Sang Yup Lee

List of Publications by Citations

805	47,817	107	184
papers	citations	h-index	g-index
884	55,802	7.4	8.2
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
805	antiSMASH 5.0: updates to the secondary metabolite genome mining pipeline. *Nucleic Acids Research*, **2019**, 47, W81-W87	4.4	1429
804	antiSMASH 3.0-a comprehensive resource for the genome mining of biosynthetic gene clusters. *Nucleic Acids Research*, **2015**, 43, W237-43	4.4	1403
803	Metabolic engineering of Escherichia coli for direct production of 1,4-butanediol. *Nature Chemical Biology*, **2011**, 7, 445-52	3.2	835
802	antiSMASH 4.0-improvements in chemistry prediction and gene cluster boundary identification. *Nucleic Acids Research*, **2017**, 45, W36-W41	4.4	834
801	Fermentative butanol production by Clostridia. *Biotechnology and Bioengineering*, **2008**, 101, 209-28	1.3	819
800	High cell-density culture of Escherichia coli. *Trends in Biotechnology*, **1996**, 14, 98-105	4.2	659
799	Bacterial polyhydroxyalkanoates. *Biotechnology and Bioengineering*, **1996**, 49, 1-14	1.3	594
798	Production of succinic acid by bacterial fermentation. *Enzyme and Microbial Technology*, **2006**, 39, 352-361	3	575
797	Systems metabolic engineering of microorganisms for natural and non-natural chemicals. *Nature Chemical Biology*, **2012**, 8, 536-46	3.2	551
796	Secretory and extracellular production of recombinant proteins using Escherichia coli. *Applied Microbiology and Biotechnology*, **2004**, 64, 625-35	1.7	462
795	Metabolic engineering of Escherichia coli for the production of L-valine based on transcriptome analysis and in silico gene knockout simulation. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 7797-802	3.3	451
794	Metabolic engineering of Escherichia coli using synthetic small regulatory RNAs. *Nature Biotechnology*, **2013**, 31, 170-4	10.2	446
793	Bacterial polyhydroxyalkanoates **1996**, 49, 1		426
792	Microbial cell-surface display. *Trends in Biotechnology*, **2003**, 21, 45-52	4.2	395
791	Native-sized recombinant spider silk protein produced in metabolically engineered Escherichia coli results in a strong fiber. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 14059-63	3.3	392
790	Harnessing Yarrowia lipolytica lipogenesis to create a platform for lipid and biofuel production. *Nature Communications*, **2014**, 5, 3131	5	386
789	Plastic bacteria? Progress and prospects for polyhydroxyalkanoate production in bacteria. *Trends in Biotechnology*, **1996**, 14, 431-438	4.2	367

788	Biorefineries for the production of top building block chemicals and their derivatives. *Metabolic Engineering*, **2015**, 28, 223-239	2.9	358
787	Microbial production of short-chain alkanes. *Nature*, **2013**, 502, 571-4	16.4	345
786	Factors affecting the economics of polyhydroxyalkanoate production by bacterial fermentation. *Applied Microbiology and Biotechnology*, **1999**, 51, 13-21	1.7	343
785	Systems metabolic engineering of Escherichia coli for L-threonine production. *Molecular Systems Biology*, **2007**, 3, 149	2.8	342
784	Process analysis and economic evaluation for Poly(3-hydroxybutyrate) production by fermentation. *Bioprocess and Biosystems Engineering*, **1997**, 17, 335		338
783	Systems strategies for developing industrial microbial strains. *Nature Biotechnology*, **2015**, 33, 1061-72	10.2	331
782	Patterned multiplex pathogen DNA detection by Au particle-on-wire SERS sensor. *Nano Letters*, **2010**, 10, 1189-93	3.2	326
781	Optical Biosensors for the Detection of Pathogenic Microorganisms. *Trends in Biotechnology*, **2016**, 34, 7-25	4.2	319
780	Solution chemistry of self-assembled graphene nanohybrids for high-performance flexible biosensors. *ACS Nano*, **2010**, 4, 2910-8	5.6	311
779	Bio-based production of C2-C6 platform chemicals. *Biotechnology and Bioengineering*, **2012**, 109, 2437-59	1.3	291
778	CRISPR-Cas9 Based Engineering of Actinomycetal Genomes. *ACS Synthetic Biology*, **2015**, 4, 1020-9	1.7	279
777	Production of poly(3-hydroxybutyric acid) by fed-batch culture of Alcaligenes eutrophus with glucose concentration control. *Biotechnology and Bioengineering*, **1994**, 43, 892-8	1.3	258
776	Metabolic engineering of Escherichia coli for enhanced production of succinic acid, based on genome comparison and in silico gene knockout simulation. *Applied and Environmental Microbiology* , **2005**, 71, 7880-7	1.4	255
775	Systems biotechnology for strain improvement. *Trends in Biotechnology*, **2005**, 23, 349-58	4.2	251
774	Structural insight into molecular mechanism of poly(ethylene terephthalate) degradation. *Nature Communications*, **2018**, 9, 382	5	247
773	Industrial scale production of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate). *Applied Microbiology and Biotechnology*, **2001**, 57, 50-5	1.7	244
772	Isolation and characterization of a new succinic acid-producing bacterium, Mannheimia succiniciproducensMBEL55E, from bovine rumen. *Applied Microbiology and Biotechnology*, **2002**, 58, 663-8	1.7	241
771	A comprehensive metabolic map for production of bio-based chemicals. *Nature Catalysis*, **2019**, 2, 18-33	10.3	237

770	Metabolic engineering of Escherichia coli for the production of polylactic acid and its copolymers. *Biotechnology and Bioengineering*, **2010**, 105, 161-71	1.3	229
769	Production of recombinant proteins by high cell density culture of Escherichia coli. *Chemical Engineering Science*, **2006**, 61, 876-885	1.9	228
768	Succinic acid production with reduced by-product formation in the fermentation of Anaerobiospirillum succiniciproducens using glycerol as a carbon source. *Biotechnology and Bioengineering*, **2001**, 72, 41-48	1.3	228
767	Control of fed-batch fermentations. *Biotechnology Advances*, **1999**, 17, 29-48	5	216
766	Butanol production from renewable biomass by clostridia. *Bioresource Technology*, **2012**, 123, 653-63	4.8	214
765	Promoter engineering: recent advances in controlling transcription at the most fundamental level. *Biotechnology Journal*, **2013**, 8, 46-58	1.6	213
764	Current status and applications of genome-scale metabolic models. *Genome Biology*, **2019**, 20, 121	3.6	208
763	Genome-based metabolic engineering of Mannheimia succiniciproducens for succinic acid production. *Applied and Environmental Microbiology*, **2006**, 72, 1939-48	1.4	208
762	Metabolic engineering of muconic acid production in Saccharomyces cerevisiae. *Metabolic Engineering*, **2013**, 15, 55-66	2.9	206
761	Systems Metabolic Engineering Strategies: Integrating Systems and Synthetic Biology with Metabolic Engineering. *Trends in Biotechnology*, **2019**, 37, 817-837	4.2	192
760	Metabolic engineering of Clostridium acetobutylicum ATCC 824 for isopropanol-butanol-ethanol fermentation. *Applied and Environmental Microbiology*, **2012**, 78, 1416-23	1.4	190
759	Enhanced butanol production obtained by reinforcing the direct butanol-forming route in Clostridium acetobutylicum. *MBio*, **2012**, 3,	2	187
758	Expanding the metabolic engineering toolbox: more options to engineer cells. *Trends in Biotechnology*, **2007**, 25, 132-7	4.2	183
757	Micro total analysis system (micro-TAS) in biotechnology. *Applied Microbiology and Biotechnology*, **2004**, 64, 289-99	1.7	183
756	In silico identification of gene amplification targets for improvement of lycopene production. *Applied and Environmental Microbiology*, **2010**, 76, 3097-105	1.4	182
755	Metabolic engineering of Escherichia coli for the production of putrescine: a four carbon diamine. *Biotechnology and Bioengineering*, **2009**, 104, 651-62	1.3	178
754	Microbial production of building block chemicals and polymers. *Current Opinion in Biotechnology*, **2011**, 22, 758-67	2.7	174
753	Production of succinic acid by metabolically engineered microorganisms. *Current Opinion in Biotechnology*, **2016**, 42, 54-66	2.7	169

752	Metabolic engineering of Escherichia coli for the production of cadaverine: a five carbon diamine. *Biotechnology and Bioengineering*, **2011**, 108, 93-103	1.3	166
751	Metabolic engineering of Corynebacterium glutamicum for L-arginine production. *Nature Communications*, **2014**, 5, 4618	5	165
750	The antiSMASH database, a comprehensive database of microbial secondary metabolite biosynthetic gene clusters. *Nucleic Acids Research*, **2017**, 45, D555-D559	4.4	164
749	Recent advances in reconstruction and applications of genome-scale metabolic models. *Current Opinion in Biotechnology*, **2012**, 23, 617-23	2.7	157
748	The genome sequence of the capnophilic rumen bacterium Mannheimia succiniciproducens. *Nature Biotechnology*, **2004**, 22, 1275-81	10.2	157
747	Systems metabolic engineering for chemicals and materials. *Trends in Biotechnology*, **2011**, 29, 370-8	4.2	156
746	Application of systems biology for bioprocess development. *Trends in Biotechnology*, **2008**, 26, 404-12	4.2	155
745	Deep learning improves prediction of drug-drug and drug-food interactions. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E4304-E4311	3.3	154
744	Recent advances in systems metabolic engineering tools and strategies. *Current Opinion in Biotechnology*, **2017**, 47, 67-82	2.7	149
743	Dissemination of antibiotic resistance genes from antibiotic producers to pathogens. *Nature Communications*, **2017**, 8, 15784	5	147
742	Genome-scale reconstruction and in silico analysis of the Clostridium acetobutylicum ATCC 824 metabolic network. *Applied Microbiology and Biotechnology*, **2008**, 80, 849-62	1.7	146
741	Recent advances in polyhydroxyalkanoate production by bacterial fermentation: mini-review. *International Journal of Biological Macromolecules*, **1999**, 25, 31-6	3.1	146
740	Production of Poly(3-hydroxybutyrate) by fed-batch culture of recombinant Escherichia coli with a highly concentrated whey solution. *Applied and Environmental Microbiology*, **2000**, 66, 3624-7	1.4	145
739	Efficient and economical recovery of poly(3-hydroxybutyrate) from recombinant Escherichia coli by simple digestion with chemicals. *Biotechnology and Bioengineering*, **1999**, 62, 546-53	1.3	145
738	Systems biology and biotechnology of Streptomyces species for the production of secondary metabolites. *Biotechnology Advances*, **2014**, 32, 255-68	5	141
737	Batch and continuous fermentation of succinic acid from wood hydrolysate by Mannheimia succiniciproducens MBEL55E. *Enzyme and Microbial Technology*, **2004**, 35, 648-653	1.3	140
736	Double-gate nanowire field effect transistor for a biosensor. *Nano Letters*, **2010**, 10, 2934-8	3.2	139
735	Combined transcriptome and proteome analysis of Escherichia coli during high cell density culture. *Biotechnology and Bioengineering*, **2003**, 81, 753-67	1.3	139

734	Metabolic engineering of antibiotic factories: new tools for antibiotic production in actinomycetes. *Trends in Biotechnology*, **2015**, 33, 15-26	4.2	138
733	Biosynthesis of polylactic acid and its copolymers using evolved propionate CoA transferase and PHA synthase. *Biotechnology and Bioengineering*, **2010**, 105, 150-60	1.3	137
732	Towards systems metabolic engineering of microorganisms for amino acid production. *Current Opinion in Biotechnology*, **2008**, 19, 454-60	2.7	136
731	One-step fermentative production of poly(lactate-co-glycolate) from carbohydrates in Escherichia coli. *Nature Biotechnology*, **2016**, 34, 435-40	10.2	135
730	CRISPR/Cas9-coupled recombineering for metabolic engineering of Corynebacterium glutamicum. *Metabolic Engineering*, **2017**, 42, 157-167	2.9	134
729	Synthetic biology and molecular genetics in non-conventional yeasts: Current tools and future advances. *Fungal Genetics and Biology*, **2016**, 89, 126-136	1	134
728	Family of the major cold-shock protein, CspA (CS7.4), of Escherichia coli, whose members show a high sequence similarity with the eukaryotic Y-box binding proteins. *Molecular Microbiology*, **1994**, 11, 833-9	1.2	133
727	Advanced bacterial polyhydroxyalkanoates: towards a versatile and sustainable platform for unnatural tailor-made polyesters. *Biotechnology Advances*, **2012**, 30, 1196-206	5	129
726	Engineering of microorganisms for the production of biofuels and perspectives based on systems metabolic engineering approaches. *Biotechnology Advances*, **2012**, 30, 989-1000	5	128
725	Integrative genome-scale metabolic analysis of Vibrio vulnificus for drug targeting and discovery. *Molecular Systems Biology*, **2011**, 7, 460	2.8	128
724	Molecular mass of poly[(R)-3-hydroxybutyric acid] produced in a recombinant Escherichia coli. *Applied Microbiology and Biotechnology*, **1997**, 47, 140-3	1.7	127
723	The Escherichia coli proteome: past, present, and future prospects. *Microbiology and Molecular Biology Reviews*, **2006**, 70, 362-439	3.4	127
722	Engineering synergy in biotechnology. *Nature Chemical Biology*, **2014**, 10, 319-22	3.2	126
721	Metabolic flux analysis and metabolic engineering of microorganisms. *Molecular BioSystems*, **2008**, 4, 113-20		125
720	Use of expression-enhancing terminators in Saccharomyces cerevisiae to increase mRNA half-life and improve gene expression control for metabolic engineering applications. *Metabolic Engineering* , **2013**, 19, 88-97	2.9	122
719	MEMOTE for standardized genome-scale metabolic model testing. *Nature Biotechnology*, **2020**, 38, 272-276	2.62	121
718	The genome sequence of E. coli W (ATCC 9637): comparative genome analysis and an improved genome-scale reconstruction of E. coli. *BMC Genomics*, **2011**, 12, 9	1.3	121
717	Rational Protein Engineering of Thermo-Stable PETase from Ideonella sakaiensis for Highly Efficient PET Degradation. *ACS Catalysis*, **2019**, 9, 3519-3526	4.1	120

716	Design and use of synthetic regulatory small RNAs to control gene expression in Escherichia coli. *Nature Protocols*, **2013**, 8, 1694-707	4.6	120
715	Expanding the chemical palate of cells by combining systems biology and metabolic engineering. *Metabolic Engineering*, **2012**, 14, 289-97	2.9	119
714	Continuous butanol production with reduced byproducts formation from glycerol by a hyper producing mutant of Clostridium pasteurianum. *Applied Microbiology and Biotechnology*, **2012**, 93, 1485-94	1.7	118
713	Metabolic engineering of Escherichia coli for the production of 5-aminovalerate and glutarate as C5 platform chemicals. *Metabolic Engineering*, **2013**, 16, 42-7	2.9	118
712	Gaussian curvature and the equilibrium among bilayer cylinders, spheres, and discs. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 15318-22	3.3	118
711	Analysis of the mouse gut microbiome using full-length 16S rRNA amplicon sequencing. *Scientific Reports*, **2016**, 6, 29681	1.5	117
710	Butanol production from renewable biomass: rediscovery of metabolic pathways and metabolic engineering. *Biotechnology Journal*, **2012**, 7, 186-98	1.6	116
709	Succinic acid production by Anaerobiospirillum succiniciproducens: effects of the H2/CO2 supply and glucose concentration. *Enzyme and Microbial Technology*, **1999**, 24, 549-554	1.3	116
708	Advances in microbial biosynthesis of metal nanoparticles. *Applied Microbiology and Biotechnology*, **2016**, 100, 521-34	1.7	113
707	Complete genome sequence of the metabolically versatile plant growth-promoting endophyte Variovorax paradoxus S110. *Journal of Bacteriology*, **2011**, 193, 1183-90	0.9	113
706	MetaFluxNet: the management of metabolic reaction information and quantitative metabolic flux analysis. *Bioinformatics*, **2003**, 19, 2144-6	1.7	111
705	Metabolic engineering of microorganisms: general strategies and drug production. *Drug Discovery Today*, **2009**, 14, 78-88	2.2	110
704	In vivo synthesis of diverse metal nanoparticles by recombinant Escherichia coli. *Angewandte Chemie - International Edition*, **2010**, 49, 7019-24	4.6	110
703	Proteome analysis of metabolically engineered Escherichia coli producing Poly(3-hydroxybutyrate). *Journal of Bacteriology*, **2001**, 183, 301-8	0.9	109
702	Cloning of the Alcaligenes latus polyhydroxyalkanoate biosynthesis genes and use of these genes for enhanced production of Poly(3-hydroxybutyrate) in Escherichia coli. *Applied and Environmental Microbiology*, **1998**, 64, 4897-903	1.4	109
701	Recovery and characterization of poly(3-hydroxybutyric acid) synthesized in Alcaligenes eutrophus and recombinant Escherichia coli. *Applied and Environmental Microbiology*, **1995**, 61, 34-9	1.4	109
700	Metabolic engineering of Clostridium acetobutylicum M5 for highly selective butanol production. *Biotechnology Journal*, **2009**, 4, 1432-40	1.6	108
699	Model based engineering of Pichia pastoris central metabolism enhances recombinant protein production. *Metabolic Engineering*, **2014**, 24, 129-38	2.9	107

698	Metabolic engineering of Escherichia coli for the production of fumaric acid. *Biotechnology and Bioengineering*, **2013**, 110, 2025-34	1.3	107
697	Protein nanopatterns and biosensors using gold binding polypeptide as a fusion partner. *Analytical Chemistry*, **2006**, 78, 7197-205	2.7	107
696	Comparison of recombinant Escherichia coli strains for synthesis and accumulation of poly-(3-hydroxybutyric acid) and morphological changes. *Biotechnology and Bioengineering*, **1994**, 44, 1337-47	1.3	107
695	Prediction of novel synthetic pathways for the production of desired chemicals. *BMC Systems Biology*, **2010**, 4, 35	3.4	106
694	Chiral compounds from bacterial polyesters: sugars to plastics to fine chemicals. *Biotechnology and Bioengineering*, **1999**, 65, 363-8	1.3	106
693	The antiSMASH database version 2: a comprehensive resource on secondary metabolite biosynthetic gene clusters. *Nucleic Acids Research*, **2019**, 47, D625-D630	4.4	106
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691	Holographic deep learning for rapid optical screening of anthrax spores. *Science Advances*, **2017**, 3, e1700606	12	104
690	Production of medium-chain-length polyhydroxyalkanoates by high-cell-density cultivation of Pseudomonas putida under phosphorus limitation **2000**, 68, 466-470		104
689	Tools and strategies of systems metabolic engineering for the development of microbial cell factories for chemical production. *Chemical Society Reviews*, **2020**, 49, 4615-4636	14.1	102
688	Biological conversion of wood hydrolysate to succinic acid by Anaerobiospirillum succiniciproducens. *Biotechnology Letters*, **2003**, 25, 111-4	0.9	101
687	Organizational and mutational analysis of a complete FR-008/candicidin gene cluster encoding a structurally related polyene complex. *Chemistry and Biology*, **2003**, 10, 1065-76		101
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685	Systems biology as a foundation for genome-scale synthetic biology. *Current Opinion in Biotechnology*, **2006**, 17, 488-92	2.7	100
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683	Comparative multi-omics systems analysis of Escherichia coli strains B and K-12. *Genome Biology*, **2012**, 13, R37	3.6	99
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679	Genome-scale metabolic model of methylotrophic yeast Pichia pastoris and its use for in silico analysis of heterologous protein production. *Biotechnology Journal*, **2010**, 5, 705-15	1.6	97
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677	Metabolic Engineering of Escherichia coli for Natural Product Biosynthesis. *Trends in Biotechnology*, **2020**, 38, 745-765	4.2	97
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675	Nanogap field-effect transistor biosensors for electrical detection of avian influenza. *Small*, **2009**, 5, 2407-12	3.3	96
674	Metabolic engineering of Yarrowia lipolytica for itaconic acid production. *Metabolic Engineering*, **2015**, 32, 66-73	2.9	95
673	Metabolic engineering in the host Yarrowia lipolytica. *Metabolic Engineering*, **2018**, 50, 192-208	2.9	95
672	Biosynthesis of polyhydroxyalkanoates containing 2-hydroxybutyrate from unrelated carbon source by metabolically engineered Escherichia coli. *Applied Microbiology and Biotechnology*, **2012**, 93, 273-83	1.7	94
671	Covalent attachment and hybridization of DNA oligonucleotides on patterned single-walled carbon nanotube films. *Langmuir*, **2004**, 20, 8886-91	1.3	94
670	Aptamer-functionalized localized surface plasmon resonance sensor for the multiplexed detection of different bacterial species. *Talanta*, **2015**, 132, 112-7	2.5	93
669	Production of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) by high-cell-density cultivation of Aeromonas hydrophila. *Biotechnology and Bioengineering*, **2000**, 67, 240-4	1.3	92
668	Generalizing a hybrid synthetic promoter approach in Yarrowia lipolytica. *Applied Microbiology and Biotechnology*, **2013**, 97, 3037-52	1.7	90
667	Construction and optimization of synthetic pathways in metabolic engineering. *Current Opinion in Microbiology*, **2010**, 13, 363-70	1.5	90
666	Constraints-based genome-scale metabolic simulation for systems metabolic engineering. *Biotechnology Advances*, **2009**, 27, 979-988	5	90
665	Production of poly(3-hydroxybutyrate) from whey by cell recycle fed-batch culture of recombinant Escherichia coli. *Biotechnology Letters*, **2001**, 23, 235-240	0.9	90
664	Display of polyhistidine peptides on the Escherichia coli cell surface by using outer membrane protein C as an anchoring motif. *Applied and Environmental Microbiology*, **1999**, 65, 5142-7	1.4	90
663	Frontiers of yeast metabolic engineering: diversifying beyond ethanol and Saccharomyces. *Current Opinion in Biotechnology*, **2013**, 24, 1023-30	2.7	89

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661	Development of gold nanoparticle-aptamer-based LSPR sensing chips for the rapid detection of Salmonella typhimurium in pork meat. *Scientific Reports*, **2017**, 7, 10130	1.5	88
660	Effects of dissolved CO2 levels on the growth of Mannheimia succiniciproducens and succinic acid production. *Biotechnology and Bioengineering*, **2007**, 98, 1296-304	1.3	86
659	Heterologous production of pentane in the oleaginous yeast Yarrowia lipolytica. *Journal of Biotechnology*, **2013**, 165, 184-94	1.5	85
658	Batch and continuous cultures of Mannheimia succiniciproducens MBEL55E for the production of succinic acid from whey and corn steep liquor. *Bioprocess and Biosystems Engineering*, **2003**, 26, 63-7	1.5	85
657	Metabolic flux analysis for succinic acid production by recombinant Escherichia coli with amplified malic enzyme activity. *Biotechnology and Bioengineering*, **2001**, 74, 89-95	1.3	85
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655	In silico genome-scale metabolic analysis of Pseudomonas putida KT2440 for polyhydroxyalkanoate synthesis, degradation of aromatics and anaerobic survival. *Biotechnology Journal*, **2010**, 5, 739-50	1.6	84
654	Genome-scale analysis of Mannheimia succiniciproducens metabolism. *Biotechnology and Bioengineering*, **2007**, 97, 657-71	1.3	84
653	Removal of endotoxin during purification of poly(3-hydroxybutyrate) from gram-negative bacteria. *Applied and Environmental Microbiology*, **1999**, 65, 2762-4	1.4	84
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648	Fermentative production of chemicals that can be used for polymer synthesis. *Macromolecular Bioscience*, **2004**, 4, 157-64	1.5	82
647	High cell density fed-batch cultivation of Escherichia coli using exponential feeding combined with pH-stat. *Bioprocess and Biosystems Engineering*, **2004**, 26, 147-50	1.5	81
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645	Enabling tools for high-throughput detection of metabolites: Metabolic engineering and directed evolution applications. *Biotechnology Advances*, **2017**, 35, 950-970	5	80

644	Novel gene members in the Pho regulon of Escherichia coli. *FEMS Microbiology Letters*, **2006**, 264, 104-9	0.9	80
643	Identification and characterization of a new enoyl coenzyme A hydratase involved in biosynthesis of medium-chain-length polyhydroxyalkanoates in recombinant Escherichia coli. *Journal of Bacteriology*, **2003**, 185, 5391-7	0.9	80
642	CRISPy-web: An online resource to design sgRNAs for CRISPR applications. *Synthetic and Systems Biotechnology*, **2016**, 1, 118-121	1.4	80
641	Biosensor-Enabled Directed Evolution to Improve Muconic Acid Production in Saccharomyces cerevisiae. *Biotechnology Journal*, **2017**, 12, 1600687	1.6	79
640	Graphene-based electrochemical biosensor for pathogenic virus detection. *Biochip Journal*, **2011**, 5, 123-128	1.3	79
639	Metabolic engineering of Escherichia coli for the production of 1-propanol. *Metabolic Engineering*, **2012**, 14, 477-86	2.9	78
638	Metabolic engineering of Corynebacterium glutamicum for enhanced production of 5-aminovaleric acid. *Microbial Cell Factories*, **2016**, 15, 174	2.1	78
637	Metabolic engineering of microorganisms for production of aromatic compounds. *Microbial Cell Factories*, **2019**, 18, 41	2.1	76
636	Metabolic engineering of Escherichia coli for high-level astaxanthin production with high productivity. *Metabolic Engineering*, **2018**, 49, 105-115	2.9	76
635	Production of poly(3-hydroxybutyric-co-3-hydroxyvaleric acid) by fed-batch culture of Alcaligenes eutrophus with substrate control using on-line glucose analyzer. *Enzyme and Microbial Technology*, **1994**, 16, 556-561	1.3	76
634	Au nanowire-on-film SERRS sensor for ultrasensitive Hg2+ detection. *Chemistry - A European Journal*, **2011**, 17, 2211-4	1.2	75
633	Production of poly-□glutamic acid by fed-batch culture of Bacillus licheniformis. *Biotechnology Letters*, **2000**, 22, 585-588	0.9	74
632	Production of poly(3-hydroxybutyric acid) by recombinant Escherichia coli strains: genetic and fermentation studies. *Canadian Journal of Microbiology*, **1995**, 41 Suppl 1, 207-15	0.9	74
631	Metabolic engineering for the synthesis of polyesters: A 100-year journey from polyhydroxyalkanoates to non-natural microbial polyesters. *Metabolic Engineering*, **2020**, 58, 47-81	2.9	74
630	Development of a Glucose Biosensor Using Advanced Electrode Modified by Nanohybrid Composing Chemically Modified Graphene and Ionic Liquid. *Electroanalysis*, **2010**, 22, 1223-1228	1.3	73
629	One hundred years of clostridial butanol fermentation. *FEMS Microbiology Letters*, **2016**, 363,	0.9	72
628	Synthetic Biology Expands the Industrial Potential of Yarrowia lipolytica. *Trends in Biotechnology*, **2018**, 36, 1085-1095	4.2	72
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626	Production of poly-hydroxybutyrate by fed-batch culture of recombinantEscherichia coli. *Biotechnology Letters*, **1992**, 14, 811-816	0.9	71
625	Efficient production of polylactic acid and its copolymers by metabolically engineered Escherichia coli. *Journal of Biotechnology*, **2011**, 151, 94-101	1.5	70
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