Denise Maria GuimarÃ£es Freire

List of Publications by Year
in descending order

250 papers	9,076 citations	38742 50 h-index	64796 79 g-index
256 all docs	256 docs citations	256 times ranked	7816 citing authors

#	Article	IF	Citations
1	Immobilization of lipases on hydrophobic supports involves the open form of the enzyme. Enzyme and Microbial Technology, 2015, 71, 53-57.	3.2	429
2	Nanomaterials for biocatalyst immobilization â€“ state of the art and future trends. RSC Advances, 2016, 6, 104675-104692.	3.6	267
3	A review on hydrolytic enzymes in the treatment of wastewater with high oil and grease content. Bioresource Technology, 2006, 97, 2195-2210.	9.6	265
4	Production of polyhydroxyalkanoates (PHAs) from waste materials and by-products by submerged and solid-state fermentation. Bioresource Technology, 2009, 100, 5996-6009.	9.6	263
5	Lipase production by Penicillium restrictum in solid-state fermentation using babassu oil cake as substrate. Process Biochemistry, 1999, 35, 85-90.	3.7	205
6	Gene regulation of rhamnolipid production in Pseudomonas aeruginosa â€“ A review. Bioresource Technology, 2011, 102, 6377-6384.	9.6	183
7	Economic analysis of lipase production by Penicillium restrictum in solid-state and submerged fermentations. Biochemical Engineering Journal, 2000, 4, 239-247.	3.6	179
8	Biodiesel production from Acrocomia aculeata acid oil by (enzyme/enzyme) hydroesterification process: Use of vegetable lipase and fermented solid as low-cost biocatalysts. Fuel, 2014, 135, 315-321.	6.4	137
9	Production of an acidic and thermostable lipase of the mesophilic fungus Penicillium simplicissimum by solid-state fermentation. Bioresource Technology, 2009, 100, 5249-5254.	9.6	126
10	Effect of enzymatic hydrolysis on anaerobic treatment of dairy wastewater. Process Biochemistry, 2006, 41, 1173-1178.	3.7	122
11	Characterization of poly(3-hydroxybutyrate) produced by Cupriavidus necator in solid-state fermentation. Bioresource Technology, 2007, 98, 633-638.	9.6	119
12	Production and Use of Lipases in Bioenergy: A Review from the Feedstocks to Biodiesel Production. Enzyme Research, 2011, 2011, 1-16.	1.8	118
13	Current status and new developments of biodiesel production using fungal lipases. Fuel, 2015, 159, 52-67.	6.4	116
14	Improved production of biolubricants from soybean oil and different polyols via esterification reaction catalyzed by immobilized lipase from Candida rugosa. Fuel, 2018, 215, 705-713.	6.4	113
15	Rhamnolipid and surfactin: Anti-adhesion/antibiofilm and antimicrobial effects. Food Control, 2016, 63, 171-178.	5.5	102
16	From Structure to Catalysis: Recent Developments in the Biotechnological Applications of Lipases. BioMed Research International, 2014, 2014, 1-11.	1.9	99
17	Techno-economic evaluation of a complete bioprocess for 2,3-butanediol production from renewable resources. Bioresource Technology, 2016, 204, 55-64.	9.6	96
18	A brief review on the emerging technology of ethanol production by cold hydrolysis of raw starch. Fuel, 2015, 150, 721-729.	6.4	93

#	Article	IF	Citations
19	Enzymatic pre-hydrolysis and anaerobic degradation of wastewaters with high fat contents. Biotechnology Letters, 2001, 23, 1591-1595.	2.2	92
20	Application of lipase from the physic nut (Jatropha curcas L.) to a new hybrid (enzyme/chemical) hydroesterification process for biodiesel production. Journal of Molecular Catalysis B: Enzymatic, 2010, 65, 133-137.	1.8	90
21	Characterization of rhamnolipids produced by wild-type and engineered Burkholderia kururiensis. Applied Microbiology and Biotechnology, 2013, 97, 1909-1921.	3.6	83
22	Response surface method to optimize the production and characterization of lipase from Penicillium verrucosum in solid-state fermentation. Bioprocess and Biosystems Engineering, 2008, 31, 119-125.	3.4	82
23	Evaluation of Different Carbon and Nitrogen Sources in Production of Rhamnolipids by a Strain of <E1>Pseudomonas aeruginosa. Applied Biochemistry and Biotechnology, 2002, 98-100, 1025-1036.	2.9	81
24	Accurel MP 1000 as a support for the immobilization of lipase from Burkholderia cepacia : Application to the kinetic resolution of myo -inositol derivatives. Process Biochemistry, 2015, 50, 1557-1564.	3.7	81
25	Surfactin reduces the adhesion of food-borne pathogenic bacteria to solid surfaces. Letters in Applied Microbiology, 2009, 49, 241-247.	2.2	78
26	Design of a coreâ€“shell support to improve lipase features by immobilization. RSC Advances, 2016, 6, 62814-62824.	3.6	76
27	Preparation of coreâ€“shell polymer supports to immobilize lipase B from Candida antarctica. Journal of Molecular Catalysis B: Enzymatic, 2014, 100, 59-67.	1.8	75
28	Enzymatic esterification of palm fatty-acid distillate for the production of polyol esters with biolubricant properties. Industrial Crops and Products, 2018, 116, 90-96.	5.2	74
29	Rhamnolipid and surfactin inhibit Listeria monocytogenes adhesion. Food Research International, 2011, 44, 481-488.	6.2	72
30	Influence of compressed fluids treatment on the activity of Yarrowia lipolytica lipase. Journal of Molecular Catalysis B: Enzymatic, 2006, 39, 117-123.	1.8	70
31	Enzymatic pre-hydrolysis applied to the anaerobic treatment of effluents from poultry slaughterhouses. International Biodeterioration and Biodegradation, 2007, 60, 219-225.	3.9	68
32	Production and Regulation of Lipase Activity from Penicillium restrictum in Submerged and Solid-State Fermentations. Current Microbiology, 2007, 54, 361-365.	2.2	68
33	Strategies of covalent immobilization of a recombinant Candida antarctica lipase B on pore-expanded SBA-15 and its application in the kinetic resolution of (R , S)-Phenylethyl acetate. Journal of Molecular Catalysis B: Enzymatic, 2016, 133, 246-258.	1.8	67
34	Use of a low-cost methodology for biodetoxification of castor bean waste and lipase production. Enzyme and Microbial Technology, 2009, 44, 317-322.	3.2	66
35	Bioprocess development for biolubricant production using microbial oil derived via fermentation from confectionery industry wastes. Bioresource Technology, 2018, 267, 311-318.	9.6	65
36	Effect of Temperature, Moisture, and Carbon Supplementation on Lipase Production by Solid-State Fermentation of Soy Cake by <I>Penicillium simplicissimum</I>. Applied Biochemistry and Biotechnology, 2004, 113, 173-180.	2.9	64

#	Article	IF	Citations
37	The Protagonism of Biocatalysis in Green Chemistry and Its Environmental Benefits. Catalysts, 2017, 7, 9.	3.5	64
38	Lipase Production by Solid-State Fermentation: Cultivation Conditions and Operation of Tray and Packed-Bed Bioreactors. Applied Biochemistry and Biotechnology, 2005, 121, 0105-0116.	2.9	62
39	Bacillus amyloliquefaciens TSBSO 3.8, a biosurfactant-producing strain with biotechnological potential for microbial enhanced oil recovery. Colloids and Surfaces B: Biointerfaces, 2015, 136, 14-21.	5.0	60
40	Lipase Production by Penicillium restrictum Using Solid Waste of Industrial Babassu Oil Production as Substrate. Applied Biochemistry and Biotechnology, 2000, 84-86, 1137-1146.	2.9	59
41	L-DOPA Production by Immobilized Tyrosinase. Applied Biochemistry and Biotechnology, 2000, 84-86, 791-800.	2.9	58
42	Study of Soybean Oil Hydrolysis Catalyzed by Thermomyces lanuginosus Lipase and Its Application to Biodiesel Production via Hydroesterification. Enzyme Research, 2011, 2011, 1-8.	1.8	58
43	Biosurfactant microfoam: Application in the removal of pollutants from soil. Journal of Environmental Chemical Engineering, 2015, 3, 89-94.	6.7	57
44	Production of lipases in cottonseed meal and application of the fermented solid as biocatalyst in esterification and transesterification reactions. Renewable Energy, 2019, 130, 574-581.	8.9	57
45	Influence of the raw material on the final properties of biodiesel produced using lipase from Rhizomucor miehei grown on babassu cake as biocatalyst of esterification reactions. Renewable Energy, 2017, 113, 112-118.	8.9	56
46	Purification and characterization of a surfactin-like molecule produced by Bacillus sp. H2O-1 and its antagonistic effect against sulfate reducing bacteria. BMC Microbiology, 2012, 12, 252.	3.3	55
47	Thermophilic protease production by Streptomyces sp. 594 in submerged and solid-state fermentations using feather meal. Journal of Applied Microbiology, 2006, 100, 641-647.	3.1	54
48	Enzymatic production and characterization of potential biolubricants from castor bean biodiesel. Journal of Molecular Catalysis B: Enzymatic, 2015, 122, 323-329.	1.8	53
49	Production of wax esters via microbial oil synthesis from food industry waste and by-product streams. Bioresource Technology, 2017, 245, 274-282.	9.6	53
50	Optimization of lipase production by Penicillium simplicissimum in soybean meal. Journal of Chemical Technology and Biotechnology, 2008, 83, 47-54.	3.2	51
51	Performance and molecular evaluation of an anaerobic system with suspended biomass for treating wastewater with high fat content after enzymatic hydrolysis. Bioresource Technology, 2009, 100, 6170-6176.	9.6	51
52	Adding value to a toxic residue from the biodiesel industry: production of two distinct pool of lipases from Penicillium simplicissimum in castor bean waste. Journal of Industrial Microbiology and Biotechnology, 2011, 38, 945-953.	3.0	51
53	Two-step enzymatic production of environmentally friendly biolubricants using castor oil: Enzyme selection and product characterization. Fuel, 2017, 202, 196-205.	6.4	51
54	Production and partial characterization of thermophilic proteases from Streptomyces sp. isolated from Brazilian cerrado soil. Enzyme and Microbial Technology, 2004, 34, 354-358.	3.2	48

#	Article	IF	Citations
55	A Low-Cost Fermentation Medium for Thermophilic Protease Production by Streptomyces sp. 594 Using Feather Meal and Corn Steep Liquor. Current Microbiology, 2006, 53, 335-339.	2.2	48
56	Performance of a fixed-bed solid-state fermentation bioreactor with forced aeration for the production of hydrolases by Aspergillus awamori. Biochemical Engineering Journal, 2015, 93, 303-308.	3.6	46
57	Extraction of Phenolic Compounds from Palm Oil Processing Residues and Their Application as Antioxidants. Food Technology and Biotechnology, 2019, 57, 29-38.	2.1	46
58	Production of poly(3-hydroxybutyrate) by solid-state fermentation with Ralstonia eutropha. Biotechnology Letters, 2004, 26, 1851-1855.	2.2	45
59	Inoculum strategies forPenicillium simplicissimum lipase production by solid-state fermentation using a residue from the babassu oil industry. Journal of Chemical Technology and Biotechnology, 2007, 82, 313-318.	3.2	45
60	Enzymatic synthesis of neopentyl glycol-bases biolubricants using biodiesel from soybean and castor bean as raw materials. Renewable Energy, 2020, 148, 689-696.	8.9	45
61	Lipase production by solid-state fermentation in fixed-bed bioreactors. Brazilian Archives of Biology and Technology, 2005, 48, 79-84.	0.5	44
62	Use of biosurfactant in the removal of oil from contaminated sandy soil. Journal of Chemical Technology and Biotechnology, 2007, 82, 687-691.	3.2	44
63	Utilization of agroindustrial residues for lipase production by solid-state fermentation. Brazilian Journal of Microbiology, 2008, 39, 676-681.	2.0	44
64	Oxygen-controlled Biosurfactant Production in a Bench Scale Bioreactor. Applied Biochemistry and Biotechnology, 2008, 147, 33-45.	2.9	43
65	Profiles of fatty acids and triacylglycerols and their influence on the anaerobic biodegradability of effluents from poultry slaughterhouse. Bioresource Technology, 2011, 102, 7043-7050.	9.6	43
66	Fumaric acid production using renewable resources from biodiesel and cane sugar production processes. Environmental Science and Pollution Research, 2018, 25, 35960-35970.	5.3	42
67	Immobilization of Yarrowia lipolytica Lipaseâ€”a Comparison of Stability of Physical Adsorption and Covalent Attachment Techniques. Applied Biochemistry and Biotechnology, 2008, 146, 49-56.	2.9	41
68	Effect of Treatment with Compressed Propane on Lipases Hydrolytic Activity. Food and Bioprocess Technology, 2010, 3, 511-520.	4.7	40
69	Production of Biosurfactant from a New and Promising Strain of Pseudomonas aeruginosa PA1. Applied Biochemistry and Biotechnology, 2001, 91-93, 459-468.	2.9	39
70	Performance of anaerobic bioreactor treating fish-processing plant wastewater pre-hydrolyzed with a solid enzyme pool. Renewable Energy, 2011, 36, 3439-3444.	8.9	39
71	Influence of the Morphology of Core-Shell Supports on the Immobilization of Lipase B from Candida antarctica. Molecules, 2014, 19, 12509-12530.	3.8	38
72	Characterization of babassu, canola, castor seed and sunflower residual cakes for use as raw materials for fermentation processes. Industrial Crops and Products, 2016, 83, 140-148.	5.2	38

#	Article	IF	Citations
73	Impact of enzymatic pre-hydrolysis on batch activated sludge systems dealing with oily wastewaters. Biotechnology Letters, 2002, 24, 1797-1802.	2.2	37
74	Biodiesel fuel production by the transesterification reaction of soybean oil using immobilized lipase. Applied Biochemistry and Biotechnology, 2007, 137-140, 105-114.	2.9	37
75	Valorization of Residual Agroindustrial Cakes by Fungal Production of Multienzyme Complexes and Their Use in Cold Hydrolysis of Raw Starch. Waste and Biomass Valorization, 2011, 2, 291-302.	3.4	37
76	A potential biodegradable lubricant from castor biodiesel esters. Lubrication Science, 2013, 25, 53-61.	2.1	37
77	Study of the Extraction, Concentration, and Partial Characterization of Lipases Obtained from Penicillium verrucosum using Solid-State Fermentation of Soybean Bran. Food and Bioprocess Technology, 2010, 3, 537-544.	4.7	36
78	Optimization of Magnetosome Production and Growth by the Magnetotactic Vibrio Magnetovibrio blakemorei Strain MV-1 through a Statistics-Based Experimental Design. Applied and Environmental Microbiology, 2013, 79, 2823-2827.	3.1	36
79	Displaying Lipase B from Candida antarctica in Pichia pastoris Using the Yeast Surface Display Approach: Prospection of a New Anchor and Characterization of the Whole Cell Biocatalyst. PLoS ONE, 2015, 10, e0141454.	2.5	36
80	Support engineering: relation between development of new supports for immobilization of lipases and their applications. Biotechnology Research and Innovation, 2017, 1, 26-34.	0.9	36
81	Enzymatic synthesis of biolubricants from by-product of soybean oil processing catalyzed by different biocatalysts of Candida rugosa lipase. Catalysis Today, 2021, 362, 122-129.	4.4	36
82	Strategies for improved rhamnolipid production byPseudomonas aeruginosaPA1. PeerJ, 2016, 4, e2078.	2.0	36
83	Economic Analysis of the Production of Amylases and Other Hydrolases byAspergillus awamoriin Solid-State Fermentation of Babassu Cake. Enzyme Research, 2010, 2010, 1-9.	1.8	35
84	Valorisation of sugarcane molasses for the production of microbial lipids via fermentation of two Rhodosporidium strains for enzymatic synthesis of polyol esters. Journal of Chemical Technology and Biotechnology, 2020, 95, 402-407.	3.2	35
85	High-Yield <I>Bacillus subtilis </I>Protease Production by Solid-State Fermentation. Applied Biochemistry and Biotechnology, 2005, 121, 0311-0320.	2.9	33
86	Use of Mesophilic Fungal Amylases Produced by Solid-state Fermentation in the Cold Hydrolysis of Raw Babassu Cake Starch. Applied Biochemistry and Biotechnology, 2010, 162, 1612-1625.	2.9	33
87	Technological development of the bioâ€based 2,3â€butanediol process. Biofuels, Bioproducts and Biorefining, 2021, 15, 357-376.	3.7	33
88	Valorisation of fruit and vegetable waste from open markets for the production of 2,3-butanediol. Food and Bioproducts Processing, 2018, 108, 27-36.	3.6	32
89	Microbial enhanced oil recovery potential of surfactin-producing Bacillus subtilis AB2.0. Fuel, 2020, 272, 117730.	6.4	32
90	Biosurfactant Production by Rhodococcus erythropolis Grown on Glycerol As Sole Carbon Source. Applied Biochemistry and Biotechnology, 2006, 131, 880-886.	2.9	31

#	Article	IF	Citations
91	Immobilization of a recombinant thermostable esterase (Pf2001) from Pyrococcus furiosus on microporous polypropylene: Isotherms, hyperactivation and purification. Biochemical Engineering Journal, 2008, 39, 531-537.	3.6	31
92	Granular starch hydrolysis of babassu agroindustrial residue: A bioprocess within the context of biorefinery. Fuel, 2014, 124, 41-48.	6.4	31
93	Optimisation of 2,3-butanediol production by Enterobacter ludwigii using sugarcane molasses. Biochemical Engineering Journal, 2019, 152, 107370.	3.6	31
94	Enhanced rhamnolipid production by Pseudomonas aeruginosa overexpressing estA in a simple medium. PLoS ONE, 2017, 12, e0183857.	2.5	31
95	Efficient biohydrogen production via dark fermentation from hydrolized palm oil mill effluent by non-commercial enzyme preparation. International Journal of Hydrogen Energy, 2017, 42, 29166-29174.	7.1	30
96	Bioconversion of Sugarcane Vinasse into High-Added Value Products and Energy. BioMed Research International, 2017, 2017, 1-11.	1.9	30
97	Pilotâ€scale development of coreâ€“shell polymer supports for the immobilization of recombinant lipase B from Candida antarctica and their application in the production of ethyl esters from residual fatty acids. Journal of Applied Polymer Science, 2018, 135, 46727.	2.6	30
98	Enzyme Surface Glycosylation in the Solid Phase: Improved Activity and Selectivity of Candida Antarctica Lipase B. ChemCatChem, 2011, 3, 1902-1910.	3.7	29
99	An overview on advances of amylases production and their use in the production of bioethanol by conventional and non-conventional processes. Biomass Conversion and Biorefinery, 2011, 1, 245-255.	4.6	29
100	Biossurfactantes: propriedades anticorrosivas, antibiofilmes e antimicrobianas. Quimica Nova, 2013, 36, 848-858.	0.3	29
101	Core/<scp>S</scp>hell Polymer Particles by Semibatch Combined Suspension/<scp>E</scp>mulsion Polymerizations for Enzyme Immobilization. Macromolecular Materials and Engineering, 2014, 299, 135-143.	3.6	29
102	Application of rhamnolipid surfactant for remediation of toxic metals of long- and short-term contamination sites. International Journal of Environmental Science and Technology, 2021, 18, 575-588.	3.5	29
103	Effects of carbon and nitrogen sources on the proteome of Pseudomonas aeruginosa PA1 during rhamnolipid production. Process Biochemistry, 2010, 45, 1504-1510.	3.7	28
104	Extraction of bioactive compounds from palm (Elaeis guineensis) pressed fiber using different compressed fluids. Journal of Supercritical Fluids, 2016, 112, 51-56.	3.2	28
105	Production of recombinant lipase B from Candida antarctica in Pichia pastoris under control of the promoter PGK using crude glycerol from biodiesel production as carbon source. Biochemical Engineering Journal, 2017, 118, 123-131.	3.6	28
106	Ultrasound-assisted extraction of bioactive compounds from palm pressed fiber with high antioxidant and photoprotective activities. Ultrasonics Sonochemistry, 2017, 36, 362-366.	8.2	28
107	Characterization of the Recombinant Thermostable Lipase (Pf2001) from Pyrococcus furiosus: Effects of Thioredoxin Fusion Tag and Triton X-100. Enzyme Research, 2011, 2011, 1-7.	1.8	27
108	Rhamnolipid production: effect of oxidative stress on virulence factors and proteome of Pseudomonas aeruginosa PA1. Applied Microbiology and Biotechnology, 2012, 95, 1519-1529.	3.6	27

#	Article	IF	Citations
109	Pore-expanded SBA-15 for the immobilization of a recombinant Candida antarctica lipase B: Application in esterification and hydrolysis as model reactions. Chemical Engineering Research and Design, 2018, 129, 12-24.	5.6	27
110	Olive Oil Oleogel Formulation Using Wax Esters Derived from Soybean Fatty Acid Distillate. Biomolecules, 2020, 10, 106.	4.0	27
111	Separation and Immobilization of Lipase from Penicillium simplicissimum by Selective Adsorption on Hydrophobic Supports. Applied Biochemistry and Biotechnology, 2009, 156, 133-145.	2.9	26
112	Kinetic Resolution of 1,3,6-Tri-O-benzyl-myo-Inositol by Novozym 435: Optimization and Enzyme Reuse. Organic Process Research and Development, 2012, 16, 1378-1384.	2.7	26
113	Evaluation of the performance of differently immobilized recombinant lipase B from Candida antarctica preparations for the synthesis of pharmacological derivatives in organic media. RSC Advances, 2016, 6, 4043-4052.	3.6	26
114	Simultaneous Enzymatic Transesterification and Esterification of an Acid Oil Using Fermented Solid as Biocatalyst. JAOCS, Journal of the American Oil Chemists' Society, 2017, 94, 551-558.	1.9	26
115	Comparison of monoâ€rhamnolipids and diâ€rhamnolipids on microbial enhanced oil recovery (MEOR) applications. Biotechnology Progress, 2020, 36, e2981.	2.6	26
116	How the biodiesel from immobilized enzymes production is going on: An advanced bibliometric evaluation of global research. Renewable and Sustainable Energy Reviews, 2022, 153, 111765.	16.4	26
117	Lipase production and Penicillium simplicissimum morphology in solidâ€state and submerged fermentations. Biotechnology Journal, 2009, 4, 1450-1459.	3.5	25
118	Valorization of By-Products from Palm Oil Mills for the Production of Generic Fermentation Media for Microbial Oil Synthesis. Applied Biochemistry and Biotechnology, 2017, 181, 1241-1256.	2.9	25
119	New cost-effective bioconversion process of palm kernel cake into bioinsecticides based on Beauveria bassiana and Isaria javanica. Applied Microbiology and Biotechnology, 2018, 102, 2595-2606.	3.6	25
120	Application of Different Lipases as Pretreatment in Anaerobic Treatment of Wastewater. Environmental Engineering Science, 2008, 25, 1243-1248.	1.6	24
121	Comparison of Two Lipases in the Hydrolysis of Oil and Grease in Wastewater of the Swine Meat Industry. Industrial & Engineering Chemistry Research, 2008, 47, 1760-1765.	3.7	24
122	Evaluation of different pre-hydrolysis times and enzyme pool concentrations on the biodegradability of poultry slaughterhouse wastewater with a high fat content. Water Science and Technology, 2009, 60, 243-249.	2.5	24
123	Production of core-shell polymer particles-containing cardanol by semibatch combined suspension/emulsion polymerization. Polymer Engineering and Science, 2014, 54, 1222-1229.	3.1	24
124	The combined use of a biosurfactant and an enzyme preparation to treat an effluent with a high fat content. Colloids and Surfaces B: Biointerfaces, 2012, 95, 241-246.	5.0	23
125	On the kinetic resolution of sterically hindered myo-inositol derivatives in organic media by lipases. Tetrahedron: Asymmetry, 2012, 23, 47-52.	1.8	23
126	Enzymatic hydrolysis and anaerobic biological treatment of fish industry effluent: Evaluation of the mesophilic and thermophilic conditions. Renewable Energy, 2015, 83, 455-462.	8.9	23

#	Article	IF	Citations
127	Continuous operation, a realistic alternative to fed-batch fermentation for the production of recombinant lipase B from Candida antarctica under the constitutive promoter PGK in Pichia pastoris. Biochemical Engineering Journal, 2019, 147, 39-47.	3.6	23
128	Bioprocess Development for 2,3â€Butanediol Production byâ€‰Paenibacillusâ€‰Strains. ChemBioEng Reviews, 2021, 8, 44-62.	4.4	23
129	Production and Utilization of a Novel Solid Enzymatic Preparation Produced by Penicillium restrictum in Activated Sludge Systems Treating Wastewater with High Levels of Oil and Grease. Environmental Engineering Science, 2006, 23, 814-823.	1.6	22
130	Esterification activities of nonâ€commercial lipases after preâ€treatment in pressurized propane. Journal of Chemical Technology and Biotechnology, 2010, 85, 839-844.	3.2	22
131	Kinetic resolution of a precursor for myo-inositol phosphates under continuous flow conditions. Journal of Molecular Catalysis B: Enzymatic, 2013, 87, 139-143.	1.8	22
132	Development of Microbial Oil Wax-Based Oleogel with Potential Application in Food Formulations. Food and Bioprocess Technology, 2019, 12, 899-909.	4.7	22
133	Proteases from actinomycetes interfere in solid media plate assays of hyaluronidase activity. Journal of Microbiological Methods, 2001, 45, 207-212.	1.6	21
134	Enzymatic synthesis of bio-based wax esters from palm and soybean fatty acids using crude lipases produced on agricultural residues. Industrial Crops and Products, 2019, 139, 111499.	5.2	21
135	Multipurpose fixed-bed bioreactor to simplify lipase production by solid-state fermentation and application in biocatalysis. Biochemical Engineering Journal, 2019, 144, 1-7.	3.6	21
136	Production and partial characterization of lipase from Penicillium verrucosum obtained by submerged fermentation of conventional and industrial media. Food Science and Technology, 2008, 28, 444-450.	1.7	20
137	Kinetic resolution of (R,S)-1,2-isopropylidene glycerol (solketal) ester derivatives by lipases. Journal of Molecular Catalysis B: Enzymatic, 2011, 69, 42-46.	1.8	20
138	Characterization of multienzyme solutions produced by solid-state fermentation of babassu cake, for use in cold hydrolysis of raw biomass. Biochemical Engineering Journal, 2013, 77, 231-239.	3.6	20
139	Optimization of biosurfactant production using waste from biodiesel industry in a new membrane assisted bioreactor. Process Biochemistry, 2013, 48, 1271-1278.	3.7	20
140	Rapid determination of the synthetic activity of lipases/esterases via transesterification and esterification zymography. Fuel, 2016, 177, 123-129.	6.4	20
141	Bioprocess development for (2R,3R)â€butanediol and acetoin production using very high polarity cane sugar and sugarcane molasses by a Bacillus amyloliquefaciens strain. Journal of Chemical Technology and Biotechnology, 2019, 94, 2167-2177.	3.2	20
142	Effect of solid-state fermentation over the release of phenolic compounds from brewer's spent grain revealed by UPLC-MSE. LWT - Food Science and Technology, 2020, 133, 110136.	5.2	20
143	Application of Rhizomucor miehei lipase-displaying Pichia pastoris whole cell for biodiesel production using agro-industrial residuals as substrate. International Journal of Biological Macromolecules, 2021, 189, 734-743.	7.5	20
144	Production of multifunctional lipases by Penicillium verrucosum and Penicillium brevicompactum under solid state fermentation of babassu cake and castor meal. Bioprocess and Biosystems Engineering, 2011, 34, 145-152.	3.4	19

#	Article	IF	Citations
145	Simultaneous allergen inactivation and detoxification of castor bean cake by treatment with calcium compounds. Brazilian Journal of Medical and Biological Research, 2012, 45, 1002-1010.	1.5	19
146	Methods to prevent acidification of MacaÃºba (Acrocomia aculeata) fruit pulp oil: A promising oil for producing biodiesel. Industrial Crops and Products, 2015, 77, 703-707.	5.2	19
147	Solid-state fermentation of co-products from palm oil processing: Production of lipase and xylanase and effects on chemical composition. Biocatalysis and Biotransformation, 2018, 36, 381-388.	2.0	19
148	Protease Production by Streptomyces sp. Isolated from Brazilian Cerrado Soil: Optimization of Culture Medium Employing Statistical Experimental Design. Applied Biochemistry and Biotechnology, 2003, 108, 749-756.	2.9	18
149	Efficient kinetic resolution of (Â±)-1,2-O-isopropylidene-3,6-di-O-benzyl-myo-inositol with the lipase B of Candida antarctica. Tetrahedron: Asymmetry, 2010, 21, 2899-2903.	1.8	18
150	Immobilization and Characterization of a Recombinant Thermostable Lipase (Pf2001) from Pyrococcus furiosus on Supports with Different Degrees of Hydrophobicity. Enzyme Research, 2010, 2010, 1-8.	1.8	18
151	Improving the Thermostability and Optimal Temperature of a Lipase from the Hyperthermophilic ArchaeonPyrococcus furiosusby Covalent Immobilization. BioMed Research International, 2015, 2015, 1-8.	1.9	18
152	Enzymes produced by solid state fermentation of agro-industrial by-products release ferulic acid in bioprocessed whole-wheat breads. Food Research International, 2021, 140, 109843.	6.2	18
153	A Pesticide Biopurification System: A Source of Biosurfactant-Producing Bacteria with Environmental Biotechnology Applications. Agronomy, 2021, 11, 624.	3.0	18
154	Synthesis of Monocaprin Catalyzed by Lipase. Applied Biochemistry and Biotechnology, 2003, 108, 757-768.	2.9	17
155	Production of Coreâ€“shell Particles by Combined Semibatch Emulsion/Suspension Polymerizations. Macromolecular Reaction Engineering, 2011, 5, 518-532.	1.5	17
156	Minimizing solid wastes in an activated sludge system treating oil refinery wastewater. Chemical Engineering and Processing: Process Intensification, 2016, 103, 53-62.	3.6	17
157	TREATMENT OF WASTEWATER WITH HIGH FAT CONTENT EMPLOYING AN ENZYME POOL AND BIOSURFACTANT: TECHNICAL AND ECONOMIC FEASIBILITY. Brazilian Journal of Chemical Engineering, 2018, 35, 531-542.	1.3	17
158	Rutin derivatives obtained by transesterification reactions catalyzed by Novozym 435: Antioxidant properties and absence of toxicity in mammalian cells. PLoS ONE, 2018, 13, e0203159.	2.5	17
159	Agricultural Residues as Animal Feed. , 2018, , 235-256.		17
160	Streptomyces luridus So3.2 from Antarctic soil as a novel producer of compounds with bioemulsification potential. PLoS ONE, 2018, 13, e0196054.	2.5	17
161	Environmentally friendly rhamnolipid production for petroleum remediation. Chemosphere, 2020, 252, 126349.	8.2	17
162	Multivariate Optimization and Supplementation Strategies for the Simultaneous Production of Amylases, Cellulases, Xylanases, and Proteases by Aspergillus awamori Under Solid-State Fermentation Conditions. Applied Biochemistry and Biotechnology, 2015, 175, 1588-1602.	2.9	16

#	Article	IF	Citations
163	Synthesis of butyl esters via ultrasound-assisted transesterification of macaÃºba (Acrocomia aculeata) acid oil using a biomass-derived fermented solid as biocatalyst. Journal of Molecular Catalysis B: Enzymatic, 2016, 133, S213-S219.	1.8	16
164	Production and optimization of isopropyl palmitate via biocatalytic route using homeâ€made enzymatic catalysts. Journal of Chemical Technology and Biotechnology, 2019, 94, 389-397.	3.2	16
165	Membrane distillation and pervaporation for ethanol removal: are we comparing in the right way?. Separation Science and Technology, 2019, 54, 110-127.	2.5	16
166	Novel combination of a biosurfactant with entomopathogenic fungi enhances efficacy against Bemisia whitefly. Pest Management Science, 2019, 75, 2882-2891.	3.4	16
167	Experimental study and preliminary economic evaluation of enzymatic biodiesel production by an integrated process using co-products from palm (Elaeais guineensis Jaquim) industry. Industrial Crops and Products, 2020, 157, 112904.	5.2	16
168	Benchmarking recombinant Pichia pastoris for 3â€hydroxypropionic acid production from glycerol. Microbial Biotechnology, 2021, 14, 1671-1682.	4.2	16
169	Oriented irreversible immobilization of a glycosylated Candida antarctica B lipase on heterofunctional organoborane-aldehyde support. Catalysis Science and Technology, 2011, 1, 260.	4.1	15
170	Fungal and enzymatic bio-depolymerization of waste post-consumer poly(ethylene terephthalate) (PET) bottles using Penicillium species. 3 Biotech, 2021, 11, 435.	2.2	15
171	Kinetic resolution of (Â±)-1,2-O-isopropylidene-3,6-di-O-benzyl-myo-inositol by lipases: An experimental and theoretical study on the reaction of a key precursor of chiral inositols. Journal of Molecular Catalysis B: Enzymatic, 2011, 70, 32-40.	1.8	14
172	Solid-state fermentation as a tool for methylxanthine reduction and simultaneous xylanase production in cocoa meal. Biocatalysis and Agricultural Biotechnology, 2017, 11, 34-41.	3.1	14
173	2,3-Butanediol production by the non-pathogenic bacterium Paenibacillus brasilensis. Applied Microbiology and Biotechnology, 2018, 102, 8773-8782.	3.6	14
174	Fire Ant Venom Alkaloids Inhibit Biofilm Formation. Toxins, 2019, 11, 420.	3.4	14
175	Bioaccessibility and gut metabolism of phenolic compounds of breads added with green coffee infusion and enzymatically bioprocessed. Food Chemistry, 2020, 333, 127473.	8.2	14
176	A newly isolatedEnterobactersp. strain produces 2,3-butanediol during its cultivation on low-cost carbohydrate-based substrates. FEMS Microbiology Letters, 2019, 366, .	1.8	13
177	High-Yield Bacillus subtilis Protease Production by Solid-State Fermentation. , 2005, , 311-319.		12
178	Impact of the addition of an enzyme pool on an activated sludge system treating dairy wastewater under fat shock loads. Journal of Chemical Technology and Biotechnology, 2008, 83, 730-738.	3.2	12
179	Performance of an Anaerobic Reactor Treating Poultry Abattoir Wastewater with High Fat Content After Enzymatic Hydrolysis. Environmental Engineering Science, 2011, 28, 299-307.	1.6	12
180	Hydrolysis of starch with immobilized glucoamylase. Applied Biochemistry and Biotechnology, 1990, 26, 23-34.	2.9	11

#	Article	IF	Citations
181	Acetone powder from dormant seeds of Ricinus communis L. Applied Biochemistry and Biotechnology, 2007, 137-140, 57-65.	2.9	11
182	Biotechnological Methods to Produce Biodiesel. , 2011, , 315-337.		11
183	PrÃ©-hidrÃ³lise enzimÃ¡tica da gordura de efluente da indÃºstria de pescado objetivando o aumento da produÃ§Ã£o de metano. Food Science and Technology, 2010, 30, 483-488.	1.7	10
184	Experimental design of the kinetic resolution of a key precursor of highâ€value bioactive myoâ€inositols by an immobilized lipase. Journal of Chemical Technology and Biotechnology, 2013, 88, 205-211.	3.2	10
185	A mathematical programming formulation for biorefineries technology selection. Biochemical Engineering Journal, 2016, 116, 135-145.	3.6	10
186	Surface imaging of the filamentous fungus Penicillium simplicissimum growing in a solid-state fermentation system. Micron, 2017, 99, 19-25.	2.2	10
187	Lipase Regioselective Oâ€Acetylations of a myoâ€Inositol Derivative: Efficient Desymmetrization of 1,3â€Diâ€Oâ€benzylâ€myoâ€inositol. European Journal of Organic Chemistry, 2018, 2018, 386-391.	2.4	10
188	Enzymes in Green Chemistry: The State of the Art in Chemical Transformations. , 2019, , 137-151.		10
189	Palm oil wastes as feedstock for lipase production by Yarrowia lipolytica and biocatalyst application/reuse. 3 Biotech, 2021, 11, 191.	2.2	10
190	Enzymatic production of isopropyl and 2-ethylhexyl esters using Î³-linolenic acid rich fungal oil produced from spent sulphite liquor. Biochemical Engineering Journal, 2021, 169, 107956.	3.6	10
191	Enzymatic hydrolysis by immobilized lipase applied to a new prototype anti-asthma drug. Biochemical Engineering Journal, 2004, 21, 103-110.	3.6	9
192	Use of Vero cell line to verify the biodetoxification efficiency of castor bean waste. Process Biochemistry, 2012, 47, 578-584.	3.7	9
193	Solid-State Fermentation for the Production of Lipases for Environmental and Biodiesel Applications. , 2018, , 123-168.		9
194	Development of an integrated process involving palm industry co-products for monoglyceride/diglyceride emulsifier synthesis: Use of palm cake and fiber for lipase production and palm fatty-acid distillate as raw material. LWT - Food Science and Technology, 2021, 135, 110039.	5.2	9
195	Ethanol from babassu coconut starch. Applied Biochemistry and Biotechnology, 1998, 70-72, 877-886.	2.9	8
196	Lipase Production by Solid-State Fermentation. , 2005, , 105-116.		8
197	The effect of enzymatic pre-hydrolysis of dairy wastewater on the granular and immobilized microbial community in anaerobic bioreactors. Environmental Technology (United Kingdom), 2013, 34, 417-428.	2.2	8
198	Techno-economic analysis of a bioprocess for the production of multienzyme solutions from the cake of babassu industrial processing: evaluation of five different inoculum propagation strategies. Biomass Conversion and Biorefinery, 2014, 4, 237-247.	4.6	8

#	Article	IF	Citations
199	Surfactin from Bacillus velezensis H2Oâ€1: Production and Physicochemical Characterization for Postsalt Applications. Journal of Surfactants and Detergents, 2019, 22, 451-462.	2.1	8
200	Production of New Functionalized Polymer Nanoparticles and Use for Manufacture of Novel Nanobiocatalysts. Macromolecular Materials and Engineering, 2020, 305, 2000065.	3.6	8
201	Sequential hydrogen and methane production using the residual biocatalyst of biodiesel synthesis as raw material. International Journal of Hydrogen Energy, 2021, 46, 23658-23669.	7.1	8
202	Bioprocess Development for 2,3-Butanediol Production from Crude Glycerol and Conceptual Process Design for Aqueous Conversion into Methyl Ethyl Ketone. ACS Sustainable Chemistry and Engineering, 2021, 9, 8692-8705.	6.7	8
203	Mathematical Modeling of Lipase and Protease Production by Penicillium restrictum in a Batch Fermenter. Applied Biochemistry and Biotechnology, 1999, 79, 845-856.	2.9	7
204	New Group-Specific 16S rDNA Primers for Monitoring Foaming Mycolata During Saline Waste-Water Treatment. Biotechnology Letters, 2006, 28, 447-453.	2.2	7
205	ImobilizaÃ§Ã£o de lipases produzidas por fermentaÃ§Ã£o em estado sÃ³lido utilizando Penicillium verrucosum em suportes hidrofÃ³bicos. Food Science and Technology, 2009, 29, 440-443.	1.7	7
206	Assessing a mixture of biosurfactant and enzyme pools in the anaerobic biological treatment of wastewater with a high-fat content. Environmental Technology (United Kingdom), 2014, 35, 2035-2045.	2.2	7
207	Effect of hydrophobicity degree of polymer particles on lipase immobilization and on biocatalyst performance. Biocatalysis and Biotransformation, 0, , 1-11.	2.0	7
208	Synthesis of lipase/silica biocatalysts through the immobilization of CALB on porous SBA-15 and their application on the resolution of pharmaceutical derivatives and on nutraceutical enrichment of natural oil. Molecular Catalysis, 2021, 505, 111529.	2.0	7
209	Fatty acid ethyl esters production using a non-commercial lipase in pressurized propane medium. Food Science and Technology, 2009, 29, 603-608.	1.7	7
210	Oxygen-controlled Biosurfactant Production in a Bench Scale Bioreactor. , 2007, , 401-413.		6
211	Concentration, Partial Characterization, and Immobilization of Lipase Extract from P. brevicompactum by Solid-State Fermentation of Babassu Cake and Castor Bean Cake. Applied Biochemistry and Biotechnology, 2011, 164, 755-766.	2.9	6
212	Impact of Extraction Parameters on the Recovery of Lipolytic Activity from Fermented Babassu Cake. PLoS ONE, 2014, 9, e103176.	2.5	6
213	Enzyme technology in Brazil: trade balance and research community. Brazilian Journal of Science and Technology, 2016, 3, .	0.8	6
214	Effects of Reaction Operation Policies on Properties of Coreâ€“Shell Polymer Supports Used for Preparation of Highly Active Biocatalysts. Macromolecular Reaction Engineering, 2019, 13, 1800055.	1.5	6
215	Bacillus velezensis H2O-1 surfactin efficiently maintains its interfacial properties in extreme conditions found in post-salt and pre-salt oil reservoirs. Colloids and Surfaces B: Biointerfaces, 2021, 208, 112072.	5.0	6
216	FORMULATION AND CHARACTERIZATION OF ULTRASOUND-ASSISTED NANOEMULSIONS CONTAINING PALM OIL (Elaeis guineensis Jacq) IN WATER. Brazilian Journal of Chemical Engineering, 2019, 36, 941-947.	1.3	6

#	Article	IF	Citations
217	Multiresponse Optimization of Inoculum Conditions for the Production of Amylases and Proteases by Aspergillus awamori in Solid-State Fermentation of Babassu Cake. Enzyme Research, 2011, 2011, 1-9.	1.8	5
218	Efficient desymmetrization of 4,6-di-O-benzyl-myo-inositol by Lipozyme TL-IM. Carbohydrate Research, 2014, 386, 7-11.	2.3	5
219	Increase of Candida antarctica lipase B production under PGK promoter in Pichia pastoris: effect of multicopies. Brazilian Journal of Microbiology, 2019, 50, 405-413.	2.0	5
220	Comparative performance and reusability studies of lipases on syntheses of octyl esters with an economic approach. Bioprocess and Biosystems Engineering, 2022, 45, 131-145.	3.4	5
221	Productive Chain of Biofuels and Industrial Biocatalysis. , 2017, , 545-581.		4
222	Solid-State Fermentation for the Production of Proteases and Amylases and Their Application in Nutrient Medium Production. , 2018, , 185-210.		4
223	Fatty acid ethyl esters production from distillers corn oil by enzymatic catalysis. JAOCS, Journal of the American Oil Chemists' Society, 2022, 99, 393-405.	1.9	4
224	Current approaches to use oil crops by-products for biodiesel and biolubricant production: Focus on biocatalysis. Bioresource Technology Reports, 2022, 18, 101030.	2.7	4
225	Evaluation of Different Carbon and Nitrogen Sources in Production of Rhamnolipids by a Strain of Pseudomonas aeruginosa. , 2002, , 1025-1035.		3
226	Nutritional enrichment of vegetable oils with long-chain n-3 fatty acids through enzymatic interesterification with a new vegetable lipase. Grasas Y Aceites, 2015, 66, e071.	0.9	3
227	Synthesis of Porous Polymeric Supports with PolyHIPE Structures Based on Styreneâ€Ðivinylbenzene Copolymers. Macromolecular Symposia, 2020, 394, 2000109.	0.7	3
228	Development of a green integrated process for biodiesel esters production: Use of fermented macaÃºba cake as biocatalyst for macaÃºba acid oil transesterification. JAOCS, Journal of the American Oil Chemists' Society, 2021, 98, 825-835.	1.9	3
229	Immobilization of Yarrowia lipolytica Lipaseâ€"A Comparison of Stability of Physical Adsorption and Covalent Attachment Techniques. , 2007, , 169-176.		3
230	Effect of Temperature, Moisture, and Carbon Supplementation on Lipase Production by Solid-State Fermentation of Soy Cake by Penicillium simplicissimum. , 2004, , 173-180.		2
231	Environmental Solid-State Cultivation Processes and Bioreactors. , 2010, , 287-342.		2
232	Comparison of Different Compressed Fluids for Residual Oil Extraction from Palm Kernel Cake. Waste and Biomass Valorization, 2018, 9, 265-271.	3.4	2
233	MAPEAMENTO TECNOLÃ“GICO DA APLICAÃ‡ÃƒO DE PROTEASES EM DETERGENTES E COMPOSIÃ‡Ã•ES DE LIMPEZA. Cadernos De ProspecÃ§Ã£o, 2017, 10, 226.	0.1	2
234	The role of Brazil in the advancement of enzymatic biodiesel production. Brazilian Journal of Chemical Engineering, 2023, 40, 67-80.	1.3	2

#	Article	IF	Citations
235	Wholeâ€wheat bread enzymatically bioprocessed and added with green coffee infusion had improved volume and were sensory accepted when consumers were informed of the presence of healthy substances. International Journal of Food Science and Technology, 0, , .	2.7	2
236	Biosurfactant Versus Commercial Surfactant: Study on Effectiveness for Application in EOR. , 2018, , .		1
237	Antibiofilm effect of monoâ€rhamnolipids and diâ€rhamnolipids on carbon steel submitted to oil produced water. Biotechnology Progress, 2021, 37, e3131.	2.6	1
238	Aqueous Extracts of the Castor Beans as a Corrosion Inhibitor of Mild Steel in HCl Media. Journal of the Brazilian Chemical Society, 0, , .	0.6	1
239	Revisiting Jatropha curcas Monomeric Esterase: A Dienelactone Hydrolase Compatible with the Electrostatic Catapult Model. Biomolecules, 2021, 11, 1486.	4.0	1
240	Synthesis of Monocaprin Catalyzed by Lipase. , 2003, , 757-768.		1
241	Influence of Textural Properties of Divinylbenzene Copolymers on the Immobilization of Lipase B from Candida antarctica. Materials Research, 0, 25, .	1.3	1
242	Enzymes and pathways in microbial production of 2,3-butanediol and 3-acetoin isomers. Critical Reviews in Biotechnology, 2023, 43, 67-81.	9.0	1
243	Growth of Methylobacterium organophilum in Methanol for the Simultaneous Production of Single-Cell Protein and Metabolites of Interest. Food Technology and Biotechnology, 2022, 60, 338-349.	2.1	1
244	Selected Papers from ENZITEC 2010. Enzyme Research, 2011, 2011, 1-1.	1.8	0
245	Polymerization strategies to produce new polymer biocatalysts for the biodiesel industry. Journal of Applied Polymer Science, 0, , 51774.	2.6	0
246	Lipase Production by Penicillium testrictum Using Solid Waste of Industrial Babassu Oil Production as Substrate. , 2000, , 1137-1145.		0
247	Chemoenzymatic Enantiospecific Synthesis of a Fluorinated myo-Inositol Analogue. , 0, , .		0
248	Enantioselective catalysis from Pseudomonas cepacia on the kinetic resolution by different reactors. , 0, , .		0
249	CHAPTER 9. Lipases in Enantioselective Syntheses: Evolution of Technology and Recent Applications. RSC Green Chemistry, 2015, , 207-244.	0.1	0
250	Patent Landscape on Structured Lipids Produced by Enzyme Technology. Recent Patents on Biotechnology, 2018, 12, 252-268.	0.8	0