

# Kohsuke Honda

## List of Publications by Year in descending order

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97  
papers

2,330  
citations

201658

27  
h-index

243610

44  
g-index

100  
all docs

100  
docs citations

100  
times ranked

2298  
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>Lactate oxidase</i> -mediated removal of <i>L</i> -lactic acid derived from fermentation medium for the production of optically pure <i>D</i> -lactic acid. <i>Biotechnology Journal</i> , 2022, 17, e2100331.	3.5	6
2	Polyhydroxybutyrate (PHB) Production Using an Arabinose-Inducible Expression System in Comparison With Cold Shock Inducible Expression System in <i>Escherichia coli</i> . <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 661096.	4.1	8
3	Strategies for Poly(3-hydroxybutyrate) Production Using a Cold-Shock Promoter in <i>Escherichia coli</i> . <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 666036.	4.1	4
4	Functional characterization and overexpression of $\Delta^12$ -desaturase in the oleaginous yeast <i>Rhodotorula toruloides</i> for production of linoleic acid-rich lipids. <i>Journal of Bioscience and Bioengineering</i> , 2021, 131, 631-639.	2.2	13
5	<i>In Vitro</i> Production of Coenzyme A Using Thermophilic Enzymes. <i>Applied and Environmental Microbiology</i> , 2021, 87, e0054121.	3.1	6
6	Heterologous gene expression and characterization of two serine hydroxymethyltransferases from <i>Thermoplasma acidophilum</i> . <i>Extremophiles</i> , 2021, 25, 393-402.	2.3	3
7	Genome editing by miniature CRISPR/Cas12f1 enzyme in <i>Escherichia coli</i> . <i>Journal of Bioscience and Bioengineering</i> , 2021, 132, 120-124.	2.2	11
8	Improvement of production yield of <i>L</i> -cysteine through <i>in vitro</i> metabolic pathway with thermophilic enzymes. <i>Journal of Bioscience and Bioengineering</i> , 2021, 132, 585-591.	2.2	4
9	<i>In vitro</i> reconstitution of non-phosphorylative Entner-Doudoroff pathway for lactate production. <i>Journal of Bioscience and Bioengineering</i> , 2020, 129, 269-275.	2.2	5
10	Enhancement of S-Adenosylmethionine-Dependent Methylation by Integrating Methanol Metabolism with 5-Methyl-Tetrahydrofolate Formation in <i>Escherichia coli</i> . <i>Catalysts</i> , 2020, 10, 1001.	3.5	5
11	TEMPURA: Database of Growth TEMPeratures of Usual and RAre Prokaryotes. <i>Microbes and Environments</i> , 2020, 35, n/a.	1.6	24
12	Chemical Manufacturing through an <i>In Vitro</i> Cascade Reaction with Thermophilic Enzymes: Synthetic Metabolic Pathway Outside of Cells. <i>Kagaku To Seibutsu</i> , 2020, 58, 389-395.	0.0	0
13	Expression of engineered carbonyl reductase from <i>Ogataea minuta</i> in <i>Rhodococcus opacus</i> and its application to whole-cell bioconversion in anhydrous solvents. <i>Journal of Bioscience and Bioengineering</i> , 2019, 127, 145-149.	2.2	8
14	<i>In vitro</i> production of cysteine from glucose. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 8009-8019.	3.6	14
15	Class III Polyphosphate Kinase Enzymes Catalyze the Pyrophosphorylation of Adenosine Monophosphate. <i>ChemBioChem</i> , 2019, 20, 2961-2967.	2.6	23
16	Developing a single strain for <i>in vitro</i> salvage synthesis of NAD <sup>+</sup> at high temperatures and its potential for bioconversion. <i>Microbial Cell Factories</i> , 2019, 18, 75.	4.0	9
17	Metabolic Engineering of <i>Lactobacillus plantarum</i> for Direct <i>L</i> -Lactic Acid Production From Raw Corn Starch. <i>Biotechnology Journal</i> , 2018, 13, e1700517.	3.5	33
18	Online measurement of the respiratory activity in shake flasks enables the identification of cultivation phases and patterns indicating recombinant protein production in various <i>Escherichia coli</i> host strains. <i>Biotechnology Progress</i> , 2018, 34, 315-327.	2.6	12

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19	De novo design of biosynthetic pathways for bacterial production of bulk chemicals and biofuels. FEMS Microbiology Letters, 2018, 365, .	1.8	9
20	Improvement of operational stability of Ogataea minuta carbonyl reductase for chiral alcohol production. Journal of Bioscience and Bioengineering, 2017, 123, 673-678.	2.2	20
21	A Key Enzyme of the NAD <sup>+</sup> Salvage Pathway in Thermus thermophilus: Characterization of Nicotinamidase and the Impact of Its Gene Deletion at High Temperatures. Journal of Bacteriology, 2017, 199, .	2.2	10
22	InÂvitro bioconversion of chitin to pyruvate with thermophilic enzymes. Journal of Bioscience and Bioengineering, 2017, 124, 296-301.	2.2	29
23	Modules for inÂvitro metabolic engineering: Pathway assembly for bio-based production of value-added chemicals. Synthetic and Systems Biotechnology, 2017, 2, 65-74.	3.7	38
24	Industrial Applications of Multistep Enzyme Reactions. , 2017, , 433-450.		7
25	Redirection of the Reaction Specificity of a Thermophilic Acetolactate Synthase toward Acetaldehyde Formation. PLoS ONE, 2016, 11, e0146146.	2.5	1
26	Lipid production from biodiesel-derived crude glycerol by Rhodosporidium fluviale DMKU-RK253 using temperature shift with high cell density. Biochemical Engineering Journal, 2016, 112, 208-218.	3.6	45
27	A simple technology for phosphorus recovery using acid-treated concrete sludge. Separation and Purification Technology, 2016, 165, 173-178.	7.9	17
28	A mobile pilot-scale plant for in situ demonstration of phosphorus recovery from wastewater using amorphous calcium silicate hydrates. Separation and Purification Technology, 2016, 170, 116-121.	7.9	16
29	In vitro metabolic engineering for the salvage synthesis of NAD. Metabolic Engineering, 2016, 35, 114-120.	7.0	38
30	Kinetic properties and stability of glucose dehydrogenase from Bacillus amyloliquefaciens SB5 and its potential for cofactor regeneration. AMB Express, 2015, 5, 68.	3.0	25
31	Amorphous calcium silicate hydrates and their possible mechanism for recovering phosphate from wastewater. Separation and Purification Technology, 2015, 144, 63-69.	7.9	47
32	High-level production of (5S)-hydroxyhexane-2-one by two thermostable oxidoreductases in a whole-cell catalytic approach. Journal of Molecular Catalysis B: Enzymatic, 2015, 121, 37-44.	1.8	5
33	Assembly and multiple gene expression of thermophilic enzymes in <i>Escherichia coli</i> for in vitro metabolic engineering. Biotechnology and Bioengineering, 2015, 112, 189-196.	3.3	50
34	Phenotyping the quality of complex medium components by simple online-monitored shake flask experiments. Microbial Cell Factories, 2014, 13, 149.	4.0	32
35	In vitro conversion of glycerol to lactate with thermophilic enzymes. Bioresources and Bioprocessing, 2014, 1, .	4.2	14
36	Glycosylation analysis of an aggregated antibody produced by Chinese hamster ovary cells in bioreactor culture. Journal of Bioscience and Bioengineering, 2014, 117, 639-644.	2.2	25

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37	Directed evolution of thermotolerant malic enzyme for improved malate production. <i>Journal of Bioscience and Bioengineering</i> , 2014, 117, 147-152.	2.2	22
38	Isolation and characterization of a thermotolerant ene reductase from <i>Geobacillus</i> sp. 30 and its heterologous expression in <i>Rhodococcus opacus</i> . <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 5925-5935.	3.6	13
39	Generation of high-producing cell lines by overexpression of cell division cycle 25 homolog A in Chinese hamster ovary cells. <i>Journal of Bioscience and Bioengineering</i> , 2013, 116, 754-760.	2.2	17
40	In vitro production of n-butanol from glucose. <i>Metabolic Engineering</i> , 2013, 20, 84-91.	7.0	89
41	Construction of an in vitro bypassed pyruvate decarboxylation pathway using thermostable enzyme modules and its application to N-acetylglutamate production. <i>Microbial Cell Factories</i> , 2013, 12, 91.	4.0	8
42	Construction of transgene-amplified CHO cell lines by cell cycle checkpoint engineering. <i>BMC Proceedings</i> , 2013, 7, .	1.6	2
43	Direct conversion of glucose to malate by synthetic metabolic engineering. <i>Journal of Biotechnology</i> , 2013, 164, 34-40.	3.8	53
44	Novel technique for phosphorus recovery from aqueous solutions using amorphous calcium silicate hydrates (A-CSHs). <i>Water Research</i> , 2013, 47, 2251-2259.	11.3	108
45	Rapid construction of transgene-amplified CHO cell lines by cell cycle checkpoint engineering. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 5731-5741.	3.6	21
46	Improved antibody production in Chinese hamster ovary cells by ATF4 overexpression. <i>Cytotechnology</i> , 2013, 65, 993-1002.	1.6	30
47	Overexpression of mutant cell division cycle 25 homolog B (CDC25B) enhances the efficiency of selection in Chinese hamster ovary cells. <i>Cytotechnology</i> , 2013, 65, 1017-1026.	1.6	6
48	Development of a Continuous Bioconversion System Using a Thermophilic Whole-Cell Biocatalyst. <i>Applied and Environmental Microbiology</i> , 2013, 79, 1996-2001.	3.1	24
49	Identification of the Replication Region of a 111-kb Circular Plasmid from <i>Rhodococcus opacus</i> B-4 by Red Recombination-Based Deletion Analysis. <i>Bioscience, Biotechnology and Biochemistry</i> , 2012, 76, 1758-1764.	1.3	3
50	Fluorescence in situ hybridization using bacterial artificial chromosome (BAC) clones for the analysis of chromosome rearrangement in Chinese hamster ovary cells. <i>Methods</i> , 2012, 56, 418-423.	3.8	12
51	Synthetic metabolic engineering-a novel, simple technology for designing a chimeric metabolic pathway. <i>Microbial Cell Factories</i> , 2012, 11, 120.	4.0	76
52	Bacteria Interface Pickering Emulsions Stabilized by Self-assembled Bacteria- <i>Chitosan</i> Network. <i>Langmuir</i> , 2012, 28, 5729-5736.	3.5	105
53	Construction of BAC-based physical map and analysis of chromosome rearrangement in chinese hamster ovary cell lines. <i>Biotechnology and Bioengineering</i> , 2012, 109, 1357-1367.	3.3	62
54	Enhancement of sialylation on humanized IgG-like bispecific antibody by overexpression of $\beta$ 2,6-sialyltransferase derived from Chinese hamster ovary cells. <i>Applied Microbiology and Biotechnology</i> , 2012, 94, 69-80.	3.6	40

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55	l-Pantoyl lactone dehydrogenase from <i>Rhodococcus erythropolis</i> : genetic analyses and application to the stereospecific oxidation of l-pantoyl lactone. <i>Applied Microbiology and Biotechnology</i> , 2012, 95, 431-440.	3.6	10
56	Development of a whole-cell biocatalyst co-expressing P450 monooxygenase and glucose dehydrogenase for synthesis of epoxyhexane. <i>Applied Microbiology and Biotechnology</i> , 2012, 95, 357-367.	3.6	27
57	Construction of membrane-anchoring fusion protein of <i>Thermococcus kodakaraensis</i> glycerol kinase and its application to repetitive batchwise reactions. <i>Journal of Bioscience and Bioengineering</i> , 2012, 113, 521-525.	2.2	2
58	Growth inhibitory effects of anthranilic acid and its derivatives against <i>Legionella pneumophila</i> . <i>Journal of Bioscience and Bioengineering</i> , 2012, 113, 726-729.	2.2	9
59	Bioproduction of vanillin using an organic solvent-tolerant <i>Brevibacillus agri</i> 13. <i>Applied Microbiology and Biotechnology</i> , 2012, 93, 555-563.	3.6	29
60	Feasibility of thermophilic adenosine triphosphate-regeneration system using <i>Thermus thermophilus</i> polyphosphate kinase. <i>Process Biochemistry</i> , 2011, 46, 1747-1752.	3.7	31
61	Thermal analysis for differentiating between oleaginous and non-oleaginous microorganisms. <i>Biochemical Engineering Journal</i> , 2011, 57, 23-29.	3.6	9
62	ATF4 over-expression increased IgG1 productivity in Chinese hamster ovary cells. <i>BMC Proceedings</i> , 2011, 5, O11.	1.6	1
63	Chromosome identification and its application in Chinese hamster ovary cells. <i>BMC Proceedings</i> , 2011, 5, O8.	1.6	4
64	Simultaneous thermogravimetry and differential thermal analysis for comparing burning characteristics between oleaginous and non-oleaginous microorganisms. <i>Thermochimica Acta</i> , 2011, 517, 115-120.	2.7	4
65	Glycosylation pattern of humanized IgG-like bispecific antibody produced by recombinant CHO cells. <i>Applied Microbiology and Biotechnology</i> , 2010, 85, 535-542.	3.6	24
66	Systematic screening of <i>Escherichia coli</i> single-gene knockout mutants for improving recombinant whole-cell biocatalysts. <i>Applied Microbiology and Biotechnology</i> , 2010, 87, 647-655.	3.6	8
67	Identification and analysis of specific chromosomal region adjacent to exogenous Dhfr-amplified region in Chinese hamster ovary cell genome. <i>Journal of Bioscience and Bioengineering</i> , 2010, 109, 504-511.	2.2	15
68	Enhancement of recombinant enzyme activity in <i>cpxA</i> -deficient mutant of <i>Escherichia coli</i> . <i>Journal of Bioscience and Bioengineering</i> , 2010, 110, 403-407.	2.2	2
69	Effects of palindrome structure on Dhfr amplification in Chinese hamster ovary cells. <i>Process Biochemistry</i> , 2010, 45, 1845-1851.	3.7	7
70	Production of 2-deoxyribose 5-phosphate from fructose to demonstrate a potential of artificial bio-synthetic pathway using thermophilic enzymes. <i>Journal of Biotechnology</i> , 2010, 148, 204-207.	3.8	24
71	Electron Microscopic Analysis of Heat-Induced Leakage of Polyphosphate from a <i>phoU</i> Mutant of <i>Escherichia coli</i> . <i>Bioscience, Biotechnology and Biochemistry</i> , 2010, 74, 865-868.	1.3	6
72	Effect of cell-surface hydrophobicity on bacterial conversion of water-immiscible chemicals in two-liquid-phase culture systems. <i>Journal of Bioscience and Bioengineering</i> , 2009, 108, 116-120.	2.2	15

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73	Bacterial artificial chromosome library for genome-wide analysis of Chinese hamster ovary cells. <i>Biotechnology and Bioengineering</i> , 2009, 104, 986-994.	3.3	34
74	Characterization of an organic-solvent-tolerant <i>Brevibacillus agri</i> strain 13 able to stabilize solvent/water emulsion. <i>FEMS Microbiology Letters</i> , 2009, 297, 225-233.	1.8	27
75	Stabilization of water-in-oil emulsion by <i>Rhodococcus opacus</i> B-4 and its application to biotransformation. <i>Applied Microbiology and Biotechnology</i> , 2008, 78, 767-773.	3.6	23
76	Improved production of recombinant human antithrombin III in Chinese hamster ovary cells by ATF4 overexpression. <i>Biotechnology and Bioengineering</i> , 2008, 100, 317-324.	3.3	90
77	A Comparison of Various Methods to Predict Bacterial Predilection for Organic Solvents Used as Reaction Media. <i>Journal of Bioscience and Bioengineering</i> , 2008, 106, 357-362.	2.2	30
78	Decrease in antithrombin III fucosylation by expressing GDP-fucose transporter siRNA in Chinese hamster ovary cells. <i>Journal of Bioscience and Bioengineering</i> , 2008, 106, 168-173.	2.2	21
79	Expression of <i>Rhodococcus opacus</i> alkB genes in anhydrous organic solvents. <i>Journal of Bioscience and Bioengineering</i> , 2008, 106, 199-203.	2.2	30
80	Decrease in Antithrombin III Fucosylation by Expressing GDP-fucose Transporter siRNA in Chinese Hamster Ovary Cells. <i>Journal of Bioscience and Bioengineering</i> , 2008, 106, 417.	2.2	0
81	Overexpression of GADD34 Enhances Production of Recombinant Human Antithrombin III in Chinese Hamster Ovary Cells. <i>Journal of Bioscience and Bioengineering</i> , 2008, 106, 568-573.	2.2	58
82	Utilization of hydrophobic bacterium <i>Rhodococcus opacus</i> B-4 as whole-cell catalyst in anhydrous organic solvents. <i>Applied Microbiology and Biotechnology</i> , 2007, 74, 761-767.	3.6	34
83	Microbial enzymes involved in lactone compound metabolism and their biotechnological applications. <i>Applied Microbiology and Biotechnology</i> , 2007, 75, 257-266.	3.6	26
84	Integrated biooxidation and acid dehydration process for monohydroxylation of aromatics. <i>Process Biochemistry</i> , 2007, 42, 46-51.	3.7	5
85	Whole organism biocatalysis. <i>Current Opinion in Chemical Biology</i> , 2005, 9, 174-180.	6.1	233
86	Expression of the <i>Fusarium oxysporum</i> lactonase gene in <i>Aspergillus oryzae</i> : molecular properties of the recombinant enzyme and its application. <i>Applied Microbiology and Biotechnology</i> , 2005, 66, 520-526.	3.6	18
87	Practical resolution system for dl-pantoyl lactone using the lactonase from <i>Fusarium oxysporum</i> . <i>Journal of Biotechnology</i> , 2005, 118, 99-106.	3.8	27
88	Role of <i>Acinetobacter calcoaceticus</i> 3,4-dihydrocoumarin hydrolase in oxidative stress defence against peroxyacids. <i>FEBS Journal</i> , 2003, 270, 486-494.	0.2	9
89	Biocatalytic Deprotection of a Cetraxate Ester by <i>Microbacterium</i> sp. Strain 7-1W Cells. <i>Bioscience, Biotechnology and Biochemistry</i> , 2003, 67, 192-194.	1.3	5
90	A novel dihydrocoumarin hydrolase from <i>Acinetobacter calcoaceticus</i> : application to the production of useful compounds. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2002, 19-20, 231-235.	1.8	1

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91	Functional analyses and application of microbial lactonohydrolases. <i>Biotechnology and Bioprocess Engineering</i> , 2002, 7, 130-137.	2.6	13
92	Enzymatic preparation of D- $\beta$ -acetylthioisobutyric acid and cetraxate hydrochloride using a stereo- and/or regioselective hydrolase, 3,4-dihydrocoumarin hydrolase from <i>Acinetobacter calcoaceticus</i> . <i>Applied Microbiology and Biotechnology</i> , 2002, 60, 288-292.	3.6	12
93	Purification and characterization of a novel esterase promising for the production of useful compounds from <i>Microbacterium</i> sp. 7-1W. <i>FEMS Microbiology Letters</i> , 2002, 206, 221-227.	1.8	12
94	Purification and characterization of a novel esterase promising for the production of useful compounds from <i>Microbacterium</i> sp. 7-1W. <i>FEMS Microbiology Letters</i> , 2002, 206, 221-227.	1.8	1
95	Lactone-ring-cleaving enzymes of microorganisms: their diversity and applications. <i>Journal of Biotechnology</i> , 2001, 92, 187-194.	3.8	32
96	3,4-Dihydrocoumarin hydrolase with haloperoxidase activity from <i>Acinetobacter calcoaceticus</i> F46. <i>FEBS Journal</i> , 2000, 267, 3-10.	0.2	52
97	One-step preparation of cell-free ATP regeneration module based on non-oxidative glycolysis using thermophilic enzymes. <i>ChemBioChem</i> , 0, , .	2.6	3