Jay D Keasling

List of Publications by Year
in descending order

514 papers	53,284 citations	1296 112 h-index	2351 205 g-index
555 all docs	555 docs citations	555 times ranked	34736 citing authors

#	Article	IF	Citations
1	Supplying plant natural products by yeast cell factories. Current Opinion in Green and Sustainable Chemistry, 2022, 33, 100567.	3.2	14
2	Assembly and Evolution of Artificial Metalloenzymes within E. coli Nissle 1917 for Enantioselective and Site-Selective Functionalization of Câ”€H and Câ•C Bonds. Journal of the American Chemical Society, 2022, 144, 883-890.	6.6	16
3	Lower-Cost, Lower-Carbon Production of Circular Polydiketoenamine Plastics. ACS Sustainable Chemistry and Engineering, 2022, 10, 2740-2749.	3.2	6
4	Sustainable manufacturing with synthetic biology. Nature Biotechnology, 2022, 40, 304-307.	9.4	46
5	Nitrogen Metabolism in Pseudomonas putida: Functional Analysis Using Random Barcode Transposon Sequencing. Applied and Environmental Microbiology, 2022, 88, e0243021.	1.4	8
6	A FAIR-compliant parts catalogue for genome engineering and expression control in Saccharomyces cerevisiae. Synthetic and Systems Biotechnology, 2022, 7, 657-663.	1.8	4
7	Biosynthesis of polycyclopropanated high energy biofuels. Joule, 2022, 6, 1590-1605.	11.7	38
8	Optimizing the biosynthesis of oxygenated and acetylated Taxol precursors in Saccharomyces cerevisiae using advanced bioprocessing strategies. Biotechnology and Bioengineering, 2021, 118, 279-293.	1.7	39
9	A Reporter System for Cytosolic Protein Aggregates in Yeast. ACS Synthetic Biology, 2021, 10, 466-477.	1.9	9
10	Integrating continuous hypermutation with highâ€throughput screening for optimization of cis,cisâ€muconic acid production in yeast. Microbial Biotechnology, 2021, 14, 2617-2626.	2.0	22
11	Biofuels for a sustainable future. Cell, 2021, 184, 1636-1647.	13.5	156
12	Correction for Thompson et al., â€œFatty Acid and Alcohol Metabolism in Pseudomonas putida: Functional Analysis Using Random Barcode Transposon Sequencingâ€• Applied and Environmental Microbiology, 2021, 87, .	1.4	0
13	Leveling the cost and carbon footprint of circular polymers that are chemically recycled to monomer. Science Advances, 2021, 7, .	4.7	54
14	Engineering yeast metabolism for the discovery and production of polyamines and polyamine analogues. Nature Catalysis, 2021, 4, 498-509.	16.1	26
15	Microbial production of advanced biofuels. Nature Reviews Microbiology, 2021, 19, 701-715.	13.6	126
16	A synthetic RNA-mediated evolution system in yeast. Nucleic Acids Research, 2021, 49, e88-e88.	6.5	17
17	The Design-Build-Test-Learn cycle for metabolic engineering of Streptomycetes. Essays in Biochemistry, 2021, 65, 261-275.	2.1	17
18	A synthetic promoter system for well-controlled protein expression with different carbon sources in Saccharomyces cerevisiae. Microbial Cell Factories, 2021, 20, 202.	1.9	20

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19	Unnatural biosynthesis by an engineered microorganism with heterologously expressed natural enzymes and an artificial metalloenzyme. Nature Chemistry, 2021, 13, 1186-1191.	6.6	56
20	Lepidopteran mevalonate pathway optimization in Escherichia coli efficiently produces isoprenol analogs for next-generation biofuels. Metabolic Engineering, 2021, 68, 210-219.	3.6	8
21	Insight into the Mechanism of Phenylacetate Decarboxylase (PhdB), a Tolueneâ€Producing Glycyl Radical Enzyme. ChemBioChem, 2020, 21, 663-671.	1.3	14
22	Leveraging host metabolism for bisdemethoxycurcumin production in Pseudomonas putida. Metabolic Engineering Communications, 2020, 10, e00119.	1.9	41
23	Identification, Characterization, and Application of a Highly Sensitive Lactam Biosensor from Pseudomonas putida. ACS Synthetic Biology, 2020, 9, 53-62.	1.9	31
24	Structural Mechanism of Regioselectivity in an Unusual Bacterial Acyl-CoA Dehydrogenase. Journal of the American Chemical Society, 2020, 142, 835-846.	6.6	9
25	Evolution-guided engineering of small-molecule biosensors. Nucleic Acids Research, 2020, 48, e3-e3.	6.5	92
26	Combining mechanistic and machine learning models for predictive engineering and optimization of tryptophan metabolism. Nature Communications, 2020, 11, 4880.	5.8	137
27	High titer methyl ketone production with tailored Pseudomonas taiwanensis VLB120. Metabolic Engineering, 2020, 62, 84-94.	3.6	15
28	Engineering Plant Synthetic Pathways for the Biosynthesis of Novel Antifungals. ACS Central Science, 2020, 6, 1394-1400.	5.3	22
29	Dietary Change Enables Robust Growth-Coupling of Heterologous Methyltransferase Activity in Yeast. ACS Synthetic Biology, 2020, 9, 3408-3415.	1.9	3
30	A bimodular PKS platform that expands the biological design space. Metabolic Engineering, 2020, 61, 389-396.	3.6	2
31	Promoter Architecture and Promoter Engineering in Saccharomyces cerevisiae. Metabolites, 2020, 10, 320.	1.3	57
32	Regulatory control circuits for stabilizing long-term anabolic product formation in yeast. Metabolic Engineering, 2020, 61, 369-380.	3.6	17
33	Genome-scale metabolic rewiring improves titers rates and yields of the non-native product indigoidine at scale. Nature Communications, 2020, 11, 5385.	5.8	67
34	Investigation of Bar-seq as a method to study population dynamics of Saccharomyces cerevisiae deletion library during bioreactor cultivation. Microbial Cell Factories, 2020, 19, 167.	1.9	9
35	Fatty Acid and Alcohol Metabolism in Pseudomonas putida: Functional Analysis Using Random Barcode Transposon Sequencing. Applied and Environmental Microbiology, 2020, 86, .	1.4	52
36	Enhanced production of taxadiene in Saccharomyces cerevisiae. Microbial Cell Factories, 2020, 19, 200.	1.9	59

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37	Chemoinformatic-Guided Engineering of Polyketide Synthases. Journal of the American Chemical Society, 2020, 142, 9896-9901.	6.6	13
38	An iron (II) dependent oxygenase performs the last missing step of plant lysine catabolism. Nature Communications, 2020, 11, 2931.	5.8	11
39	Investigation of Indigoidine Synthetase Reveals a Conserved Active-Site Base Residue of Nonribosomal Peptide Synthetase Oxidases. Journal of the American Chemical Society, 2020, 142, 10931-10935.	6.6	23
40	Response of Pseudomonas putida to Complex, Aromaticâ€Rich Fractions from Biomass. ChemSusChem, 2020, 13, 4455-4467.	3.6	23
41	Adenosine Triphosphate and Carbon Efficient Route to Second Generation Biofuel Isopentanol. ACS Synthetic Biology, 2020, 9, 468-474.	1.9	9
42	New frontiers: harnessing pivotal advances in microbial engineering for the biosynthesis of plant-derived terpenoids. Current Opinion in Biotechnology, 2020, 65, 88-93.	3.3	49
43	Directed evolution of VanR biosensor specificity in yeast. Biotechnology Notes, 2020, 1, 9-15.	0.7	17
44	Programmable polyketide biosynthesis platform for production of aromatic compounds in yeast. Synthetic and Systems Biotechnology, 2020, 5, 11-18.	1.8	13
45	High-Resolution Scanning of Optimal Biosensor Reporter Promoters in Yeast. ACS Synthetic Biology, 2020, 9, 218-226.	1.9	26
46	Enhancing Terminal Deoxynucleotidyl Transferase Activity on Substrates with 3â€² Terminal Structures for Enzymatic De Novo DNA Synthesis. Genes, 2020, 11, 102.	1.0	26
47	Structure and Function of BorB, the Type II Thioesterase from the Borrelidin Biosynthetic Gene Cluster. Biochemistry, 2020, 59, 1630-1639.	1.2	10
48	Engineering Natural Product Biosynthetic Pathways to Produce Commodity and Specialty Chemicals. , 2020, , 352-376.		0
49	Technical Advances to Accelerate Modular Type I Polyketide Synthase Engineering towards a Retro-biosynthetic Platform. Biotechnology and Bioprocess Engineering, 2019, 24, 413-423.	1.4	17
50	Distinct functional roles for hopanoid composition in the chemical tolerance of Zymomonas mobilis. Molecular Microbiology, 2019, 112, 1564-1575.	1.2	28
51	Automated â€œCells-To-Peptidesâ€•Sample Preparation Workflow for High-Throughput, Quantitative Proteomic Assays of Microbes. Journal of Proteome Research, 2019, 18, 3752-3761.	1.8	32
52	Optimization of the IPP-bypass mevalonate pathway and fed-batch fermentation for the production of isoprenol in Escherichia coli. Metabolic Engineering, 2019, 56, 85-96.	3.6	46
53	Omics-driven identification and elimination of valerolactam catabolism in Pseudomonas putida KT2440 for increased product titer. Metabolic Engineering Communications, 2019, 9, e00098.	1.9	25
54	Robust Characterization of Two Distinct Glutarate Sensing Transcription Factors of Pseudomonas putida <scp>l</scp>-Lysine Metabolism. ACS Synthetic Biology, 2019, 8, 2385-2396.	1.9	17

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55	Mevalonate Pathway Promiscuity Enables Noncanonical Terpene Production. ACS Synthetic Biology, 2019, 8, 2238-2247.	1.9	22
56	Molecular basis for interactions between an acyl carrier protein and a ketosynthase. Nature Chemical Biology, 2019, 15, 669-671.	3.9	41
57	A Highâ€Throughput Mass Spectrometric Enzyme Activity Assay Enabling the Discovery of Cytochrome P450 Biocatalysts. Angewandte Chemie - International Edition, 2019, 58, 10114-10119.	7.2	27
58	A Highâ€Throughput Mass Spectrometric Enzyme Activity Assay Enabling the Discovery of Cytochrome P450 Biocatalysts. Angewandte Chemie, 2019, 131, 10220-10225.	1.6	8
59	Sustainable bioproduction of the blue pigment indigoidine: Expanding the range of heterologous products inR. toruloidesto include non-ribosomal peptides. Green Chemistry, 2019, 21, 3394-3406.	4.6	57
60	Structural insights into dehydratase substrate selection for the borrelidin and fluvirucin polyketide synthases. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 1225-1235.	1.4	7
61	Building a global alliance of biofoundries. Nature Communications, 2019, 10, 2040.	5.8	167
62	Massively Parallel Fitness Profiling Reveals Multiple Novel Enzymes in Pseudomonas putida Lysine Metabolism. MBio, 2019, 10, .	1.8	60
63	Engineered Reversal of Function in Glycolytic Yeast Promoters. ACS Synthetic Biology, 2019, 8, 1462-1468.	1.9	12
64	Coupling S-adenosylmethionineâ€“dependent methylation to growth: Design and uses. PLoS Biology, 2019, 17, e2007050.	2.6	39
65	Complete biosynthesis of cannabinoids and their unnatural analogues in yeast. Nature, 2019, 567, 123-126.	13.7	473
66	A rapid methods development workflow for high-throughput quantitative proteomic applications. PLoS ONE, 2019, 14, e0211582.	1.1	17
67	Liquid Chromatography and Mass Spectrometry Analysis of Isoprenoid Intermediates in Escherichia coli. Methods in Molecular Biology, 2019, 1859, 209-224.	0.4	13
68	Synthetic Biology for Fundamental Biochemical Discovery. Biochemistry, 2019, 58, 1464-1469.	1.2	9
69	Isolation and Characterization of Bacterial Cellulase Producers for Biomass Deconstruction: A Microbiology Laboratory Course. Journal of Microbiology and Biology Education, 2019, 20, .	0.5	5
70	Integrated analysis of isopentenyl pyrophosphate (IPP) toxicity in isoprenoid-producing Escherichia coli. Metabolic Engineering, 2018, 47, 60-72.	3.6	106
71	Engineered Production of Short-Chain Acyl-Coenzyme A Esters in Saccharomyces cerevisiae. ACS Synthetic Biology, 2018, 7, 1105-1115.	1.9	14
72	An Orthogonal and pH-Tunable Sensor-Selector for Muconic Acid Biosynthesis in Yeast. ACS Synthetic Biology, 2018, 7, 995-1003.	1.9	50

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73	Biochemical Characterization of Î²â€Amino Acid Incorporation in Fluvirucinâ€...B₂ Biosynthesis. ChemBioChem, 2018, 19, 1391-1395.	1.3	11
74	Alleviation of reactive oxygen species enhances PUFA accumulation in Schizochytrium sp. through regulating genes involved in lipid metabolism. Metabolic Engineering Communications, 2018, 6, 39-48.	1.9	57
75	Isolation and characterization of novel mutations in the pSC101 origin that increase copy number. Scientific Reports, 2018, 8, 1590.	1.6	35
76	Improving methyl ketone production in Escherichia coli by heterologous expression of NADHâ€dependent FabG. Biotechnology and Bioengineering, 2018, 115, 1161-1172.	1.7	15
77	Synthetic biology of polyketide synthases. Journal of Industrial Microbiology and Biotechnology, 2018, 45, 621-633.	1.4	25
78	Toward industrial production of isoprenoids in Escherichia coli: Lessons learned from CRISPRâ€Cas9 based optimization of a chromosomally integrated mevalonate pathway. Biotechnology and Bioengineering, 2018, 115, 1000-1013.	1.7	39
79	High-titer production of lathyrane diterpenoids from sugar by engineered Saccharomyces cerevisiae. Metabolic Engineering, 2018, 45, 142-148.	3.6	56
80	Industrial brewing yeast engineered for the production of primary flavor determinants in hopped beer. Nature Communications, 2018, 9, 965.	5.8	152
81	Discovery of enzymes for toluene synthesis from anoxic microbial communities. Nature Chemical Biology, 2018, 14, 451-457.	3.9	47
82	De novo synthesis of the sedative valerenic acid in Saccharomyces cerevisiae. Metabolic Engineering, 2018, 47, 94-101.	3.6	21
83	ClusterCAD: a computational platform for type I modular polyketide synthase design. Nucleic Acids Research, 2018, 46, D509-D515.	6.5	55
84	A combinatorial approach to synthetic transcription factorâ€promoter combinations for yeast strain engineering. Yeast, 2018, 35, 273-280.	0.8	19
85	Assembly and Multiplex Genome Integration of Metabolic Pathways in Yeast Using CasEMBLR. Methods in Molecular Biology, 2018, 1671, 185-201.	0.4	8
86	Design, Engineering, and Characterization of Prokaryotic Ligand-Binding Transcriptional Activators as Biosensors in Yeast. Methods in Molecular Biology, 2018, 1671, 269-290.	0.4	11
87	Production efficiency of the bacterial non-ribosomal peptide indigoidine relies on the respiratory metabolic state in S. cerevisiae. Microbial Cell Factories, 2018, 17, 193.	1.9	35
88	Renewable production of high density jet fuel precursor sesquiterpenes from Escherichia coli. Biotechnology for Biofuels, 2018, 11, 285.	6.2	43
89	Viscous control of cellular respiration by membrane lipid composition. Science, 2018, 362, 1186-1189.	6.0	167
90	Short-chain ketone production by engineered polyketide synthases in Streptomyces albus. Nature Communications, 2018, 9, 4569.	5.8	52

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91	Modular 5â€²-UTR hexamers for context-independent tuning of protein expression in eukaryotes. Nucleic Acids Research, 2018, 46, e127.	6.5	15
92	Synthetic Enzymology and the Fountain of Youth: Repurposing Biology for Longevity. ACS Omega, 2018, 3, 11050-11061.	1.6	3
93	Overexpression of a rice BAHD acyltransferase gene in switchgrass (Panicum virgatum L.) enhances saccharification. BMC Biotechnology, 2018, 18, 54.	1.7	38
94	Constraining Genome-Scale Models to Represent the Bow Tie Structure of Metabolism for 13C Metabolic Flux Analysis. Metabolites, 2018, 8, 3.	1.3	7
95	Engineering Î²-oxidation in Yarrowia lipolytica for methyl ketone production. Metabolic Engineering, 2018, 48, 52-62.	3.6	39
96	Polyketide synthases as a platform for chemical product design. AICHE Journal, 2018, 64, 4201-4207.	1.8	13
97	CasPER, a method for directed evolution in genomic contexts using mutagenesis and CRISPR/Cas9. Metabolic Engineering, 2018, 48, 288-296.	3.6	60
98	Commodity Chemicals From Engineered Modular Type I Polyketide Synthases. Methods in Enzymology, 2018, 608, 393-415.	0.4	9
99	A Pseudomonas putida efflux pump acts on short-chain alcohols. Biotechnology for Biofuels, 2018, 11, 136.	6.2	42
100	Probing the Flexibility of an Iterative Modular Polyketide Synthase with Non-Native Substrates in Vitro. ACS Chemical Biology, 2018, 13, 2261-2268.	1.6	21
101	De novo DNA synthesis using polymerase-nucleotide conjugates. Nature Biotechnology, 2018, 36, 645-650.	9.4	177
102	Feast: Choking on Acetyl-CoA, the Glyoxylate Shunt, and Acetyl-CoA-Driven Metabolism. , 2018, , 463-474.		0
103	Wholeâ€cell biocatalytic and de novo production of alkanes from free fatty acids in Saccharomyces cerevisiae. Biotechnology and Bioengineering, 2017, 114, 232-237.	1.7	57
104	Endoribonuclease-Based Two-Component Repressor Systems for Tight Gene Expression Control in Plants. ACS Synthetic Biology, 2017, 6, 806-816.	1.9	15
105	Development of an integrated approach for Î±-pinene recovery and sugar production from loblolly pine using ionic liquids. Green Chemistry, 2017, 19, 1117-1127.	4.6	10
106	Engineering glucose metabolism of Escherichia coli under nitrogen starvation. Npj Systems Biology and Applications, 2017, 3, 16035.	1.4	34
107	Leveraging microbial biosynthetic pathways for the generation of â€˜drop-inâ€™ biofuels. Current Opinion in Biotechnology, 2017, 45, 156-163.	3.3	55
108	Application of an Acyl-CoA Ligase from Streptomyces aizunensis for Lactam Biosynthesis. ACS Synthetic Biology, 2017, 6, 884-890.	1.9	60

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109	Polyketide mimetics yield structural and mechanistic insights into product template domain function in nonreducing polyketide synthases. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4142-E4148.	3.3	18
110	OpenMSI Arrayed Analysis Toolkit: Analyzing Spatially Defined Samples Using Mass Spectrometry Imaging. Analytical Chemistry, 2017, 89, 5818-5823.	3.2	21
111	Intracellular cellobiose metabolism and its applications in lignocellulose-based biorefineries. Bioresource Technology, 2017, 239, 496-506.	4.8	61
112	A Cas9-based toolkit to program gene expression inSaccharomyces cerevisiae. Nucleic Acids Research, 2017, 45, 496-508.	6.5	215
113	Engineering high-level production of fatty alcohols by Saccharomyces cerevisiae from lignocellulosic feedstocks. Metabolic Engineering, 2017, 42, 115-125.	3.6	97
114	System-level perturbations of cell metabolism using CRISPR/Cas9. Current Opinion in Biotechnology, 2017, 46, 134-140.	3.3	25
115	High-throughput enzyme screening platform for the IPP-bypass mevalonate pathway for isopentenol production. Metabolic Engineering, 2017, 41, 125-134.	3.6	38
116	Production of jet fuel precursor monoterpenoids from engineered Escherichia coli. Biotechnology and Bioengineering, 2017, 114, 1703-1712.	1.7	81
117	Production of Odd-Carbon Dicarboxylic Acids in Escherichia coli Using an Engineered Biotinâ€“Fatty Acid Biosynthetic Pathway. Journal of the American Chemical Society, 2017, 139, 4615-4618.	6.6	29
118	Cyanobacterial carbon metabolism: Fluxome plasticity and oxygen dependence. Biotechnology and Bioengineering, 2017, 114, 1593-1602.	1.7	83
119	Transcriptional reprogramming in yeast using dCas9 and combinatorial gRNA strategies. Microbial Cell Factories, 2017, 16, 46.	1.9	102
120	Lipid engineering reveals regulatory roles for membrane fluidity in yeast flocculation and oxygen-limited growth. Metabolic Engineering, 2017, 41, 46-56.	3.6	57
121	Deciphering flux adjustments of engineered E. coli cells during fermentation with changing growth conditions. Metabolic Engineering, 2017, 39, 247-256.	3.6	33
122	Development of a Transcription Factor-Based Lactam Biosensor. ACS Synthetic Biology, 2017, 6, 439-445.	1.9	56
123	Heterologous Gene Expression of N-Terminally Truncated Variants of LipPks1 Suggests a Functionally Critical Structural Motif in the N-terminus of Modular Polyketide Synthase. ACS Chemical Biology, 2017, 12, 2725-2729.	1.6	12
124	The Experiment Data Depot: A Web-Based Software Tool for Biological Experimental Data Storage, Sharing, and Visualization. ACS Synthetic Biology, 2017, 6, 2248-2259.	1.9	45
125	Engineered polyketides: Synergy between protein and host level engineering. Synthetic and Systems Biotechnology, 2017, 2, 147-166.	1.8	70
126	Oxidative cyclization of prodigiosin by an alkylglycerol monooxygenase-like enzyme. Nature Chemical Biology, 2017, 13, 1155-1157.	3.9	25

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127	Base-Catalyzed Depolymerization of Solid Lignin-Rich Streams Enables Microbial Conversion. ACS Sustainable Chemistry and Engineering, 2017, 5, 8171-8180.	3.2	115
128	Autonomous control of metabolic state by a quorum sensing (QS)-mediated regulator for bisabolene production in engineered E. coli. Metabolic Engineering, 2017, 44, 325-336.	3.6	78
129	The JBEI quantitative metabolic modeling library (jQMM): a python library for modeling microbial metabolism. BMC Bioinformatics, 2017, 18, 205.	1.2	19
130	Bio-based production of fuels and industrial chemicals by repurposing antibiotic-producing type I modular polyketide synthases: opportunities and challenges. Journal of Antibiotics, 2017, 70, 378-385.	1.0	18
131	Comprehensive in Vitro Analysis of Acyltransferase Domain Exchanges in Modular Polyketide Synthases and Its Application for Short-Chain Ketone Production. ACS Synthetic Biology, 2017, 6, 139-147.	1.9	100
132	Development of Next Generation Synthetic Biology Tools for Use in Streptomyces venezuelae. ACS Synthetic Biology, 2017, 6, 159-166.	1.9	76
133	Flux-Enabled Exploration of the Role of Sip1 in Galactose Yeast Metabolism. Frontiers in Bioengineering and Biotechnology, 2017, 5, 31.	2.0	4
134	Rhodosporidium toruloides: a new platform organism for conversion of lignocellulose into terpene biofuels and bioproducts. Biotechnology for Biofuels, 2017, 10, 241.	6.2	150
135	Expression of S-adenosylmethionine Hydrolase in Tissues Synthesizing Secondary Cell Walls Alters Specific Methylated Cell Wall Fractions and Improves Biomass Digestibility. Frontiers in Bioengineering and Biotechnology, 2016, 4, 58.	2.0	8
136	13C Metabolic Flux Analysis for Systematic Metabolic Engineering of S. cerevisiae for Overproduction of Fatty Acids. Frontiers in Bioengineering and Biotechnology, 2016, 4, 76.	2.0	42
137	Loss of Inositol Phosphorylceramide Sphingolipid Mannosylation Induces Plant Immune Responses and Reduces Cellulose Content in Arabidopsis. Plant Cell, 2016, 28, 2991-3004.	3.1	71
138	Photosynthetic conversion of CO2 to farnesyl diphosphate-derived phytochemicals (amorpha-4,11-diene and squalene) by engineered cyanobacteria. Biotechnology for Biofuels, 2016, 9, 202.	6.2	75
139	Development of an E. coli strain for one-pot biofuel production from ionic liquid pretreated cellulose and switchgrass. Green Chemistry, 2016, 18, 4189-4197.	4.6	52
140	ATP citrate lyase mediated cytosolic acetyl-CoA biosynthesis increases mevalonate production in Saccharomyces cerevisiae. Microbial Cell Factories, 2016, 15, 48.	1.9	58
141	Switchable ionic liquids based on di-carboxylic acids for one-pot conversion of biomass to an advanced biofuel. Green Chemistry, 2016, 18, 4012-4021.	4.6	31
142	Characterizing Strain Variation in Engineered E.Âcoli Using a Multi-Omics-Based Workflow. Cell Systems, 2016, 2, 335-346.	2.9	73
143	Structural and Biochemical Analysis of Proteinâ€“Protein Interactions Between the Acylâ€Carrier Protein and Product Template Domain. Angewandte Chemie, 2016, 128, 13199-13203.	1.6	3
144	The Need for Integrated Approaches in Metabolic Engineering. Cold Spring Harbor Perspectives in Biology, 2016, 8, a023903.	2.3	43

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145	Exploiting members of the BAHD acyltransferase family to synthesize multiple hydroxycinnamate and benzoate conjugates in yeast. Microbial Cell Factories, 2016, 15, 198.	1.9	32
146	Evolved hexose transporter enhances xylose uptake and glucose/xylose co-utilization in Saccharomyces cerevisiae. Scientific Reports, 2016, 6, 19512.	1.6	100
147	Enhanced fatty acid production in engineered chemolithoautotrophic bacteria using reduced sulfur compounds as energy sources. Metabolic Engineering Communications, 2016, 3, 211-215.	1.9	1
148	Structural and Biochemical Analysis of Proteinâ€“Protein Interactions Between the Acylâ€Carrier Protein and Product Template Domain. Angewandte Chemie - International Edition, 2016, 55, 13005-13009.	7.2	16
149	Engineering prokaryotic transcriptional activators as metabolite biosensors in yeast. Nature Chemical Biology, 2016, 12, 951-958.	3.9	182
150	EasyCloneâ€MarkerFree: A vector toolkit for markerâ€less integration of genes into Saccharomyces cerevisiae via CRISPRâ€Cas9. Biotechnology Journal, 2016, 11, 1110-1117.	1.8	206
151	Engineering Bacteria to Catabolize the Carbonaceous Component of Sarin: Teaching E. coli to Eat Isopropanol. ACS Synthetic Biology, 2016, 5, 1485-1496.	1.9	6
152	Engineering an NADPH/NADP⁺ Redox Biosensor in Yeast. ACS Synthetic Biology, 2016, 5, 1546-1556.	1.9	66
153	Examining Escherichia coli glycolytic pathways, catabolite repression, and metabolite channeling using Î”pfk mutants. Biotechnology for Biofuels, 2016, 9, 212.	6.2	74
154	Synthetic and systems biology for microbial production of commodity chemicals. Npj Systems Biology and Applications, 2016, 2, 16009.	1.4	187
155	Engineering a functional 1-deoxy-D-xylulose 5-phosphate (DXP) pathway in Saccharomyces cerevisiae. Metabolic Engineering, 2016, 38, 494-503.	3.6	46
156	Engineering of synthetic, stress-responsive yeast promoters. Nucleic Acids Research, 2016, 44, e136-e136.	6.5	99
157	Insights into polyketide biosynthesis gained from repurposing antibiotic-producing polyketide synthases to produce fuels and chemicals. Journal of Antibiotics, 2016, 69, 494-499.	1.0	19
158	End-to-end automated microfluidic platform for synthetic biology: from design to functional analysis. Journal of Biological Engineering, 2016, 10, 3.	2.0	54
159	Alteration of Polyketide Stereochemistry from anti to syn by a Ketoreductase Domain Exchange in a Type I Modular Polyketide Synthase Subunit. Biochemistry, 2016, 55, 1677-1680.	1.2	23
160	Insights into Complex Oxidation during BE-7585A Biosynthesis: Structural Determination and Analysis of the Polyketide Monooxygenase BexE. ACS Chemical Biology, 2016, 11, 1137-1147.	1.6	10
161	A Droplet Microfluidic Platform for Automating Genetic Engineering. ACS Synthetic Biology, 2016, 5, 426-433.	1.9	63
162	Exploiting the Substrate Promiscuity of Hydroxycinnamoyl-CoA:Shikimate Hydroxycinnamoyl Transferase to Reduce Lignin. Plant and Cell Physiology, 2016, 57, 568-579.	1.5	78

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163	Engineering Cellular Metabolism. Cell, 2016, 164, 1185-1197.	13.5	953
164	CRISPR/Cas9 advances engineering of microbial cell factories. Metabolic Engineering, 2016, 34, 44-59.	3.6	179
165	Metabolic engineering of Escherichia coli for the biosynthesis of 2-pyrrolidone. Metabolic Engineering Communications, 2016, 3, 1-7.	1.9	34
166	Isopentenyl diphosphate (IPP)-bypass mevalonate pathways for isopentenol production. Metabolic Engineering, 2016, 34, 25-35.	3.6	97
167	Engineering a Polyketide Synthase for In Vitro Production of Adipic Acid. ACS Synthetic Biology, 2016, 5, 21-27.	1.9	69
168	Modular Synthetic Inverters from Zinc Finger Proteins and Small RNAs. PLoS ONE, 2016, 11, e0149483.	1.1	8
169	Investigation of Proposed Ladderane Biosynthetic Genes from Anammox Bacteria by Heterologous Expression in E. coli. PLoS ONE, 2016, 11, e0151087.	1.1	26
170	Feast: Choking on Acetyl-CoA, the Glyoxylate Shunt, and Acetyl-CoA-Driven Metabolism. , 2016, , 1-12.		0
171	Mechanistic Analysis of an Engineered Enzyme that Catalyzes the Formose Reaction. ChemBioChem, 2015, 16, 1950-1954.	1.3	39
172	Interlaboratory study to evaluate the robustness of capillary electrophoresisâ€mass spectrometry for peptide mapping. Journal of Separation Science, 2015, 38, 3262-3270.	1.3	36
173	Structural and functional analysis of two di-domain aromatase/cyclases from type II polyketide synthases. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6844-51.	3.3	30
174	CrEdit: CRISPR mediated multi-loci gene integration in Saccharomyces cerevisiae. Microbial Cell Factories, 2015, 14, 97.	1.9	134
175	Principal component analysis of proteomics (PCAP) as a tool to direct metabolic engineering. Metabolic Engineering, 2015, 28, 123-133.	3.6	140
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