

Eun Yeol Lee

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

177
papers

4,040
citations

39
h-index

53
g-index

186
ext. papers

4,896
ext. citations

6.3
avg, IF

6.18
L-index

#	Paper	IF	Citations
177	Boosting the acetol production in methanotrophic biocatalyst <i>Methylomonas</i> sp. DH-1 by the coupling activity of heteroexpressed novel protein PmoD with endogenous particulate methane monooxygenase. 2022 , 15, 7		0
176	Glyoxylate carbonylase-based whole-cell biotransformation of formaldehyde into ethylene glycol via glycolaldehyde. <i>Green Chemistry</i> , 2022 , 24, 218-226	10	1
175	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, 1325-1332	14.7	2
174	Bypassing the bottlenecks in the shikimate and methylerythritol phosphate pathways for enhancing the production of natural products from methane in <i>Methylobacterium alcaliphilum</i> 20Z. <i>Green Chemistry</i> , 2022 , 24, 2893-2903	10	0
173	Systems Metabolic Engineering of Methanotrophic Bacteria for Biological Conversion of Methane to Value-Added Compounds.. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2022 , 1	1.7	
172	Bio-upgrading of ethanol to fatty acid ethyl esters by metabolic engineering of <i>Pseudomonas putida</i> KT2440.. <i>Bioresource Technology</i> , 2022 , 350, 126899	11	0
171	Valorization of industrial lignin to value-added chemicals by chemical depolymerization and biological conversion. <i>Industrial Crops and Products</i> , 2021 , 161, 113219	5.9	29
170	Biofuel upgrade reactions via phase-transfer catalysis of methanotrophs. <i>Journal of Industrial and Engineering Chemistry</i> , 2021 , 95, 305-311	6.3	0
169	Type II methanotrophs: A promising microbial cell-factory platform for bioconversion of methane to chemicals. <i>Biotechnology Advances</i> , 2021 , 47, 107700	17.8	7
168	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	6.3	1
167	Microwave-Assisted Two-Step Liquefaction of Acetone-Soluble Lignin of Silvergrass Saccharification Residue for Production of Biopolyol and Biopolyurethane. <i>Polymers</i> , 2021 , 13,	4.5	2
166	Enhancing Sesquiterpenoid Production from Methane via Synergy of the Methylerythritol Phosphate Pathway and a Short-Cut Route to 1-Deoxy-D-xylulose 5-Phosphate in Methanotrophic Bacteria. <i>Microorganisms</i> , 2021 , 9,	4.9	4
165	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	7.9	10
164	Methanotrophic microbial cell factory platform for simultaneous conversion of methane and xylose to value-added chemicals. <i>Chemical Engineering Journal</i> , 2021 , 420, 127632	14.7	5
163	Techno-economic analysis of sugar production from lignocellulosic biomass with utilization of hemicellulose and lignin for high-value co-products. <i>Biofuels, Bioproducts and Biorefining</i> , 2021 , 15, 404-413	5.3	11
162	Engineered Methanotrophy: A Sustainable Solution for Methane-Based Industrial Biomanufacturing. <i>Trends in Biotechnology</i> , 2021 , 39, 381-396	15.1	21
161	Review on lignin modifications toward natural UV protection ingredient for lignin-based sunscreens. <i>Green Chemistry</i> , 2021 , 23, 4633-4646	10	22

160	Acid-Base-catalyzed two-step liquefaction of empty fruit bunch lignin residue for preparation of biopolyol and high-performance biopolyurethanes. <i>Wood Science and Technology</i> , 2021 , 55, 315-330	2.5	2
159	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	7.3	2
158	Alginate derived functional oligosaccharides: Recent developments, barriers, and future outlooks. <i>Carbohydrate Polymers</i> , 2021 , 267, 118158	10.3	14
157	Methane-based biosynthesis of 4-hydroxybutyrate and P(3-hydroxybutyrate-co-4-hydroxybutyrate) using engineered <i>Methylophilus trichosporium</i> OB3b. <i>Bioresource Technology</i> , 2021 , 335, 125263	11	7
156	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	11	9
155	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	7.9	2
154	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	11	3
153	Controlled hydrodeoxygenation of lignin-derived anisole over supported Pt on UiO-66 based-catalysts through defect engineering approach. <i>Fuel Processing Technology</i> , 2021 , 224, 107001	7.2	2
152	Unlocking the biosynthesis of sesquiterpenoids from methane via the methylerythritol phosphate pathway in methanotrophic bacteria, using humulene as a model compound. <i>Metabolic Engineering</i> , 2020 , 61, 69-78	9.7	14
151	Developments of Riboswitches and Toehold Switches for Molecular Detection-Biosensing and Molecular Diagnostics. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	15
150	Controlled hydrogenolysis over heterogeneous catalysts for lignin valorization. <i>Catalysis Reviews - Science and Engineering</i> , 2020 , 62, 607-630	12.6	7
149	Functional Characterization of a Novel Oligoalginate Lyase of <i>Stenotrophomonas maltophilia</i> KJ-2 Using Site-Specific Mutation Reveals Bifunctional Mode of Action, Possessing Both Endolytic and Exolytic Degradation Activity Toward Alginate in Seaweed Biomass. <i>Frontiers in Marine Science</i> , 2020 , 7,	4.5	4
148	Metabolic role of pyrophosphate-linked phosphofructokinase pfk for C1 assimilation in <i>Methylophilus microbium</i> alcaliphilum 20Z. <i>Microbial Cell Factories</i> , 2020 , 19, 131	6.4	3
147	Metabolic engineering of type II methanotroph, <i>Methylophilus 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	9.7	15
146	Flavonoids, terpenoids, and polyketide antibiotics: Role of glycosylation and biocatalytic tactics in engineering glycosylation. <i>Biotechnology Advances</i> , 2020 , 41, 107550	17.8	19
145	Functional cooperation of the glycine synthase-reductase and Wood-Ljungdahl pathways for autotrophic growth of. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 7516-7523	11.5	41
144	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	7.3	16
143	Understanding the molecular properties of the E1 subunit (SucA) of β -ketoglutarate dehydrogenase complex from <i>Vibrio vulnificus</i> for the enantioselective ligation of acetaldehydes into (R)-acetoin. <i>Catalysis Science and Technology</i> , 2020 , 10, 79-85	5.5	3

142	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	6.3	20
141	Development of cell-free platform-based toehold switch system for detection of IP-10 mRNA, an indicator for acute kidney allograft rejection diagnosis. <i>Clinica Chimica Acta</i> , 2020 , 510, 619-624	6.2	2
140	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	10	15
139	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	6.3	5
138	Genome-scale evaluation of core one-carbon metabolism in gammaproteobacterial methanotrophs grown on methane and methanol. <i>Metabolic Engineering</i> , 2020 , 57, 1-12	9.7	21
137	Genome-Scale Metabolic Model Reconstruction and in Silico Investigations of Methane Metabolism in OB3b. <i>Microorganisms</i> , 2020 , 8,	4.9	10
136	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	4.2	7
135	Nucleic acid diagnostics on the total integrated lab-on-a-disc for point-of-care testing. <i>Biosensors and Bioelectronics</i> , 2019 , 141, 111466	11.8	40
134	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	11.8	43
133	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	9.7	25
132	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	4.5	23
131	Development and Optimization of the Biological Conversion of Ethane to Ethanol Using Whole-Cell Methanotrophs Possessing Methane Monooxygenase. <i>Molecules</i> , 2019 , 24,	4.8	4
130	Biological conversion of methane to putrescine using genome-scale model-guided metabolic engineering of a methanotrophic bacterium 20Z. <i>Biotechnology for Biofuels</i> , 2019 , 12, 147	7.8	19
129	Efficient production of d-lactate from methane in a lactate-tolerant strain of sp. DH-1 generated by adaptive laboratory evolution. <i>Biotechnology for Biofuels</i> , 2019 , 12, 234	7.8	19
128	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	4	9
127	Metabolic Engineering of Methanotrophs for the Production of Chemicals and Fuels. <i>Microbiology Monographs</i> , 2019 , 163-203	0.8	
126	Biological conversion of methane to chemicals and fuels: technical challenges and issues. <i>Applied Microbiology and Biotechnology</i> , 2018 , 102, 3071-3080	5.7	33
125	Systematic metabolic engineering of <i>Methylomicrobium alcaliphilum</i> 20Z for 2,3-butanediol production from methane. <i>Metabolic Engineering</i> , 2018 , 47, 323-333	9.7	61

124	Thermochemical conversion of red pine wood, <i>Pinus densiflora</i> to biopolyol using biobutanediol-mediated solvolysis for biopolyurethane preparation. <i>Wood Science and Technology</i> , 2018 , 52, 581-596	2.5	4
123	Identification of 4-Deoxy-L-Etychro-Hexoseulose Uronic Acid Reductases in an Alginolytic Bacterium <i>Vibrio splendidus</i> and their Uses for L-Lactate Production in an <i>Escherichia coli</i> Cell-Free System. <i>Marine Biotechnology</i> , 2018 , 20, 410-423	3.4	4
122	Catalytic Hydroisomerization Upgrading of Vegetable Oil-Based Insulating Oil. <i>Catalysts</i> , 2018 , 8, 131	4	8
121	Completely Bio-based Polyol Production from Sunflower Stalk Saccharification Lignin Residue via Solvothermal Liquefaction Using Biobutanediol Solvent and Application to Biopolyurethane Synthesis. <i>Journal of Polymers and the Environment</i> , 2018 , 26, 3493-3501	4.5	5
120	Nano-Immobilized Biocatalysts for Biodiesel Production from Renewable and Sustainable Resources. <i>Catalysts</i> , 2018 , 8, 68	4	61
119	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	2	9
118	Basics of genome-scale metabolic modeling and applications on C1-utilization. <i>FEMS Microbiology Letters</i> , 2018 , 365,	2.9	7
117	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	4	18
116	Simultaneous Production of Transformer Insulating Oil and Value-Added Glycerol Carbonates from Soybean Oil by Lipase-Catalyzed Transesterification in Dimethyl Carbonate. <i>Energies</i> , 2018 , 11, 82	3.1	6
115	Highly efficient bioconversion of methane to methanol using a novel type I <i>Methylomonas</i> sp. DH-1 newly isolated from brewery waste sludge. <i>Journal of Chemical Technology and Biotechnology</i> , 2017 , 92, 311-318	3.5	43
114	Pyrolysis characteristics and kinetics of microalgal <i>Aurantiochytrium</i> sp. KRS101. <i>Energy</i> , 2017 , 118, 369-376	3.6	50
113	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	8.5	39
112	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	2	11
111	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	2	11
110	Characteristics of Reduced Graphene Oxide Quantum Dots for a Flexible Memory Thin Film Transistor. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 16375-16380	9.5	21
109	Preparation of Biopolyol from Empty Fruit Bunch Saccharification Residue Using Glycerol and PEG#300-Mediated Liquefaction for Application to Bio-Polyester and Bio-Polyurethane Production. <i>Journal of Wood Chemistry and Technology</i> , 2017 , 37, 283-293	2	5
108	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	11	24
107	Selective bio-oxidation of propane to acetone using methane-oxidizing <i>Methylomonas</i> sp. DH-1. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2017 , 44, 1097-1105	4.2	16

106	Low-cost and facile fabrication of a paper-based capillary electrophoresis microdevice for pathogen detection. <i>Biosensors and Bioelectronics</i> , 2017 , 91, 388-392	11.8	19
105	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	11.8	137
104	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	11	31
103	Environmentally-Benign Dimethyl Carbonate-Mediated Production of Chemicals and Biofuels from Renewable Bio-Oil. <i>Energies</i> , 2017 , 10, 1790	3.1	20
102	Tunable three-dimensional graphene assembly architectures through controlled diffusion of aqueous solution from a micro-droplet. <i>NPG Asia Materials</i> , 2016 , 8, e329-e329	10.3	5
101	Characterization of the Two Methylation Steps Involved in the Biosynthesis of Mycinose in Tylosin. <i>Journal of Natural Products</i> , 2016 , 79, 2014-21	4.9	2
100	Sustainable production of bioethanol from renewable brown algae biomass. <i>Biomass and Bioenergy</i> , 2016 , 92, 70-75	5.3	77
99	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	6.3	19
98	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	2	14
97	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	6.3	12
96	Preparation of 11-hexyloxy-9-undecenoic acid from crude castor oil hydrolysates by recombinant <i>Escherichia coli</i> expressing alcohol dehydrogenase and Baeyer-Villiger monooxygenase. <i>Process Biochemistry</i> , 2016 , 51, 362-368	4.8	2
95	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	6.3	22
94	Biobutenediol-mediated liquefaction of empty fruit bunch saccharification residues to prepare lignin biopolyols. <i>Bioresource Technology</i> , 2016 , 208, 24-30	11	12
93	Metabolic versatility of microbial methane oxidation for biocatalytic methane conversion. <i>Journal of Industrial and Engineering Chemistry</i> , 2016 , 35, 8-13	6.3	10
92	Enhanced mass transfer rate of methane in aqueous phase via methyl-functionalized SBA-15. <i>Journal of Molecular Liquids</i> , 2016 , 215, 154-160	6	16
91	Value-added Utilization of Lignin Residue from Pretreatment Process of Lignocellulosic Biomass. <i>Applied Chemistry for Engineering</i> , 2016 , 27, 135-144		1
90	Lipase-catalyzed in-situ biosynthesis of glycerol-free biodiesel from heterotrophic microalgae, <i>Aurantiochytrium</i> sp. KRS101 biomass. <i>Bioresource Technology</i> , 2016 , 211, 472-7	11	33
89	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	3.1	13

88	Kinetics study of the hydrothermal liquefaction of the microalga <i>Aurantiochytrium</i> sp. KRS101. <i>Chemical Engineering Journal</i> , 2016 , 306, 763-771	14.7	46
87	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	5.3	39
86	Stabilization and fabrication of microbubbles: applications for medical purposes and functional materials. <i>Soft Matter</i> , 2015 , 11, 2067-79	3.6	71
85	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	2.8	10
84	Gas-liquid mass transfer coefficient of methane in bubble column reactor. <i>Korean Journal of Chemical Engineering</i> , 2015 , 32, 1060-1063	2.8	22
83	Bioethanol production from carbohydrate-enriched residual biomass obtained after lipid extraction of <i>Chlorella</i> sp. KR-1. <i>Bioresource Technology</i> , 2015 , 196, 22-7	11	74
82	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	6.3	40
81	Tightly regulated and high level expression vector construction for <i>Escherichia coli</i> BL21 (DE3). <i>Journal of Industrial and Engineering Chemistry</i> , 2015 , 31, 367-373	6.3	3
80	Enzymatic synthesis of amentoflavone glycoside using recombinant oleandomycin glycosyltransferase. <i>Journal of Industrial and Engineering Chemistry</i> , 2015 , 25, 304-307	6.3	2
79	Sustainable production of liquid biofuels from renewable microalgae biomass. <i>Journal of Industrial and Engineering Chemistry</i> , 2015 , 29, 24-31	6.3	73
78	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	6.3	12
77	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, 782-92	3.4	10
76	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	5	26
75	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	14.7	76
74	Microbial synthesis gas utilization and ways to resolve kinetic and mass-transfer limitations. <i>Bioresource Technology</i> , 2015 , 177, 361-74	11	81
73	Rapid and high-throughput construction of microbial cell-factories with regulatory noncoding RNAs. <i>Biotechnology Advances</i> , 2015 , 33, 914-30	17.8	15
72	Batch conversion of methane to methanol using <i>Methylosinus trichosporium</i> OB3b as biocatalyst. <i>Journal of Microbiology and Biotechnology</i> , 2015 , 25, 375-80	3.3	50
71	Mesoporous silica-coated luminescent Eu ³⁺ doped GdVO ₄ nanoparticles for multimodal imaging and drug delivery. <i>RSC Advances</i> , 2014 , 4, 45687-45695	3.7	26

70	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	11	43
69	Harvesting of microalgae using flocculation combined with dissolved air flotation. <i>Biotechnology and Bioprocess Engineering</i> , 2014 , 19, 143-149	3-1	42
68	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	11	37
67	Molecular cloning and characterization of a novel acetylalginase gene in alg operon from <i>Sphingomonas</i> sp. MJ-3. <i>Applied Microbiology and Biotechnology</i> , 2014 , 98, 2145-54	5-7	4
66	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, 1597-605	3-3	54
65	Enhanced stability and reusability of marine epoxide hydrolase using ship-in-a-bottle approach with magnetically-separable mesoporous silica. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2013 , 89, 48-51		23
64	Streamlined cell-free protein synthesis from sequence information. <i>Biotechnology and Bioprocess Engineering</i> , 2013 , 18, 1101-1108	3-1	3
63	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	11	59
62	Integrating cell-free biosyntheses of heme prosthetic group and apoenzyme for the synthesis of functional P450 monooxygenase. <i>Biotechnology and Bioengineering</i> , 2013 , 110, 1193-200	4-9	18
61	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	11	111
60	Identification and characterization of epoxide hydrolase activity of polycyclic aromatic hydrocarbon-degrading bacteria for biocatalytic resolution of racemic styrene oxide and styrene oxide derivatives. <i>Biotechnology Letters</i> , 2013 , 35, 599-606	3	10
59	Nanoimmobilization of marine epoxide hydrolase of <i>Mugil cephalus</i> for repetitive enantioselective resolution of racemic styrene oxide in aqueous buffer. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 2266-71	1-3	4
58	Production of Biopolyols, Bioisocyanates and Biopolyurethanes from Renewable Biomass. <i>Applied Chemistry for Engineering</i> , 2013 , 24, 579-586		5
57	Biosynthesis of (R)-1,2-phenylethanediol and (R)-4-chloro-1,2-phenylethanediol by using two recombinant cells expressing enantiocomplementary epoxide hydrolases. <i>Journal of Industrial and Engineering Chemistry</i> , 2012 , 18, 160-164	6-3	4
56	Multiple sequence alignment-inspired mutagenesis of marine epoxide hydrolase of <i>Mugil cephalus</i> for enhancing enantioselective hydrolytic activity. <i>Journal of Industrial and Engineering Chemistry</i> , 2012 , 18, 72-76	6-3	6
55	Development and characterization of recombinant whole cells expressing the soluble epoxide hydrolase of <i>Danio rerio</i> and its variant for enantioselective resolution of racemic styrene oxides. <i>Journal of Industrial and Engineering Chemistry</i> , 2012 , 18, 384-391	6-3	8
54	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 ³		29
53	Cloning and characterization of a novel oligoalginase from a newly isolated bacterium <i>Sphingomonas</i> sp. MJ-3. <i>Marine Biotechnology</i> , 2012 , 14, 189-202	3-4	73

52	Glycosyltransferase and its application to glycodiversification of natural products. <i>Journal of Industrial and Engineering Chemistry</i> , 2012 , 18, 1208-1212	6.3	8
51	Molecular cloning, purification, and characterization of a novel polyMG-specific alginate lyase responsible for alginate MG block degradation in <i>Stenotrophomonas maltophilia</i> KJ-2. <i>Applied Microbiology and Biotechnology</i> , 2012 , 95, 1643-53	5.7	54
50	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	6.3	39
49	Lipase-catalyzed simultaneous biosynthesis of biodiesel and glycerol carbonate from corn oil in dimethyl carbonate. <i>Biotechnology Letters</i> , 2011 , 33, 1789-96	3	40
48	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, 113-9	3.7	19
47	Alginate lyase: Structure, property, and application. <i>Biotechnology and Bioprocess Engineering</i> , 2011 , 16, 843-851	3.1	108
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