

Eun Yeol Lee

List of Publications by Year in descending order

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185
papers

5,723
citations

61977

43
h-index

114455

63
g-index

186
all docs

186
docs citations

186
times ranked

5555
citing authors

#	ARTICLE	IF	CITATIONS
1	An integrated rotary microfluidic system with DNA extraction, loop-mediated isothermal amplification, and lateral flow strip based detection for point-of-care pathogen diagnostics. <i>Biosensors and Bioelectronics</i> , 2017, 91, 334-340.	10.1	192
2	Alginate lyase: Structure, property, and application. <i>Biotechnology and Bioprocess Engineering</i> , 2011, 16, 843-851.	2.6	153
3	Chemo-enzymatic saccharification and bioethanol fermentation of lipid-extracted residual biomass of the microalga, <i>Dunaliella tertiolecta</i> . <i>Bioresource Technology</i> , 2013, 132, 197-201.	9.6	133
4	Fermentative hydrogen production by a new chemoheterotrophic bacterium <i>Rhodospseudomonas Palustris</i> P4. <i>International Journal of Hydrogen Energy</i> , 2002, 27, 1373-1379.	7.1	128
5	Review on lignin modifications toward natural UV protection ingredient for lignin-based sunscreens. <i>Green Chemistry</i> , 2021, 23, 4633-4646.	9.0	109
6	Sustainable production of bioethanol from renewable brown algae biomass. <i>Biomass and Bioenergy</i> , 2016, 92, 70-75.	5.7	101
7	Bioethanol production from carbohydrate-enriched residual biomass obtained after lipid extraction of <i>Chlorella</i> sp. KR-1. <i>Bioresource Technology</i> , 2015, 196, 22-27.	9.6	95
8	Pyrolysis of microalgae residual biomass derived from <i>Dunaliella tertiolecta</i> after lipid extraction and carbohydrate saccharification. <i>Chemical Engineering Journal</i> , 2015, 263, 194-199.	12.7	92
9	Microbial synthesis gas utilization and ways to resolve kinetic and mass-transfer limitations. <i>Bioresource Technology</i> , 2015, 177, 361-374.	9.6	91
10	New Fluorescent Chemosensors for Silver Ion. <i>Journal of Organic Chemistry</i> , 2002, 67, 4384-4386.	3.2	90
11	Molecular engineering of epoxide hydrolase and its application to asymmetric and enantioconvergent hydrolysis. <i>Biotechnology and Bioengineering</i> , 2007, 98, 318-327.	3.3	89
12	Cloning and Characterization of a Novel Oligoalginate Lyase from a Newly Isolated Bacterium <i>Sphingomonas</i> sp. MJ-3. <i>Marine Biotechnology</i> , 2012, 14, 189-202.	2.4	89
13	Systematic metabolic engineering of <i>Methylomicrobium alcaliphilum</i> 20Z for 2,3-butanediol production from methane. <i>Metabolic Engineering</i> , 2018, 47, 323-333.	7.0	89
14	Stabilization and fabrication of microbubbles: applications for medical purposes and functional materials. <i>Soft Matter</i> , 2015, 11, 2067-2079.	2.7	88
15	Sustainable production of liquid biofuels from renewable microalgae biomass. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 29, 24-31.	5.8	88
16	Functional cooperation of the glycine synthase-reductase and Wood-Werkman pathways for autotrophic growth of <i>Clostridium drakei</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 7516-7523.	7.1	88
17	Valorization of industrial lignin to value-added chemicals by chemical depolymerization and biological conversion. <i>Industrial Crops and Products</i> , 2021, 161, 113219.	5.2	84
18	Nano-Immobilized Biocatalysts for Biodiesel Production from Renewable and Sustainable Resources. <i>Catalysts</i> , 2018, 8, 68.	3.5	81

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19	Biosynthesis of glycerol carbonate from glycerol by lipase in dimethyl carbonate as the solvent. <i>Bioprocess and Biosystems Engineering</i> , 2010, 33, 1059-1065.	3.4	70
20	Molecular cloning, purification, and characterization of a novel polyMG-specific alginate lyase responsible for alginate MG block degradation in <i>Stenotrophomas maltophilia</i> KJ-2. <i>Applied Microbiology and Biotechnology</i> , 2012, 95, 1643-1653.	3.6	68
21	Kinetics study of the hydrothermal liquefaction of the microalga <i>Aurantiochytrium</i> sp. KRS101. <i>Chemical Engineering Journal</i> , 2016, 306, 763-771.	12.7	68
22	Cloning and Characterization of Alginate Lyase from a Marine Bacterium <i>Streptomyces</i> sp. ALG-5. <i>Marine Biotechnology</i> , 2009, 11, 10-16.	2.4	67
23	Point-of-care genetic analysis for multiplex pathogenic bacteria on a fully integrated centrifugal microdevice with a large-volume sample. <i>Biosensors and Bioelectronics</i> , 2019, 136, 132-139.	10.1	67
24	Biocatalytic Conversion of Methane to Methanol as a Key Step for Development of Methane-Based Biorefineries. <i>Journal of Microbiology and Biotechnology</i> , 2014, 24, 1597-1605.	2.1	67
25	Highly efficient extraction and lipase-catalyzed transesterification of triglycerides from <i>Chlorella</i> sp. KR-1 for production of biodiesel. <i>Bioresource Technology</i> , 2013, 147, 240-245.	9.6	65
26	Metabolic engineering of methanotrophs and its application to production of chemicals and biofuels from methane. <i>Biofuels, Bioproducts and Biorefining</i> , 2016, 10, 848-863.	3.7	63
27	Batch Conversion of Methane to Methanol Using <i>Methylosinus trichosporium</i> OB3b as Biocatalyst. <i>Journal of Microbiology and Biotechnology</i> , 2015, 25, 375-380.	2.1	63
28	Pyrolysis characteristics and kinetics of microalgal <i>Aurantiochytrium</i> sp. KRS101. <i>Energy</i> , 2017, 118, 369-376.	8.8	62
29	A general reaction network and kinetic model of the hydrothermal liquefaction of microalgae <i>Tetraselmis</i> sp.. <i>Bioresource Technology</i> , 2017, 241, 610-619.	9.6	61
30	Kinetic resolution for optically active epoxides by microbial enantioselective hydrolysis. <i>Biotechnology Letters</i> , 1998, 12, 225-228.	0.5	59
31	Nucleic acid diagnostics on the total integrated lab-on-a-disc for point-of-care testing. <i>Biosensors and Bioelectronics</i> , 2019, 141, 111466.	10.1	58
32	Alginate derived functional oligosaccharides: Recent developments, barriers, and future outlooks. <i>Carbohydrate Polymers</i> , 2021, 267, 118158.	10.2	55
33	Preparation of biopolyol by liquefaction of palm kernel cake using PEG#400 blended glycerol. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 29, 304-313.	5.8	53
34	Engineered Methanotrophy: A Sustainable Solution for Methane-Based Industrial Biomanufacturing. <i>Trends in Biotechnology</i> , 2021, 39, 381-396.	9.3	53
35	Highly efficient bioconversion of methane to methanol using a novel type I <i>Methylomonas</i> sp. <i><sc>DH</sc></i> newly isolated from brewery waste sludge. <i>Journal of Chemical Technology and Biotechnology</i> , 2017, 92, 311-318.	3.2	52
36	Development of a high-throughput centrifugal loop-mediated isothermal amplification microdevice for multiplex foodborne pathogenic bacteria detection. <i>Sensors and Actuators B: Chemical</i> , 2017, 246, 146-153.	7.8	52

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37	Synthesis of hybrid Fe ₃ O ₄ @silica@NiO superstructures and their application as magnetically separable high-performance biocatalysts. <i>Chemical Communications</i> , 2009, , 3780.	4.1	51
38	Effect of internal pressure and gas/liquid interface area on the CO mass transfer coefficient using hollow fibre membranes as a high mass transfer gas diffusing system for microbial syngas fermentation. <i>Bioresource Technology</i> , 2014, 169, 637-643.	9.6	51
39	Gas chromatography-mass spectrometric analysis and its application to a screening procedure for novel bacterial polyhydroxyalkanoic acids containing long chain saturated and unsaturated monomers. <i>Journal of Bioscience and Bioengineering</i> , 1995, 80, 408-414.	0.9	50
40	Flavonoids, terpenoids, and polyketide antibiotics: Role of glycosylation and biocatalytic tactics in engineering glycosylation. <i>Biotechnology Advances</i> , 2020, 41, 107550.	11.7	50
41	Identification of 4-hydroxyhexanoic acid as a new constituent of biosynthetic polyhydroxyalkanoic acids from bacteria. <i>Applied Microbiology and Biotechnology</i> , 1994, 40, 710-716.	3.6	49
42	Bio- and chemo-catalytic preparations of chiral epoxides. <i>Journal of Industrial and Engineering Chemistry</i> , 2010, 16, 1-6.	5.8	49
43	Biological conversion of methane to chemicals and fuels: technical challenges and issues. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 3071-3080.	3.6	49
44	Harvesting of microalgae using flocculation combined with dissolved air flotation. <i>Biotechnology and Bioprocess Engineering</i> , 2014, 19, 143-149.	2.6	48
45	Lipase-catalyzed in-situ biosynthesis of glycerol-free biodiesel from heterotrophic microalgae, <i>Aurantiochytrium</i> sp. KRS101 biomass. <i>Bioresource Technology</i> , 2016, 211, 472-477.	9.6	45
46	Lipase-catalyzed simultaneous biosynthesis of biodiesel and glycerol carbonate from corn oil in dimethyl carbonate. <i>Biotechnology Letters</i> , 2011, 33, 1789-1796.	2.2	43
47	Smooth muscle-like tissues engineered with bone marrow stromal cells. <i>Biomaterials</i> , 2004, 25, 2979-2986.	11.4	42
48	Saccharification of alginate by using exolytic oligoalginate lyase from marine bacterium <i>Sphingomonas</i> sp. MJ-3. <i>Journal of Industrial and Engineering Chemistry</i> , 2011, 17, 853-858.	5.8	41
49	Genome-scale evaluation of core one-carbon metabolism in gammaproteobacterial methanotrophs grown on methane and methanol. <i>Metabolic Engineering</i> , 2020, 57, 1-12.	7.0	40
50	Production of (S)-styrene oxide by recombinant <i>Pichia pastoris</i> containing epoxide hydrolase from <i>Rhodotorula glutinis</i> . <i>Enzyme and Microbial Technology</i> , 2004, 35, 624-631.	3.2	39
51	Metabolic engineering of the type I methanotroph <i>Methylomonas</i> sp. DH-1 for production of succinate from methane. <i>Metabolic Engineering</i> , 2019, 54, 170-179.	7.0	39
52	Spray pyrolysis synthesis of bimetallic NiMo/Al ₂ O ₃ @TiO ₂ catalyst for hydrodeoxygenation of guaiacol: Effects of bimetallic composition and reduction temperature. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 83, 351-358.	5.8	39
53	Molecular identification of a polyM-specific alginate lyase from <i>Pseudomonas</i> sp. strain KS-408 for degradation of glycosidic linkages between two mannuronates or mannuronate and guluronate in alginate. <i>Canadian Journal of Microbiology</i> , 2011, 57, 1032-1041.	1.7	38
54	Dimethyl carbonate-mediated lipid extraction and lipase-catalyzed in situ transesterification for simultaneous preparation of fatty acid methyl esters and glycerol carbonate from <i>Chlorella</i> sp. KR-1 biomass. <i>Bioresource Technology</i> , 2014, 158, 105-110.	9.6	38

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55	Screening of the strictly xylose-utilizing <i>Bacillus</i> sp. SM01 for polyhydroxybutyrate and its co-culture with <i>Cupriavidus necator</i> NCIMB 11599 for enhanced production of PHB. <i>International Journal of Biological Macromolecules</i> , 2021, 181, 410-417.	7.5	38
56	Biological conversion of methane to putrescine using genome-scale model-guided metabolic engineering of a methanotrophic bacterium <i>Methylomicrobium alcaliphilum</i> 20Z. <i>Biotechnology for Biofuels</i> , 2019, 12, 147.	6.2	35
57	Metabolic engineering of type II methanotroph, <i>Methylosinus trichosporium</i> OB3b, for production of 3-hydroxypropionic acid from methane via a malonyl-CoA reductase-dependent pathway. <i>Metabolic Engineering</i> , 2020, 59, 142-150.	7.0	35
58	Epoxyde hydrolase-mediated enantioconvergent bioconversions to prepare chiral epoxydes and alcohols. <i>Biotechnology Letters</i> , 2008, 30, 1509-1514.	2.2	34
59	Efficient production of d-lactate from methane in a lactate-tolerant strain of <i>Methylomonas</i> sp. DH-1 generated by adaptive laboratory evolution. <i>Biotechnology for Biofuels</i> , 2019, 12, 234.	6.2	34
60	A comparative transcriptome analysis of the novel obligate methanotroph <i>Methylomonas</i> sp. DH-1 reveals key differences in transcriptional responses in C1 and secondary metabolite pathways during growth on methane and methanol. <i>BMC Genomics</i> , 2019, 20, 130.	2.8	32
61	Phosphoric acid enhancement in a Pt-encapsulated Metal-Organic Framework (MOF) bifunctional catalyst for efficient hydro-deoxygenation of oleic acid from biomass. <i>Journal of Catalysis</i> , 2020, 386, 19-29.	6.2	32
62	Glycosylation of various flavonoids by recombinant oleandomycin glycosyltransferase from <i>Streptomyces antibioticus</i> in batch and repeated batch modes. <i>Biotechnology Letters</i> , 2012, 34, 499-505.	2.2	31
63	Mesoporous silica-coated luminescent Eu ³⁺ -doped GdVO ₄ nanoparticles for multimodal imaging and drug delivery. <i>RSC Advances</i> , 2014, 4, 45687-45695.	3.6	31
64	Solvothermal liquefaction of microalgal <i>Tetraselmis</i> sp. biomass to prepare biopolyols by using PEG#400-blended glycerol. <i>Algal Research</i> , 2015, 12, 539-544.	4.6	31
65	Bioconversion of methane to cadaverine and lysine using an engineered type II methanotroph, <i>Methylosinus trichosporium</i> OB3b. <i>Green Chemistry</i> , 2020, 22, 7803-7811.	9.0	31
66	Unlocking the biosynthesis of sesquiterpenoids from methane via the methylerythritol phosphate pathway in methanotrophic bacteria, using β -humulene as a model compound. <i>Metabolic Engineering</i> , 2020, 61, 69-78.	7.0	31
67	Growth of Silver Nanowires from Controlled Silver Chloride Seeds and Their Application for Fluorescence Enhancement Based on Localized Surface Plasmon Resonance. <i>Small</i> , 2017, 13, 1603392.	10.0	29
68	Techno-economic analysis of sugar production from lignocellulosic biomass with utilization of hemicellulose and lignin for high-value products. <i>Biofuels, Bioproducts and Biorefining</i> , 2021, 15, 404-415.	3.7	29
69	Enhanced production of cis,cis-muconate in a cell-recycle bioreactor. <i>Journal of Bioscience and Bioengineering</i> , 1997, 84, 70-76.	0.9	28
70	Crude glycerol-mediated liquefaction of empty fruit bunches saccharification residues for preparation of biopolyurethane. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 34, 157-164.	5.8	28
71	Environmentally-Benign Dimethyl Carbonate-Mediated Production of Chemicals and Biofuels from Renewable Bio-Oil. <i>Energies</i> , 2017, 10, 1790.	3.1	28
72	Enhanced stability and reusability of marine epoxyde hydrolase using ship-in-a-bottle approach with magnetically-separable mesoporous silica. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2013, 89, 48-51.	1.8	27

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73	Type II methanotrophs: A promising microbial cell-factory platform for bioconversion of methane to chemicals. <i>Biotechnology Advances</i> , 2021, 47, 107700.	11.7	27
74	Gas-liquid mass transfer coefficient of methane in bubble column reactor. <i>Korean Journal of Chemical Engineering</i> , 2015, 32, 1060-1063.	2.7	25
75	Characteristics of Reduced Graphene Oxide Quantum Dots for a Flexible Memory Thin Film Transistor. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 16375-16380.	8.0	25
76	Low-cost and facile fabrication of a paper-based capillary electrophoresis microdevice for pathogen detection. <i>Biosensors and Bioelectronics</i> , 2017, 91, 388-392.	10.1	25
77	Biocatalytic preparation of chiral epichlorohydrins using recombinant <i>Pichia pastoris</i> expressing epoxide hydrolase of <i>Rhodotorula glutinis</i> . <i>Biotechnology and Bioprocess Engineering</i> , 2004, 9, 62-64.	2.6	24
78	Enantioselective epoxide hydrolase activity of a newly isolated microorganism, <i>Sphingomonas echinoides</i> EH-983, from seawater. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006, 41, 130-135.	1.8	24
79	Crude glycerol-mediated liquefaction of saccharification residues of sunflower stalks for production of lignin biopolyols. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 38, 175-180.	5.8	24
80	Biosynthesis of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) by newly isolated <i>Agrobacterium</i> sp. SH-1 and GW-014 from structurally unrelated single carbon substrates. <i>Journal of Bioscience and Bioengineering</i> , 1995, 79, 328-334.	0.9	23
81	Integrating cell-free biosyntheses of heme prosthetic group and apoenzyme for the synthesis of functional P450 monooxygenase. <i>Biotechnology and Bioengineering</i> , 2013, 110, 1193-1200.	3.3	23
82	Developments of Riboswitches and Toehold Switches for Molecular Detection” <i>Biosensing and Molecular Diagnostics</i> . <i>International Journal of Molecular Sciences</i> , 2020, 21, 3192.	4.1	23
83	Controlled hydrogenolysis over heterogeneous catalysts for lignin valorization. <i>Catalysis Reviews - Science and Engineering</i> , 2020, 62, 607-630.	12.9	23
84	Heterologous expression of an alginate lyase from <i>Streptomyces</i> sp. ALG-5 in <i>Escherichia coli</i> and its use for preparation of the magnetic nanoparticle-immobilized enzymes. <i>Bioprocess and Biosystems Engineering</i> , 2011, 34, 113-119.	3.4	22
85	Methane-based biosynthesis of 4-hydroxybutyrate and P(3-hydroxybutyrate-co-4-hydroxybutyrate) using engineered <i>Methylosinus trichosporium</i> OB3b. <i>Bioresource Technology</i> , 2021, 335, 125263.	9.6	22
86	Title is missing!. <i>Biotechnology Letters</i> , 1997, 11, 167-171.	0.5	21
87	Selective bio-oxidation of propane to acetone using methane-oxidizing <i>Methylomonas</i> sp. Δ DH-1. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2017, 44, 1097-1105.	3.0	21
88	Genome-Scale Metabolic Model Reconstruction and in Silico Investigations of Methane Metabolism in <i>Methylosinus trichosporium</i> OB3b. <i>Microorganisms</i> , 2020, 8, 437.	3.6	21
89	Cloning and characterization of a fish microsomal epoxide hydrolase of <i>Danio rerio</i> and application to kinetic resolution of racemic styrene oxide. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2005, 37, 30-35.	1.8	20
90	Co-upgrading of ethanol-assisted depolymerized lignin: A new biological lignin valorization approach for the production of protocatechuic acid and polyhydroxyalkanoic acid. <i>Bioresource Technology</i> , 2021, 338, 125563.	9.6	20

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91	Glyoxylate carboligase-based whole-cell biotransformation of formaldehyde into ethylene glycol <i>via</i> glycolaldehyde. <i>Green Chemistry</i> , 2022, 24, 218-226.	9.0	20
92	Development and characterization of recombinant whole-cell biocatalysts expressing epoxide hydrolase from <i>Rhodotorula glutinis</i> for enantioselective resolution of racemic epoxides. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006, 43, 2-8.	1.8	19
93	Cloning, expression and enantioselective hydrolytic catalysis of a microsomal epoxide hydrolase from a marine fish, <i>Mugil cephalus</i> . <i>Biotechnology Letters</i> , 2007, 29, 237-246.	2.2	19
94	Epoxidation of Methanol-Soluble Kraft Lignin for Lignin-Derived Epoxy Resin and Its Usage in the Preparation of Biopolyester. <i>Journal of Wood Chemistry and Technology</i> , 2017, 37, 433-442.	1.7	19
95	Functional Analysis of <i>Methylomonas</i> sp. DH-1 Genome as a Promising Biocatalyst for Bioconversion of Methane to Valuable Chemicals. <i>Catalysts</i> , 2018, 8, 117.	3.5	19
96	<i>Ulva lactuca</i> : A potential seaweed for tumor treatment and immune stimulation. <i>Biotechnology and Bioprocess Engineering</i> , 2004, 9, 236-238.	2.6	18
97	Liquefaction of Red Pine Wood, <i>Pinus densiflora</i>, Biomass Using Peg-400-Blended Crude Glycerol for Biopolyol and Biopolyurethane Production. <i>Journal of Wood Chemistry and Technology</i> , 2016, 36, 353-364.	1.7	18
98	Effect of amino-defective-MOF materials on the selective hydrodeoxygenation of fatty acid over Pt-based catalysts. <i>Journal of Catalysis</i> , 2021, 400, 283-293.	6.2	18
99	Production of (S)-styrene oxide using styrene oxide isomerase negative mutant of <i>Pseudomonas putida</i> SN1. <i>Enzyme and Microbial Technology</i> , 2006, 39, 1264-1269.	3.2	17
100	Biobutanediol-mediated liquefaction of empty fruit bunch saccharification residues to prepare lignin biopolyols. <i>Bioresource Technology</i> , 2016, 208, 24-30.	9.6	17
101	Enhanced mass transfer rate of methane in aqueous phase via methyl-functionalized SBA-15. <i>Journal of Molecular Liquids</i> , 2016, 215, 154-160.	4.9	17
102	Green Preparation of Bioplastics Based on Degradation and Chemical Modification of Lignin Residue. <i>Journal of Wood Chemistry and Technology</i> , 2018, 38, 460-478.	1.7	17
103	Catalytic hydrogenolysis of alkali lignin in supercritical ethanol over copper monometallic catalyst supported on a chromium-based metal-organic framework for the efficient production of aromatic monomers. <i>Bioresource Technology</i> , 2021, 342, 125941.	9.6	17
104	Development of an engineered methanotroph-based microbial platform for biocatalytic conversion of methane to phytohormone for sustainable agriculture. <i>Chemical Engineering Journal</i> , 2022, 429, 132522.	12.7	17
105	Evaluation of composts as biofilter packing material for treatment of gaseous p-xylene. <i>Biochemical Engineering Journal</i> , 2007, 35, 142-149.	3.6	16
106	Screening Enantioselective Epoxide Hydrolase Activities from Marine Microorganisms: Detection of Activities in <i>Erythrobacter</i> spp.. <i>Marine Biotechnology</i> , 2008, 10, 366-373.	2.4	16
107	Biodegradation of gas-phase styrene in a high-performance biotrickling filter using porous polyurethane foam as a packing medium. <i>Biotechnology and Bioprocess Engineering</i> , 2010, 15, 512-519.	2.6	16
108	Rapid and high-throughput construction of microbial cell-factories with regulatory noncoding RNAs. <i>Biotechnology Advances</i> , 2015, 33, 914-930.	11.7	16

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109	Reconstruction of methanol and formate metabolic pathway in non-native host for biosynthesis of chemicals and biofuels. <i>Biotechnology and Bioprocess Engineering</i> , 2016, 21, 477-482.	2.6	16
110	Metabolic versatility of microbial methane oxidation for biocatalytic methane conversion. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 35, 8-13.	5.8	16
111	Chemical Modification of Methanol-Insoluble Kraft Lignin Using Oxypropylation Under Mild Conditions for the Preparation of Bio-Polyester. <i>Journal of Wood Chemistry and Technology</i> , 2017, 37, 334-342.	1.7	16
112	Development and optimization of solvothermal liquefaction of marine macroalgae <i>Saccharina japonica</i> biomass for biopolyol and biopolyurethane production. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 81, 167-177.	5.8	16
113	One-pot biotransformation of racemic styrene oxide into (R)-1,2-phenylethandiol by two recombinant microbial epoxide hydrolases. <i>Biotechnology and Bioprocess Engineering</i> , 2008, 13, 453-457.	2.6	15
114	Molecular characterization of a novel oligoalginate lyase consisting of AlgL- and heparinase II/III-like domains from <i>Stenotrophomonas maltophilia</i> KJ-2 and its application to alginate saccharification. <i>Korean Journal of Chemical Engineering</i> , 2015, 32, 917-924.	2.7	15
115	An efficient cell-free protein synthesis system using periplasmic phosphatase-removed S30 extract. <i>Journal of Microbiological Methods</i> , 2000, 43, 91-96.	1.6	14
116	Glycosyltransferase and its application to glycodiversification of natural products. <i>Journal of Industrial and Engineering Chemistry</i> , 2012, 18, 1208-1212.	5.8	14
117	Isolation, identification and characterization of marine bacteria exhibiting complementary enantioselective epoxide hydrolase activity for preparing chiral chlorinated styrene oxide derivatives. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 28, 225-228.	5.8	14
118	Enhanced mass transfer rate of methane via hollow fiber membrane modules for <i>Methylosinus trichosporium</i> OB3b fermentation. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 39, 149-152.	5.8	14
119	Bioproduction of Isoprenoids and Other Secondary Metabolites Using Methanotrophic Bacteria as an Alternative Microbial Cell Factory Option: Current Stage and Future Aspects. <i>Catalysts</i> , 2019, 9, 883.	3.5	14
120	Development of recombinant <i>Pseudomonas putida</i> containing homologous styrene monooxygenase genes for the production of (S)-styrene oxide. <i>Biotechnology and Bioprocess Engineering</i> , 2006, 11, 530-537.	2.6	13
121	Catalytic Hydroisomerization Upgrading of Vegetable Oil-Based Insulating Oil. <i>Catalysts</i> , 2018, 8, 131.	3.5	13
122	Sustainable biosynthesis of chemicals from methane and glycerol via reconstruction of multi-carbon utilizing pathway in obligate methanotrophic bacteria. <i>Microbial Biotechnology</i> , 2021, 14, 2552-2565.	4.2	13
123	Novel phasins from the Arctic <i>Pseudomonas</i> sp. B14-6 enhance the production of polyhydroxybutyrate and increase inhibitor tolerance. <i>International Journal of Biological Macromolecules</i> , 2021, 190, 722-729.	7.5	13
124	Development of <i>Methylorubrum extorquens</i> AM1 as a promising platform strain for enhanced violacein production from co-utilization of methanol and acetate. <i>Metabolic Engineering</i> , 2022, 72, 150-160.	7.0	13
125	Purification and characterization of human caseinomacropeptide produced by a recombinant <i>Saccharomyces cerevisiae</i> . <i>Protein Expression and Purification</i> , 2005, 41, 441-446.	1.3	12
126	Development and mathematical modeling of a two-stage reactor system for trichloroethylene degradation using <i>Methylosinus trichosporium</i> OB3b. <i>Biodegradation</i> , 2006, 18, 91-101.	3.0	12

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127	Site-Directed Mutagenesis-Based Functional Analysis and Characterization of Endolytic Lyase Activity of N- and C-Terminal Domains of a Novel Oligoalginate Lyase from <i>Sphingomonas</i> sp. MJ-3 Possessing Exolytic Lyase Activity in the Intact Enzyme. <i>Marine Biotechnology</i> , 2015, 17, 782-792.	2.4	12
128	Biological conversion of propane to 2-propanol using group I and II methanotrophs as biocatalysts. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2019, 46, 675-685.	3.0	12
129	Methanotrophic microbial cell factory platform for simultaneous conversion of methane and xylose to value-added chemicals. <i>Chemical Engineering Journal</i> , 2021, 420, 127632.	12.7	12
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