Zihe Liu

List of Publications by Citations

418 papers	23,400 citations	72 h-index	143 g-index
460 ext. papers	31,756 ext. citations	9.9 avg, IF	7.55 L-index

#	Paper	IF	Citations
418	Proteomics. Tissue-based map of the human proteome. *Science*, **2015**, 347, 1260419	33.3	6576
417	Engineering Cellular Metabolism. *Cell*, **2016**, 164, 1185-1197	56.2	655
416	Minimum Information about a Biosynthetic Gene cluster. *Nature Chemical Biology*, **2015**, 11, 625-31	11.7	498
415	Roux-en-Y Gastric Bypass and Vertical Banded Gastroplasty Induce Long-Term Changes on the Human Gut Microbiome Contributing to Fat Mass Regulation. *Cell Metabolism*, **2015**, 22, 228-38	24.6	489
414	Voluntary Running Suppresses Tumor Growth through Epinephrine- and IL-6-Dependent NK Cell Mobilization and Redistribution. *Cell Metabolism*, **2016**, 23, 554-62	24.6	405
413	Genome-scale metabolic modelling of hepatocytes reveals serine deficiency in patients with non-alcoholic fatty liver disease. *Nature Communications*, **2014**, 5, 3083	17.4	320
412	Biofuels. Altered sterol composition renders yeast thermotolerant. *Science*, **2014**, 346, 75-8	33.3	279
411	In silico aided metabolic engineering of Saccharomyces cerevisiae for improved bioethanol production. *Metabolic Engineering*, **2006**, 8, 102-11	9.7	276
410	Quantifying Diet-Induced Metabolic Changes of the Human Gut Microbiome. *Cell Metabolism*, **2015**, 22, 320-31	24.6	275
409	Metabolic engineering of yeast for production of fuels and chemicals. *Current Opinion in Biotechnology*, **2013**, 24, 398-404	11.4	231
408	Production of fatty acid-derived oleochemicals and biofuels by synthetic yeast cell factories. *Nature Communications*, **2016**, 7, 11709	17.4	220
407	Establishing a platform cell factory through engineering of yeast acetyl-CoA metabolism. *Metabolic Engineering*, **2013**, 15, 48-54	9.7	211
406	The gut microbiota modulates host amino acid and glutathione metabolism in mice. *Molecular Systems Biology*, **2015**, 11, 834	12.2	199
405	Improving the phenotype predictions of a yeast genome-scale metabolic model by incorporating enzymatic constraints. *Molecular Systems Biology*, **2017**, 13, 935	12.2	193
404	An Integrated Understanding of the Rapid Metabolic Benefits of a Carbohydrate-Restricted Diet on Hepatic Steatosis in Humans. *Cell Metabolism*, **2018**, 27, 559-571.e5	24.6	189
403	De novo production of resveratrol from glucose or ethanol by engineered Saccharomyces cerevisiae. *Metabolic Engineering*, **2015**, 32, 1-11	9.7	184
402	Kinetic models in industrial biotechnology - Improving cell factory performance. *Metabolic Engineering*, **2014**, 24, 38-60	9.7	183

401	Microbial acetyl-CoA metabolism and metabolic engineering. *Metabolic Engineering*, **2015**, 28, 28-42	9.7	174
400	High-throughput screening for industrial enzyme production hosts by droplet microfluidics. *Lab on A Chip*, **2014**, 14, 806-13	7.2	158
399	Impact of synthetic biology and metabolic engineering on industrial production of fine chemicals. *Biotechnology Advances*, **2015**, 33, 1395-402	17.8	153
398	Establishment of a yeast platform strain for production of p-coumaric acid through metabolic engineering of aromatic amino acid biosynthesis. *Metabolic Engineering*, **2015**, 31, 181-8	9.7	151
397	Lipid engineering combined with systematic metabolic engineering of Saccharomyces cerevisiae for high-yield production of lycopene. *Metabolic Engineering*, **2019**, 52, 134-142	9.7	139
396	Global analysis of biosynthetic gene clusters reveals vast potential of secondary metabolite production in Penicillium species. *Nature Microbiology*, **2017**, 2, 17044	26.6	136
395	Establishing a synthetic pathway for high-level production of 3-hydroxypropionic acid in Saccharomyces cerevisiae via β-alanine. *Metabolic Engineering*, **2015**, 27, 57-64	9.7	136
394	Glucose repression in Saccharomyces cerevisiae. *FEMS Yeast Research*, **2015**, 15,	3.1	134
393	Metabolic engineering strategies for microbial synthesis of oleochemicals. *Metabolic Engineering*, **2015**, 29, 1-11	9.7	133
392	Production of natural products through metabolic engineering of Saccharomyces cerevisiae. *Current Opinion in Biotechnology*, **2015**, 35, 7-15	11.4	132
391	Reprogramming Yeast Metabolism from Alcoholic Fermentation to Lipogenesis. *Cell*, **2018**, 174, 1549-1558.e14	36.2	128
390	Metabolic engineering of recombinant protein secretion by Saccharomyces cerevisiae. *FEMS Yeast Research*, **2012**, 12, 491-510	3.1	128
389	Engineering synergy in biotechnology. *Nature Chemical Biology*, **2014**, 10, 319-22	11.7	126
388	The role of biofuels in the future energy supply. *Energy and Environmental Science*, **2013**, 6, 1077	35.4	125
387	Harnessing Yeast Peroxisomes for Biosynthesis of Fatty-Acid-Derived Biofuels and Chemicals with Relieved Side-Pathway Competition. *Journal of the American Chemical Society*, **2016**, 138, 15368-15377	16.4	113
386	RAVEN 2.0: A versatile toolbox for metabolic network reconstruction and a case study on Streptomyces coelicolor. *PLoS Computational Biology*, **2018**, 14, e1006541	5	110
385	Absolute Quantification of Protein and mRNA Abundances Demonstrate Variability in Gene-Specific Translation Efficiency in Yeast. *Cell Systems*, **2017**, 4, 495-504.e5	10.6	106
384	Regulation of amino-acid metabolism controls flux to lipid accumulation in. *Npj Systems Biology and Applications*, **2016**, 2, 16005	5	106

383	Systems Biology of Metabolism. *Annual Review of Biochemistry*, **2017**, 86, 245-275	29.1	105
382	Integrated Network Analysis Reveals an Association between Plasma Mannose Levels and Insulin Resistance. *Cell Metabolism*, **2016**, 24, 172-84	24.6	105
381	Biobased organic acids production by metabolically engineered microorganisms. *Current Opinion in Biotechnology*, **2016**, 37, 165-172	11.4	105
380	Rapid quantification of yeast lipid using microwave-assisted total lipid extraction and HPLC-CAD. *Analytical Chemistry*, **2013**, 85, 4912-9	7.8	102
379	Improved production of fatty acid ethyl esters in Saccharomyces cerevisiae through up-regulation of the ethanol degradation pathway and expression of the heterologous phosphoketolase pathway. *Microbial Cell Factories*, **2014**, 13, 39	6.4	101
378	Statin therapy is associated with lower prevalence of gut microbiota dysbiosis. *Nature*, **2020**, 581, 310-315	50.4	100
377	Coupled incremental precursor and co-factor supply improves 3-hydroxypropionic acid production in Saccharomyces cerevisiae. *Metabolic Engineering*, **2014**, 22, 104-9	9.7	100
376	Microfluidic screening and whole-genome sequencing identifies mutations associated with improved protein secretion by yeast. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E4689-96	11.5	99
375	The human secretome. *Science Signaling*, **2019**, 12,	8.8	99
374	Systems Biology of Metabolism: A Driver for Developing Personalized and Precision Medicine. *Cell Metabolism*, **2017**, 25, 572-579	24.6	98
373	DCEO Biotechnology: Tools To Design, Construct, Evaluate, and Optimize the Metabolic Pathway for Biosynthesis of Chemicals. *Chemical Reviews*, **2018**, 118, 4-72	68.1	97
372	Human gut microbiota and healthy aging: Recent developments and future prospective. *Nutrition and Healthy Aging*, **2016**, 4, 3-16	1.3	97
371	Succinate dehydrogenase inhibition leads to epithelial-mesenchymal transition and reprogrammed carbon metabolism. *Cancer & Metabolism*, **2014**, 2, 21	5.4	97
370	Barriers and opportunities in bio-based production of hydrocarbons. *Nature Energy*, **2018**, 3, 925-935	62.3	96
369	Guidelines and recommendations on yeast cell death nomenclature. *Microbial Cell*, **2018**, 5, 4-31	3.9	96
368	Transcriptomics resources of human tissues and organs. *Molecular Systems Biology*, **2016**, 12, 862	12.2	95
367	Third-generation biorefineries as the means to produce fuels and chemicals from CO2. *Nature Catalysis*, **2020**, 3, 274-288	36.5	94
366	Stratification of Hepatocellular Carcinoma Patients Based on Acetate Utilization. *Cell Reports*, **2015**, 13, 2014-26	10.6	92

365	Complete genomic and transcriptional landscape analysis using third-generation sequencing: a case study of Saccharomyces cerevisiae CEN.PK113-7D. *Nucleic Acids Research*, **2018**, 46, e38	20.1	91
364	Different expression systems for production of recombinant proteins in Saccharomyces cerevisiae. *Biotechnology and Bioengineering*, **2012**, 109, 1259-68	4.9	91
363	Metabolic engineering of yeast for fermentative production of flavonoids. *Bioresource Technology*, **2017**, 245, 1645-1654	11	90
362	Systems biology of lipid metabolism: from yeast to human. *FEBS Letters*, **2009**, 583, 3905-13	3.8	87
361	Long-chain alkane production by the yeast Saccharomyces cerevisiae. *Biotechnology and Bioengineering*, **2015**, 112, 1275-9	4.9	84
360	A consensus S. cerevisiae metabolic model Yeast8 and its ecosystem for comprehensively probing cellular metabolism. *Nature Communications*, **2019**, 10, 3586	17.4	83
359	Proteome- and transcriptome-driven reconstruction of the human myocyte metabolic network and its use for identification of markers for diabetes. *Cell Reports*, **2015**, 11, 921-933	10.6	81
358	Production of farnesene and santalene by Saccharomyces cerevisiae using fed-batch cultivations with RQ-controlled feed. *Biotechnology and Bioengineering*, **2016**, 113, 72-81	4.9	81
357	Engineering of vesicle trafficking improves heterologous protein secretion in Saccharomyces cerevisiae. *Metabolic Engineering*, **2012**, 14, 120-7	9.7	81
356	Improving biobutanol production in engineered Saccharomyces cerevisiae by manipulation of acetyl-CoA metabolism. *Journal of Industrial Microbiology and Biotechnology*, **2013**, 40, 1051-6	4.2	81
355	Metabolic Trade-offs in Yeast are Caused by F1F0-ATP synthase. *Scientific Reports*, **2016**, 6, 22264	4.9	79
354	Expanding the product portfolio of fungal type I fatty acid synthases. *Nature Chemical Biology*, **2017**, 13, 360-362	11.7	78
353	A gRNA-tRNA array for CRISPR-Cas9 based rapid multiplexed genome editing in Saccharomyces cerevisiae. *Nature Communications*, **2019**, 10, 1053	17.4	78
352	An atlas of human metabolism. *Science Signaling*, **2020**, 13,	8.8	78
351	Profiling of cytosolic and peroxisomal acetyl-CoA metabolism in Saccharomyces cerevisiae. *PLoS ONE*, **2012**, 7, e42475	3.7	78
350	Advancing metabolic engineering through systems biology of industrial microorganisms. *Current Opinion in Biotechnology*, **2015**, 36, 8-15	11.4	77
349	Engineering of synthetic, stress-responsive yeast promoters. *Nucleic Acids Research*, **2016**, 44, e136	20.1	76
348	Modular pathway rewiring of Saccharomyces cerevisiae enables high-level production of L-ornithine. *Nature Communications*, **2015**, 6, 8224	17.4	72

347	Rewiring carbon metabolism in yeast for high level production of aromatic chemicals. *Nature Communications*, **2019**, 10, 4976	17.4	72
346	From next-generation sequencing to systematic modeling of the gut microbiome. *Frontiers in Genetics*, **2015**, 6, 219	4.5	72
345	Metabolic Needs and Capabilities of Toxoplasma gondii through Combined Computational and Experimental Analysis. *PLoS Computational Biology*, **2015**, 11, e1004261	5	71
344	Metabolic network-based stratification of hepatocellular carcinoma reveals three distinct tumor subtypes. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E11874-E11883	11.5	71
343	Thermotolerant Yeast Strains Adapted by Laboratory Evolution Show Trade-Off at Ancestral Temperatures and Preadaptation to Other Stresses. *MBio*, **2015**, 6, e00431	7.8	70
342	Modifying Yeast Tolerance to Inhibitory Conditions of Ethanol Production Processes. *Frontiers in Bioengineering and Biotechnology*, **2015**, 3, 184	5.8	69
341	Engineering of acetyl-CoA metabolism for the improved production of polyhydroxybutyrate in Saccharomyces cerevisiae. *AMB Express*, **2012**, 2, 52	4.1	67
340	Genome-scale metabolic reconstructions of Bifidobacterium adolescentis L2-32 and Faecalibacterium prausnitzii A2-165 and their interaction. *BMC Systems Biology*, **2014**, 8, 41	3.5	64
339	Elucidating the interactions between the human gut microbiota and its host through metabolic modeling. *Frontiers in Genetics*, **2014**, 5, 86	4.5	63
338	Synthetic biology for engineering acetyl coenzyme A metabolism in yeast. *MBio*, **2014**, 5, e02153	7.8	61
337	New paradigms for metabolic modeling of human cells. *Current Opinion in Biotechnology*, **2015**, 34, 91-7	11.4	60
336	Flux balance analysis predicts essential genes in clear cell renal cell carcinoma metabolism. *Scientific Reports*, **2015**, 5, 10738	4.9	59
335	The human liver-specific proteome defined by transcriptomics and antibody-based profiling. *FASEB Journal*, **2014**, 28, 2901-14	0.9	58
334	Fatty Acid-Derived Biofuels and Chemicals Production in Saccharomyces cerevisiae. *Frontiers in Bioengineering and Biotechnology*, **2014**, 2, 32	5.8	58
333	Engineering yeast metabolism for production of terpenoids for use as perfume ingredients, pharmaceuticals and biofuels. *FEMS Yeast Research*, **2017**, 17,	3.1	57
332	Evolution reveals a glutathione-dependent mechanism of 3-hydroxypropionic acid tolerance. *Metabolic Engineering*, **2014**, 26, 57-66	9.7	57
331	Modelling approaches for studying the microbiome. *Nature Microbiology*, **2019**, 4, 1253-1267	26.6	56
330	Imbalance of heterologous protein folding and disulfide bond formation rates yields runaway oxidative stress. *BMC Biology*, **2012**, 10, 16	7.3	56

329	Recent trends in metabolic engineering of microbial chemical factories. *Current Opinion in Biotechnology*, **2019**, 60, 188-197	11.4	55
328	Current Status of COVID-19 Therapies and Drug Repositioning Applications. *IScience*, **2020**, 23, 101303	6.1	54
327	Evolutionary engineering reveals divergent paths when yeast is adapted to different acidic environments. *Metabolic Engineering*, **2017**, 39, 19-28	9.7	54
326	Human metabolic atlas: an online resource for human metabolism. *Database: the Journal of Biological Databases and Curation*, **2015**, 2015, bav068	5	54
325	Metabolic engineering of Saccharomyces cerevisiae for production of very long chain fatty acid-derived chemicals. *Nature Communications*, **2017**, 8, 15587	17.4	53
324	Production of β-ionone by combined expression of carotenogenic and plant CCD1 genes in Saccharomyces cerevisiae. *Microbial Cell Factories*, **2015**, 14, 84	6.4	53
323	Engineering Robustness of Microbial Cell Factories. *Biotechnology Journal*, **2017**, 12, 1700014	5.6	52
322	Genome scale metabolic modeling of cancer. *Metabolic Engineering*, **2017**, 43, 103-112	9.7	51
321	Biobased production of alkanes and alkenes through metabolic engineering of microorganisms. *Journal of Industrial Microbiology and Biotechnology*, **2017**, 44, 613-622	4.2	51
320	The Impact of Systems Biology on Bioprocessing. *Trends in Biotechnology*, **2017**, 35, 1156-1168	15.1	50
319	Metagenomic analysis of microbe-mediated vitamin metabolism in the human gut microbiome. *BMC Genomics*, **2019**, 20, 208	4.5	50
318	Extensive weight loss reveals distinct gene expression changes in human subcutaneous and visceral adipose tissue. *Scientific Reports*, **2015**, 5, 14841	4.9	48
317	Identifying anti-growth factors for human cancer cell lines through genome-scale metabolic modeling. *Scientific Reports*, **2015**, 5, 8183	4.9	48
316	Cocoa butter-like lipid production ability of non-oleaginous and oleaginous yeasts under nitrogen-limited culture conditions. *Applied Microbiology and Biotechnology*, **2017**, 101, 3577-3585	5.7	47
315	Adaptation to different types of stress converge on mitochondrial metabolism. *Molecular Biology of the Cell*, **2016**, 27, 2505-14	3.5	47
314	Yeast mitochondria: an overview of mitochondrial biology and the potential of mitochondrial systems biology. *FEMS Yeast Research*, **2018**, 18,	3.1	47
313	Efficient protein production by yeast requires global tuning of metabolism. *Nature Communications* , **2017**, 8, 1131	17.4	45
312	Enabling the synthesis of medium chain alkanes and 1-alkenes in yeast. *Metabolic Engineering*, **2017** , 44, 81-88	9.7	45

311	Balanced globin protein expression and heme biosynthesis improve production of human hemoglobin in Saccharomyces cerevisiae. *Metabolic Engineering*, **2014**, 21, 9-16	9.7	44
310	Multiplexed CRISPR/Cas9 Genome Editing and Gene Regulation Using Csy4 in Saccharomyces cerevisiae. *ACS Synthetic Biology*, **2018**, 7, 10-15	5.7	44
309	Drug Repositioning for Effective Prostate Cancer Treatment. *Frontiers in Physiology*, **2018**, 9, 500	4.6	43
308	Affibody Scaffolds Improve Sesquiterpene Production in Saccharomyces cerevisiae. *ACS Synthetic Biology*, **2017**, 6, 19-28	5.7	43
307	Metabolic Models of Protein Allocation Call for the Kinetome. *Cell Systems*, **2017**, 5, 538-541	10.6	43
306	Molecular mechanism of flocculation self-recognition in yeast and its role in mating and survival. *MBio*, **2015**, 6,	7.8	42
305	Multidimensional engineering of Saccharomyces cerevisiae for efficient synthesis of medium-chain fatty acids. *Nature Catalysis*, **2020**, 3, 64-74	36.5	42
304	Metabolic engineering of for overproduction of triacylglycerols. *Metabolic Engineering Communications*, **2018**, 6, 22-27	6.5	42
303	Energy metabolism controls phenotypes by protein efficiency and allocation. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 17592-17597	11.5	42
302	Heterologous transporter expression for improved fatty alcohol secretion in yeast. *Metabolic Engineering*, **2018**, 45, 51-58	9.7	42
301	A molecular genetic toolbox for. *Biotechnology for Biofuels*, **2017**, 10, 2	7.8	41
300	Exploring the potential of Saccharomyces cerevisiae for biopharmaceutical protein production. *Current Opinion in Biotechnology*, **2017**, 48, 77-84	11.4	41
299	The human cardiac and skeletal muscle proteomes defined by transcriptomics and antibody-based profiling. *BMC Genomics*, **2015**, 16, 475	4.5	41
298	BIOENGINEERING. Yeast cell factories on the horizon. *Science*, **2015**, 349, 1050-1	33.3	41
297	Engineering 1-Alkene Biosynthesis and Secretion by Dynamic Regulation in Yeast. *ACS Synthetic Biology*, **2018**, 7, 584-590	5.7	41
296	Do genome-scale models need exact solvers or clearer standards?. *Molecular Systems Biology*, **2015**, 11, 831	12.2	41
295	Structural basis of ubiquitin modification by the Legionella effector SdeA. *Nature*, **2018**, 557, 674-678	50.4	41
294	Adaptive laboratory evolution of tolerance to dicarboxylic acids in Saccharomyces cerevisiae. *Metabolic Engineering*, **2019**, 56, 130-141	9.7	40

293	Recent advances in combinatorial biosynthesis for drug discovery. *Drug Design, Development and Therapy*, **2015**, 9, 823-33	4.4	40
292	Analysis of the Viable Microbiota and Helicobacter pylori Transcriptome in Gastric Infection and Early Stages of Carcinogenesis. *Infection and Immunity*, **2017**, 85,	3.7	40
291	Metagenomic data utilization and analysis (MEDUSA) and construction of a global gut microbial gene catalogue. *PLoS Computational Biology*, **2014**, 10, e1003706	5	40
290	Global rewiring of cellular metabolism renders Saccharomyces cerevisiae Crabtree negative. *Nature Communications*, **2018**, 9, 3059	17.4	39
289	Cancer Metabolism: A Modeling Perspective. *Frontiers in Physiology*, **2015**, 6, 382	4.6	39
288	Metabolic engineering of a synergistic pathway for n-butanol production in Saccharomyces cerevisiae. *Scientific Reports*, **2016**, 6, 25675	4.9	38
287	Harnessing xylose pathways for biofuels production. *Current Opinion in Biotechnology*, **2019**, 57, 56-65	11.4	38
286	Genome-scale reconstructions of the mammalian secretory pathway predict metabolic costs and limitations of protein secretion. *Nature Communications*, **2020**, 11, 68	17.4	37
285	Heat shock response improves heterologous protein secretion in Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **2013**, 97, 3559-68	5.7	36
284	Engineering the protein secretory pathway of enables improved protein production. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E11025-E11032	11.5	36
283	Simplified Intestinal Microbiota to Study Microbe-Diet-Host Interactions in a Mouse Model. *Cell Reports*, **2019**, 26, 3772-3783.e6	10.6	35
282	Targeting CDK2 overcomes melanoma resistance against BRAF and Hsp90 inhibitors. *Molecular Systems Biology*, **2018**, 14, e7858	12.2	35
281	Genome-scale metabolic model of Pichia pastoris with native and humanized glycosylation of recombinant proteins. *Biotechnology and Bioengineering*, **2016**, 113, 961-9	4.9	35
280	Glycosaminoglycan Profiling in Patients' Plasma and Urine Predicts the Occurrence of Metastatic Clear Cell Renal Cell Carcinoma. *Cell Reports*, **2016**, 15, 1822-36	10.6	34
279	Gut microbiota dysbiosis is associated with malnutrition and reduced plasma amino acid levels: Lessons from genome-scale metabolic modeling. *Metabolic Engineering*, **2018**, 49, 128-142	9.7	34
278	Twin-primer non-enzymatic DNA assembly: an efficient and accurate multi-part DNA assembly method. *Nucleic Acids Research*, **2017**, 45, e94	20.1	33
277	Comparison of the metabolic response to over-production of p-coumaric acid in two yeast strains. *Metabolic Engineering*, **2017**, 44, 265-272	9.7	33
276	Establishing very long-chain fatty alcohol and wax ester biosynthesis in Saccharomyces cerevisiae. *Biotechnology and Bioengineering*, **2017**, 114, 1025-1035	4.9	33

275	Proteome analysis of xylose metabolism in during lipid production. *Biotechnology for Biofuels*, **2019**, 12, 137	7.8	32
274	Machine Learning Applied to Predicting Microorganism Growth Temperatures and Enzyme Catalytic Optima. *ACS Synthetic Biology*, **2019**, 8, 1411-1420	5.7	32
273	Improving the flux distributions simulated with genome-scale metabolic models of. *Metabolic Engineering Communications*, **2016**, 3, 153-163	6.5	32
272	Absolute yeast mitochondrial proteome quantification reveals trade-off between biosynthesis and energy generation during diauxic shift. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 7524-7535	11.5	31
271	BioMet Toolbox 2.0: genome-wide analysis of metabolism and omics data. *Nucleic Acids Research*, **2014**, 42, W175-81	20.1	31
270	FATTY ACID SYNTHESIS IS REQUIRED FOR BREAST CANCER BRAIN METASTASIS. *Nature Cancer*, **2021**, 2, 414-428	15.4	31
269	Moderate Expression of Increases Protein Secretion by Saccharomyces cerevisiae. *Applied and Environmental Microbiology*, **2017**, 83,	4.8	30
268	Redirection of lipid flux toward phospholipids in yeast increases fatty acid turnover and secretion. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 1262-1267	11.5	30
267	Industrial systems biology and its impact on synthetic biology of yeast cell factories. *Biotechnology and Bioengineering*, **2016**, 113, 1164-70	4.9	30
266	Genome-wide analysis of maltose utilization and regulation in aspergilli. *Microbiology (United Kingdom)*, **2009**, 155, 3893-3902	2.9	30
265	Dysregulated signaling hubs of liver lipid metabolism reveal hepatocellular carcinoma pathogenesis. *Nucleic Acids Research*, **2016**, 44, 5529-39	20.1	30
264	Leucine Biosynthesis Is Involved in Regulating High Lipid Accumulation in. *MBio*, **2017**, 8,	7.8	29
263	Versatile biomanufacturing through stimulus-responsive cell-material feedback. *Nature Chemical Biology*, **2019**, 15, 1017-1024	11.7	29
262	Engineering Saccharomyces cerevisiae cells for production of fatty acid-derived biofuels and chemicals. *Open Biology*, **2019**, 9, 190049	7	29
261	Metabolite secretion in microorganisms: the theory of metabolic overflow put to the test. *Metabolomics*, **2018**, 14, 43	4.7	29
260	Genome-scale model of Rhodotorula toruloides metabolism. *Biotechnology and Bioengineering*, **2019**, 116, 3396-3408	4.9	29
259	Correlation of cell growth and heterologous protein production by Saccharomyces cerevisiae. *Applied Microbiology and Biotechnology*, **2013**, 97, 8955-62	5.7	29
258	Imidazole propionate is increased in diabetes and associated with dietary patterns and altered microbial ecology. *Nature Communications*, **2020**, 11, 5881	17.4	29

257	Characterization of heterogeneous redox responses in hepatocellular carcinoma patients using network analysis. *EBioMedicine*, **2019**, 40, 471-487	8.8	29
256	A New Era of Genome Integration-Simply Cut and Paste!. *ACS Synthetic Biology*, **2017**, 6, 601-609	5.7	28
255	Dynamic regulation of fatty acid pools for improved production of fatty alcohols in Saccharomyces cerevisiae. *Microbial Cell Factories*, **2017**, 16, 45	6.4	28
254	A Systematic Investigation of the Malignant Functions and Diagnostic Potential of the Cancer Secretome. *Cell Reports*, **2019**, 26, 2622-2635.e5	10.6	28
253	Logical transformation of genome-scale metabolic models for gene level applications and analysis. *Bioinformatics*, **2015**, 31, 2324-31	7.2	28
252	Systems biology based drug repositioning for development of cancer therapy. *Seminars in Cancer Biology*, **2021**, 68, 47-58	12.7	28
251	In vitro co-cultures of human gut bacterial species as predicted from co-occurrence network analysis. *PLoS ONE*, **2018**, 13, e0195161	3.7	27
250	FadR-Based Biosensor-Assisted Screening for Genes Enhancing Fatty Acyl-CoA Pools in. *ACS Synthetic Biology*, **2019**, 8, 1788-1800	5.7	27
249	Changes in lipid metabolism convey acid tolerance in. *Biotechnology for Biofuels*, **2018**, 11, 297	7.8	27
248	Penicillium arizonense, a new, genome sequenced fungal species, reveals a high chemical diversity in secreted metabolites. *Scientific Reports*, **2016**, 6, 35112	4.9	26
247	Metagenomic analysis of bile salt biotransformation in the human gut microbiome. *BMC Genomics*, **2019**, 20, 517	4.5	26
246	Genome-scale metabolic models applied to human health and disease. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine*, **2017**, 9, e1393	6.6	26
245	Genome-scale analysis of the high-efficient protein secretion system of Aspergillus oryzae. *BMC Systems Biology*, **2014**, 8, 73	3.5	26
244	Compositional and functional differences of the mucosal microbiota along the intestine of healthy individuals. *Scientific Reports*, **2020**, 10, 14977	4.9	26
243	Deep learning suggests that gene expression is encoded in all parts of a co-evolving interacting gene regulatory structure. *Nature Communications*, **2020**, 11, 6141	17.4	25
242	Cell factory engineering for improved production of natural products. *Natural Product Reports*, **2019**, 36, 1233-1236	15.1	24
241	Functional expression and evaluation of heterologous phosphoketolases in Saccharomyces cerevisiae. *AMB Express*, **2016**, 6, 115	4.1	24
240	Management of the endoplasmic reticulum stress by activation of the heat shock response in yeast. *FEMS Yeast Research*, **2014**, 14, 481-94	3.1	24

239	Model-Assisted Fine-Tuning of Central Carbon Metabolism in Yeast through dCas9-Based Regulation. *ACS Synthetic Biology*, **2019**, 8, 2457-2463	5.7	23
238	Metabolic Network-Based Identification and Prioritization of Anticancer Targets Based on Expression Data in Hepatocellular Carcinoma. *Frontiers in Physiology*, **2018**, 9, 916	4.6	23
237	Type 2 diabetes and obesity induce similar transcriptional reprogramming in human myocytes. *Genome Medicine*, **2017**, 9, 47	14.4	23
236	Meta-analysis of the gut microbiota in predicting response to cancer immunotherapy in metastatic melanoma. *JCI Insight*, **2020**, 5,	9.9	23
235	Metabolic engineering of Saccharomyces cerevisiae for production of germacrene A, a precursor of beta-elemene. *Journal of Industrial Microbiology and Biotechnology*, **2017**, 44, 1065-1072	4.2	22
234	RNAi expression tuning, microfluidic screening, and genome recombineering for improved protein production in. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 9324-9332	11.5	22
233	Evolution from adherent to suspension: systems biology of HEK293 cell line development. *Scientific Reports*, **2020**, 10, 18996	4.9	22
232	Perspective: Metabotyping-A Potential Personalized Nutrition Strategy for Precision Prevention of Cardiometabolic Disease. *Advances in Nutrition*, **2020**, 11, 524-532	10	22
231	Enhanced amino acid utilization sustains growth of cells lacking Snf1/AMPK. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2015**, 1853, 1615-25	4.9	21
230	Reconstruction and analysis of a Kluyveromyces marxianus genome-scale metabolic model. *BMC Bioinformatics*, **2019**, 20, 551	3.6	21
229	HCSD: the human cancer secretome database. *Database: the Journal of Biological Databases and Curation*, **2015**, 2015, bav051	5	21
228	Effects of acetoacetyl-CoA synthase expression on production of farnesene in Saccharomyces cerevisiae. *Journal of Industrial Microbiology and Biotechnology*, **2017**, 44, 911-922	4.2	20
227	Current state of aromatics production using yeast: achievements and challenges. *Current Opinion in Biotechnology*, **2020**, 65, 65-74	11.4	20
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