

Kwon-Young Choi

List of Publications by Year in descending order

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Version: 2024-02-01

88
papers

2,137
citations

218677

26
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276875

41
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88
all docs

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docs citations

88
times ranked

1906
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Biohydrogen Machinery: Recent Insights, Genetic Fabrication, and Future Prospects. <i>Chemical Engineering and Technology</i> , 2023, 46, 179-190. | 1.5 | 2 |
| 2 | Monoxygenase-mediated cascade oxidation of fatty acids for the production of biopolymer building blocks. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 12319-12331. | 4.6 | 2 |
| 3 | Quantum dot synthesis from waste biomass and its applications in energy and bioremediation. <i>Chemosphere</i> , 2022, 293, 133564. | 8.2 | 22 |
| 4 | Indigo derivatives-incorporated functional polyhydroxybutyrate polymer with controlled biodegradability. <i>Dyes and Pigments</i> , 2022, 198, 110017. | 3.7 | 3 |
| 5 | Finding of novel lactate utilizing <i>Bacillus</i> sp. YHY22 and its evaluation for polyhydroxybutyrate (PHB) production. <i>International Journal of Biological Macromolecules</i> , 2022, 201, 653-661. | 7.5 | 29 |
| 6 | Gamma aminobutyric acid (GABA) production in <i>Escherichia coli</i> with pyridoxal kinase (pdxY) based regeneration system. <i>Enzyme and Microbial Technology</i> , 2022, 155, 109994. | 3.2 | 16 |
| 7 | One-Step RT-qPCR for Viral RNA Detection Using Digital Analysis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 837838. | 4.1 | 2 |
| 8 | Finding of novel polyhydroxybutyrate producer <i>Loktanella</i> sp. SM43 capable of balanced utilization of glucose and xylose from lignocellulosic biomass. <i>International Journal of Biological Macromolecules</i> , 2022, 208, 809-818. | 7.5 | 21 |
| 9 | Discoloration of indigo dyes by eco-friendly biocatalysts. <i>Dyes and Pigments</i> , 2021, 184, 108749. | 3.7 | 29 |
| 10 | Production of Tyrian purple indigoid dye from tryptophan in <i>Escherichia coli</i> . <i>Nature Chemical Biology</i> , 2021, 17, 104-112. | 8.0 | 32 |
| 11 | Microbial Production of Melanin Pigments from Caffeic Acid and L-Tyrosine Using <i>Streptomyces glaucescens</i> and FCS-ECH-Expressing <i>Escherichia coli</i> . <i>International Journal of Molecular Sciences</i> , 2021, 22, 2413. | 4.1 | 18 |
| 12 | <i>Bacillus subtilis</i> as a robust host for biochemical production utilizing biomass. <i>Critical Reviews in Biotechnology</i> , 2021, 41, 827-848. | 9.0 | 26 |
| 13 | Microbial synthesis of violacein pigment and its potential applications. <i>Critical Reviews in Biotechnology</i> , 2021, 41, 879-901. | 9.0 | 31 |
| 14 | Tung Oil-Based Production of High 3-Hydroxyhexanoate-Containing Terpolymer Poly(3-Hydroxybutyrate-co-3-Hydroxyvalerate-co-3-Hydroxyhexanoate) Using Engineered <i>Ralstonia eutropha</i> . <i>Polymers</i> , 2021, 13, 1084. | 4.5 | 15 |
| 15 | Fructose-Based Production of Short-Chain-Length and Medium-Chain-Length Polyhydroxyalkanoate Copolymer by Arctic <i>Pseudomonas</i> sp. B14-6. <i>Polymers</i> , 2021, 13, 1398. | 4.5 | 33 |
| 16 | Whole Cell Biotransformation of 1-dodecanol by <i>Escherichia coli</i> by Soluble Expression of ADH Enzyme from <i>Yarrowia lipolytica</i> . <i>Biotechnology and Bioprocess Engineering</i> , 2021, 26, 247-255. | 2.6 | 7 |
| 17 | Nitrogen-Neutral Amino Acids Refinery: Deamination of Amino Acids for Bio-Alcohol and Ammonia Production. <i>ChemBioEng Reviews</i> , 2021, 8, 213-226. | 4.4 | 12 |
| 18 | Biowaste-to-bioplastic (polyhydroxyalkanoates): Conversion technologies, strategies, challenges, and perspective. <i>Bioresource Technology</i> , 2021, 326, 124733. | 9.6 | 134 |

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|----|---|------|-----------|
| 19 | Biosynthesis of C12 Fatty Alcohols by Whole Cell Biotransformation of C12 Derivatives Using <i>Escherichia coli</i> Two-cell Systems Expressing CAR and ADH. <i>Biotechnology and Bioprocess Engineering</i> , 2021, 26, 392-401. | 2.6 | 5 |
| 20 | Engineering of <i>Shewanella marisflavi</i> BBL25 for biomass-based polyhydroxybutyrate production and evaluation of its performance in electricity production. <i>International Journal of Biological Macromolecules</i> , 2021, 183, 1669-1675. | 7.5 | 25 |
| 21 | Enzymatic utilization of oil and lignocellulosic biomass using halophilic marine bacteria <i>Micrococcus luteus</i> and <i>Pseudoalteromonas peptidolytica</i> . <i>3 Biotech</i> , 2021, 11, 360. | 2.2 | 0 |
| 22 | Adsorptive removal of crude petroleum oil from water using floating pinewood biochar decorated with coconut oil-derived fatty acids. <i>Science of the Total Environment</i> , 2021, 781, 146636. | 8.0 | 53 |
| 23 | Bioprocess of Microbial Melanin Production and Isolation. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 765110. | 4.1 | 20 |
| 24 | Engineering of CYP153A33 With Enhanced Ratio of Hydroxylation to Overoxidation Activity in Whole-Cell Biotransformation of Medium-Chain 1-Alkanols. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 817455. | 4.1 | 3 |
| 25 | Bioalcohol production from spent coffee grounds and okara waste biomass by engineered <i>Bacillus subtilis</i> . <i>Biomass Conversion and Biorefinery</i> , 2020, 10, 167-173. | 4.6 | 16 |
| 26 | Production of blue-colored polyhydroxybutyrate (PHB) by one-pot production and coextraction of indigo and PHB from recombinant <i>Escherichia coli</i> . <i>Dyes and Pigments</i> , 2020, 173, 107889. | 3.7 | 61 |
| 27 | Numerical modelling for effect of water curtain in mitigating toxic gas release. <i>Journal of Loss Prevention in the Process Industries</i> , 2020, 63, 103972. | 3.3 | 8 |
| 28 | Characterization of a Tryptophan 6- α -Halogenase from <i>Streptomyces albus</i> and Its Regioselectivity Determinants. <i>ChemBioChem</i> , 2020, 21, 1446-1452. | 2.6 | 14 |
| 29 | Whole-cell biocatalysis using cytochrome P450 monooxygenases for biotransformation of sustainable bioresources (fatty acids, fatty alkanes, and aromatic amino acids). <i>Biotechnology Advances</i> , 2020, 40, 107504. | 11.7 | 50 |
| 30 | Effects of osmolytes on salt resistance of <i>Halomonas socii</i> CKY01 and identification of osmolytes-related genes by genome sequencing. <i>Journal of Biotechnology</i> , 2020, 322, 21-28. | 3.8 | 13 |
| 31 | Bioconversion of Plant Hydrolysate Biomass into Biofuels Using an Engineered <i>Bacillus subtilis</i> and <i>Escherichia coli</i> Mixed-whole Cell Biotransformation. <i>Biotechnology and Bioprocess Engineering</i> , 2020, 25, 477-484. | 2.6 | 19 |
| 32 | Stepwise Evolution of Crease Patterns on Stimuli-Responsive Hydrogels for the Production of Long-Range Ordered Structures. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001551. | 3.7 | 3 |
| 33 | Multi-omics characterization of the osmotic stress resistance and protease activities of the halophilic bacterium <i>Pseudoalteromonas phenolica</i> in response to salt stress. <i>RSC Advances</i> , 2020, 10, 23792-23800. | 3.6 | 11 |
| 34 | Applications of Natural and Synthetic Melanins as Biosorbents and Adhesive Coatings. <i>Biotechnology and Bioprocess Engineering</i> , 2020, 25, 646-654. | 2.6 | 12 |
| 35 | Pyrolysis of Polyethylene Terephthalate over Carbon-Supported Pd Catalyst. <i>Catalysts</i> , 2020, 10, 496. | 3.5 | 36 |
| 36 | Regioselective Biotransformation of Phloretin Using <i>Streptomyces avermitilis</i> MA4680. <i>Biotechnology and Bioprocess Engineering</i> , 2020, 25, 272-278. | 2.6 | 5 |

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|----|---|-----|-----------|
| 37 | Enhanced isobutanol production by co-production of polyhydroxybutyrate and cofactor engineering. <i>Journal of Biotechnology</i> , 2020, 320, 66-73. | 3.8 | 12 |
| 38 | Functional Microbial Pigments Isolated from <i>Chryseobacterium</i> and <i>Deinococcus</i> species for Bio-paint Application. <i>Biotechnology and Bioprocess Engineering</i> , 2020, 25, 394-402. | 2.6 | 8 |
| 39 | ±, %Oxyfunctionalization of C12 alkanes via whole-cell biocatalysis of CYP153A from <i>Marinobacter aquaeolei</i> and a new CYP from <i>Nocardia farcinica</i> IFM10152. <i>Biochemical Engineering Journal</i> , 2020, 156, 107524. | 3.6 | 16 |
| 40 | Engineering of melanin biopolymer by co-expression of MelC tyrosinase with CYP102G4 monooxygenase: Structural composition understanding by 15 tesla FT-ICR MS analysis. <i>Biochemical Engineering Journal</i> , 2020, 157, 107530. | 3.6 | 10 |
| 41 | Heterologous production of pyomelanin biopolymer using 4-hydroxyphenylpyruvate dioxygenase isolated from <i>Ralstonia pickettii</i> in <i>Escherichia coli</i> . <i>Biochemical Engineering Journal</i> , 2020, 157, 107548. | 3.6 | 19 |
| 42 | A review of recent progress in the synthesis of bio-indigoids and their biologically assisted end-use applications. <i>Dyes and Pigments</i> , 2020, 181, 108570. | 3.7 | 31 |
| 43 | Long-Range Ordered Structures: Stepwise Evolution of Crease Patterns on Stimuli-Responsive Hydrogels for the Production of Long-Range Ordered Structures (<i>Adv. Mater. Interfaces</i> 24/2020). <i>Advanced Materials Interfaces</i> , 2020, 7, 2070136. | 3.7 | 0 |
| 44 | Chitin biomass powered microbial fuel cell for electricity production using halophilic <i>Bacillus circulans</i> BBL03 isolated from sea salt harvesting area. <i>Bioelectrochemistry</i> , 2019, 130, 107329. | 4.6 | 35 |
| 45 | Bioconversion of barley straw lignin into biodiesel using <i>Rhodococcus</i> sp. YHY01. <i>Bioresource Technology</i> , 2019, 289, 121704. | 9.6 | 58 |
| 46 | CFD/FEA connected modeling and analysis of vapor cloud explosion at a wastewater storage pond of a chemical plant in Korea. <i>Energy Science and Engineering</i> , 2019, 7, 272-287. | 4.0 | 2 |
| 47 | Synthesis and chemical composition analysis of protocatechualdehyde-based novel melanin dye by 15T FT-ICR: High dyeing performance on soft contact lens. <i>Dyes and Pigments</i> , 2019, 160, 546-554. | 3.7 | 21 |
| 48 | Ecofriendly one-pot biosynthesis of indigo derivative dyes using CYP102G4 and PrnA halogenase. <i>Dyes and Pigments</i> , 2019, 162, 80-88. | 3.7 | 40 |
| 49 | Bioconversion of plant biomass hydrolysate into bioplastic (polyhydroxyalkanoates) using <i>Ralstonia eutropha</i> 5119. <i>Bioresource Technology</i> , 2019, 271, 306-315. | 9.6 | 148 |
| 50 | Enhanced isobutanol production from acetate by combinatorial overexpression of acetyl-CoA synthetase and anaplerotic enzymes in engineered <i>Escherichia coli</i> . <i>Biotechnology and Bioengineering</i> , 2018, 115, 1971-1978. | 3.3 | 58 |
| 51 | FCS and ECH dependent production of phenolic aldehyde and melanin pigment from l-tyrosine in <i>Escherichia coli</i> . <i>Enzyme and Microbial Technology</i> , 2018, 112, 59-64. | 3.2 | 14 |
| 52 | Semi-rational engineering of CYP153A35 to enhance %hydroxylation activity toward palmitic acid. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 269-277. | 3.6 | 27 |
| 53 | Enhanced ammonium removal efficiency by ion exchange process of synthetic zeolite after Na ⁺ and heat pretreatment. <i>Water Science and Technology</i> , 2018, 78, 1417-1425. | 2.5 | 17 |
| 54 | Production of (Z)-11-(heptanoyloxy)undec-9-enoic acid from ricinoleic acid by utilizing crude glycerol as sole carbon source in engineered <i>Escherichia coli</i> expressing BVMO-ADH-FadL. <i>Enzyme and Microbial Technology</i> , 2018, 119, 45-51. | 3.2 | 17 |

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|----|---|-----|-----------|
| 55 | Recent advances in the microbial hydroxylation and reduction of soy isoflavones. FEMS Microbiology Letters, 2018, 365, . | 1.8 | 12 |
| 56 | Expression, purification and characterization of halophilic protease Pph_Pro1 cloned from Pseudoalteromonas phenolica. Protein Expression and Purification, 2018, 152, 46-55. | 1.3 | 8 |
| 57 | Polymeric solvent engineering for gram/liter scale production of a water-insoluble isoflavone derivative, (S)-equol. Applied Microbiology and Biotechnology, 2018, 102, 6915-6921. | 3.6 | 18 |
| 58 | Enhanced isobutanol production from acetate by combinatorial overexpression of acetyl-CoA synthetase and anaplerotic enzymes in engineered <i>Escherichia coli</i> . Biotechnology and Bioengineering, 2018, 115, 1971. | 3.3 | 34 |
| 59 | Expression, purification, and characterization of halophilic Pph_Pro1 protease isolated from Pseudoalteromonas phenolica. FASEB Journal, 2018, 32, 796.33. | 0.5 | 0 |
| 60 | Biosynthesis of indigo in <i>Escherichia coli</i> expressing self-sufficient CYP102A from <i>Streptomyces cattleya</i> . Dyes and Pigments, 2017, 140, 29-35. | 3.7 | 36 |
| 61 | Development of High Performance Polyurethane Elastomers Using Vanillin-Based Green Polyol Chain Extender Originating from Lignocellulosic Biomass. ACS Sustainable Chemistry and Engineering, 2017, 5, 4582-4588. | 6.7 | 92 |
| 62 | Quantitative targeted metabolomics for 15d-deoxy- β -12, 14-PGJ2 (15d-PGJ2) by MALDI-MS. Biotechnology and Bioprocess Engineering, 2017, 22, 100-106. | 2.6 | 3 |
| 63 | Production of itaconate by whole-cell bioconversion of citrate mediated by expression of multiple cis-aconitate decarboxylase (cadA) genes in <i>Escherichia coli</i> . Scientific Reports, 2017, 7, 39768. | 3.3 | 30 |
| 64 | Hydrolytic activities of hydrolase enzymes from halophilic microorganisms. Biotechnology and Bioprocess Engineering, 2017, 22, 450-461. | 2.6 | 24 |
| 65 | Screening, expression, and characterization of Baeyer-Villiger monooxygenases for the production of 9-(nonanoxy)nonanoic acid from oleic acid. Biotechnology and Bioprocess Engineering, 2017, 22, 717-724. | 2.6 | 21 |
| 66 | Biosynthesis of (β)-5-Hydroxy-equol and 5-Hydroxy-dehydroequol from Soy Isoflavone, Genistein Using Microbial Whole Cell Bioconversion. ACS Chemical Biology, 2017, 12, 2883-2890. | 3.4 | 31 |
| 67 | Production of β -hydroxybenzoic acid from β -coumaric acid by <i>Burkholderia glumae</i> BGR1. Biotechnology and Bioengineering, 2016, 113, 1493-1503. | 3.3 | 38 |
| 68 | Production of β -hydroxy palmitic acid using CYP153A35 and comparison of cytochrome P450 electron transfer system in vivo. Applied Microbiology and Biotechnology, 2016, 100, 10375-10384. | 3.6 | 28 |
| 69 | Combinatorial application of two aldehyde oxidoreductases on isobutanol production in the presence of furfural. Journal of Industrial Microbiology and Biotechnology, 2016, 43, 37-44. | 3.0 | 25 |
| 70 | Functional Study of Lysine Decarboxylases from <i>Klebsiella pneumoniae</i> in <i>Escherichia coli</i> and Application of Whole Cell Bioconversion for Cadaverine Production. Journal of Microbiology and Biotechnology, 2016, 26, 1586-1592. | 2.1 | 14 |
| 71 | The production of β -hydroxy palmitic acid using fatty acid metabolism and cofactor optimization in <i>Escherichia coli</i> . Applied Microbiology and Biotechnology, 2015, 99, 6667-6676. | 3.6 | 31 |
| 72 | Non-enzymatic PLP-dependent oxidative deamination of amino acids induces higher alcohol synthesis. Biotechnology and Bioprocess Engineering, 2015, 20, 988-994. | 2.6 | 5 |

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|----|---|-----|-----------|
| 73 | Regioselectivity-driven evolution of CYP102D1 for improved synthesis of 3-ortho-dihydroxyisoflavone. <i>Enzyme and Microbial Technology</i> , 2015, 71, 20-27. | 3.2 | 3 |
| 74 | Ortho-hydroxylation of mammalian lignan enterodiol by cytochrome P450s from <i>Actinomycetes</i> sp.. <i>Korean Journal of Chemical Engineering</i> , 2015, 32, 471-477. | 2.7 | 4 |
| 75 | Temperature sensing using red fluorescent protein. <i>Biotechnology and Bioprocess Engineering</i> , 2015, 20, 67-72. | 2.6 | 17 |
| 76 | rational design and directed evolution of CYP102A1 (BM3) for regio-specific hydroxylation of isoflavone. <i>Biotechnology and Bioprocess Engineering</i> , 2015, 20, 225-233. | 2.6 | 3 |
| 77 | Isobutanol production from an engineered <i>Shewanella oneidensis</i> MR-1. <i>Bioprocess and Biosystems Engineering</i> , 2015, 38, 2147-2154. | 3.4 | 27 |
| 78 | Consolidated conversion of protein waste into biofuels and ammonia using <i>Bacillus subtilis</i> . <i>Metabolic Engineering</i> , 2014, 23, 53-61. | 7.0 | 83 |
| 79 | Engineering class I cytochrome P450 by gene fusion with NADPH-dependent reductase and <i>S. avermitilis</i> host development for daidzein biotransformation. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 8191-8200. | 3.6 | 28 |
| 80 | Bioconversion of p-coumaric acid to p-hydroxystyrene using phenolic acid decarboxylase from <i>B. amyloliquefaciens</i> in biphasic reaction system. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 1501-1511. | 3.6 | 62 |
| 81 | Development of Colorimetric HTS Assay of Cytochrome P450 for ortho-specific Hydroxylation, and Engineering of CYP102D1 with Enhanced Catalytic Activity and Regioselectivity. <i>ChemBioChem</i> , 2013, 14, 1231-1238. | 2.6 | 9 |
| 82 | Production of a novel 7-methylisoflavone by regioselective sequential hydroxylation and 7-methylation reactions in <i>Streptomyces avermitilis</i> host system. <i>Biotechnology and Bioengineering</i> , 2013, 110, 2591-2599. | 3.3 | 8 |
| 83 | Engineering of daidzein 3-hydroxylase P450 enzyme into catalytically self-sufficient cytochrome P450. <i>Microbial Cell Factories</i> , 2012, 11, 81. | 4.0 | 22 |
| 84 | Cloning, expression and characterization of CYP102D1, a self-sufficient P450 monooxygenase from <i>Streptomyces avermitilis</i> . <i>FEBS Journal</i> , 2012, 279, 1650-1662. | 4.7 | 40 |
| 85 | Novel iron-sulfur containing NADPH-Reductase from <i>Nocardia farcinica</i> IFM10152 and fusion construction with CYP51 lanosterol demethylase. <i>Biotechnology and Bioengineering</i> , 2012, 109, 630-636. | 3.3 | 8 |
| 86 | Screening of bacterial cytochrome P450s responsible for regiospecific hydroxylation of (iso)flavonoids. <i>Enzyme and Microbial Technology</i> , 2011, 48, 386-392. | 3.2 | 30 |
| 87 | ortho-specific monohydroxylation of daidzein by cytochrome P450s of <i>Nocardia farcinica</i> IFM10152. <i>Biotechnology Journal</i> , 2009, 4, 1586-1595. | 3.5 | 19 |
| 88 | One-pot production of thermostable PHB biodegradable polymer by co-producing bio-melanin pigment in engineered <i>Escherichia coli</i> . <i>Biomass Conversion and Biorefinery</i> , 0, , 1. | 4.6 | 3 |