Aline M Castro

List of Publications by Year
in descending order

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99	2,862	159358	205818
papers	citations	30 h-index	48 g-index

100	100	100	3187
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enzymes and pathways in microbial production of 2,3-butanediol and 3-acetoin isomers. Critical Reviews in Biotechnology, 2023, 43, 67-81.	5.1	1
2	Kinetic Modeling of the Post-consumer Poly(Ethylene Terephthalate) Hydrolysis Catalyzed by Cutinase from Humicola insolens. Journal of Polymers and the Environment, 2022, 30, 1627-1637.	2.4	14
3	Biocatalytic depolymerization of waste polyester mooring lines from oil and gas offshore platforms made of poly(ethylene terephthalate) (<scp>PET</scp>). Journal of Chemical Technology and Biotechnology, 2022, 97, 709-718.	1.6	3
4	Effect of carbonic anhydrase on CO2 absorption promoted by choline hydroxide using supported liquid membranes. Separation and Purification Technology, 2022, 280, 119921.	3.9	6
5	Biochemical features and early adhesion of marine Candida parapsilosis strains on high-density polyethylene. Journal of Applied Microbiology, 2022, 132, 1954-1966.	1.4	4
6	A Temporal Evolution Perspective of Lipase Production by Yarrowia lipolytica in Solid-State Fermentation. Processes, 2022, 10, 381.	1.3	8
7	Current approaches to use oil crops by-products for biodiesel and biolubricant production: Focus on biocatalysis. Bioresource Technology Reports, 2022, 18, 101030.	1.5	4
8	Role of water on deep eutectic solvents (DES) properties and gas transport performance in biocatalytic supported DES membranes. Separation and Purification Technology, 2021, 255, 117763.	3.9	18
9	Insights into media supplementation in solid-state fermentation of soybean hulls by Yarrowia lipolytica: Impact on lipase production in tray and insulated packed-bed bioreactors. Biochemical Engineering Journal, 2021, 166, 107866.	1.8	9
10	Process strategies to improve biocatalytic depolymerization of post-consumer PET packages in bioreactors, and investigation on consumables cost reduction. Bioprocess and Biosystems Engineering, 2021, 44, 507-516.	1.7	15
11	Biofilms of Pseudomonas and Lysinibacillus Marine Strains on High-Density Polyethylene. Microbial Ecology, 2021, 81, 833-846.	1.4	16
12	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.	3.2	8
13	A critical view on the technology readiness level (TRL) of microbial plastics biodegradation. World Journal of Microbiology and Biotechnology, 2021, 37, 116.	1.7	16
14	Improved production of biocatalysts by Yarrowia lipolytica using natural sources of the biopolyesters cutin and suberin, and their application in hydrolysis of poly (ethylene terephthalate) (PET). Bioprocess and Biosystems Engineering, 2021, 44, 2277-2287.	1.7	4
15	Production of (2R,3R)-butanediol by Paenibacillus polymyxa PM 3605 from crude glycerol supplemented with sugarcane molasses. Process Biochemistry, 2021, 106, 88-95.	1.8	16
16	Solvent-free lipase-catalyzed synthesis of linear and thermally stable polyesters obtained from diacids and diols. Brazilian Journal of Chemical Engineering, 2021, 38, 549-562.	0.7	2
17	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.	0.8	3
18	Chemoâ€enzymatic depolymerization of industrial and assorted postâ€consumer poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6 Technology and Biotechnology, 2021, 96, 3237-3244.	1.6	13

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19	Fungal and enzymatic bio-depolymerization of waste post-consumer poly(ethylene terephthalate) (PET) bottles using Penicillium species. 3 Biotech, 2021, 11, 435.	1.1	15
20	A comprehensive and critical review on key elements to implement enzymatic PET depolymerization for recycling purposes. Biotechnology Advances, 2021, 52, 107811.	6.0	52
21	Experimental and mathematical modeling approaches for biocatalytic post-consumer poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock	1.9	9
22	Effects of acetic acid addition methods on butyl acetate enzymatic synthesis. Chemical Engineering Communications, 2020, 207, 177-184.	1.5	2
23	Enzyme Immobilization in Covalent Organic Frameworks: Strategies and Applications in Biocatalysis. ChemPlusChem, 2020, 85, 2051-2066.	1.3	37
24	Supplementation of watermelon peels as an enhancer of lipase and esterase production byYarrowia lipolyticain solid-state fermentation and their potential use as biocatalysts in poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 537 To	1.1	19
25	Biocatalytic CO2 Absorption and Structural Studies of Carbonic Anhydrase under Industrially-Relevant Conditions. International Journal of Molecular Sciences, 2020, 21, 2918.	1.8	11
26	Poly(ethylene terephthalate) (PET) degradation by Yarrowia lipolytica: Investigations on cell growth, enzyme production and monomers consumption. Process Biochemistry, 2020, 95, 81-90.	1.8	47
27	Evaluation of 1,3-propanediol production by twoCitrobacter freundiistrains using crude glycerol and soybean cake hydrolysate. Environmental Science and Pollution Research, 2019, 26, 35523-35532.	2.7	30
28	Acetoneâ€“butanolâ€“ethanol fermentation from sugarcane bagasse hydrolysates: Utilization of C5 and C6 sugars. Electronic Journal of Biotechnology, 2019, 42, 16-22.	1.2	35
29	Optimisation of 2,3-butanediol production by Enterobacter ludwigii using sugarcane molasses. Biochemical Engineering Journal, 2019, 152, 107370.	1.8	31
30	Hydrocarbon-associated substrates reveal promising fungi for poly (ethylene terephthalate) (PET) depolymerization. Brazilian Journal of Microbiology, 2019, 50, 633-648.	0.8	19
31	High-fold improvement of assorted post-consumer poly(ethylene terephthalate) (PET) packages hydrolysis using Humicola insolens cutinase as a single biocatalyst. Process Biochemistry, 2019, 81, 85-91.	1.8	45
32	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.	1.6	20
33	Enzymes in Green Chemistry: The State of the Art in Chemical Transformations. , 2019, , 137-151.		10
34	A newly isolatedEnterobactersp. strain produces 2,3-butanediol during its cultivation on low-cost carbohydrate-based substrates. FEMS Microbiology Letters, 2019, 366, .	0.7	13
35	Biocatalytic esterification of fatty acids using a low-cost fermented solid from solid-state fermentation with Yarrowia lipolytica. 3 Biotech, 2019, 9, 38.	1.1	9
36	Enhanced Productivity in Glycerol Carbonate Synthesis under Continuous Flow Conditions: Combination of Immobilized Lipases from Porcine Pancreas and Candida antarctica (CALB) on Epoxy Resins. ACS Omega, 2019, 4, 860-869.	1.6	30

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37	Improvement on bioprocess economics for 2,3-butanediol production from very high polarity cane sugar via optimisation of bioreactor operation. Bioresource Technology, 2019, 274, 343-352.	4.8	32
38	Fumaric acid production using renewable resources from biodiesel and cane sugar production processes. Environmental Science and Pollution Research, 2018, 25, 35960-35970.	2.7	42
39	World market and biotechnological production of itaconic acid. 3 Biotech, 2018, 8, 138.	1.1	59
40	Solid-State Fermentation for the Production of Proteases and Amylases and Their Application in Nutrient Medium Production. , 2018, , 185-210.		4
41	Fed-batch strategies for saccharification of pilot-scale mild-acid and alkali pretreated sugarcane bagasse: Effects of solid loading and surfactant addition. Industrial Crops and Products, 2018, 119, 283-289.	2.5	31
42	Valorisation of fruit and vegetable waste from open markets for the production of 2,3-butanediol. Food and Bioproducts Processing, 2018, 108, 27-36.	1.8	32
43	Characterization of esterase activity from an Acetomicrobium hydrogeniformans enzyme with high structural stability in extreme conditions. Extremophiles, 2018, 22, 781-793.	0.9	10
44	2,3-Butanediol production by the non-pathogenic bacterium Paenibacillus brasilensis. Applied Microbiology and Biotechnology, 2018, 102, 8773-8782.	1.7	14
45	A comparative review of recent advances in cellulases production by Aspergillus, Penicillium and Trichoderma strains and their use for lignocellulose deconstruction. Current Opinion in Green and Sustainable Chemistry, 2018, 14, 60-66.	3.2	58
46	Enzyme-catalyzed simultaneous hydrolysis-glycolysis reactions reveals tunability on PET depolymerization products. Biochemical Engineering Journal, 2018, 137, 239-246.	1.8	15
47	Screening of commercial enzymes for poly(ethylene terephthalate) (PET) hydrolysis and synergy studies on different substrate sources. Journal of Industrial Microbiology and Biotechnology, 2017, 44, 835-844.	1.4	84
48	A novel process for poly(ethylene terephthalate) depolymerization via enzyme-catalyzed glycolysis. Biochemical Engineering Journal, 2017, 124, 64-68.	1.8	31
49	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.	1.8	28
50	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.	0.8	26
51	A rapid enzyme-catalyzed pretreatment of the acidic oil of macauba (Acrocomia aculeata) for chemoenzymatic biodiesel production. Process Biochemistry, 2017, 53, 188-193.	1.8	15
52	Design and Characterization of Novel Cholineâ€Based Phthalic Salts: A Case Study for Sugarcane Bagasse Pretreatment. ChemistrySelect, 2017, 2, 8039-8042.	0.7	0
53	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.	1.4	25
54	Optimal design of upstream processes in biotransformation technologies. Bioresource Technology, 2017, 224, 509-514.	4.8	21

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55	Addition of Surfactants and Non-Hydrolytic Proteins and Their Influence on Enzymatic Hydrolysis of Pretreated Sugarcane Bagasse. Applied Biochemistry and Biotechnology, 2017, 181, 593-603.	1.4	19
56	Lipase from Candida antarctica (CALB) and cutinase from Humicola insolens act synergistically for PET hydrolysis to terephthalic acid. Process Biochemistry, 2017, 59, 84-90.	1.8	191
57	Biotechnological Production of Fumaric Acid: The Effect of Morphology of Rhizopus arrhizus NRRL 2582. Fermentation, 2017, 3, 33.	1.4	26
58	Microbial Production of Itaconic Acid. , 2017, , 291-316.		4
59	Environmental Factors Modulating the Stability and Enzymatic Activity of the Petrotoga mobilis Esterase (PmEst). PLoS ONE, 2016, 11, e0158146.	1.1	8
60	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
61	A mathematical programming formulation for biorefineries technology selection. Biochemical Engineering Journal, 2016, 116, 135-145.	1.8	10
62	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.	2.5	38
63	Consecutive lipase immobilization and glycerol carbonate production under continuous-flow conditions. Catalysis Science and Technology, 2016, 6, 4743-4748.	2.1	31
64	Techno-economic evaluation of a complete bioprocess for 2,3-butanediol production from renewable resources. Bioresource Technology, 2016, 204, 55-64.	4.8	96
65	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.	2.5	19
66	A brief review on the emerging technology of ethanol production by cold hydrolysis of raw starch. Fuel, 2015, 150, 721-729.	3.4	93
67	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.	1.8	46
68	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.	1.4	16
69	Principles of Green Chemistry and White Biotechnology. RSC Green Chemistry, 2015, , 1-8.	0.0	5
70	Optimisation of Cellulase Production by Penicillium funiculosum in a Stirred Tank Bioreactor Using Multivariate Response Surface Analysis. Enzyme Research, 2014, 2014, 1-8.	1.8	18
71	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.	2.9	8
72	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.	3.4	137

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73	Granular starch hydrolysis of babassu agroindustrial residue: A bioprocess within the context of biorefinery. Fuel, 2014, 124, 41-48.	3.4	31
74	MICROBIAL AND ENZYMATIC DEGRADATION OF POLYMERS: A REVIEW. Quimica Nova, 2014, , .	0.3	6
75	APPLICATIONS OF ENZYMES IN SYNTHESIS AND MODIFICATION OF POLYMERS. Quimica Nova, 2014, 37, .	0.3	3
76	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.	1.8	20
77	Effects of agitation and exogenous H2 on bioconversion of sugarcane bagasse into ethanol by Clostridium thermocellum ATCC 27405. Electronic Journal of Biotechnology, 2013, 16, .	1.2	5
78	Use of Vero cell line to verify the biodetoxification efficiency of castor bean waste. Process Biochemistry, 2012, 47, 578-584.	1.8	9
79	Assessment of the Brazilian potential for the production of enzymes for biofuels from agroindustrial materials. Biomass Conversion and Biorefinery, 2012, 2, 87-107.	2.9	17
80	Oriented irreversible immobilization of a glycosylated Candida antarctica B lipase on heterofunctional organoborane-aldehyde support. Catalysis Science and Technology, 2011, 1, 260.	2.1	15
81	Enzyme Surface Glycosylation in the Solid Phase: Improved Activity and Selectivity of Candida Antarctica Lipase B. ChemCatChem, 2011, 3, 1902-1910.	1.8	29
82	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.	1.7	19
83	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.	1.4	51
84	Enzymatic hydrolysis of pretreated sugar cane bagasse using Penicillium funiculosum and Trichoderma harzianum cellulases. Process Biochemistry, 2011, 46, 1196-1201.	1.8	148
85	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.	2.9	29
86	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.	1.4	6
87	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.	1.8	37
88	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
89	Production and Use of Lipases in Bioenergy: A Review from the Feedstocks to Biodiesel Production. Enzyme Research, 2011, 2011, 1-16.	1.8	118
90	ProduÃ§Ã£o, propriedades e aplicaÃ§Ã£o de celulases na hidrÃ³lise de resÃduos agroindustriais. Quimica Nova, 2010, 33, 181-188.	0.3	79

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91	Cellulases from Penicillium funiculosum: production, properties and application to cellulose hydrolysis. Journal of Industrial Microbiology and Biotechnology, 2010, 37, 151-158.	1.4	98
92	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.	1.4	33
93	Trichoderma harzianum IOC-4038: A Promising Strain for the Production of a Cellulolytic Complex with Significant Î²-Glucosidase Activity from Sugarcane Bagasse Cellulignin. Applied Biochemistry and Biotechnology, 2010, 162, 2111-2122.	1.4	63
94	Esterification activities of nonâ€commercial lipases after preâ€treatment in pressurized propane. Journal of Chemical Technology and Biotechnology, 2010, 85, 839-844.	1.6	22
95	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
96	High-Yield Endoglucanase Production byTrichoderma harzianumIOC-3844 Cultivated in Pretreated Sugarcane Mill Byproduct. Enzyme Research, 2010, 2010, 1-8.	1.8	39
97	Evaluation of Cell Recycle on Thermomyces lanuginosus Xylanase A Production by Pichia pastoris GS 115. Applied Biochemistry and Biotechnology, 2006, 129, 226-233.	1.4	2
98	Application of Xylanase from <I>Thermomyces lanuginosus </I>IOC-4145 for Enzymatic Hydrolysis of Corncob and Sugarcane Bagasse. Applied Biochemistry and Biotechnology, 2004, 115, 1003-1012.	1.4	32
99	Application of Xylanase from Thermomyces lanuginosus IOC-4145 for Enzymatic Hydrolysis of Corncob and Sugarcane Bagasse. , 2004, , 1003-1012.		2