Cesar Mateo

List of Publications by Year in descending order

69 papers	8,324 citations	87723 38 h-index	102304 66 g-index
69 all docs	69 docs citations	69 times ranked	6420 citing authors

#	Article	IF	Citations
1	Improvement of enzyme activity, stability and selectivity via immobilization techniques. Enzyme and Microbial Technology, 2007, 40, 1451-1463.	1.6	2,864
2	Interfacial adsorption of lipases on very hydrophobic support (octadecylâ€“Sepabeads): immobilization, hyperactivation and stabilization of the open form of lipases. Journal of Molecular Catalysis B: Enzymatic, 2002, 19-20, 279-286.	1.8	384
3	Glyoxyl agarose: A fully inert and hydrophilic support for immobilization and high stabilization of proteins. Enzyme and Microbial Technology, 2006, 39, 274-280.	1.6	347
4	Increase in conformational stability of enzymes immobilized on epoxy-activated supports by favoring additional multipoint covalent attachmentâ˜†. Enzyme and Microbial Technology, 2000, 26, 509-515.	1.6	316
5	Multifunctional Epoxy Supports:Â A New Tool To Improve the Covalent Immobilization of Proteins. The Promotion of Physical Adsorptions of Proteins on the Supports before Their Covalent Linkage. Biomacromolecules, 2000, 1, 739-745.	2.6	281
6	Immobilization of enzymes on heterofunctional epoxy supports. Nature Protocols, 2007, 2, 1022-1033.	5.5	269
7	Enzyme stabilization by glutaraldehyde crosslinking of adsorbed proteins on aminated supports. Journal of Biotechnology, 2005, 119, 70-75.	1.9	259
8	Some special features of glyoxyl supports to immobilize proteins. Enzyme and Microbial Technology, 2005, 37, 456-462.	1.6	257
9	Reversible enzyme immobilization via a very strong and nondistorting ionic adsorption on support-polyethylenimine composites. , 2000, 68, 98-105.		225
10	General Trend of Lipase to Self-Assemble Giving Bimolecular Aggregates Greatly Modifies the Enzyme Functionality. Biomacromolecules, 2003, 4, 1-6.	2.6	212
11	Effect of the support and experimental conditions in the intensity of the multipoint covalent attachment of proteins on glyoxyl-agarose supports: Correlation between enzymeâ€“support linkages and thermal stability. Enzyme and Microbial Technology, 2007, 40, 1160-1166.	1.6	200
12	Modulation of the enantioselectivity of lipases via controlled immobilization and medium engineering: hydrolytic resolution of mandelic acid esters. Enzyme and Microbial Technology, 2002, 31, 775-783.	1.6	160
13	Glutaraldehyde Cross-Linking of Lipases Adsorbed on Aminated Supports in the Presence of Detergents Leads to Improved Performance. Biomacromolecules, 2006, 7, 2610-2615.	2.6	121
14	Self-assembly ofPseudomonas fluorescenslipase into bimolecular aggregates dramatically affects functional properties. Biotechnology and Bioengineering, 2003, 82, 232-237.	1.7	119
15	Coating of Soluble and Immobilized Enzymes with Ionic Polymers: Full Stabilization of the Quaternary Structure of Multimeric Enzymes. Biomacromolecules, 2009, 10, 742-747.	2.6	111
16	The immobilization of a thermophilic Î²-galactosidase on Sepabeads supports decreases product inhibition. Enzyme and Microbial Technology, 2003, 33, 199-205.	1.6	110
17	Dextran aldehyde coating of glucose oxidase immobilized on magnetic nanoparticles prevents its inactivation by gas bubbles. Journal of Molecular Catalysis B: Enzymatic, 2005, 32, 97-101.	1.8	106
18	One-step purification, covalent immobilization, and additional stabilization of poly-His-tagged proteins using novel heterofunctional chelate-epoxy supports. Biotechnology and Bioengineering, 2001, 76, 269-276.	1.7	103

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19	Solid-Phase Handling of Hydrophobins:Â Immobilized Hydrophobins as a New Tool To Study Lipases. Biomacromolecules, 2003, 4, 204-210.	2.6	96
20	Improvement of Enzyme Properties with a Two-Step Immobilizaton Process on Novel Heterofunctional Supports. Biomacromolecules, 2010, 11, 3112-3117.	2.6	93
21	Immobilization of lactase from Kluyveromyces lactis greatly reduces the inhibition promoted by glucose. full hydrolysis of lactose in milk. Biotechnology Progress, 2004, 20, 1259-1262.	1.3	90
22	Improvement of the stability of alcohol dehydrogenase by covalent immobilization on glyoxyl-agarose. Journal of Biotechnology, 2006, 125, 85-94.	1.9	86
23	Novel Bifunctional Epoxy/Thiol-Reactive Support to Immobilize Thiol Containing Proteins by the Epoxy Chemistry. Biomacromolecules, 2003, 4, 1495-1501.	2.6	84
24	Reversible and strong immobilization of proteins by ionic exchange on supports coated with sulfate-dextran. Biotechnology Progress, 2004, 20, 1134-1139.	1.3	82
25	Reversible immobilization of a thermophilic Î²-galactosidase via ionic adsorption on PEI-coated Sepabeads. Enzyme and Microbial Technology, 2003, 32, 369-374.	1.6	80
26	Stabilization of different alcohol oxidases via immobilization and post immobilization techniques. Enzyme and Microbial Technology, 2007, 40, 278-284.	1.6	66
27	Immobilization and stabilization of glutaryl acylase on aminated sepabeads supports by the glutaraldehyde crosslinking method. Journal of Molecular Catalysis B: Enzymatic, 2005, 35, 57-61.	1.8	59
28	Heterofunctional supports for the one-step purification, immobilization and stabilization of large multimeric enzymes: Amino-glyoxyl versus amino-epoxy supports. Process Biochemistry, 2010, 45, 1692-1698.	1.8	56
29	Promotion of multipoint covalent immobilization through different regions of genetically modified penicillin G acylase from E. coli. Process Biochemistry, 2010, 45, 390-398.	1.8	55
30	Purification and stabilization of a glutamate dehygrogenase from Thermus thermophilus via oriented multisubunit plus multipoint covalent immobilization. Journal of Molecular Catalysis B: Enzymatic, 2009, 58, 158-163.	1.8	53
31	The presence of thiolated compounds allows the immobilization of enzymes on glyoxyl agarose at mild pH values: New strategies of stabilization by multipoint covalent attachment. Enzyme and Microbial Technology, 2009, 45, 477-483.	1.6	46
32	Stabilization of a Multimeric Î²-Galactosidase from Thermus sp. Strain T2 by Immobilization on Novel Heterofunctional Epoxy Supports Plus Aldehyde-Dextran Cross-Linking. Biotechnology Progress, 2008, 20, 388-392.	1.3	44
33	Novel support for enzyme immobilization prepared by chemical activation with cysteine and glutaraldehyde. Journal of Molecular Catalysis B: Enzymatic, 2014, 102, 218-224.	1.8	43
34	Immobilizationâ€“stabilization of a new recombinant glutamate dehydrogenase from Thermus thermophilus. Applied Microbiology and Biotechnology, 2008, 80, 49-58.	1.7	42
35	Mixed Ion Exchange Supports as Useful Ion Exchangers for Protein Purification:Â Purification of Penicillin G Acylase fromEscherichia coli. Biomacromolecules, 2007, 8, 703-707.	2.6	40
36	The co-operative effect of physical and covalent protein adsorption on heterofunctional supports. Process Biochemistry, 2009, 44, 757-763.	1.8	40

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37	Stabilization of a highly active but unstable alcohol dehydrogenase from yeast using immobilization and post-immobilization techniques. Process Biochemistry, 2012, 47, 679-686.	1.8	40
38	Oxidation of phenyl compounds using strongly stable immobilized-stabilized laccase from Trametes versicolor. Process Biochemistry, 2013, 48, 1174-1180.	1.8	40
39	Enzymatic transformations. Immobilized A. niger epoxide hydrolase as a novel biocatalytic tool for repeated-batch hydrolytic kinetic resolution of epoxidesPart 54. For part 53 see ref. 21.. Organic and Biomolecular Chemistry, 2003, 1, 2739.	1.5	39
40	The adsorption of multimeric enzymes on very lowly activated supports involves more enzyme subunits: Stabilization of a glutamate dehydrogenase from Thermus thermophilus by immobilization on heterofunctional supports. Enzyme and Microbial Technology, 2009, 44, 139-144.	1.6	39
41	New Heterofunctional Supports Based on Glutaraldehyde-Activation: A Tool for Enzyme Immobilization at Neutral pH. Molecules, 2017, 22, 1088.	1.7	39
42	Overproduction of Thermus sp. Strain T2 Î²-Galactosidase in Escherichia coli and Preparation by Using Tailor-Made Metal Chelate Supports. Applied and Environmental Microbiology, 2003, 69, 1967-1972.	1.4	38
43	New Cationic Exchanger Support for Reversible Immobilization of Proteins. Biotechnology Progress, 2008, 20, 284-288.	1.3	37
44	Continuous production of xylooligosaccharides in a packed bed reactor with immobilizedâ€“stabilized biocatalysts of xylanase from Aspergillus versicolor. Journal of Molecular Catalysis B: Enzymatic, 2013, 98, 8-14.	1.8	37
45	Stabilizationâ€“immobilization of carboxypeptidase A to aldehydeâ€“agarose gels. Enzyme and Microbial Technology, 2002, 31, 711-718.	1.6	36
46	Improving the Industrial Production of 6-APA: Enzymatic Hydrolysis of Penicillin G in the Presence of Organic Solvents. Biotechnology Progress, 2003, 19, 1639-1642.	1.3	36
47	Recent Trends in Biomaterials for Immobilization of Lipases for Application in Non-Conventional Media. Catalysts, 2020, 10, 697.	1.6	36
48	Coimmobilization of L-asparaginase and glutamate dehydrogenase onto highly activated supports. Enzyme and Microbial Technology, 2001, 28, 696-704.	1.6	35
49	Î²-Glucosidase immobilized and stabilized on agarose matrix functionalized with distinct reactive groups. Journal of Molecular Catalysis B: Enzymatic, 2011, 69, 47-53.	1.8	35
50	Production of xylo-oligosaccharides by immobilized-stabilized derivatives of endo-xylanase from Streptomyces halstedii. Process Biochemistry, 2013, 48, 478-483.	1.8	29
51	Improving the Activity of Lipases from Thermophilic Organisms at Mesophilic Temperatures for Biotechnology Applications. Biomacromolecules, 2004, 5, 249-254.	2.6	26
52	Reversible Immobilization of Glutaryl Acylase on Sepabeads Coated with Polyethyleneimine. Biotechnology Progress, 2008, 20, 533-536.	1.3	23
53	Preparation of a very stable immobilized Solanum tuberosum epoxide hydrolase. Tetrahedron: Asymmetry, 2007, 18, 1233-1238.	1.8	20
54	Modulation of a lipase from Staphylococcus warneri EX17 using immobilization techniques. Journal of Molecular Catalysis B: Enzymatic, 2009, 60, 125-132.	1.8	20

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55	Immobilisation and stabilisation of Î²-galactosidase from Kluyveromyces lactis using a glyoxyl support. International Dairy Journal, 2013, 28, 76-82.	1.5	16
56	Resolution of paroxetine precursor using different lipases. Enzyme and Microbial Technology, 2004, 34, 264-269.	1.6	14
57	New Tailor-Made Alkyl-Aldehyde Bifunctional Supports for Lipase Immobilization. Catalysts, 2016, 6, 191.	1.6	13
58	Purification, immobilization, and characterization of a specific lipase from Staphylococcus warneri EX17 by enzyme fractionating via adsorption on different hydrophobic supports. Biotechnology Progress, 2011, 27, 717-723.	1.3	12
59	Multi-Point Covalent Immobilization of Enzymes on Glyoxyl Agarose with Minimal Physico-Chemical Modification: Stabilization of Industrial Enzymes. Methods in Molecular Biology, 2020, 2100, 93-107.	0.4	11
60	Co-expression, purification and characterization of the lipase and foldase of Burkholderia contaminans LTEB11. International Journal of Biological Macromolecules, 2018, 116, 1222-1231.	3.6	10
61	Oriented Covalent Immobilization of Enzymes on Heterofunctional-Glyoxyl Supports. Methods in Molecular Biology, 2013, 1051, 73-88.	0.4	10
62	Partial Purification and Immobilization/Stabilization on Highly Activated Glyoxyl-agarose Supports of Different Proteases from Flavourzyme. Journal of Agricultural and Food Chemistry, 2007, 55, 6503-6508.	2.4	9
63	An immobilized acetylcholinesterase as test system to screen new inhibitor drugs to treat Alzheimerâ€™s disease. Sensors and Actuators B: Chemical, 2019, 278, 196-201.	4.0	9
64	Use of polyvalent cations to improve the adsorption strength between adsorbed enzymes and supports coated with dextran sulfate. Enzyme and Microbial Technology, 2006, 39, 332-336.	1.6	6
65	Cross-Linking with Polyethylenimine Confers Better Functional Characteristics to an Immobilized Î²-glucosidase from Exiguobacterium antarcticum B7. Catalysts, 2019, 9, 223.	1.6	6
66	Biocatalytic Process Optimization for the Production of Highâ€Addedâ€Value 6â€Oâ€Hydroxy and 3â€Oâ€Hydroxy Glycosyl Building Blocks. ChemCatChem, 2017, 9, 2536-2543.	1.8	3
67	Production and Digestibility Studies of Î²-Galactosyl Xylitol Derivatives Using Heterogeneous Catalysts of LacA Î²-Galactosidase from Lactobacillus Plantarum WCFS1. Molecules, 2022, 27, 1235.	1.7	1
68	Asymmetric and Selective Biocatalysis. Catalysts, 2018, 8, 588.	1.6	0
69	Special Issue â€œBiocatalysts: Design and Applicationâ€. Catalysts, 2021, 11, 778.	1.6	0