced scale and scope of genome engineering and regulation using CRISPR/Cas in <i>Saccharomyces cerevisiae</i> . <i>FEMS Yeast Research</i> , 2019, 19, .	1.1	11
128	Thermodynamic and first-principles biomolecular simulations applied to synthetic biology: promoter and aptamer designs. <i>Molecular Systems Design and Engineering</i> , 2018, 3, 19-37.	1.7	10
129	Design and synthesis of synthetic UP elements for modulation of gene expression in <i>Escherichia coli</i> . <i>Synthetic and Systems Biotechnology</i> , 2019, 4, 99-106.	1.8	10
130	Design, Evolution, and Characterization of a Xylose Biosensor in <i>Escherichia coli</i> Using the XylR/ <i>xytO</i> System with an Expanded Operating Range. <i>ACS Synthetic Biology</i> , 2020, 9, 2714-2722.	1.9	10
131	Enabling commercial success of industrial biotechnology. <i>Science</i> , 2021, 374, 1563-1565.	6.0	10
132	CRISPR-PIN: Modifying gene position in the nucleus via dCas9-mediated tethering. <i>Synthetic and Systems Biotechnology</i> , 2019, 4, 73-78.	1.8	9
133	Shifting the distribution: modulation of the lipid profile in <i>Yarrowia lipolytica</i> via iron content. <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 1571-1581.	1.7	9
134	Considering Strain Variation and Non-Type Strains for Yeast Metabolic Engineering Applications. <i>Life</i> , 2022, 12, 510.	1.1	9
135	Xylan catabolism is improved by blending bioprospecting and metabolic pathway engineering in <i>Saccharomyces cerevisiae</i> . <i>Biotechnology Journal</i> , 2015, 10, 575-575.	1.8	8
136	Identification and characterization of novel xylose isomerases from a <i>Bos taurus</i> fecal metagenome. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 9465-9477.	1.7	8
137	Design and Evaluation of Synthetic Terminators for Regulating Mammalian Cell Transgene Expression. <i>ACS Synthetic Biology</i> , 2019, 8, 1263-1275.	1.9	7
138	Intracellular biosensor-based dynamic regulation to manipulate gene expression at the spatiotemporal level. <i>Critical Reviews in Biotechnology</i> , 2023, 43, 646-663.	5.1	6
139	Editorial: How multiplexed tools and approaches speed up the progress of metabolic engineering. <i>Biotechnology Journal</i> , 2013, 8, 506-507.	1.8	5
140	Biocompatible Materials Enabled by Biobased Production of Pyomelanin Isoforms Using an Engineered <i>Yarrowia lipolytica</i> . <i>Advanced Functional Materials</i> , 2022, 32, 2109366.	7.8	5
141	Systems Metabolic Engineering Approaches for Rewiring Cells. <i>Biotechnology Journal</i> , 2019, 14, e1900312.	1.8	4
142	Improving Spinach2-and Broccoli-based biosensors for single and double analytes. <i>Biotechnology Notes</i> , 2020, 1, 2-8.	0.7	4
143	Data-Driven Approach to Decipher the Role of Triglyceride Composition on the Thermomechanical Properties of Thermosetting Polymers Using Vegetable and Microbial Oils. <i>ACS Applied Polymer Materials</i> , 2021, 3, 4485-4494.	2.0	4
144	From Pathways to Genomes and Beyond: The Metabolic Engineering Toolbox and Its Place in Biofuels Production. <i>Green</i> , 2011, 1, .	0.4	3

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145	Emerging synthetic biology tools for engineering mammalian cell systems and expediting cell line development. <i>Current Opinion in Chemical Engineering</i> , 2012, 1, 403-410.	3.8	3
146	Metabolic engineering efforts for chemical products special issue. <i>Metabolic Engineering</i> , 2020, 58, 1.	3.6	3
147	Uncovering latent xylose utilization potential in <i>Saccharomyces cerevisiae</i> . <i>Biofuels</i> , 2010, 1, 681-684.	1.4	2
148	Genome Engineering of <i>Yarrowia lipolytica</i> with the PiggyBac Transposon System. <i>Methods in Molecular Biology</i> , 2021, 2307, 1-24.	0.4	2
149	<i>Yarrowia lipolytica</i> as a Cell Factory for Oleochemical Biotechnology. , 2016, , 1-18.		2
150	Building synthetic cell systems from the ground up. <i>Current Opinion in Biotechnology</i> , 2012, 23, 641-643.	3.3	1
151	Editorial Introduction. <i>Metabolic Engineering</i> , 2018, 50, 1.	3.6	1
152	Modular biocatalysis for polyamines. <i>Nature Catalysis</i> , 2021, 4, 449-450.	16.1	1
153	<i>Yarrowia lipolytica</i> as a Cell Factory for Oleochemical Biotechnology. , 2017, , 1-19.		1
154	CONVERTING CELLS INTO CELLULAR FACTORIES. <i>Computational and Structural Biotechnology Journal</i> , 2012, 3, e201210001.	1.9	0
155	Harnessing Microbial Cells Through Advanced Technologies and Conventional Strategies. <i>Biotechnology Journal</i> , 2017, 12, 1700558.	1.8	0
156	Editorial overview: Energy biotechnology: Biotechnology solutions for our energy needs. <i>Current Opinion in Biotechnology</i> , 2018, 50, v-vi.	3.3	0
157	Navigating genetic diversity by painting the bacteria red. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 10824-10826.	3.3	0
158	Tools and strategies for metabolic engineering special issue - Editorial introduction. <i>Metabolic Engineering</i> , 2021, 63, 1.	3.6	0
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