

Wei Du

List of Publications by Year in descending order

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88
papers

5,399
citations

109321

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82547

72
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88
all docs

88
docs citations

88
times ranked

4182
citing authors

#	ARTICLE	IF	CITATIONS
1	Reaction-diffusion model to describe biodiesel production using lipase encapsulated in ZIF-8. Fuel, 2022, 311, 122630.	6.4	13
2	Immobilization of Lipase on Metal-Organic frameworks for biodiesel production. Journal of Environmental Chemical Engineering, 2022, 10, 107265.	6.7	39
3	Immobilization of Lipase from <i>Thermomyces lanuginosus</i> in Magnetic Macroporous ZIF-8 Improves Lipase Reusability in Biodiesel Preparation. ACS Omega, 2022, 7, 274-280.	3.5	14
4	Lipase Immobilization on Macroporous ZIF-8 for Enhanced Enzymatic Biodiesel Production. ACS Omega, 2021, 6, 2143-2148.	3.5	35
5	Progress in Enzymatic Biodiesel Production and Commercialization. Processes, 2021, 9, 355.	2.8	47
6	Biodiesel production with enzymatic technology: progress and perspectives. Biofuels, Bioproducts and Biorefining, 2021, 15, 1526-1548.	3.7	22
7	An overview to process design, simulation and sustainability evaluation of biodiesel production. Biotechnology for Biofuels, 2021, 14, 129.	6.2	54
8	Research Progress in Enzymatic Synthesis of Vitamin E Ester Derivatives. Catalysts, 2021, 11, 739.	3.5	12
9	Advances in Enzyme and Ionic Liquid Immobilization for Enhanced in MOFs for Biodiesel Production. Molecules, 2021, 26, 3512.	3.8	28
10	Kinetics and Mechanism of Solvent Influence on the Lipase-Catalyzed 1,3-Diolein Synthesis. ACS Omega, 2020, 5, 24708-24716.	3.5	9
11	Hydrophobic pore space constituted in macroporous ZIF-8 for lipase immobilization greatly improving lipase catalytic performance in biodiesel preparation. Biotechnology for Biofuels, 2020, 13, 86.	6.2	32
12	A novel clean process for the combined production of fatty acid ethyl esters (FAEEs) and the ethyl ester of polyunsaturated fatty acids (PUFAs) from microalgae oils. Renewable Energy, 2019, 143, 772-778.	8.9	10
13	Efficient Biodiesel Conversion from Microalgae Oil of Schizochytrium sp.. Catalysts, 2019, 9, 341.	3.5	6
14	Integrated Production of Biodiesel and Concentration of Polyunsaturated Fatty Acid in Glycerides Through Effective Enzymatic Catalysis. Frontiers in Bioengineering and Biotechnology, 2019, 7, 393.	4.1	7
15	Effect of silica coating on Fe ₃ O ₄ magnetic nanoparticles for lipase immobilization and their application for biodiesel production. Arabian Journal of Chemistry, 2019, 12, 4694-4706.	4.9	87
16	Biodiesel. , 2019, , 66-78.		4
17	Enzymatic ethanolysis of fish oil for selective concentration of polyunsaturated fatty acids (PUFAs) with flexible production of corresponding glycerides and ethyl esters. Journal of Chemical Technology and Biotechnology, 2018, 93, 2399-2405.	3.2	14
18	Renewable boronic acid affiliated glycerol nano-adsorbents for recycling enzymatic catalyst in biodiesel fuel production. Chemical Communications, 2018, 54, 12475-12478.	4.1	3

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19	A Robust Two-Step Process for the Efficient Conversion of Acidic Soybean Oil for Biodiesel Production. <i>Catalysts</i> , 2018, 8, 527.	3.5	13
20	Rationally designing hydrophobic UiO-66 support for the enhanced enzymatic performance of immobilized lipase. <i>Green Chemistry</i> , 2018, 20, 4500-4506.	9.0	79
21	Progress & prospect of metal-organic frameworks (MOFs) for enzyme immobilization (enzyme/MOFs). <i>Renewable and Sustainable Energy Reviews</i> , 2018, 91, 793-801.	16.4	178
22	Lipase-Mediated Selective Methanolysis of Fish Oil for Biodiesel Production and Polyunsaturated Fatty Acid Enrichment. <i>Energy & Fuels</i> , 2018, 32, 7630-7635.	5.1	12
23	Improved lipase-catalyzed methanolysis for biodiesel production by combining in-situ removal of by-product glycerol. <i>Fuel</i> , 2018, 232, 45-50.	6.4	11
24	Integrative transcriptomic and proteomic analysis of the mutant lignocellulosic hydrolyzate-tolerant <i>Rhodospiridium toruloides</i> . <i>Engineering in Life Sciences</i> , 2017, 17, 249-261.	3.6	27
25	Effect of water on lipase NS81006-catalyzed alcoholysis for biodiesel production. <i>Process Biochemistry</i> , 2017, 58, 239-244.	3.7	34
26	A novel process of lipase-mediated biodiesel production by the introduction of dimethyl carbonate. <i>Catalysis Communications</i> , 2017, 101, 89-92.	3.3	16
27	Bioconversion of glycerol into lipids by <i>Rhodospiridium toruloides</i> in a two-stage process and characterization of lipid properties. <i>Engineering in Life Sciences</i> , 2017, 17, 303-313.	3.6	25
28	Lipase NS81006 immobilized on functionalized ferric-silica magnetic nanoparticles for biodiesel production. <i>Biofuels</i> , 2017, , 1-9.	2.4	7
29	A robust process for lipase-mediated biodiesel production from microalgae lipid. <i>RSC Advances</i> , 2016, 6, 48515-48522.	3.6	11
30	Study on Lipozyme TL IM-catalyzed esterification of oleic acid and glycerol for 1,3-diolein preparation. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016, 127, 11-17.	1.8	32
31	Effect of solvent on the extraction of microalgae lipid for biodiesel production. <i>Chemical Research in Chinese Universities</i> , 2016, 32, 625-629.	2.6	2
32	Lipase-catalyzed methanolysis of microalgae oil for biodiesel production and PUFAs concentration. <i>Catalysis Communications</i> , 2016, 84, 44-47.	3.3	28
33	Lipase NS81006 immobilized on Fe ₃ O ₄ magnetic nanoparticles for biodiesel production. <i>Analele Universit�ii Ovidius Constan�a: Seria Chimie</i> , 2016, 27, 13-21.	0.9	29
34	Renewable microbial lipid production from Oleaginous Yeast: some surfactants greatly improved lipid production of <i>Rhodospiridium toruloides</i> . <i>World Journal of Microbiology and Biotechnology</i> , 2016, 32, 107.	3.6	27
35	Exploration of sodium lignosulphonate's effects on lipid production by <i>Rhodospiridium toruloides</i> . <i>Process Biochemistry</i> , 2015, 50, 424-431.	3.7	7
36	Lipase-catalyzed process for biodiesel production: Enzyme immobilization, process simulation and optimization. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 44, 182-197.	16.4	297

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37	Kinetic study on free lipase NS81006-catalyzed biodiesel production from soybean oil. Journal of Molecular Catalysis B: Enzymatic, 2015, 121, 22-27.	1.8	26
38	Study on the enzyme's 1,3-positional specificity during lipozyme TL-mediated biodiesel production. RSC Advances, 2015, 5, 62460-62468.	3.6	1
39	Combined phospholipase and lipase catalysis for biodiesel production from phospholipids-containing oil. Biotechnology and Bioprocess Engineering, 2015, 20, 965-970.	2.6	11
40	Efficient biodiesel production from phospholipids-containing oil: Synchronous catalysis with phospholipase and lipase. Biochemical Engineering Journal, 2015, 94, 45-49.	3.6	24
41	Novel mutant strains of <i>Rhodospiridium toruloides</i> by plasma mutagenesis approach and their tolerance for inhibitors in lignocellulosic hydrolysate. Journal of Chemical Technology and Biotechnology, 2014, 89, 735-742.	3.2	53
42	Free lipase-catalyzed biodiesel production from phospholipids-containing oils. Biomass and Bioenergy, 2014, 71, 162-169.	5.7	28
43	Isolation of oleaginous yeast (<i>Rhodospiridium toruloides</i>) mutants tolerant of sugarcane bagasse hydrolysate. Bioscience, Biotechnology and Biochemistry, 2014, 78, 336-342.	1.3	23
44	Exploration on the effect of phospholipids on free lipase-mediated biodiesel production. Journal of Molecular Catalysis B: Enzymatic, 2014, 102, 88-93.	1.8	25
45	Microbial oil production from various carbon sources and its use for biodiesel preparation. Biofuels, Bioproducts and Biorefining, 2013, 7, 65-77.	3.7	75
46	Free Lipase-Catalyzed Esterification of Oleic Acid for Fatty Acid Ethyl Ester Preparation with Response Surface Optimization. JAOCS, Journal of the American Oil Chemists' Society, 2013, 90, 73-79.	1.9	28
47	Effect of phospholipids on free lipase-mediated methanolysis for biodiesel production. Journal of Molecular Catalysis B: Enzymatic, 2013, 91, 67-71.	1.8	27
48	Kinetics of lipase recovery from the aqueous phase of biodiesel production by macroporous resin adsorption and reuse of the adsorbed lipase for biodiesel preparation. Enzyme and Microbial Technology, 2013, 52, 226-233.	3.2	21
49	Ethanol as the acyl acceptor for biodiesel production. Renewable and Sustainable Energy Reviews, 2013, 25, 742-748.	16.4	35
50	Simulation and experimentation on the gas holdup characteristics of a novel oscillating airlift loop reactor. Journal of Chemical Technology and Biotechnology, 2013, 88, 704-710.	3.2	5
51	Kinetics of Liquid Lipase NS81006-Catalyzed Alcoholysis of Oil for Biodiesel Production. Chinese Journal of Catalysis, 2013, 33, 1857-1861.	14.0	2
52	Effects of some inhibitors on the growth and lipid accumulation of oleaginous yeast <i>Rhodospiridium toruloides</i> and preparation of biodiesel by enzymatic transesterification of the lipid. Bioprocess and Biosystems Engineering, 2012, 35, 993-1004.	3.4	151
53	Microbial conversion of biodiesel byproduct glycerol to triacylglycerols by oleaginous yeast <i>Rhodospiridium toruloides</i> and the individual effect of some impurities on lipid production. Biochemical Engineering Journal, 2012, 65, 30-36.	3.6	177
54	Biodiesel From Conventional Feedstocks. Advances in Biochemical Engineering/Biotechnology, 2011, 128, 53-68.	1.1	5

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55	Comparative study on stability of whole cells during biodiesel production in solvent-free system. Process Biochemistry, 2011, 46, 661-664.	3.7	16
56	Study on Free Lipase-Catalyzed Ethanolysis for Biodiesel Preparation in an Oil/Water Biphasic System. JAOCS, Journal of the American Oil Chemists' Society, 2011, 88, 1551-1555.	1.9	40
57	Improved catalytic performance of GA cross-linking treated Rhizopus oryzae IFO 4697 whole cell for biodiesel production. Process Biochemistry, 2010, 45, 1192-1195.	3.7	17
58	Study on acyl migration kinetics of partial glycerides: Dependence on temperature and water activity. Journal of Molecular Catalysis B: Enzymatic, 2010, 63, 17-22.	1.8	60
59	Mechanism study on NS81006-mediated methanolysis of triglyceride in oil/water biphasic system for biodiesel production. Process Biochemistry, 2010, 45, 446-450.	3.7	35
60	Exploring the effects of oil inducer on whole cell-mediated methanolysis for biodiesel production. Process Biochemistry, 2010, 45, 514-518.	3.7	12
61	Novozym 435-catalyzed 1,3-diacylglycerol preparation via esterification in t-butanol system. Process Biochemistry, 2010, 45, 1923-1927.	3.7	66
62	Acyl migration and kinetics study of 1(3)-positional specific lipase of Rhizopus oryzae-catalyzed methanolysis of triglyceride for biodiesel production. Process Biochemistry, 2010, 45, 1888-1893.	3.7	39
63	Dependence on the properties of organic solvent: Study on acyl migration kinetics of partial glycerides. Bioresource Technology, 2010, 101, 5737-5742.	9.6	54
64	Prospective and impacts of whole cell mediated alcoholysis of renewable oils for biodiesel production. Biofuels, Bioproducts and Biorefining, 2009, 3, 633-639.	3.7	14
65	Integrated production for biodiesel and 1,3-propanediol with lipase-catalyzed transesterification and fermentation. Biotechnology Letters, 2009, 31, 1335-1341.	2.2	19
66	Response surface optimization of biocatalytic biodiesel production with acid oil. Biochemical Engineering Journal, 2008, 40, 423-429.	3.6	102
67	Study on factors influencing stability of whole cell during biodiesel production in solvent-free and tert-butanol system. Biochemical Engineering Journal, 2008, 41, 111-115.	3.6	43
68	Effect of several factors on soluble lipase-mediated biodiesel preparation in the biphasic aqueous-oil systems. World Journal of Microbiology and Biotechnology, 2008, 24, 2097-2102.	3.6	44
69	Perspectives for biotechnological production of biodiesel and impacts. Applied Microbiology and Biotechnology, 2008, 79, 331-337.	3.6	198
70	Perspectives of microbial oils for biodiesel production. Applied Microbiology and Biotechnology, 2008, 80, 749-756.	3.6	656
71	Lipase-mediated methanolysis of soybean oils for biodiesel production. Journal of Chemical Technology and Biotechnology, 2008, 83, 71-76.	3.2	40
72	Rhizopus oryzae Whole-Cell-Catalyzed Biodiesel Production from Oleic Acid in <i>tert</i> -Butanol Medium. Energy & Fuels, 2008, 22, 155-158.	5.1	28

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73	Improved methanol tolerance during Novozym435-mediated methanolysis of SODD for biodiesel production. <i>Green Chemistry</i> , 2007, 9, 173-176.	9.0	67
74	Mechanism Exploration during Lipase-Mediated Methanolysis of Renewable Oils for Biodiesel Production in a tert-Butanol System. <i>Biotechnology Progress</i> , 2007, 23, 0-0.	2.6	14
75	Optimization of whole cell-catalyzed methanolysis of soybean oil for biodiesel production using response surface methodology. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2007, 45, 122-127.	1.8	74
76	<i>Rhizopus oryzae</i> IFO 4697 whole cell catalyzed methanolysis of crude and acidified rapeseed oils for biodiesel production in tert-butanol system. <i>Process Biochemistry</i> , 2007, 42, 1481-1485.	3.7	93
77	Mechanism Exploration during Lipase-Mediated Methanolysis of Renewable Oils for Biodiesel Production in a tert-Butanol System. <i>Biotechnology Progress</i> , 2007, 23, 1087-1090.	2.6	48
78	Lipase-catalyzed biodiesel production from soybean oil deodorizer distillate with absorbent present in tert-butanol system. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006, 43, 29-32.	1.8	160
79	Study on the effect of cultivation parameters and pretreatment on <i>Rhizopus oryzae</i> cell-catalyzed transesterification of vegetable oils for biodiesel production. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006, 43, 15-18.	1.8	46
80	Lipase-catalyzed transesterification of rapeseed oils for biodiesel production with a novel organic solvent as the reaction medium. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006, 43, 58-62.	1.8	324
81	Study on the kinetics of enzymatic interesterification of triglycerides for biodiesel production with methyl acetate as the acyl acceptor. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2005, 32, 241-245.	1.8	129
82	Study on acyl migration in immobilized lipozyme TL-catalyzed transesterification of soybean oil for biodiesel production. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2005, 37, 68-71.	1.8	156
83	Comparative study on lipase-catalyzed transformation of soybean oil for biodiesel production with different acyl acceptors. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2004, 30, 125-129.	1.8	456
84	Novozym 435-catalysed transesterification of crude soya bean oils for biodiesel production in a solvent-free medium. <i>Biotechnology and Applied Biochemistry</i> , 2004, 40, 187.	3.1	85
85	A novel enzymatic route for biodiesel production from renewable oils in a solvent-free medium. <i>Biotechnology Letters</i> , 2003, 25, 1239-1241.	2.2	169
86	Lipase-catalysed transesterification of soya bean oil for biodiesel production during continuous batch operation. <i>Biotechnology and Applied Biochemistry</i> , 2003, 38, 103.	3.1	87
87	Lipase-catalysed enantioselective ammonolysis of phenylglycine methyl ester in organic solvent. <i>Biotechnology and Applied Biochemistry</i> , 2003, 38, 107.	3.1	9
88	Improving lipase-catalyzed enantioselective ammonolysis of phenylglycine methyl ester in organic solvent by in situ racemization. <i>Biotechnology Letters</i> , 2003, 25, 461-464.	2.2	11