Oveimar Barbosa

List of Publications by Year in descending order

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47 papers	5,721 citations	94433 37 h-index	206112 48 g-index
50 all docs	50 docs citations	50 times ranked	4176 citing authors

#	Article	IF	Citations
1	Glutaraldehyde in bio-catalysts design: a useful crosslinker and a versatile tool in enzyme immobilization. RSC Advances, 2014, 4, 1583-1600.	3.6	669
2	Strategies for the one-step immobilizationâ€“purification of enzymes as industrial biocatalysts. Biotechnology Advances, 2015, 33, 435-456.	11.7	568
3	Importance of the Support Properties for Immobilization or Purification of Enzymes. ChemCatChem, 2015, 7, 2413-2432.	3.7	466
4	Heterofunctional Supports in Enzyme Immobilization: From Traditional Immobilization Protocols to Opportunities in Tuning Enzyme Properties. Biomacromolecules, 2013, 14, 2433-2462.	5.4	429
5	Immobilization of lipases on hydrophobic supports: immobilization mechanism, advantages, problems, and solutions. Biotechnology Advances, 2019, 37, 746-770.	11.7	409
6	Novozym 435: the â€œperfectâ€•lipase immobilized biocatalyst?. Catalysis Science and Technology, 2019, 9, 2380-2420.	4.1	393
7	Polyethylenimine: a very useful ionic polymer in the design of immobilized enzyme biocatalysts. Journal of Materials Chemistry B, 2017, 5, 7461-7490.	5.8	228
8	Versatility of glutaraldehyde to immobilize lipases: Effect of the immobilization protocol on the properties of lipase B from Candida antarctica. Process Biochemistry, 2012, 47, 1220-1227.	3.7	188
9	Chemical Modification in the Design of Immobilized Enzyme Biocatalysts: Drawbacks and Opportunities. Chemical Record, 2016, 16, 1436-1455.	5.8	183
10	Improved performance of lipases immobilized on heterofunctional octyl-glyoxyl agarose beads. RSC Advances, 2015, 5, 11212-11222.	3.6	129
11	Amination of enzymes to improve biocatalyst performance: coupling genetic modification and physicochemical tools. RSC Advances, 2014, 4, 38350-38374.	3.6	117
12	Characterization of supports activated with divinyl sulfone as a tool to immobilize and stabilize enzymes via multipoint covalent attachment. Application to chymotrypsin. RSC Advances, 2015, 5, 20639-20649.	3.6	104
13	Improved production of butyl butyrate with lipase from Thermomyces lanuginosus immobilized on styreneâ€“divinylbenzene beads. Bioresource Technology, 2013, 134, 417-422.	9.6	94
14	Bovine trypsin immobilization on agarose activated with divinylsulfone: Improved activity and stability via multipoint covalent attachment. Journal of Molecular Catalysis B: Enzymatic, 2015, 117, 38-44.	1.8	93
15	Evaluation of divinylsulfone activated agarose to immobilize lipases and to tune their catalytic properties. Process Biochemistry, 2015, 50, 918-927.	3.7	91
16	Easy stabilization of interfacially activated lipases using heterofunctional divinyl sulfone activated-octyl agarose beads. Modulation of the immobilized enzymes by altering their nanoenvironment. Process Biochemistry, 2016, 51, 865-874.	3.7	88
17	Immobilization of lipases on glyoxylâ€“octyl supports: Improved stability and reactivation strategies. Process Biochemistry, 2015, 50, 1211-1217.	3.7	73
18	Optimized preparation of CALB-CLEAs by response surface methodology: The necessity to employ a feeder to have an effective crosslinking. Journal of Molecular Catalysis B: Enzymatic, 2012, 80, 7-14.	1.8	72

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19	Immobilization of CALB on activated chitosan: Application to enzymatic synthesis in supercritical and near-critical carbon dioxide. Biotechnology Reports (Amsterdam, Netherlands), 2017, 14, 16-26.	4.4	72
20	Reversible immobilization of lipases on octyl-glutamic agarose beads: A mixed adsorption that reinforces enzyme immobilization. Journal of Molecular Catalysis B: Enzymatic, 2016, 128, 10-18.	1.8	70
21	Immobilization/Stabilization of Ficin Extract on Glutaraldehyde-Activated Agarose Beads. Variables That Control the Final Stability and Activity in Protein Hydrolyses. Catalysts, 2018, 8, 149.	3.5	69
22	Chemical amination of lipases improves their immobilization on octyl-glyoxyl agarose beads. Catalysis Today, 2016, 259, 107-118.	4.4	68
23	Improved immobilization and stabilization of lipase from Rhizomucor miehei on octyl-glyoxyl agarose beads by using CaCl2. Process Biochemistry, 2016, 51, 48-52.	3.7	67
24	Modulation of the properties of immobilized CALB by chemical modification with 2,3,4-trinitrobenzenesulfonate or ethylendiamine. Advantages of using adsorbed lipases on hydrophobic supports. Process Biochemistry, 2012, 47, 867-876.	3.7	66
25	Tuning of Lecitase features via solid-phase chemical modification: Effect of the immobilization protocol. Process Biochemistry, 2014, 49, 604-616.	3.7	65
26	The slow-down of the CALB immobilization rate permits to control the inter and intra molecular modification produced by glutaraldehyde. Process Biochemistry, 2012, 47, 766-774.	3.7	62
27	Evaluation of Styrene-Divinylbenzene Beads as a Support to Immobilize Lipases. Molecules, 2014, 19, 7629-7645.	3.8	62
28	Immobilization of Proteins in Poly-Styrene-Divinylbenzene Matrices: Functional Properties and Applications. Current Organic Chemistry, 2015, 19, 1707-1718.	1.6	62
29	Effect of the immobilization protocol on the properties of lipase B from Candida antarctica in organic media: Enantiospecifc production of atenolol acetate. Journal of Molecular Catalysis B: Enzymatic, 2011, 71, 124-132.	1.8	59
30	Reversible Immobilization of Lipases on Heterofunctional Octyl-Amino Agarose Beads Prevents Enzyme Desorption. Molecules, 2016, 21, 646.	3.8	58
31	Chemical amination of lipase B from Candida antarctica is an efficient solution for the preparation of crosslinked enzyme aggregates. Process Biochemistry, 2012, 47, 2373-2378.	3.7	55
32	Stabilization of ficin extract by immobilization on glyoxyl agarose. Preliminary characterization of the biocatalyst performance in hydrolysis of proteins. Process Biochemistry, 2017, 58, 98-104.	3.7	54
33	Stabilization of the hexameric glutamate dehydrogenase from Escherichia coli by cations and polyethyleneimine. Enzyme and Microbial Technology, 2013, 52, 211-217.	3.2	45
34	Reactivation of lipases by the unfolding and refolding of covalently immobilized biocatalysts. RSC Advances, 2015, 5, 55588-55594.	3.6	43
35	Lecitase ultra: A phospholipase with great potential in biocatalysis. Molecular Catalysis, 2019, 473, 110405.	2.0	43
36	Combined Effects of Ultrasound and Immobilization Protocol on Butyl Acetate Synthesis Catalyzed by CALB. Molecules, 2014, 19, 9562-9576.	3.8	42

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37	Kinetic resolution of (R/S)-propranolol (1-isopropylamino-3-(1-naphtoxy)-2-propanolol) catalyzed by immobilized preparations of Candida antarctica lipase B (CAL-B). New Biotechnology, 2010, 27, 844-850.	4.4	38
38	Effect of solid-phase chemical modification on the features of the lipase from Thermomyces lanuginosus. Process Biochemistry, 2012, 47, 460-466.	3.7	34
39	Tuning lipase B from Candida antarctica Câ€“C bond promiscuous activity by immobilization on poly-styrene-divinylbenzene beads. RSC Advances, 2014, 4, 6219.	3.6	31
40	Immobilization of Lipases on Heterofunctional Octylâ€“Glyoxyl Agarose Supports. Methods in Enzymology, 2016, 571, 73-85.	1.0	28
41	Solid phase chemical modification of agarose glyoxyl-ficin: Improving activity and stability properties by amination and modification with glutaraldehyde. Process Biochemistry, 2018, 73, 109-116.	3.7	26
42	Cooperativity of covalent attachment and ion exchange on alcalase immobilization using glutaraldehyde chemistry: Enzyme stabilization and improved proteolytic activity. Biotechnology Progress, 2019, 35, e2768.	2.6	22
43	Biotechnological prospects of the lipase from Mucor javanicus. Journal of Molecular Catalysis B: Enzymatic, 2013, 93, 34-43.	1.8	21
44	Solid-phase modification with succinic polyethyleneglycol of aminated lipase B from Candida antarctica: Effect of the immobilization protocol on enzyme catalytic properties. Journal of Molecular Catalysis B: Enzymatic, 2013, 87, 75-82.	1.8	18
45	Use of Lecitase-Ultra immobilized on styrene-divinylbenzene beads as catalyst of esterification reactions: Effects of ultrasounds. Catalysis Today, 2015, 255, 27-32.	4.4	18
46	Further Stabilization of Alcalase Immobilized on Glyoxyl Supports: Amination Plus Modification with Glutaraldehyde. Molecules, 2018, 23, 3188.	3.8	17
47	Optimization and characterization of CLEAs of the very thermostable dimeric peroxidase from Roystonea regia. RSC Advances, 2015, 5, 53047-53053.	3.6	5