Christopher T Nomura

List of Publications by Year
in descending order

70 papers	2,644 citations	172457 29 h-index	197818 49 g-index
72 all docs	72 docs citations	72 times ranked	2515 citing authors

#	Article	IF	Citations
1	Mini-Review: Biosynthesis of Poly(hydroxyalkanoates). Polymer Reviews, 2009, 49, 226-248.	10.9	180
2	Biosynthesis of polyhydroxyalkanoate copolymers from mixtures of plant oils and 3-hydroxyvalerate precursors. Bioresource Technology, 2008, 99, 6844-6851.	9.6	165
3	Production of polyhydroxyalkanoates by<i>Burkholderia cepacia</i>ATCC 17759 using a detoxified sugar maple hemicellulosic hydrolysate. Journal of Industrial Microbiology and Biotechnology, 2012, 39, 459-469.	3.0	152
4	Production and characterization of polyâ€3â€hydroxybutyrate from biodieselâ€glycerol by <i>Burkholderia cepacia</i> ATCC 17759. Biotechnology Progress, 2010, 26, 424-430.	2.6	123
5	Development of a New Strategy for Production of Medium-Chain-Length Polyhydroxyalkanoates by Recombinant Escherichia coli via Inexpensive Non-Fatty Acid Feedstocks. Applied and Environmental Microbiology, 2012, 78, 519-527.	3.1	119
6	PHA synthase engineering toward superbiocatalysts for custom-made biopolymers. Applied Microbiology and Biotechnology, 2007, 73, 969-979.	3.6	118
7	Rearrangement of Gene Order in the <i>phaCAB</i> Operon Leads to Effective Production of Ultrahigh-Molecular-Weight Poly[(<i>R</i>)-3-Hydroxybutyrate] in Genetically Engineered Escherichia coli. Applied and Environmental Microbiology, 2012, 78, 3177-3184.	3.1	97
8	Engineering Bacillus licheniformis for the production of meso-2,3-butanediol. Biotechnology for Biofuels, 2016, 9, 117.	6.2	79
9	Coexpression of Genetically Engineered 3-Ketoacyl-ACP Synthase III (fabH) and Polyhydroxyalkanoate Synthase (phaC) Genes Leads to Short-Chain-Length-Medium-Chain-Length Polyhydroxyalkanoate Copolymer Production from Glucose in Escherichia coli JM109. Applied and Environmental Microbiology, 2004, 70, 999-1007.	3.1	74
10	Reduction of dimethylsulfoxide to dimethylsulfide by marine phytoplankton. Limnology and Oceanography, 2009, 54, 560-570.	3.1	71
11	Bioplastics from waste glycerol derived from biodiesel industry. Journal of Applied Polymer Science, 2013, 130, 1-13.	2.6	70
12	Monitoring differences in gene expression levels and polyhydroxyalkanoate (PHA) production in Pseudomonas putida KT2440 grown on different carbon sources. Journal of Bioscience and Bioengineering, 2010, 110, 653-659.	2.2	68
13	Expression of 3-Ketoacyl-Acyl Carrier Protein Reductase (fabG) Genes Enhances Production of Polyhydroxyalkanoate Copolymer from Glucose in Recombinant Escherichia coli JM109. Applied and Environmental Microbiology, 2005, 71, 4297-4306.	3.1	64
14	Enhanced production of polyâ€Î³â€glutamic acid by improving ATP supply in metabolically engineered <i>Bacillus licheniformis</i>. Biotechnology and Bioengineering, 2018, 115, 2541-2553.	3.3	62
15	Effective Enhancement of Short-Chain-Lengthâˆ'Medium-Chain-Length Polyhydroxyalkanoate Copolymer Production by Coexpression of Genetically Engineered 3-Ketoacyl-Acyl-Carrier-Protein Synthase III (fabH) and Polyhydroxyalkanoate Synthesis Genes. Biomacromolecules, 2004, 5, 1457-1464.	5.4	61
16	Precise control of repeating unit composition in biodegradable poly(3-hydroxyalkanoate) polymers synthesized by Escherichia coli. Journal of Bioscience and Bioengineering, 2012, 113, 480-486.	2.2	57
17	Roles for hemeâ€"copper oxidases in extreme high-light and oxidative stress response in the cyanobacterium Synechococcus sp. PCC 7002. Archives of Microbiology, 2006, 185, 471-479.	2.2	55
18	Enhanced production of polyhydroxyalkanoates (PHAs) from beechwood xylan by recombinant Escherichia coli. Applied Microbiology and Biotechnology, 2014, 98, 831-842.	3.6	48

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19	Gene PA2449 Is Essential for Glycine Metabolism and Pyocyanin Biosynthesis in Pseudomonas aeruginosa PAO1. Journal of Bacteriology, 2013, 195, 2087-2100.	2.2	46
20	Characterization of two cytochrome oxidase operons in the marine cyanobacterium Synechococcus sp. PCC 7002: Inactivation of ctaDI affects the PS I:PS II ratio. Photosynthesis Research, 2006, 87, 215-228.	2.9	44
21	Glycerine and levulinic acid: Renewable co-substrates for the fermentative synthesis of short-chain poly(hydroxyalkanoate) biopolymers. Bioresource Technology, 2012, 118, 272-280.	9.6	44
22	A novel strategy to improve protein secretion via overexpression of the SppA signal peptide peptidase in Bacillus licheniformis. Microbial Cell Factories, 2017, 16, 70.	4.0	41
23	Influence of Cross-Linking on the Physical Properties and Cytotoxicity of Polyhydroxyalkanoate (PHA) Scaffolds for Tissue Engineering. ACS Biomaterials Science and Engineering, 2015, 1, 567-576.	5.2	39
24	Production of Short-Chain-Length/Medium-Chain-Length Polyhydroxyalkanoate (PHA) Copolymer in the Plastid of Arabidopsis thaliana Using an Engineered 3-Ketoacyl-acyl Carrier Protein Synthase III. Biomacromolecules, 2009, 10, 686-690.	5.4	34
25	Targeting the alternative sigma factor RpoN to combat virulence in Pseudomonas aeruginosa. Scientific Reports, 2017, 7, 12615.	3.3	34
26	Use of thiol-ene click chemistry to modify mechanical and thermal properties of polyhydroxyalkanoates (PHAs). International Journal of Biological Macromolecules, 2016, 83, 358-365.	7.5	33
27	FabG Mediates Polyhydroxyalkanoate Production from Both Related and Nonrelated Carbon Sources in Recombinant Escherichia coli LS5218. Biotechnology Progress, 2008, 24, 342-351.	2.6	32
28	Biosynthesis of Poly[(<i>R</i>)-3-hydroxyalkanoate] Copolymers with Controlled Repeating Unit Compositions and Physical Properties. Biomacromolecules, 2012, 13, 2964-2972.	5.4	32
29	Untangling the transcription regulatory network of the bacitracin synthase operon in Bacillus licheniformis DW2. Research in Microbiology, 2017, 168, 515-523.	2.1	32
30	Estimation of inhibitory effects of hemicellulosic wood hydrolysate inhibitors on PHA production by Burkholderia cepacia ATCC 17759 using response surface methodology. Bioresource Technology, 2012, 125, 275-282.	9.6	31
31	Engineering <i>Escherichia coli</i> for Improved Production of Short-Chain-Length-<i>co-</i>Medium-Chain-Length Poly[(<i>R</i>)-3-hydroxyalkanoate] (SCL-<i>co</i>-MCL PHA) Copolymers from Renewable Nonfatty Acid Feedstocks. ACS Sustainable Chemistry and Engineering, 2014, 2, 1879-1887.	6.7	31
32	The effect of nucleating agents on physical properties of poly-3-hydroxybutyrate (PHB) and poly-3-hydroxybutyrate-co-3-hydroxyvalerate (PHB-co-HV) produced by Burkholderia cepacia ATCC 17759. Polymer Testing, 2012, 31, 579-585.	4.8	29
33	Facilitating Protein Expression with Portable 5â€²-UTR Secondary Structures in <i>Bacillus licheniformis</i>. ACS Synthetic Biology, 2020, 9, 1051-1058.	3.8	29
34	Genetic Analysis of the Assimilation of C ₅ -Dicarboxylic Acids in Pseudomonas aeruginosa PAO1. Journal of Bacteriology, 2014, 196, 2543-2551.	2.2	26
35	Poly[(R)-3-hydroxybutyrate] formation in Escherichia coli from glucose through an enoyl-CoA hydratase-mediated pathway. Journal of Bioscience and Bioengineering, 2007, 103, 38-44.	2.2	24
36	Consolidated bioprocessing of poly(lactate-co-3-hydroxybutyrate) from xylan as a sole feedstock by genetically-engineered Escherichia coli. Journal of Bioscience and Bioengineering, 2016, 122, 406-414.	2.2	23

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37	Use of Bacillus amyloliquefaciens HZ-12 for High-Level Production of the Blood Glucose Lowering Compound, 1-Deoxynojirimycin (DNJ), and Nutraceutical Enriched Soybeans via Fermentation. Applied Biochemistry and Biotechnology, 2017, 181, 1108-1122.	2.9	22
38	Acetolactate synthase (AlsS) in Bacillus licheniformis WX-02: enzymatic properties and efficient functions for acetoin/butanediol and l-valine biosynthesis. Bioprocess and Biosystems Engineering, 2018, 41, 87-96.	3.4	22
39	Increased Production of the Value-Added Biopolymers Poly(R-3-Hydroxyalkanoate) and Poly(Î³-Glutamic) Tj ETQq1 1 0.784314 rgBT /Ov 2019, 7, 409.	4.1	22
40	Ethanolamine Catabolism in Pseudomonas aeruginosa PAO1 Is Regulated by the Enhancer-Binding Protein EatR (PA4021) and the Alternative Sigma Factor RpoN. Journal of Bacteriology, 2016, 198, 2318-2329.	2.2	21
41	Chemically Intractable No More: In Vivo Incorporation of â€œClickâ€•Ready Fatty Acids into Poly-[(<i>R</i>)-3-hydroxyalkanoates] in <i>Escherichia coli</i>. ACS Macro Letters, 2016, 5, 215-219.	4.8	20
42	Optimization of Inexpensive Agricultural By-Products as Raw Materials for Bacitracin Production in Bacillus licheniformis DW2. Applied Biochemistry and Biotechnology, 2017, 183, 1146-1157.	2.9	20
43	Deletion of the<i>pflA</i>gene in<i>Escherichia coli</i>LS5218 and its effects on the production of polyhydroxyalkanoates using beechwood xylan as a feedstock. Bioengineered, 2014, 5, 284-287.	3.2	18
44	GcsR, a TyrR-Like Enhancer-Binding Protein, Regulates Expression of the Glycine Cleavage System in Pseudomonas aeruginosa PAO1. MSphere, 2016, 1, .	2.9	17
45	Quick and efficient method for genetic transformation of biopolymerâ€producing bacteria. Journal of Chemical Technology and Biotechnology, 2010, 85, 775-778.	3.2	16
46	Enhancing poly(3-hydroxyalkanoate) production in Escherichia coli by the removal of the regulatory gene arcA. AMB Express, 2016, 6, 120.	3.0	16
47	Superior thermal stability and fast crystallization behavior of a novel, biodegradable Î±-methylated bacterial polyester. NPG Asia Materials, 2021, 13, .	7.9	16
48	The metabolism of (R)-3-hydroxybutyrate is regulated by the enhancer-binding protein PA2005 and the alternative sigma factor RpoN in Pseudomonas aeruginosa PAO1. Microbiology (United Kingdom), 2015, 161, 2232-2242.	1.8	14
49	Low Carbon Concentration Feeding Improves Medium-Chain-Length Polyhydroxyalkanoate Production in Escherichia coli Strains With Defective Î²-Oxidation. Frontiers in Bioengineering and Biotechnology, 2018, 6, 178.	4.1	13
50	Increased synthesis of poly(3-hydroxydodecanoate) by random mutagenesis of polyhydroxyalkanoate synthase. Applied Microbiology and Biotechnology, 2018, 102, 7927-7934.	3.6	13
51	Optimizing a Fed-Batch High-Density Fermentation Process for Medium Chain-Length Poly(3-Hydroxyalkanoates) in Escherichia coli. Frontiers in Bioengineering and Biotechnology, 2021, 9, 618259.	4.1	13
52	A rapid and efficient electroporation method for transformation of Halomonas sp. O-1. Journal of Microbiological Methods, 2016, 129, 127-132.	1.6	12
53	Methanol-induced chain termination in poly(3-hydroxybutyrate) biopolymers: Molecular weight control. International Journal of Biological Macromolecules, 2015, 74, 195-201.	7.5	11
54	Effect of acetate as a co-feedstock on the production of poly(lactate-co-3-hydroxyalkanoate) by pflA-deficient Escherichia coli RSC10. Journal of Bioscience and Bioengineering, 2017, 123, 547-554.	2.2	10

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55	Defining the Metabolic Functions and Roles in Virulence of the rpoN1 and rpoN2 Genes in Ralstonia solanacearum GMI1000. PLoS ONE, 2015, 10, e0144852.	2.5	10
56	Cloning and heterologous expression of a novel subgroup of class IV polyhydroxyalkanoate synthase genes from the genus Bacillus. Bioscience, Biotechnology and Biochemistry, 2017, 81, 194-196.	1.3	9
57	SfnR2 Regulates Dimethyl Sulfide-Related Utilization in Pseudomonas aeruginosa PAO1. Journal of Bacteriology, 2019, 201, .	2.2	8
58	Utilization of L-glutamate as a preferred or sole nutrient in Pseudomonas aeruginosa PAO1 depends on genes encoding for the enhancer-binding protein AauR, the sigma factor RpoN and the transporter complex AatJQMP. BMC Microbiology, 2021, 21, 83.	3.3	8
59	MifS, a DctB family histidine kinase, is a specific regulator of Î±-ketoglutarate response in Pseudomonas aeruginosa PAO1. Microbiology (United Kingdom), 2020, 166, 867-879.	1.8	8
60	DdaR (PA1196) Regulates Expression of Dimethylarginine Dimethylaminohydrolase for the Metabolism of Methylarginines in Pseudomonas aeruginosa PAO1. Journal of Bacteriology, 2017, 199, .	2.2	7
61	Production of polyhydroxybutyrate and polyhydroxybutyrate-co-MCL copolymers from brewerâ€™s spent grains by recombinant Escherichia coli LSBJ. Biomass Conversion and Biorefinery, 0, , 1.	4.6	7
62	Poly(3-mercapto-2-methylpropionate), a Novel Î±-Methylated Bio-Polythioester with Rubber-like Elasticity, and Its Copolymer with 3-hydroxybutyrate: Biosynthesis and Characterization. Bioengineering, 2022, 9, 228.	3.5	6
63	Mutations to the active site of 3-ketoacyl-ACP synthase III (FabH) increase polyhydroxyalkanoate biosynthesis in transgenic Escherichia coli. Journal of Bioscience and Bioengineering, 2012, 113, 300-306.	2.2	4
64	Biosynthesis of poly(glycolate-<i>co</i>-3-hydroxybutyrate-<i>co</i>-3-hydroxyhexanoate) in <i>Escherichia coli</i> expressing sequence-regulating polyhydroxyalkanoate synthase and medium-chain-length 3-hydroxyalkanoic acid coenzyme A ligase. Bioscience, Biotechnology and Biochemistry, 2022, 86, 217-223.	1.3	4
65	The Effect of Co-Substrate Feeding on Polyhydroxyalkanoate (PHA) Homopolymer and Copolymer Production in Recombinant Escherichia coli LS5218. Journal of Bioprocess Engineering and Biorefinery, 2012, 1, 86-92.	0.2	3
66	Production of Medium Chain Length polyhydroxyalkanoate copolymers from agro-industrial waste streams. Biocatalysis and Agricultural Biotechnology, 2022, 43, 102385.	3.1	3
67	Metabolic Engineering of <i>Escherichia coli</i> for Short Chain Length-Medium Chain Length Polyhydroxyalkanoate Biosynthesis. ACS Symposium Series, 2006, , 30-44.	0.5	1
68	Recent Advances in Polyhydroxyalkanoate Biosynthesis in Escherichia coli. ACS Symposium Series, 2012, , 141-156.	0.5	0
69	Polyhydroxyalkanoates: Biosynthesis. , 0, , 6350-6363.		0
70	Recent Advances in Chemically Modifiable Polyhydroxyalkanoates. , 2020, , 3-16.		0