George N Bennett

List of Publications by Year
in descending order

194 papers	9,813 citations	34105 52 h-index	48315 88 g-index
195 all docs	195 docs citations	195 times ranked	6472 citing authors

#	Article	IF	Citations
1	Genome Sequence and Comparative Analysis of the Solvent-Producing Bacterium<i>Clostridium acetobutylicum</i>. Journal of Bacteriology, 2001, 183, 4823-4838.	2.2	725
2	Construction and analysis of in vivo activity of E. coll promoter hybrids and promoter mutants that alter the âˆ’35 to âˆ’10 spacing. Gene, 1982, 20, 231-243.	2.2	260
3	Metabolic Engineering of Escherichia coli: Increase of NADH Availability by Overexpressing an NAD+-Dependent Formate Dehydrogenase. Metabolic Engineering, 2002, 4, 217-229.	7.0	254
4	Metabolic Engineering through Cofactor Manipulation and Its Effects on Metabolic Flux Redistribution in Escherichia coli. Metabolic Engineering, 2002, 4, 182-192.	7.0	234
5	Novel pathway engineering design of the anaerobic central metabolic pathway in Escherichia coli to increase succinate yield and productivity. Metabolic Engineering, 2005, 7, 229-239.	7.0	226
6	Metabolic Engineering of Clostridium acetobutylicum ATCC 824 for Isopropanol-Butanol-Ethanol Fermentation. Applied and Environmental Microbiology, 2012, 78, 1416-1423.	3.1	213
7	Expression of Cloned Homologous Fermentative Genes in Clostridium Acetobutylicum ATCC 824. Nature Biotechnology, 1992, 10, 190-195.	17.5	209
8	Metabolic engineering of aerobic succinate production systems in Escherichia coli to improve process productivity and achieve the maximum theoretical succinate yield. Metabolic Engineering, 2005, 7, 116-127.	7.0	179
9	Succinate production in <i>Escherichia coli</i>. Biotechnology Journal, 2012, 7, 213-224.	3.5	159
10	The Effect of Increasing NADH Availability on the Redistribution of Metabolic Fluxes in Escherichia coli Chemostat Cultures. Metabolic Engineering, 2002, 4, 230-237.	7.0	142
11	Biodegradation of xenobiotics by anaerobic bacteria. Applied Microbiology and Biotechnology, 2005, 67, 600-618.	3.6	135
12	Nucleotide sequences of the trpG regions of Escherichia coli, Shigella dysenteriae, Salmonella typhimurium and Serratia marcescens. Journal of Molecular Biology, 1980, 142, 503-517.	4.2	134
13	Cofactor engineering for advancing chemical biotechnology. Current Opinion in Biotechnology, 2013, 24, 994-999.	6.6	132
14	Sequence analysis of operator constitutive mutants of the tryptophan operon of Escherichia coli. Journal of Molecular Biology, 1978, 121, 179-192.	4.2	124
15	Replacing Escherichia coli NAD-dependent glyceraldehyde 3-phosphate dehydrogenase (GAPDH) with a NADP-dependent enzyme from Clostridium acetobutylicum facilitates NADPH dependent pathways. Metabolic Engineering, 2008, 10, 352-359.	7.0	118
16	Efficient Succinic Acid Production from Glucose through Overexpression of Pyruvate Carboxylase in an Escherichia coli Alcohol Dehydrogenase and Lactate Dehydrogenase Mutant. Biotechnology Progress, 2008, 21, 358-365.	2.6	118
17	Acetyl-CoA synthetase overexpression in Escherichia coli demonstrates more efficient acetate assimilation and lower acetate accumulation: a potential tool in metabolic engineering. Applied Microbiology and Biotechnology, 2006, 71, 870-874.	3.6	116
18	Characterization of the Acetate-Producing Pathways in Escherichia coli. Biotechnology Progress, 2008, 21, 1062-1067.	2.6	113

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19	Effect of ArcA and FNR on the expression of genes related to the oxygen regulation and the glycolysis pathway inEscherichia coli under microaerobic growth conditions. Biotechnology and Bioengineering, 2005, 92, 147-159.	3.3	111
20	Fedâ€batch culture of a metabolically engineered <i>Escherichia coli</i> strain designed for highâ€level succinate production and yield under aerobic conditions. Biotechnology and Bioengineering, 2005, 90, 775-779.	3.3	110
21	Microbial formation of esters. Applied Microbiology and Biotechnology, 2009, 85, 13-25.	3.6	109
22	Effect of oxygen, and ArcA and FNR regulators on the expression of genes related to the electron transfer chain and the TCA cycle in Escherichia coli. Metabolic Engineering, 2005, 7, 364-374.	7.0	107
23	Effect of oxygen on the <i>Escherichia coli</i> ArcA and FNR regulation systems and metabolic responses. Biotechnology and Bioengineering, 2005, 89, 556-564.	3.3	107
24	Genetic reconstruction of the aerobic central metabolism inEscherichia coli for the absolute aerobic production of succinate. Biotechnology and Bioengineering, 2005, 89, 148-156.	3.3	106
25	Expression of a Cloned Cyclopropane Fatty Acid Synthase Gene Reduces Solvent Formation in Clostridium acetobutylicum ATCC 824. Applied and Environmental Microbiology, 2003, 69, 2831-2841.	3.1	101
26	Metabolic engineering ofClostridium acetobutylicum ATCC 824 for increased solvent production by enhancement of acetone formation enzyme activities using a synthetic acetone operon. Biotechnology and Bioengineering, 1993, 42, 1053-1060.	3.3	98
27	Effect of modified glucose uptake using genetic engineering techniques on high-level recombinant protein production inescherichia coli dense cultures. Biotechnology and Bioengineering, 1994, 44, 952-960.	3.3	97
28	Effect of Overexpression of a Soluble Pyridine Nucleotide Transhydrogenase (UdhA) on the Production of Poly(3-hydroxybutyrate) in Escherichia coli. Biotechnology Progress, 2006, 22, 420-425.	2.6	95
29	Regulation of the sol Locus Genes for Butanol and Acetone Formation in Clostridium acetobutylicum ATCC 824 by a Putative Transcriptional Repressor. Journal of Bacteriology, 1999, 181, 319-330.	2.2	95
30	MUTAGENICITY OF NITROAROMATIC DEGRADATION COMPOUNDS. Environmental Toxicology and Chemistry, 2003, 22, 2293.	4.3	94
31	Metabolic engineering of Escherichia coli to minimize byproduct formate and improving succinate productivity through increasing NADH availability by heterologous expression of NAD+-dependent formate dehydrogenase. Metabolic Engineering, 2013, 20, 1-8.	7.0	93
32	Comparison of the nucleotide sequences of the initial transcribed regions of the tryptophan operons of Escherichia coli and Salmonella typhimurium. Journal of Molecular Biology, 1978, 121, 193-217.	4.2	92
33	Isolation and Characterization of Mutants of <i>Clostridium acetobutylicum</i> ATCC 824 Deficient in Acetoacetyl-Coenzyme A:Acetate/Butyrate:Coenzyme A-Transferase (EC 2.8.3.9) and in Other Solvent Pathway Enzymes. Applied and Environmental Microbiology, 1989, 55, 970-976.	3.1	88
34	Intracellular Butyryl Phosphate and Acetyl Phosphate Concentrations in <i>Clostridium acetobutylicum</i> and Their Implications for Solvent Formation. Applied and Environmental Microbiology, 2005, 71, 530-537.	3.1	87
35	Modification of central metabolic pathway inescherichia coli to reduce acetate accumulation by heterologous expression of thebacillus subtilis acetolactate synthase gene. Biotechnology and Bioengineering, 1994, 44, 944-951.	3.3	84
36	Batch culture characterization and metabolic flux analysis of succinate-producing Escherichia coli strains. Metabolic Engineering, 2006, 8, 209-226.	7.0	78

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37	Metabolic Flux Analysis ofEscherichia coliDeficient in the Acetate Production Pathway and Expressing theBacillus subtilisAcetolactate Synthase. Metabolic Engineering, 1999, 1, 26-34.	7.0	77
38	Sequence and arrangement of two genes of the butyrate-synthesis pathway of Clostridium acetobutylicum ATCC 824. Gene, 1993, 134, 107-111.	2.2	76
39	Cofactor engineering of intracellular CoA/acetyl-CoA and its effect on metabolic flux redistribution in Escherichia coli. Metabolic Engineering, 2004, 6, 133-139.	7.0	75
40	Enhanced Lycopene Productivity by Manipulation of Carbon Flow to Isopentenyl Diphosphate in Escherichia coli. Biotechnology Progress, 2005, 21, 1558-1561.	2.6	74
41	2,4,6-Trinitrotoluene Reduction by Carbon Monoxide Dehydrogenase from Clostridium thermoaceticum. Applied and Environmental Microbiology, 2000, 66, 1474-1478.	3.1	72
42	Molecular characterization of adiY, a regulatory gene which affects expression of the biodegradative acid-induced arginine decarboxylase gene (adiA) of Escherichia coli. Microbiology (United Kingdom), 1996, 142, 1311-1320.	1.8	71
43	Metabolic engineering of Escherichia coli to enhance recombinant protein production through acetate reduction. Biotechnology Progress, 1995, 11, 475-478.	2.6	69
44	Redistribution of Metabolic Fluxes in the Central Aerobic Metabolic Pathway of E. coli Mutant Strains with Deletion of the ackA-pta and poxB Pathways for the Synthesis of Isoamyl Acetate. Biotechnology Progress, 2008, 21, 627-631.	2.6	68
45	Increasing the Acetyl-CoA Pool in the Presence of Overexpressed Phosphoenolpyruvate Carboxylase or Pyruvate Carboxylase Enhances Succinate Production in Escherichia coli. Biotechnology Progress, 2004, 20, 1599-1604.	2.6	67
46	Redistribution of Metabolic Fluxes inEscherichia coliwith Fermentative Lactate Dehydrogenase Overexpression and Deletion. Metabolic Engineering, 1999, 1, 141-152.	7.0	66
47	The central metabolic pathway from acetyl-CoA to butyryl-CoA inClostridium acetobutylicum. FEMS Microbiology Reviews, 1995, 17, 241-249.	8.6	65
48	The Effects of Feed and Intracellular Pyruvate Levels on the Redistribution of Metabolic Fluxes in Escherichia coli. Metabolic Engineering, 2001, 3, 115-123.	7.0	65
49	Effect of Sorghum vulgare phosphoenolpyruvate carboxylase and Lactococcus lactis pyruvate carboxylase coexpression on succinate production in mutant strains of Escherichia coli. Applied Microbiology and Biotechnology, 2005, 67, 515-523.	3.6	65
50	Intracellular Concentrations of Coenzyme A and Its Derivatives from <i>Clostridium acetobutylicum</i> ATCC 824 and Their Roles in Enzyme Regulation. Applied and Environmental Microbiology, 1994, 60, 39-44.	3.1	65
51	Effect of different levels of NADH availability on metabolic fluxes of Escherichia coli chemostat cultures in defined medium. Journal of Biotechnology, 2005, 117, 395-405.	3.8	63
52	Escherichia coli RNA polymerase and trp repressor interaction with the promoter-operator region of the tryptophan operon of Salmonella typhimurium. Journal of Molecular Biology, 1980, 144, 133-142.	4.2	60
53	Sequence and arrangement of genes encoding enzymes of the acetone-production pathway of Clostridium acetobutylicum ATCC 824. Gene, 1993, 123, 93-97.	2.2	58
54	Reduction of acetate accumulation in Escherichia coli cultures for increased recombinant protein production. Metabolic Engineering, 2008, 10, 97-108.	7.0	56

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55	Applicability of CoA/acetyl-CoA manipulation system to enhance isoamyl acetate production in Escherichia coli. Metabolic Engineering, 2004, 6, 294-299.	7.0	53
56	Succinate production from different carbon sources under anaerobic conditions by metabolic engineered Escherichia coli strains. Metabolic Engineering, 2011, 13, 328-335.	7.0	53
57	Metabolic engineering of carbon and redox flow in the production of small organic acids. Journal of Industrial Microbiology and Biotechnology, 2015, 42, 403-422.	3.0	53
58	Effect of carbon sources differing in oxidation state and transport route on succinate production in metabolically engineered Escherichia coli. Journal of Industrial Microbiology and Biotechnology, 2005, 32, 87-93.	3.0	52
59	Finding metabolic pathways using atom tracking. Bioinformatics, 2010, 26, 1548-1555.	4.1	52
60	Reduction of 2,4,6â€trinitrotoluene by <i>Clostridium acetobutylicum</i> through hydroxylaminoâ€nitrotoluene intermediates. Environmental Toxicology and Chemistry, 1998, 17, 343-348.	4.3	51
61	SpoIIE Regulates Sporulation but Does Not Directly Affect Solventogenesis in Clostridium acetobutylicum ATCC 824. Journal of Bacteriology, 2005, 187, 1930-1936.	2.2	51
62	Characterization of the Î²-lactamase promoter of pBR322. Nucleic Acids Research, 1981, 9, 2517-2533.	14.5	50
63	Production of succinic acid by engineered E. coli strains using soybean carbohydrates as feedstock under aerobic fermentation conditions. Bioresource Technology, 2013, 130, 398-405.	9.6	50
64	Characterization of an acetyl-CoA C-acetyltransferase (thiolase) gene from Clostridium acetobutylicum ATCC 824. Gene, 1995, 154, 81-85.	2.2	48
65	Inactivation of an aldehyde/alcohol dehydrogenase gene fromClostridium acetobutylicum ATCC 824. Applied Biochemistry and Biotechnology, 1996, 57-58, 213-221.	2.9	48
66	Effect of inactivation ofnuo andackA-pta on redistribution of metabolic fluxes inEscherichia coli. Biotechnology and Bioengineering, 1999, 65, 291-297.	3.3	48
67	Proteome analysis and comparison of Clostridium acetobutylicum ATCC 824 and Spo0A strain variants. Journal of Industrial Microbiology and Biotechnology, 2006, 33, 298-308.	3.0	48
68	The effect of carbon sources and lactate dehydrogenase deletion on 1,2-propanediol production in Escherichia coli. Journal of Industrial Microbiology and Biotechnology, 2003, 30, 34-40.	3.0	47
69	2,4,6-Trinitrotoluene Reduction by an Fe-Only Hydrogenase in Clostridium acetobutylicum. Applied and Environmental Microbiology, 2003, 69, 1542-1547.	3.1	46
70	Effect of different levels of NADH availability on metabolite distribution in Escherichia coli fermentation in minimal and complex media. Applied Microbiology and Biotechnology, 2004, 65, 426-432.	3.6	46
71	Metabolic Flux Analysis of <i>Escherichia coli creB</i> and <i>arcA</i> Mutants Reveals Shared Control of Carbon Catabolism under Microaerobic Growth Conditions. Journal of Bacteriology, 2009, 191, 5538-5548.	2.2	46
72	Metabolic impact of the level of aeration during cell growth on anaerobic succinate production by an engineered Escherichia coli strain. Metabolic Engineering, 2010, 12, 499-509.	7.0	46

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73	Metalloprotein switches that display chemical-dependent electron transfer in cells. Nature Chemical Biology, 2019, 15, 189-195.	8.0	46
74	Biochemical characterization of trinitrotoluene transforming oxygen-insensitive nitroreductases from Clostridium acetobutylicum ATCC 824. Archives of Microbiology, 2005, 184, 158-167.	2.2	45
75	Characterization of Methylglyoxal Synthase from <i>Clostridium acetobutylicum</i> ATCC 824 and Its Use in the Formation of 1,2-Propanediol. Applied and Environmental Microbiology, 1999, 65, 3244-3247.	3.1	45
76	Effect of Modulated Glucose Uptake on High-Level Recombinant Protein Production in a Dense Escherichia coli Culture. Biotechnology Progress, 1994, 10, 644-647.	2.6	44
77	Expression of <i>abrB310</i> and <i>sinR</i> , and Effects of Decreased <i>abrB310</i> Expression on the Transition from Acidogenesis to Solventogenesis, in <i>Clostridium acetobutylicum</i> ATCC 824. Applied and Environmental Microbiology, 2005, 71, 1987-1995.	3.1	44
78	Cellular Assays for Ferredoxins: A Strategy for Understanding Electron Flow through Protein Carriers That Link Metabolic Pathways. Biochemistry, 2016, 55, 7047-7064.	2.5	44
79	A method for construction of E. coli strains with multiple DNA insertions in the chromosome. Gene, 1997, 187, 231-238.	2.2	43
80	Role of Hydroxylamine Intermediates in the Phytotransformation of 2,4,6-Trinitrotoluene byMyriophyllum aquaticum. Environmental Science & Technology, 2003, 37, 3595-3600.	10.0	43
81	Improvement of Biomass Yield and Recombinant Gene Expression in Escherichia coli by Using Fructose as the Primary Carbon Source. Biotechnology Progress, 1999, 15, 140-145.	2.6	42
82	Production of isoamyl acetate in ackA-pta and/or ldh mutants of Escherichia coli with overexpression of yeast ATF2. Applied Microbiology and Biotechnology, 2004, 63, 698-704.	3.6	41
83	Chemostat culture characterization of Escherichia coli mutant strains metabolically engineered for aerobic succinate production: A study of the modified metabolic network based on metabolite profile, enzyme activity, and gene expression profile. Metabolic Engineering, 2005, 7, 337-352.	7.0	41
84	De novo design of symmetric ferredoxins that shuttle electrons in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14557-14562.	7.1	41
85	Development of a metabolic network design and optimization framework incorporating implementation constraints: A succinate production case study. Metabolic Engineering, 2006, 8, 46-57.	7.0	40
86	Effects of Antibiotic Physicochemical Properties on Their Release Kinetics from Biodegradable Polymer Microparticles. Pharmaceutical Research, 2014, 31, 3379-3389.	3.5	39
87	Evolutionary Relationships Between Low Potential Ferredoxin and Flavodoxin Electron Carriers. Frontiers in Energy Research, 2019, 7, .	2.3	39
88	Overexpression, Purification, and Characterization of the Thermostable Mevalonate Kinase from Methanococcus jannaschii. Protein Expression and Purification, 1999, 17, 33-40.	1.3	38
89	Heterologous expression of the Saccharomyces cerevisiae alcohol acetyltransferase genes in Clostridium acetobutylicum and Escherichia coli for the production of isoamyl acetate. Journal of Industrial Microbiology and Biotechnology, 2003, 30, 427-432.	3.0	38
90	Effects of Local Antibiotic Delivery from Porous Space Maintainers on Infection Clearance and Induction of an Osteogenic Membrane in an Infected Bone Defect. Tissue Engineering - Part A, 2017, 23, 91-100.	3.1	37

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91	Effect of the global redox sensing/regulation networks on Escherichia coli and metabolic flux distribution based on C-13 labeling experiments. Metabolic Engineering, 2006, 8, 619-627.	7.0	36
92	Improving the Clostridium acetobutylicum butanol fermentation by engineering the strain for co-production of riboflavin. Journal of Industrial Microbiology and Biotechnology, 2011, 38, 1013-1025.	3.0	35
93	Metabolic engineering and transhydrogenase effects on NADPH availability in <i>escherichia coli</i>. Biotechnology Progress, 2013, 29, 1124-1130.	2.6	35
94	Construction ofEscherichia coli-Clostridium acetobutylicum shuttle vectors and transformation ofClostridium acetobutylicum strains. Biotechnology Letters, 1992, 14, 427-432.	2.2	33
95	Bioconversion of methane to C-4 carboxylic acids using carbon flux through acetyl-CoA in engineered Methylomicrobium buryatense 5GB1C. Metabolic Engineering, 2018, 48, 175-183.	7.0	33
96	Vector Construction, Transformation, and Gene Amplification in Clostridium acetobutylicum ATCC 824. Annals of the New York Academy of Sciences, 1992, 665, 39-51.	3.8	32
97	Metabolic flux analysis ofEscherichia coli expressing theBacillus subtilis acetolactate synthase in batch and continuous cultures. , 1999, 63, 737-749.		32
98	Single cell protein production from food waste using purple non-sulfur bacteria shows economically viable protein products have higher environmental impacts. Journal of Cleaner Production, 2020, 276, 123114.	9.3	32
99	Characterization of a pH-inducible promoter system for high-level expression of recombinant proteins inEscherichia coli. Biotechnology and Bioengineering, 1995, 47, 186-192.	3.3	31
100	Engineering poly(3â€hydroxybutyrateâ€<i>co</i>â€3â€hydroxyvalerate) copolymer composition in <i>E. coli</i>. Biotechnology and Bioengineering, 2008, 99, 919-928.	3.3	31
101	Ester production in E. coli and C. acetobutylicum. Enzyme and Microbial Technology, 2006, 38, 937-943.	3.2	30
102	Proteomic analyses of the phase transition from acidogenesis to solventogenesis using solventogenic and non-solventogenic Clostridium acetobutylicum strains. Applied Microbiology and Biotechnology, 2014, 98, 5105-5115.	3.6	29
103	Molecular cloning and characterization of the alcohol dehydrogenase ADH1 gene of Candida utilis ATCC 9950. Journal of Industrial Microbiology and Biotechnology, 2006, 33, 1032-1036.	3.0	28
104	Manipulating respiratory levels in Escherichia coli for aerobic formation of reduced chemical products. Metabolic Engineering, 2011, 13, 704-712.	7.0	28
105	Genetic and Metabolic Engineering of Clostridium acetobutylicum ATCC 824. Annals of the New York Academy of Sciences, 1994, 721, 54-68.	3.8	27
106	Effect of variation ofKlebsiella pneumoniae acetolactate synthase expression on metabolic flux redistribution inEscherichia coli. , 2000, 69, 150-159.		27
107	Heterologous pyc gene expression under various natural and engineered promoters in Escherichia coli for improved succinate production. Journal of Biotechnology, 2011, 155, 236-243.	3.8	27
108	Anthramycin inhibition of restriction endonuclease cleavage and its use as a reversible blocking agent in DNA constructions. Nucleic Acids Research, 1981, 9, 2105-2120.	14.5	26

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109	Formation of alkali labile linkages in DNA by hedamycin and use of hedamycin as a probe of protein-DNA complexes. Nucleic Acids Research, 1982, 10, 4581-4594.	14.5	26
110	Genetic manipulation of acid and solvent formation inClostridium acetobutylicum ATCC 824. , 1998, 58, 215-221.		26
111	Evaluation of antibiotic releasing porous polymethylmethacrylate space maintainers in an infected composite tissue defect model. Acta Biomaterialia, 2013, 9, 8832-8839.	8.3	26
112	Improvement of NADPH bioavailability in Escherichia coli through the use of phosphofructokinase deficient strains. Applied Microbiology and Biotechnology, 2013, 97, 6883-6893.	3.6	26
113	Effect of culture operating conditions on succinate production in a multiphase fed-batch bioreactor using an engineered Escherichia coli strain. Applied Microbiology and Biotechnology, 2011, 92, 499-508.	3.6	24
114	Volatile Gas Production by Methyl Halide Transferase: An In Situ Reporter Of Microbial Gene Expression In Soil. Environmental Science & Technology, 2016, 50, 8750-8759.	10.0	24
115	Ratiometric Gas Reporting: A Nondisruptive Approach To Monitor Gene Expression in Soils. ACS Synthetic Biology, 2018, 7, 903-911.	3.8	24
116	Improvement of butanol production in <i>Clostridium acetobutylicum</i> through enhancement of NAD(P)H availability. Journal of Industrial Microbiology and Biotechnology, 2018, 45, 993-1002.	3.0	24
117	Cloning of small DNA fragments containing the Escherichia coli tryptophan operon promoter and operator. Gene, 1982, 17, 9-18.	2.2	22
118	Sequence and arrangement of genes encoding sigma factors in Clostridium acetobutylicum ATCC 824. Gene, 1995, 153, 89-92.	2.2	22
119	Genetic manipulation of stationary-phase genes to enhance recombinant protein production inEscherichia coli. , 1996, 50, 636-642.		22
120	Cloning, Sequencing, and Characterization of the Gene Encoding Flagellin, flaC, and the Post-translational Modification of Flagellin, FlaC, from Clostridium acetobutylicum ATCC824. Anaerobe, 2000, 6, 69-79.	2.1	22
121	Role of DNA regions flanking the tryptophan promoter of Escherichia coli I. Insertion of synthetic oligonucleotides. Gene, 1984, 32, 337-348.	2.2	21
122	Genetically constrained metabolic flux analysis. Metabolic Engineering, 2005, 7, 445-456.	7.0	21
123	Characterization of thermostable Xyn10A enzyme from mesophilic Clostridium acetobutylicum ATCC 824. Journal of Industrial Microbiology and Biotechnology, 2005, 32, 12-18.	3.0	21
124	Improvement of NADPH bioavailability in <i>Escherichia coli</i> by replacing NAD+-dependent glyceraldehyde-3-phosphate dehydrogenase GapA with NADP+-dependent GapB from <i>Bacillus subtilis</i> and addition of NAD kinase. Journal of Industrial Microbiology and Biotechnology, 2013, 40, 1449-1460.	3.0	21
125	Enhanced Isoamyl Acetate Production upon Manipulation of the Acetyl-CoA Node in Escherichia coli. Biotechnology Progress, 2004, 20, 692-697.	2.6	20
126	Thermostable xylanase10B from Clostridium acetobutylicum ATCC824. Journal of Industrial Microbiology and Biotechnology, 2004, 31, 229-234.	3.0	20

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127	The YfiD protein contributes to the pyruvate formate-lyase flux in anEscherichia coli arcA mutant strain. Biotechnology and Bioengineering, 2007, 97, 138-143.	3.3	20
128	Regulation of lysine decarboxylase activity in Escherichia coli K-12. Archives of Microbiology, 1989, 151, 466-468.	2.2	19
129	Characterization of alcohol dehydrogenase 1 and 3 from Neurospora crassa FGSC2489. Applied Microbiology and Biotechnology, 2007, 76, 349-356.	3.6	18
130	Metabolic transistor strategy for controlling electron transfer chain activity in Escherichia coli. Metabolic Engineering, 2015, 28, 159-168.	7.0	18
131	Polymer-Based Local Antibiotic Delivery for Prevention of Polymicrobial Infection in Contaminated Mandibular Implants. ACS Biomaterials Science and Engineering, 2016, 2, 558-566.	5.2	17
132	High yield production of four-carbon dicarboxylic acids by metabolically engineered <i>Escherichia coli</i>. Journal of Industrial Microbiology and Biotechnology, 2018, 45, 53-60.	3.0	17
133	Improving the organization and interactivity of metabolic pathfinding with precomputed pathways. BMC Bioinformatics, 2020, 21, 13.	2.6	17
134	Efficient production of free fatty acids from soybean meal carbohydrates. Biotechnology and Bioengineering, 2015, 112, 2324-2333.	3.3	16
135	Construction and characterization of pBR322-derived plasmids with deletions of the RNA I region. Gene, 1986, 41, 281-288.	2.2	15
136	Enzymatic characterization of a nonmotile, nonsolventogenicClostridium acetobutylicum ATCC 824 mutant. Current Microbiology, 1991, 23, 253-258.	2.2	15
137	Cloning, Sequence, and Expression of the Phosphofructokinase Gene of Clostridium acetobutylicum ATCC 824 in Escherichia coli. Current Microbiology, 1998, 37, 17-22.	2.2	15
138	Mutagenicity of trinitrotoluene and metabolites formed during anaerobic degradation byClostridium acetobutylicumATCC 824. Environmental Toxicology and Chemistry, 2000, 19, 2871-2875.	4.3	15
139	Metabolic engineering of <i>Escherichia coli</i> to produce succinate from soybean hydrolysate under anaerobic conditions. Biotechnology and Bioengineering, 2018, 115, 1743-1754.	3.3	15
140	Enzymatic digestion of operator DNA in the presence of the lac repressor tryptic core. Journal of Molecular Biology, 1984, 179, 335-350.	4.2	14
141	100th Anniversary of Macromolecular Science Viewpoint: Soft Materials for Microbial Bioelectronics. ACS Macro Letters, 2020, 9, 1590-1603.	4.8	14
142	REDUCTION OF 2,4,6-TRINITROTOLUENE BY CLOSTRIDIUM ACETOBUTYLICUM THROUGH HYDROXYLAMINO-NITROTOLUENE INTERMEDIATES. Environmental Toxicology and Chemistry, 1998, 17, 343.	4.3	14
143	A kinetic model of oxygen regulation of cytochrome production in Escherichia coli. Journal of Theoretical Biology, 2006, 242, 547-563.	1.7	13
144	An Algorithm for Efficient Identification of Branched Metabolic Pathways. Journal of Computational Biology, 2011, 18, 1575-1597.	1.6	13

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145	Synthesis and Expression of a Gene for a Mini Type II Dihydrofolate Reductase. DNA and Cell Biology, 1988, 7, 243-251.	5.2	12
146	Sequences affecting the regulation of solvent production in Clostridium acetobutylicum. Journal of Industrial Microbiology and Biotechnology, 2003, 30, 414-420.	3.0	12
147	Characterization of d-ribose biosynthesis in Bacillus subtilis JY200 deficient in transketolase gene. Journal of Biotechnology, 2006, 121, 508-516.	3.8	12
148	Combinatorial design of chemicalâ€dependent protein switches for controlling intracellular electron transfer. AIChE Journal, 2020, 66, e16796.	3.6	12
149	Localized mandibular infection affects remote in vivo bioreactor bone generation. Biomaterials, 2020, 256, 120185.	11.4	12
150	Metabolic engineering of Escherichia coli for quinolinic acid production by assembling L-aspartate oxidase and quinolinate synthase as an enzyme complex. Metabolic Engineering, 2021, 67, 164-172.	7.0	12
151	Cloning and Assembly of PCR Products Using Modified Primers and DNA Repair Enzymes. BioTechniques, 1997, 23, 858-864.	1.8	11
152	Succinate production from sucrose by metabolic engineered <i>escherichia coli</i> strains under aerobic conditions. Biotechnology Progress, 2011, 27, 1242-1247.	2.6	11
153	Biosynthesis of Medium-Chain Ï‰-Hydroxy Fatty Acids by AlkBGT of Pseudomonas putida GPo1 With Native FadL in Engineered Escherichia coli. Frontiers in Bioengineering and Biotechnology, 2019, 7, 273.	4.1	11
154	Effects of rifampicin and chloramphenicol on product and enzyme levels of the acid- and solvent-producing pathways of Clostridium acetobutylicum (ATCC 824). Enzyme and Microbial Technology, 1992, 14, 277-283.	3.2	10
155	Metabolic engineering of the anaerobic central metabolic pathway in <i>Escherichia coli</i> for the simultaneous anaerobic production of isoamyl acetate and succinic acid. Biotechnology Progress, 2009, 25, 1304-1309.	2.6	10
156	Structural correlations of activity of Clostridium acetobutylicum ATCC 824 butyrate kinase isozymes. Enzyme and Microbial Technology, 2010, 46, 118-124.	3.2	10
157	Characterization and evaluation of corn steep liquid in acetone-butanol-ethanol production by Clostridium acetobutylicum. Biotechnology and Bioprocess Engineering, 2013, 18, 266-271.	2.6	10
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159	Efficient free fatty acid production in engineered <scp><i>E</i></scp><i>scherichia coli</i> strains using soybean oligosaccharides as feedstock. Biotechnology Progress, 2015, 31, 686-694.	2.6	10
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