

Roberto Fernandez-Lafuente

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531
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552
ext. papers

37,835
ext. citations

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avg, IF

7.69
L-index

#	Paper	IF	Citations
531	Improvement of enzyme activity, stability and selectivity via immobilization techniques. <i>Enzyme and Microbial Technology</i> , 2007 , 40, 1451-1463	3.7	2476
530	Modifying enzyme activity and selectivity by immobilization. <i>Chemical Society Reviews</i> , 2013 , 42, 6290-3077.5	7.5	1280
529	Potential of Different Enzyme Immobilization Strategies to Improve Enzyme Performance. <i>Advanced Synthesis and Catalysis</i> , 2011 , 353, 2885-2904	5.5	1155
528	Glutaraldehyde in bio-catalysts design: a useful crosslinker and a versatile tool in enzyme immobilization. <i>RSC Advances</i> , 2014 , 4, 1583-1600	3.6	522
527	Stabilization of multimeric enzymes: Strategies to prevent subunit dissociation. <i>Enzyme and Microbial Technology</i> , 2009 , 45, 405-418	3.7	493
526	Control of protein immobilization: coupling immobilization and site-directed mutagenesis to improve biocatalyst or biosensor performance. <i>Enzyme and Microbial Technology</i> , 2011 , 48, 107-22	3.7	479
525	Strategies for the one-step immobilization-purification of enzymes as industrial biocatalysts. <i>Biotechnology Advances</i> , 2015 , 33, 435-56	17.3	455
524	A single step purification, immobilization, and hyperactivation of lipases via interfacial adsorption on strongly hydrophobic supports. <i>Biotechnology and Bioengineering</i> , 1998 , 58, 486-93	4.7	435
523	Lipase from <i>Thermomyces lanuginosus</i> : Uses and prospects as an industrial biocatalyst. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2010 , 62, 197-212		411
522	Immobilization of lipases by selective adsorption on hydrophobic supports. <i>Chemistry and Physics of Lipids</i> , 1998 , 93, 185-97	3.6	400
521	Importance of the Support Properties for Immobilization or Purification of Enzymes. <i>ChemCatChem</i> , 2015 , 7, 2413-2432	5.1	380
520	Heterofunctional supports in enzyme immobilization: from traditional immobilization protocols to opportunities in tuning enzyme properties. <i>Biomacromolecules</i> , 2013 , 14, 2433-62	6.7	352
519	Interfacial adsorption of lipases on very hydrophobic support (octadecylSepabeads): immobilization, hyperactivation and stabilization of the open form of lipases. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2002 , 19-20, 279-286		355
518	Immobilization of lipases on hydrophobic supports involves the open form of the enzyme. <i>Enzyme and Microbial Technology</i> , 2015 , 71, 53-7	3.7	352
517	Different mechanisms of protein immobilization on glutaraldehyde activated supports: Effect of support activation and immobilization conditions. <i>Enzyme and Microbial Technology</i> , 2006 , 39, 877-882	3.7	319
516	Glyoxyl agarose: A fully inert and hydrophilic support for immobilization and high stabilization of proteins. <i>Enzyme and Microbial Technology</i> , 2006 , 39, 274-280	3.7	320
515	Coupling Chemical Modification and Immobilization to Improve the Catalytic Performance of Enzymes. <i>Advanced Synthesis and Catalysis</i> , 2011 , 353, 2216-2238	5.5	262

514	Multifunctional epoxy supports: a new tool to improve the covalent immobilization of proteins. The promotion of physical adsorptions of proteins on the supports before their covalent linkage. <i>Biomacromolecules</i> , 2000 , 1, 739-45	6.7	261
513	Enhancing the functional properties of thermophilic enzymes by chemical modification and immobilization. <i>Enzyme and Microbial Technology</i> , 2011 , 49, 326-46	3.7	255
512	Some special features of glyoxyl supports to immobilize proteins. <i>Enzyme and Microbial Technology</i> , 2005 , 37, 456-462	3.7	241
511	Immobilization of lipases on hydrophobic supports: immobilization mechanism, advantages, problems, and solutions. <i>Biotechnology Advances</i> , 2019 , 37, 746-770	17.3	239
510	Enzyme stabilization by glutaraldehyde crosslinking of adsorbed proteins on aminated supports. <i>Journal of Biotechnology</i> , 2005 , 119, 70-5	3	231
509	Epoxy sepabeads: a novel epoxy support for stabilization of industrial enzymes via very intense multipoint covalent attachment. <i>Biotechnology Progress</i> , 2002 , 18, 629-34	2.8	231
508	Immobilization of enzymes on heterofunctional epoxy supports. <i>Nature Protocols</i> , 2007 , 2, 1022-33	18.1	228
507	Nanomaterials for biocatalyst immobilization [State of the art and future trends. <i>RSC Advances</i> , 2016 , 6, 104675-104692	3.6	223
506	Novozym 435: the perfect lipase immobilized biocatalyst?. <i>Catalysis Science and Technology</i> , 2019 , 9, 2380-2420	5.4	215
505	Lipase from <i>Rhizomucor miehei</i> as an industrial biocatalyst in chemical process. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2010 , 64, 1-22		217
504	Preparation of activated supports containing low pK amino groups. A new tool for protein immobilization via the carboxyl coupling method. <i>Enzyme and Microbial Technology</i> , 1993 , 15, 546-50	3.7	215
503	Epoxy-amino groups: a new tool for improved immobilization of proteins by the epoxy method. <i>Biomacromolecules</i> , 2003 , 4, 772-7	6.7	209
502	Reversible enzyme immobilization via a very strong and nondistorting ionic adsorption on support-polyethylenimine composites. <i>Biotechnology and Bioengineering</i> , 2000 , 68, 98-105	4.7	204
501	Lipase from <i>Rhizomucor miehei</i> as a biocatalyst in fats and oils modification. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2010 , 66, 15-32		196
500	General trend of lipase to self-assemble giving bimolecular aggregates greatly modifies the enzyme functionality. <i>Biomacromolecules</i> , 2003 , 4, 1-6	6.7	194
499	Effect of the support and experimental conditions in the intensity of the multipoint covalent attachment of proteins on glyoxyl-agarose supports: Correlation between enzyme-support linkages and thermal stability. <i>Enzyme and Microbial Technology</i> , 2007 , 40, 1160-1166	3.7	175
498	Versatility of glutaraldehyde to immobilize lipases: Effect of the immobilization protocol on the properties of lipase B from <i>Candida antarctica</i> . <i>Process Biochemistry</i> , 2012 , 47, 1220-1227	4.7	167
497	Advances in the design of new epoxy supports for enzyme immobilization-stabilization. <i>Biochemical Society Transactions</i> , 2007 , 35, 1593-601	5	165

496	Interfacially activated lipases against hydrophobic supports: Effect of the support nature on the biocatalytic properties. <i>Process Biochemistry</i> , 2008 , 43, 1061-1067	4.7	164
495	Activation of bacterial thermoalkalophilic lipases is spurred by dramatic structural rearrangements. <i>Journal of Biological Chemistry</i> , 2009 , 284, 4365-72	5	163
494	Polyethylenimine: a very useful ionic polymer in the design of immobilized enzyme biocatalysts. <i>Journal of Materials Chemistry B</i> , 2017 , 5, 7461-7490	7.1	154
493	Parameters necessary to define an immobilized enzyme preparation. <i>Process Biochemistry</i> , 2020 , 90, 66-80	4.7	150
492	Modulation of the enantioselectivity of lipases via controlled immobilization and medium engineering: hydrolytic resolution of mandelic acid esters. <i>Enzyme and Microbial Technology</i> , 2002 , 31, 775-783	3.7	150
491	Effect of protein load on stability of immobilized enzymes. <i>Enzyme and Microbial Technology</i> , 2017 , 98, 18-25	3.7	145
490	Novozym 435 displays very different selectivity compared to lipase from <i>Candida antarctica</i> B adsorbed on other hydrophobic supports. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2009 , 57, 171-176		145
489	Agarose and Its Derivatives as Supports for Enzyme Immobilization. <i>Molecules</i> , 2016 , 21,	4.7	139
488	Strategies for enzyme stabilization by intramolecular crosslinking with bifunctional reagents. <i>Enzyme and Microbial Technology</i> , 1995 , 17, 517-523	3.7	134
487	Immobilization-stabilization of penicillin G acylase from <i>Escherichia coli</i> . <i>Applied Biochemistry and Biotechnology</i> , 1990 , 26, 181-95	3.1	133
486	Chemical Modification in the Design of Immobilized Enzyme Biocatalysts: Drawbacks and Opportunities. <i>Chemical Record</i> , 2016 , 16, 1436-55	6.5	128
485	Chitosan crosslinked with genipin as support matrix for application in food process: Support characterization and ED-galactosidase immobilization. <i>Carbohydrate Polymers</i> , 2016 , 137, 184-190	10.1	125
484	The coimmobilization of d-amino acid oxidase and catalase enables the quantitative transformation of d-amino acids (d-phenylalanine) into β -keto acids (phenylpyruvic acid). <i>Enzyme and Microbial Technology</i> , 1998 , 23, 28-33	3.7	123
483	Enzymatic reactors for biodiesel synthesis: Present status and future prospects. <i>Biotechnology Advances</i> , 2015 , 33, 511-25	17.3	122
482	Encapsulation of crosslinked penicillin G acylase aggregates in lentikats: evaluation of a novel biocatalyst in organic media. <i>Biotechnology and Bioengineering</i> , 2004 , 86, 558-62	4.7	113
481	Glutaraldehyde cross-linking of lipases adsorbed on aminated supports in the presence of detergents leads to improved performance. <i>Biomacromolecules</i> , 2006 , 7, 2610-5	6.7	113
480	Improved performance of lipases immobilized on heterofunctional octyl-glyoxyl agarose beads. <i>RSC Advances</i> , 2015 , 5, 11212-11222	3.6	113
479	Antimicrobial peptides: promising compounds against pathogenic microorganisms. <i>Current Medicinal Chemistry</i> , 2014 , 21, 2299-321	4.1	111

478	Modulation of the enantioselectivity of <i>Candida antarctica</i> B lipase via conformational engineering. Kinetic resolution of (–)- β -hydroxy-phenylacetic acid derivatives. <i>Tetrahedron: Asymmetry</i> , 2002 , 13, 1337-1345		111
477	Co-aggregation of penicillin G acylase and polyionic polymers: an easy methodology to prepare enzyme biocatalysts stable in organic media. <i>Biomacromolecules</i> , 2004 , 5, 852-7	6.7	112
476	Stabilization of multimeric enzymes via immobilization and post-immobilization techniques. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 1999 , 7, 181-189		109
475	Biotechnological Applications of Proteases in Food Technology. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2018 , 17, 412-436	15.8	105
474	Effect of the support size on the properties of β -galactosidase immobilized on chitosan: advantages and disadvantages of macro and nanoparticles. <i>Biomacromolecules</i> , 2012 , 13, 2456-64	6.7	108
473	Simple and efficient immobilization of lipase B from <i>Candida antarctica</i> on porous styrene-divinylbenzene beads. <i>Enzyme and Microbial Technology</i> , 2011 , 49, 72-8	3.7	107
472	Use of immobilized lipases for lipase purification via specific lipase-lipase interactions. <i>Journal of Chromatography A</i> , 2004 , 1038, 267-73	4.3	105
471	CLEAs of lipases and poly-ionic polymers: A simple way of preparing stable biocatalysts with improved properties. <i>Enzyme and Microbial Technology</i> , 2006 , 39, 750-755	3.7	103
470	Improved stabilization of chemically aminated enzymes via multipoint covalent attachment on glyoxyl supports. <i>Journal of Biotechnology</i> , 2005 , 116, 1-10	3	102
469	Hydrogen Peroxide in Biocatalysis. A Dangerous Liaison. <i>Current Organic Chemistry</i> , 2012 , 16, 2652-2672	1.6	101
468	Self-assembly of <i>Pseudomonas fluorescens</i> lipase into bimolecular aggregates dramatically affects functional properties. <i>Biotechnology and Bioengineering</i> , 2003 , 82, 232-7	4.7	101
467	Evaluation of different lipase biocatalysts in the production of biodiesel from used cooking oil: Critical role of the immobilization support. <i>Fuel</i> , 2017 , 200, 1-10	7	100
466	Coating of soluble and immobilized enzymes with ionic polymers: full stabilization of the quaternary structure of multimeric enzymes. <i>Biomacromolecules</i> , 2009 , 10, 742-7	6.7	98
465	Inactivation of immobilized trypsin under dissimilar conditions produces trypsin molecules with different structures. <i>RSC Advances</i> , 2016 , 6, 27329-27334	3.6	100
464	Specificity enhancement towards hydrophobic substrates by immobilization of lipases by interfacial activation on hydrophobic supports. <i>Enzyme and Microbial Technology</i> , 2007 , 41, 565-569	3.7	98
463	The immobilization of a thermophilic β -galactosidase on Sepabeads supports decreases product inhibition. <i>Enzyme and Microbial Technology</i> , 2003 , 33, 199-205	3.7	97
462	Effect of immobilization rate and enzyme crowding on enzyme stability under different conditions. The case of lipase from <i>Thermomyces lanuginosus</i> immobilized on octyl agarose beads. <i>Process Biochemistry</i> , 2017 , 56, 117-123	4.7	95
461	Lipase-lipase interactions as a new tool to immobilize and modulate the lipase properties. <i>Enzyme and Microbial Technology</i> , 2005 , 36, 447-454	3.7	95

460	Dextran aldehyde coating of glucose oxidase immobilized on magnetic nanoparticles prevents its inactivation by gas bubbles. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2005 , 32, 97-101		93
459	Stabilization of penicillin G acylase from <i>Escherichia coli</i> : site-directed mutagenesis of the protein surface to increase multipoint covalent attachment. <i>Applied and Environmental Microbiology</i> , 2004 , 70, 1249-51	4.6	92
458	The combined use of ultrasound and molecular sieves improves the synthesis of ethyl butyrate catalyzed by immobilized <i>Thermomyces lanuginosus</i> lipase. <i>Ultrasonics Sonochemistry</i> , 2015 , 22, 89-94	8.8	92
457	Amination of enzymes to improve biocatalyst performance: coupling genetic modification and physicochemical tools. <i>RSC Advances</i> , 2014 , 4, 38350-38374	3.6	89
456	Co-aggregation of enzymes and polyethyleneimine: a simple method to prepare stable and immobilized derivatives of glutaryl acylase. <i>Biomacromolecules</i> , 2005 , 6, 1839-42	6.7	88
455	One-step purification, covalent immobilization, and additional stabilization of poly-His-tagged proteins using novel heterofunctional chelate-epoxy supports. <i>Biotechnology and Bioengineering</i> , 2001 , 76, 269-76	4.7	90
454	Cross-linked aggregates of multimeric enzymes: a simple and efficient methodology to stabilize their quaternary structure. <i>Biomacromolecules</i> , 2004 , 5, 814-7	6.7	90
453	Facile synthesis of artificial enzyme nano-environments via solid-phase chemistry of immobilized derivatives: Dramatic stabilization of penicillin acylase versus organic solvents. <i>Enzyme and Microbial Technology</i> , 1999 , 24, 96-103	3.7	90
452	Relevance of substrates and products on the desorption of lipases physically adsorbed on hydrophobic supports. <i>Enzyme and Microbial Technology</i> , 2017 , 96, 30-35	3.7	89
451	Modulation of penicillin acylase properties via immobilization techniques: one-pot chemoenzymatic synthesis of Cephmandole from Cephalosporin C. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2001 , 11, 2429-32	2.8	89
450	Stabilization of enzymes by multipoint immobilization of thiolated proteins on new epoxy-thiol supports. <i>Biotechnology and Bioengineering</i> , 2005 , 90, 597-605	4.7	89
449	Effects of the combined use of <i>Thermomyces lanuginosus</i> and <i>Rhizomucor miehei</i> lipases for the transesterification and hydrolysis of soybean oil. <i>Process Biochemistry</i> , 2011 , 46, 682-688	4.7	88
448	Ultrasound-assisted butyl acetate synthesis catalyzed by Novozym 435: enhanced activity and operational stability. <i>Ultrasonics Sonochemistry</i> , 2013 , 20, 1155-60	8.8	87
447	Solid-phase chemical amination of a lipase from <i>Bacillus thermocatenulatus</i> to improve its stabilization via covalent immobilization on highly activated glyoxyl-agarose. <i>Biomacromolecules</i> , 2008 , 9, 2553-61	6.7	87
446	Use of enzymes in the production of semi-synthetic penicillins and cephalosporins: drawbacks and perspectives. <i>Current Medicinal Chemistry</i> , 2010 , 17, 3855-73	4.1	85
445	Characterization of supports activated with divinyl sulfone as a tool to immobilize and stabilize enzymes via multipoint covalent attachment. Application to chymotrypsin. <i>RSC Advances</i> , 2015 , 5, 20639-20649	3.6	85
444	Modulation of <i>Mucor miehei</i> lipase properties via directed immobilization on different hetero-functional epoxy resins. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2003 , 21, 201-210		85
443	Solid-phase handling of hydrophobins: immobilized hydrophobins as a new tool to study lipases. <i>Biomacromolecules</i> , 2003 , 4, 204-10	6.7	84

442	Novel bifunctional epoxy/thiol-reactive support to immobilize thiol containing proteins by the epoxy chemistry. <i>Biomacromolecules</i> , 2003 , 4, 1495-501	6.7	81
441	Development of simple protocols to solve the problems of enzyme coimmobilization. Application to coimmobilize a lipase and a β -galactosidase. <i>RSC Advances</i> , 2016 , 6, 61707-61715	3.6	79
440	Improved production of butyl butyrate with lipase from <i>Thermomyces lanuginosus</i> immobilized on styrene-divinylbenzene beads. <i>Bioresource Technology</i> , 2013 , 134, 417-22	11	80
439	Modulation of lipase properties in macro-aqueous systems by controlled enzyme immobilization: enantioselective hydrolysis of a chiral ester by immobilized <i>Pseudomonas</i> lipase. <i>Enzyme and Microbial Technology</i> , 2001 , 28, 389-396	3.7	80
438	Structural and functional stabilization of L-asparaginase via multisubunit immobilization onto highly activated supports. <i>Biotechnology Progress</i> , 2001 , 17, 537-42	2.8	80
437	Immobilization of lactase from <i>Kluyveromyces lactis</i> greatly reduces the inhibition promoted by glucose. full hydrolysis of lactose in milk. <i>Biotechnology Progress</i> , 2004 , 20, 1259-62	2.8	79
436	Improved catalytic properties of immobilized lipases by the presence of very low concentrations of detergents in the reaction medium. <i>Biotechnology and Bioengineering</i> , 2007 , 97, 242-50	4.7	78
435	Reversible immobilization of a thermophilic β -galactosidase via ionic adsorption on PEI-coated Sepabeads. <i>Enzyme and Microbial Technology</i> , 2003 , 32, 369-374	3.7	77
434	Enzyme reaction engineering: synthesis of antibiotics catalysed by stabilized penicillin G acylase in the presence of organic cosolvents. <i>Enzyme and Microbial Technology</i> , 1991 , 13, 898-905	3.7	78
433	Improved production of biolubricants from soybean oil and different polyols via esterification reaction catalyzed by immobilized lipase from <i>Candida rugosa</i> . <i>Fuel</i> , 2018 , 215, 705-713	7	77
432	Bovine trypsin immobilization on agarose activated with divinylsulfone: Improved activity and stability via multipoint covalent attachment. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015 , 117, 38-44		76
431	Improvement of the stability of alcohol dehydrogenase by covalent immobilization on glyoxyl-agarose. <i>Journal of Biotechnology</i> , 2006 , 125, 85-94	3	76
430	Preparation of inert magnetic nano-particles for the directed immobilization of antibodies. <i>Biosensors and Bioelectronics</i> , 2005 , 20, 1380-7	11.6	75
429	Preparation of a stable biocatalyst of bovine liver catalase using immobilization and postimmobilization techniques. <i>Biotechnology Progress</i> , 2003 , 19, 763-7	2.8	74
428	One-step purification, covalent immobilization, and additional stabilization of a thermophilic poly-His-tagged beta-galactosidase from <i>Thermus</i> sp. strain T2 by using novel heterofunctional chelate-epoxy Sepabeads. <i>Biomacromolecules</i> , 2003 , 4, 107-13	6.7	75
427	Kinetic resolution of drug intermediates catalyzed by lipase B from <i>Candida antarctica</i> immobilized on imobead-350. <i>Biotechnology Progress</i> , 2018 , 34, 878-889	2.8	74
426	Reversible and strong immobilization of proteins by ionic exchange on supports coated with sulfate-dextran. <i>Biotechnology Progress</i> , 2004 , 20, 1134-9	2.8	74
425	A novel heterofunctional epoxy-amino sepabeads for a new enzyme immobilization protocol: immobilization-stabilization of beta-galactosidase from <i>Aspergillus oryzae</i> . <i>Biotechnology Progress</i> , 2003 , 19, 1056-60	2.8	74

424	Chitosan activated with divinyl sulfone: a new heterofunctional support for enzyme immobilization. Application in the immobilization of lipase B from <i>Candida antarctica</i> . <i>International Journal of Biological Macromolecules</i> , 2019 , 130, 798-809	7.7	73
423	High stability of immobilized ED-galactosidase for lactose hydrolysis and galactooligosaccharides synthesis. <i>Carbohydrate Polymers</i> , 2013 , 95, 465-70	10.1	73
422	Design of a lipase-nano particle biocatalysts and its use in the kinetic resolution of medicament precursors. <i>Biochemical Engineering Journal</i> , 2017 , 125, 104-115	4.2	73
421	Biotransformations catalyzed by multimeric enzymes: stabilization of tetrameric ampicillin acylase permits the optimization of ampicillin synthesis under dissociation conditions. <i>Biomacromolecules</i> , 2001 , 2, 95-104	6.7	73
420	Improvement of the functional properties of a thermostable lipase from <i>alcaligenes</i> sp. via strong adsorption on hydrophobic supports. <i>Enzyme and Microbial Technology</i> , 2006 , 38, 975-980	3.7	71
419	Evaluation of divinylsulfone activated agarose to immobilize lipases and to tune their catalytic properties. <i>Process Biochemistry</i> , 2015 , 50, 918-927	4.7	70
418	Preparation of a very stable immobilized biocatalyst of glucose oxidase from <i>Aspergillus niger</i> . <i>Journal of Biotechnology</i> , 2006 , 121, 284-9	3	70
417	Reversible immobilization of invertase on Sepabeads coated with polyethyleneimine: optimization of the biocatalyst's stability. <i>Biotechnology Progress</i> , 2002 , 18, 1221-6	2.8	70
416	Use of dextrans as long and hydrophilic spacer arms to improve the performance of immobilized proteins acting on macromolecules. <i>Biotechnology and Bioengineering</i> , 1998 , 60, 518-23	4.7	70
415	Easy stabilization of interfacially activated lipases using heterofunctional divinyl sulfone activated-octyl agarose beads. Modulation of the immobilized enzymes by altering their nanoenvironment. <i>Process Biochemistry</i> , 2016 , 51, 865-874	4.7	68
414	Stabilization of a formate dehydrogenase by covalent immobilization on highly activated glyoxyl-agarose supports. <i>Biomacromolecules</i> , 2006 , 7, 669-73	6.7	68
413	Affinity chromatography of polyhistidine tagged enzymes. New dextran-coated immobilized metal ion affinity chromatography matrices for prevention of undesired multipoint adsorptions. <i>Journal of Chromatography A</i> , 2001 , 915, 97-106	4.3	68
412	Stabilization of heterodimeric enzyme by multipoint covalent immobilization: Penicillin G acylase from <i>Kluyvera citrophila</i> . <i>Biotechnology and Bioengineering</i> , 1993 , 42, 455-64	4.7	68
411	Accurel MP 1000 as a support for the immobilization of lipase from <i>Burkholderia cepacia</i> : Application to the kinetic resolution of myo -inositol derivatives. <i>Process Biochemistry</i> , 2015 , 50, 1557-1564	4.7	67
410	Evaluation of different enzymes as catalysts for the production of β -lactam antibiotics following a kinetically controlled strategy. <i>Enzyme and Microbial Technology</i> , 1999 , 25, 336-343	3.7	67
409	The presence of methanol exerts a strong and complex modulation of the synthesis of different antibiotics by immobilized penicillin G acylase. <i>Enzyme and Microbial Technology</i> , 1998 , 23, 305-310	3.7	67
408	Optimization of ethyl ester production from olive and palm oils using mixtures of immobilized lipases. <i>Applied Catalysis A: General</i> , 2015 , 490, 50-56	5.1	65
407	Optimized preparation of CALB-CLEAs by response surface methodology: The necessity to employ a feeder to have an effective crosslinking. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012 , 80, 7-14		65

406	Purification, immobilization, and stabilization of a lipase from <i>Bacillus thermocatenulatus</i> by interfacial adsorption on hydrophobic supports. <i>Biotechnology Progress</i> , 2004 , 20, 630-5	2.8	65
405	Prevention of interfacial inactivation of enzymes by coating the enzyme surface with dextran-aldehyde. <i>Journal of Biotechnology</i> , 2004 , 110, 201-7	3	64
404	Effect of chemical modification of Novozym 435 on its performance in the alcoholysis of camelina oil. <i>Biochemical Engineering Journal</i> , 2016 , 111, 75-86	4.2	64
403	Combi-lipase for heterogeneous substrates: a new approach for hydrolysis of soybean oil using mixtures of biocatalysts. <i>RSC Advances</i> , 2014 , 4, 6863-6868	3.6	64
402	Use of aqueous two-phase systems for in situ extraction of water soluble antibiotics during their synthesis by enzymes immobilized on porous supports 1998 , 59, 73-79		63
401	Immobilization of CALB on activated chitosan: Application to enzymatic synthesis in supercritical and near-critical carbon dioxide. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2017 , 14, 16-26	5.2	63
400	Stabilization of different alcohol oxidases via immobilization and post immobilization techniques. <i>Enzyme and Microbial Technology</i> , 2007 , 40, 278-284	3.7	62
399	Determination of protein-protein interactions through aldehyde-dextran intermolecular cross-linking. <i>Proteomics</i> , 2004 , 4, 2602-7	4.1	63
398	Preparation of a robust biocatalyst of d-amino acid oxidase on sepabeads supports using the glutaraldehyde crosslinking method. <i>Enzyme and Microbial Technology</i> , 2005 , 37, 750-756	3.7	63
397	Selective adsorption of poly-His tagged glutaryl acylase on tailor-made metal chelate supports. <i>Journal of Chromatography A</i> , 1999 , 848, 61-70	4.3	63
396	Ultrasound technology and molecular sieves improve the thermodynamically controlled esterification of butyric acid mediated by immobilized lipase from <i>Rhizomucor miehei</i> . <i>RSC Advances</i> , 2014 , 4, 8675	3.6	62
395	Two step ethanolysis: A simple and efficient way to improve the enzymatic biodiesel synthesis catalyzed by an immobilized lipase from <i>Thermomyces lanuginosus</i> . <i>Process Biochemistry</i> , 2010 , 45, 1268-1273	4.7	62
394	Ion exchange using poorly activated supports, an easy way for purification of large proteins. <i>Journal of Chromatography A</i> , 2004 , 1034, 155-9	4.3	62
393	Synthesis of antibiotics (cephaloglycin) catalyzed by penicillin G acylase: Evaluation and optimization of different synthetic approaches. <i>Enzyme and Microbial Technology</i> , 1996 , 19, 9-14	3.7	62
392	Preparation of core-shell polymer supports to immobilize lipase B from <i>Candida antarctica</i> . <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014 , 100, 59-67		61
391	Immobilization of lipases on glyoxyl-ethyl supports: Improved stability and reactivation strategies. <i>Process Biochemistry</i> , 2015 , 50, 1211-1217	4.7	60
390	Modulation of Immobilized Lipase Enantioselectivity via Chemical Amination. <i>Advanced Synthesis and Catalysis</i> , 2007 , 349, 1119-1127	5.5	59
389	Preparation of new lipases derivatives with high activity and stability in anhydrous media: adsorption on hydrophobic supports plus hydrophilization with polyethylenimine. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2001 , 11, 817-824		59

388	Evaluation of different immobilized lipases in transesterification reactions using tributyrin: Advantages of the heterofunctional octyl agarose beads. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016 , 133, 117-123		59
387	New Trends in the Recycling of NAD(P)H for the Design of Sustainable Asymmetric Reductions Catalyzed by Dehydrogenases. <i>Current Organic Chemistry</i> , 2010 , 14, 1000-1021	1.6	59
386	Synthesis of enantiomerically pure glycidol via a fully enantioselective lipase-catalyzed resolution. <i>Tetrahedron: Asymmetry</i> , 2005 , 16, 869-874		59
385	Comparison of acid, basic and enzymatic catalysis on the production of biodiesel after RSM optimization. <i>Renewable Energy</i> , 2019 , 135, 1-9	8	59
384	Effect of lipase-lipase interactions in the activity, stability and specificity of a lipase from <i>Alcaligenes sp.</i> . <i>Enzyme and Microbial Technology</i> , 2006 , 39, 259-264	3.7	57
383	Hydrolysis of proteins by immobilized-stabilized alcalase-glyoxyl agarose. <i>Biotechnology Progress</i> , 2003 , 19, 352-60	2.8	58
382	Evaluation of different commercial hydrophobic supports for the immobilization of lipases: tuning their stability, activity and specificity. <i>RSC Advances</i> , 2016 , 6, 100281-100294	3.6	57
381	Tuning the catalytic properties of lipases immobilized on divinylsulfone activated agarose by altering its nanoenvironment. <i>Enzyme and Microbial Technology</i> , 2015 , 77, 1-7	3.7	57
380	Reversible immobilization of lipases on octyl-glutamic agarose beads: A mixed adsorption that reinforces enzyme immobilization. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016 , 128, 10-18		56
379	Fructooligosaccharides synthesis by highly stable immobilized β -fructofuranosidase from <i>Aspergillus aculeatus</i> . <i>Carbohydrate Polymers</i> , 2014 , 103, 193-7	10.1	57
378	Detecting minimal traces of DNA using DNA covalently attached to superparamagnetic nanoparticles and direct PCR-ELISA. <i>Biosensors and Bioelectronics</i> , 2006 , 21, 1574-80	11.6	57
377	Preparation of artificial hyper-hydrophilic micro-environments (polymeric salts) surrounding enzyme molecules. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2002 , 19-20, 295-303		56
376	Improved immobilization and stabilization of lipase from <i>Rhizomucor miehei</i> on octyl-glyoxyl agarose beads by using CaCl ₂ . <i>Process Biochemistry</i> , 2016 , 51, 48-52	4.7	56
375	Versatility of divinylsulfone supports permits the tuning of CALB properties during its immobilization. <i>RSC Advances</i> , 2015 , 5, 35801-35810	3.6	56
374	Cashew apple bagasse as a support for the immobilization of lipase B from <i>Candida antarctica</i> : Application to the chemoenzymatic production of (R)-Indanol. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016 , 130, 58-69		56
373	Modulation of the properties of immobilized CALB by chemical modification with 2,3,4-trinitrobenzenesulfonate or ethylenediamine. Advantages of using adsorbed lipases on hydrophobic supports. <i>Process Biochemistry</i> , 2012 , 47, 867-876	4.7	55
372	Influence of the enzyme derivative preparation and substrate structure on the enantioselectivity of penicillin G acylase. <i>Enzyme and Microbial Technology</i> , 2002 , 31, 88-93	3.7	56
371	Stabilization of dimeric β -glucosidase from <i>Aspergillus niger</i> via glutaraldehyde immobilization under different conditions. <i>Enzyme and Microbial Technology</i> , 2018 , 110, 38-45	3.7	55

370	Immobilization of lipase B from <i>Candida antarctica</i> on porous styrene-divinylbenzene beads improves butyl acetate synthesis. <i>Biotechnology Progress</i> , 2012 , 28, 406-12	2.8	55
369	Effect of the immobilization protocol on the properties of lipase B from <i>Candida antarctica</i> in organic media: Enantiospecific production of atenolol acetate. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2011 , 71, 124-132		54
368	Immobilization and stabilization of glutaryl acylase on aminated sephabeads supports by the glutaraldehyde crosslinking method. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2005 , 35, 57-61		54
367	Hyperstabilization of a thermophilic esterase by multipoint covalent attachment. <i>Enzyme and Microbial Technology</i> , 1995 , 17, 366-372	3.7	55
366	High operational stability of invertase from <i>Saccharomyces cerevisiae</i> immobilized on chitosan nanoparticles. <i>Carbohydrate Polymers</i> , 2013 , 92, 462-8	10.1	54
365	Chemical amination of lipases improves their immobilization on octyl-glyoxyl agarose beads. <i>Catalysis Today</i> , 2016 , 259, 107-118	5.2	54
364	Evaluation of different immobilization strategies to prepare an industrial biocatalyst of formate dehydrogenase from <i>Candida boidinii</i> . <i>Enzyme and Microbial Technology</i> , 2007 , 40, 540-546	3.7	54
363	Regio-selective deprotection of peracetylated sugars via lipase hydrolysis. <i>Tetrahedron</i> , 2003 , 59, 5705-5711	5.1	54
362	Comparison of the immobilization of lipase from <i>Pseudomonas fluorescens</i> on divinylsulfone or p-benzoquinone activated support. <i>International Journal of Biological Macromolecules</i> , 2019 , 134, 936-945	7.7	53
361	New applications of glyoxyl-octyl agarose in lipases co-immobilization: Strategies to reuse the most stable lipase. <i>International Journal of Biological Macromolecules</i> , 2019 , 131, 989-997	7.7	53
360	Enzyme co-immobilization: Always the biocatalyst designers' choice or not?. <i>Biotechnology Advances</i> , 2021 , 51, 107584	17.3	50
359	Use of physicochemical tools to determine the choice of optimal enzyme: stabilization of D-amino acid oxidase. <i>Biotechnology Progress</i> , 2003 , 19, 784-8	2.8	53
358	Glutaraldehyde modification of lipases adsorbed on aminated supports: A simple way to improve their behaviour as enantioselective biocatalyst. <i>Enzyme and Microbial Technology</i> , 2007 , 40, 704-707	3.7	52
357	One-Pot Chemoenzymatic Synthesis of 3-Functionalized Cephalosporines (Cefazolin) by Three Consecutive Biotransformations in Fully Aqueous Medium. <i>Journal of Organic Chemistry</i> , 1997 , 62, 9099-9106	4.1	51
356	A criterion for the selection of monophasic solvents for enzymatic synthesis. <i>Enzyme and Microbial Technology</i> , 1998 , 23, 64-69	3.7	51
355	Transesterification of Waste Frying Oil and Soybean Oil by Combi-lipases Under Ultrasound-Assisted Reactions. <i>Applied Biochemistry and Biotechnology</i> , 2018 , 186, 576-589	3.1	50
354	Design of a core-shell support to improve lipase features by immobilization. <i>RSC Advances</i> , 2016 , 6, 62814-62824	3.0	50
353	Tuning of Lecitase features via solid-phase chemical modification: Effect of the immobilization protocol. <i>Process Biochemistry</i> , 2014 , 49, 604-616	4.7	50

352	Immobilization of Proteins in Poly-Styrene-Divinylbenzene Matrices: Functional Properties and Applications. <i>Current Organic Chemistry</i> , 2015 , 19, 1707-1718	1.6	50
351	Improvement of the enantioselectivity of lipase (fraction B) from <i>Candida antarctica</i> via adsorption on polyethylenimine-agarose under different experimental conditions. <i>Enzyme and Microbial Technology</i> , 2006 , 39, 167-171	3.7	49
350	Design of an immobilized preparation of catalase from <i>Thermus thermophilus</i> to be used in a wide range of conditions.: Structural stabilization of a multimeric enzyme. <i>Enzyme and Microbial Technology</i> , 2003 , 33, 278-285	3.7	49
349	The Protagonism of Biocatalysis in Green Chemistry and Its Environmental Benefits. <i>Catalysts</i> , 2017 , 7, 9	3.9	49
348	Preparation and characterization of a Combi-CLEAs from pectinases and cellulases: a potential biocatalyst for grape juice clarification. <i>RSC Advances</i> , 2016 , 6, 27242-27251	3.6	47
347	Operational stabilities of different chemical derivatives of Novozym 435 in an alcoholysis reaction. <i>Enzyme and Microbial Technology</i> , 2016 , 90, 35-44	3.7	48
346	Effect of immobilization protocol on optimal conditions of ethyl butyrate synthesis catalyzed by lipase B from <i>Candida antarctica</i> . <i>Journal of Chemical Technology and Biotechnology</i> , 2013 , 88, 1089-1095 ^{3,4}	3.4	49
345	Chemical amination of lipase B from <i>Candida antarctica</i> is an efficient solution for the preparation of crosslinked enzyme aggregates. <i>Process Biochemistry</i> , 2012 , 47, 2373-2378	4.7	49
344	The slow-down of the CALB immobilization rate permits to control the inter and intra molecular modification produced by glutaraldehyde. <i>Process Biochemistry</i> , 2012 , 47, 766-774	4.7	49
343	Physical crosslinking of lipase from <i>Rhizomucor miehei</i> immobilized on octyl agarose via coating with ionic polymers. <i>Process Biochemistry</i> , 2017 , 54, 81-88	4.7	49
342	Purification and stabilization of a glutamate dehydrogenase from <i>Thermus thermophilus</i> via oriented multisubunit plus multipoint covalent immobilization. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2009 , 58, 158-163		49
341	Stabilization of enzymes (D-amino acid oxidase) against hydrogen peroxide via immobilization and post-immobilization techniques. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 1999 , 7, 173-179		48
340	Additional stabilization of penicillin G acylase-agarose derivatives by controlled chemical modification with formaldehyde. <i>Enzyme and Microbial Technology</i> , 1992 , 14, 489-95	3.7	49
339	Comparison of the performance of commercial immobilized lipases in the synthesis of different flavor esters. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014 , 105, 18-25		47
338	Design of new immobilized-stabilized carboxypeptidase a derivative for production of aromatic free hydrolysates of proteins. <i>Biotechnology Progress</i> , 2003 , 19, 565-74	2.8	47
337	Biocatalyst engineering exerts a dramatic effect on selectivity of hydrolysis catalyzed by immobilized lipases in aqueous medium. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2001 , 11, 649-656		48
336	Enzymatic esterification of palm fatty-acid distillate for the production of polyol esters with biolubricant properties. <i>Industrial Crops and Products</i> , 2018 , 116, 90-96	5.8	47
335	Reversible Immobilization of Lipases on Heterofunctional Octyl-Amino Agarose Beads Prevents Enzyme Desorption. <i>Molecules</i> , 2016 , 21,	4.7	47

334	Improving the catalytic properties of immobilized Lecitase via physical coating with ionic polymers. <i>Enzyme and Microbial Technology</i> , 2014 , 60, 1-8	3-7	47
333	Glyoxyl agarose as a new chromatographic matrix. <i>Enzyme and Microbial Technology</i> , 2006 , 38, 960-966	3-7	47
332	Advantages of the pre-immobilization of enzymes on porous supports for their entrapment in sol-gels. <i>Biomacromolecules</i> , 2005 , 6, 1027-30	6-7	47
331	Immobilization and stabilization of recombinant multimeric uridine and purine nucleoside phosphorylases from <i>Bacillus subtilis</i> . <i>Biomacromolecules</i> , 2004 , 5, 2195-200	6-7	47
330	Selective oxidation: stabilisation by multipoint attachment of ferredoxin NADP+ reductase, an interesting cofactor recycling enzyme. <i>Journal of Molecular Catalysis A</i> , 1995 , 98, 161-169		47
329	Immobilization/Stabilization of Ficin Extract on Glutaraldehyde-Activated Agarose Beads. Variables That Control the Final Stability and Activity in Protein Hydrolyses. <i>Catalysts</i> , 2018 , 8, 149	3-9	48
328	Immobilization of Lipase A from onto Chitosan-Coated Magnetic Nanoparticles. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.1	45
327	Ion exchange of β galactosidase: The effect of the immobilization pH on enzyme stability. <i>Process Biochemistry</i> , 2016 , 51, 875-880	4-7	46
326	Reuse of anion exchangers as supports for enzyme immobilization: Reinforcement of the enzyme-support multiinteraction after enzyme inactivation. <i>Process Biochemistry</i> , 2016 , 51, 1391-1396	4-7	46
325	Purification and very strong reversible immobilization of large proteins on anionic exchangers by controlling the support and the immobilization conditions. <i>Enzyme and Microbial Technology</i> , 2006 , 39, 909-915	3-7	46
324	Electrostatic and covalent immobilisation of enzymes on ITQ-6 delaminated zeolitic materials. <i>Chemical Communications</i> , 2001 , 419-420	5-7	47
323	Immobilization and stabilization of different β glucosidases using the glutaraldehyde chemistry: Optimal protocol depends on the enzyme. <i>International Journal of Biological Macromolecules</i> , 2019 , 129, 672-678	7-7	45
322	Improved stability of immobilized lipases via modification with polyethylenimine and glutaraldehyde. <i>Enzyme and Microbial Technology</i> , 2017 , 106, 67-74	3-7	44
321	Lipase B from <i>Candida antarctica</i> immobilized on octadecyl Sepabeads: A very stable biocatalyst in the presence of hydrogen peroxide. <i>Process Biochemistry</i> , 2011 , 46, 873-878	4-7	45
320	Purification of different lipases from <i>Aspergillus niger</i> by using a highly selective adsorption on hydrophobic supports. <i>Biotechnology and Bioengineering</i> , 2005 , 92, 773-9	4-7	44
319	One-Pot Conversion of Cephalosporin C to 7-Aminocephalosporanic Acid in the Absence of Hydrogen Peroxide. <i>Advanced Synthesis and Catalysis</i> , 2005 , 347, 1804-1810	5-5	44
318	Continuous production of β cyclodextrin from starch by highly stable cyclodextrin glycosyltransferase immobilized on chitosan. <i>Carbohydrate Polymers</i> , 2013 , 98, 1311-6	10.1	42
317	Stabilizing hyperactivated lecithase structures through physical treatment with ionic polymers. <i>Process Biochemistry</i> , 2014 , 49, 1511-1515	4-7	42

316	Hydrolysis of triacetin catalyzed by immobilized lipases: effect of the immobilization protocol and experimental conditions on diacetin yield. <i>Enzyme and Microbial Technology</i> , 2011 , 48, 510-7	3-7	43
315	Stabilization of a multimeric beta-galactosidase from <i>Thermus</i> sp. strain T2 by immobilization on novel heterofunctional epoxy supports plus aldehyde-dextran cross-linking. <i>Biotechnology Progress</i> , 2004 , 20, 388-92	2-8	42
314	Influence of the raw material on the final properties of biodiesel produced using lipase from <i>Rhizomucor miehei</i> grown on babassu cake as biocatalyst of esterification reactions. <i>Renewable Energy</i> , 2017 , 113, 112-118	8	43
313	Enhancement of Novozym-435 catalytic properties by physical or chemical modification. <i>Process Biochemistry</i> , 2009 , 44, 226-231	4-7	43
312	Crosslinked penicillin acylase aggregates for synthesis of beta-lactam antibiotics in organic medium. <i>Applied Biochemistry and Biotechnology</i> , 2006 , 133, 189-202	3-1	43
311	Optimization of an industrial biocatalyst of glutaryl acylase: stabilization of the enzyme by multipoint covalent attachment onto new amino-epoxy Sepabeads. <i>Journal of Biotechnology</i> , 2004 , 111, 219-27	3	42
310	Production of lipases in cottonseed meal and application of the fermented solid as biocatalyst in esterification and transesterification reactions. <i>Renewable Energy</i> , 2019 , 130, 574-581	8	42
309	Evaluation of styrene-divinylbenzene beads as a support to immobilize lipases. <i>Molecules</i> , 2014 , 19, 7629-45	4-5	43
308	Lecitase [®] ultra as regioselective biocatalyst in the hydrolysis of fully protected carbohydrates. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2008 , 51, 110-117		42
307	Chemical modification of protein surfaces to improve their reversible enzyme immobilization on ionic exchangers. <i>Biomacromolecules</i> , 2006 , 7, 3052-8	6-7	42
306	Synthesis of 2'-Deoxynucleosides by Transglycosylation with New Immobilized and Stabilized Uridine Phosphorylase and Purine Nucleoside Phosphorylase. <i>Advanced Synthesis and Catalysis</i> , 2004 , 346, 1361-1366	5-5	42
305	Equilibrium controlled synthesis of cephalothin in water-cosolvent systems by stabilized penicillin G acylase. <i>Applied Biochemistry and Biotechnology</i> , 1991 , 27, 277-290	3-1	42
304	Dynamic reaction design of enzymic biotransformations in organic media: equilibrium-controlled synthesis of antibiotics by penicillin G acylase. <i>Biotechnology and Applied Biochemistry</i> , 1996 , 24, 139-43	2-7	42
303	Synthesis of butyl butyrate in batch and continuous enzymatic reactors using <i>Thermomyces lanuginosus</i> lipase immobilized in Immobead 150. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016 , 127, 67-75		41
302	Bioprocess development for biolubricant production using microbial oil derived via fermentation from confectionery industry wastes. <i>Bioresource Technology</i> , 2018 , 267, 311-318	11	41
301	Exploiting the Versatility of Aminated Supports Activated with Glutaraldehyde to Immobilize Galactosidase from <i>Aspergillus oryzae</i> . <i>Catalysts</i> , 2017 , 7, 250	3-9	41
300	Optimization of the immobilization of sweet potato amylase using glutaraldehyde-agarose support. Characterization of the immobilized enzyme. <i>Process Biochemistry</i> , 2013 , 48, 1054-1058	4-7	41
299	Optimization of synthesis of fatty acid methyl esters catalyzed by lipase B from <i>Candida antarctica</i> immobilized on hydrophobic supports. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2013 , 94, 51-56		41

298	Covalent immobilization of antibodies on finally inert support surfaces through their surface regions having the highest densities in carboxyl groups. <i>Biomacromolecules</i> , 2008 , 9, 2230-6	6.7	41
297	Stabilization of ficin extract by immobilization on glyoxyl agarose. Preliminary characterization of the biocatalyst performance in hydrolysis of proteins. <i>Process Biochemistry</i> , 2017 , 58, 98-104	4.7	41
296	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. <i>Enzyme and Microbial Technology</i> , 2009 , 45, 477-483	3.7	41
295	Reversible immobilization of glucoamylase by ionic adsorption on sephabeads coated with polyethyleneimine. <i>Biotechnology Progress</i> , 2004 , 20, 1297-300	2.8	41
294	Stabilizing effects of cations on lipases depend on the immobilization protocol. <i>RSC Advances</i> , 2015 , 5, 83868-83875	3.6	40
293	Enzymatic production and characterization of potential biolubricants from castor bean biodiesel. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015 , 122, 323-329		40
292	Stabilization of the hexameric glutamate dehydrogenase from <i>Escherichia coli</i> by cations and polyethyleneimine. <i>Enzyme and Microbial Technology</i> , 2013 , 52, 211-7	3.7	40
291	Immobilization-stabilization of a new recombinant glutamate dehydrogenase from <i>Thermus thermophilus</i> . <i>Applied Microbiology and Biotechnology</i> , 2008 , 80, 49-58	5.6	40
290	Coimmobilization of enzymes in bilayers using pei as a glue to reuse the most stable enzyme: Preventing pei release during inactivated enzyme desorption. <i>Process Biochemistry</i> , 2017 , 61, 95-101	4.7	40
289	Regioselective Hydrolysis of Different Peracetylated Monosaccharides by Immobilized Lipases from Different Sources. Key Role of The Immobilization. <i>Advanced Synthesis and Catalysis</i> , 2007 , 349, 1969-1976	5.5	40
288	Effect of the immobilization protocol in the activity, stability, and enantioselectivity of Lecitase [®] Ultra. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2007 , 47, 99-104		40
287	Enzymatic resolution of (-)-glycidyl butyrate in aqueous media. Strong modulation of the properties of the lipase from <i>Rhizopus oryzae</i> via immobilization techniques. <i>Tetrahedron: Asymmetry</i> , 2004 , 15, 1157-1161		40
286	Pectin lyase immobilization using the glutaraldehyde chemistry increases the enzyme operation range. <i>Enzyme and Microbial Technology</i> , 2020 , 132, 109397	3.7	39
285	<i>Thermus thermophilus</i> as a cell factory for the production of a thermophilic Mn-dependent catalase which fails to be synthesized in an active form in <i>Escherichia coli</i> . <i>Applied and Environmental Microbiology</i> , 2004 , 70, 3839-44	4.6	39
284	Enzymatic production of (3S,4R)-4-(4-fluorophenyl)-6-oxo-piperidin-3-carboxylic acid using a commercial preparation from <i>Candida antarctica</i> A: the role of a contaminant esterase. <i>Tetrahedron: Asymmetry</i> , 2002 , 13, 2653-2659		39
283	Meta-pathway degradation of phenolics by thermophilic Bacilli. <i>Enzyme and Microbial Technology</i> , 1998 , 23, 462-468	3.7	39
282	Magnetic biocatalysts of pectinase and cellulase: Synthesis and characterization of two preparations for application in grape juice clarification. <i>International Journal of Biological Macromolecules</i> , 2018 , 115, 35-44	7.7	38
281	Different strategies to immobilize lipase from <i>Geotrichum candidum</i> : Kinetic and thermodynamic studies. <i>Process Biochemistry</i> , 2018 , 67, 55-63	4.7	38

280	Use of Alcalase in the production of bioactive peptides: A review. <i>International Journal of Biological Macromolecules</i> , 2020 , 165, 2143-2196	7.7	39
279	Effects of Enzyme Loading and Immobilization Conditions on the Catalytic Features of Lipase From Immobilized on Octyl-Agarose Beads. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 36	5.6	38
278	The adsorption of multimeric enzymes on very lowly activated supports involves more enzyme subunits: Stabilization of a glutamate dehydrogenase from <i>Thermus thermophilus</i> by immobilization on heterofunctional supports. <i>Enzyme and Microbial Technology</i> , 2009 , 44, 139-144	3.7	38
277	Evaluation of the lipase from <i>Bacillus thermocatenuatus</i> as an enantioselective biocatalyst. <i>Tetrahedron: Asymmetry</i> , 2003 , 14, 3679-3687		38
276	Stabilization of Immobilized Enzymes Against Water-Soluble Organic Cosolvents and Generation of Hyper-Hydrophilic Micro-Environments Surrounding Enzyme Molecules. <i>Biocatalysis and Biotransformation</i> , 2001 , 19, 489-503	2.4	38
275	Stabilization of <i>Candida antarctica</i> Lipase B (CALB) Immobilized on Octyl Agarose by Treatment with Polyethyleneimine (PEI). <i>Molecules</i> , 2016 , 21,	4.7	37
274	Immobilization of <i>Yarrowia lipolytica</i> lipase--a comparison of stability of physical adsorption and covalent attachment techniques. <i>Applied Biochemistry and Biotechnology</i> , 2008 , 146, 49-56	3.1	36
273	A new bioprocess for the production of prebiotic lactosucrose by an immobilized β -galactosidase. <i>Process Biochemistry</i> , 2017 , 55, 96-103	4.7	36
272	The co-operative effect of physical and covalent protein adsorption on heterofunctional supports. <i>Process Biochemistry</i> , 2009 , 44, 757-763	4.7	37
271	Genetic modification of the penicillin G acylase surface to improve its reversible immobilization on ionic exchangers. <i>Applied and Environmental Microbiology</i> , 2007 , 73, 312-9	4.6	37
270	Overproduction of <i>Thermus</i> sp. Strain T2 beta-galactosidase in <i>Escherichia coli</i> and preparation by using tailor-made metal chelate supports. <i>Applied and Environmental Microbiology</i> , 2003 , 69, 1967-72	4.6	37
269	Different properties of the lipases contained in porcine pancreatic lipase extracts as enantioselective biocatalysts. <i>Biotechnology Progress</i> , 2004 , 20, 825-9	2.8	37
268	Covalent immobilisation of manganese peroxidases (MnP) from <i>Phanerochaete chrysosporium</i> and <i>Bjerkandera</i> sp. BOS55. <i>Enzyme and Microbial Technology</i> , 2003 , 32, 769-775	3.7	37
267	Immobilization of functionally unstable catechol-2,3-dioxygenase greatly improves operational stability. <i>Enzyme and Microbial Technology</i> , 2000 , 26, 568-573	3.7	37
266	Desorption of Lipases Immobilized on Octyl-Agarose Beads and Coated with Ionic Polymers after Thermal Inactivation. Stronger Adsorption of Polymers/Unfolded Protein Composites. <i>Molecules</i> , 2017 , 22,	4.7	36
265	Synthesis of Benzyl Acetate Catalyzed by Lipase Immobilized in Nontoxic Chitosan-Polyphosphate Beads. <i>Molecules</i> , 2017 , 22,	4.7	36
264	Combined effects of ultrasound and immobilization protocol on butyl acetate synthesis catalyzed by CALB. <i>Molecules</i> , 2014 , 19, 9562-76	4.7	37
263	New cationic exchanger support for reversible immobilization of proteins. <i>Biotechnology Progress</i> , 2004 , 20, 284-8	2.8	36

262	Mixed ion exchange supports as useful ion exchangers for protein purification: purification of penicillin G acylase from <i>Escherichia coli</i> . <i>Biomacromolecules</i> , 2007 , 8, 703-7	6.7	36
261	Modulation of the catalytic properties of multimeric β -galactosidase from <i>E. coli</i> by using different immobilization protocols. <i>Enzyme and Microbial Technology</i> , 2007 , 40, 310-315	3.7	36
260	Enzymatic resolution of (-)-trans-4-(4?-fluorophenyl)-6-oxo-piperidin-3-ethyl carboxylate, an intermediate in the synthesis of (S)-Paroxetine. <i>Tetrahedron: Asymmetry</i> , 2002 , 13, 2375-2381		35
259	Immobilization and stabilization of an endoxylanase from <i>Bacillus subtilis</i> (XynA) for xylooligosaccharides (XOs) production. <i>Catalysis Today</i> , 2016 , 259, 130-139	5.2	34
258	Liquid lipase preparations designed for industrial production of biodiesel. Is it really an optimal solution?. <i>Renewable Energy</i> , 2021 , 164, 1566-1587	8	35
257	Continuous production of fructooligosaccharides and invert sugar by chitosan immobilized enzymes: Comparison between in fluidized and packed bed reactors. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015 , 111, 51-55		34
256	Immobilization of Glycoside Hydrolase Families GH1, GH13, and GH70: State of the Art and Perspectives. <i>Molecules</i> , 2016 , 21,	4.7	34
255	Advantages of Heterofunctional Octyl Supports: Production of 1,2-Dibutyryn by Specific and Selective Hydrolysis of Tributyrin Catalyzed by Immobilized Lipases. <i>ChemistrySelect</i> , 2016 , 1, 3259-3270 ^{1.8}		34
254	Immobilization of Eversa Lipase on Octyl Agarose Beads and Preliminary Characterization of Stability and Activity Features. <i>Catalysts</i> , 2018 , 8, 511	3.9	34
253	Characterization of the catalytic properties of lipases from plant seeds for the production of concentrated fatty acids from different vegetable oils. <i>Industrial Crops and Products</i> , 2013 , 49, 462-470	5.8	34
252	One Pot Use of Combilipases for Full Modification of Oils and Fats: Multifunctional and Heterogeneous Substrates. <i>Catalysts</i> , 2020 , 10, 605	3.9	34
251	Two-step enzymatic production of environmentally friendly biolubricants using castor oil: Enzyme selection and product characterization. <i>Fuel</i> , 2017 , 202, 196-205	7	34
250	Purification and identification of different lipases contained in PPL commercial extracts: A minor contaminant is the main responsible of most esterase activity. <i>Enzyme and Microbial Technology</i> , 2006 , 39, 817-823	3.7	34
249	Enzymatic transformations. Immobilized <i>A. niger</i> epoxide hydrolase as a novel biocatalytic tool for repeated-batch hydrolytic kinetic resolution of epoxides. <i>Organic and Biomolecular Chemistry</i> , 2003 , 1, 2739-43	3.8	34
248	Improving the industrial production of 6-APA: enzymatic hydrolysis of penicillin G in the presence of organic solvents. <i>Biotechnology Progress</i> , 2003 , 19, 1639-42	2.8	34
247	'Interfacial affinity chromatography' of lipases: separation of different fractions by selective adsorption on supports activated with hydrophobic groups. <i>BBA - Proteins and Proteomics</i> , 1998 , 1388, 337-48		34
246	Purification and partial characterization of a novel thermophilic carboxylesterase with high mesophilic specific activity. <i>Enzyme and Microbial Technology</i> , 1995 , 17, 816-25	3.7	34
245	Effect of high salt concentrations on the stability of immobilized lipases: Dramatic deleterious effects of phosphate anions. <i>Process Biochemistry</i> , 2017 , 62, 128-134	4.7	33

244	Immobilization and stabilization of a cyclodextrin glycosyltransferase by covalent attachment on highly activated glyoxyl-agarose supports. <i>Biotechnology Progress</i> , 2006 , 22, 1140-5	2.8	33
243	Regioselective enzymatic hydrolysis of acetylated pyranoses and pyranosides using immobilised lipases. An easy chemoenzymatic synthesis of alpha- and beta-D-glucopyranose acetates bearing a free secondary C-4 hydroxyl group. <i>Carbohydrate Research</i> , 2002 , 337, 1615-21	2.8	33
242	Increasing the binding strength of proteins to PEI coated supports by immobilizing at high ionic strength. <i>Enzyme and Microbial Technology</i> , 2005 , 37, 295-299	3.7	33
241	The use of stabilised penicillin acylase derivatives improves the design of kinetically controlled synthesis. <i>Journal of Molecular Catalysis A</i> , 1995 , 101, 91-97		33
240	Optimization of the coating of octyl-CALB with ionic polymers to improve stability and decrease enzyme leakage. <i>Biocatalysis and Biotransformation</i> , 2018 , 36, 47-56	2.4	31
239	Further stabilization of lipase from <i>Pseudomonas fluorescens</i> immobilized on octyl coated nanoparticles via chemical modification with bifunctional agents. <i>International Journal of Biological Macromolecules</i> , 2019 , 141, 313-324	7.7	30
238	Improvement of pectinase, xylanase and cellulase activities by ultrasound: Effects on enzymes and substrates, kinetics and thermodynamic parameters. <i>Process Biochemistry</i> , 2017 , 61, 80-87	4.7	30
237	Production and characterization of biodiesel from oil of fish waste by enzymatic catalysis. <i>Renewable Energy</i> , 2020 , 153, 1346-1354	8	32
236	Immobilization of lipases via interfacial activation on hydrophobic supports: Production of biocatalysts libraries by altering the immobilization conditions. <i>Catalysis Today</i> , 2021 , 362, 130-140	5.2	31
235	Coimmobilization of L-asparaginase and glutamate dehydrogenase onto highly activated supports. <i>Enzyme and Microbial Technology</i> , 2001 , 28, 696-704	3.7	31
234	Stabilization of enzymes via immobilization: Multipoint covalent attachment and other stabilization strategies. <i>Biotechnology Advances</i> , 2021 , 52, 107821	17.3	31
233	Immobilization on octyl-agarose beads and some catalytic features of commercial preparations of lipase a from <i>Candida antarctica</i> (Novocor ADL): Comparison with immobilized lipase B from <i>Candida antarctica</i> . <i>Biotechnology Progress</i> , 2019 , 35, e2735	2.8	30
232	Support engineering: relation between development of new supports for immobilization of lipases and their applications. <i>Biotechnology Research and Innovation</i> , 2017 , 1, 26-34	8.9	30
231	Biotechnological relevance of the lipase A from <i>Candida antarctica</i> . <i>Catalysis Today</i> , 2021 , 362, 141-154	5.2	29
230	Positive effects of the multipoint covalent immobilization in the reactivation of partially inactivated derivatives of lipase from <i>Thermomyces lanuginosus</i> . <i>Enzyme and Microbial Technology</i> , 2009 , 44, 386-393	3.7	29
229	Chemo-biocatalytic regioselective one-pot synthesis of different deprotected monosaccharides. <i>Catalysis Today</i> , 2009 , 140, 11-18	5.2	30
228	Improved Stabilization of Genetically Modified Penicillin G Acylase in the Presence of Organic Cosolvents by Co- Immobilization of the Enzyme with Polyethyleneimine. <i>Advanced Synthesis and Catalysis</i> , 2007 , 349, 459-464	5.5	29
227	A controlled fed-batch cultivation for the production of new crude lipases from <i>Candida rugosa</i> with improved properties in fine chemistry. <i>Journal of Biotechnology</i> , 1999 , 69, 169-182	3	30

226	Stabilizing effect of penicillin G sulfoxide, a competitive inhibitor of penicillin G acylase: its practical applications. <i>Enzyme and Microbial Technology</i> , 1991 , 13, 210-4	3.7	30
225	Immobilization of lipase from <i>Pseudomonas fluorescens</i> on glyoxyl-octyl-agarose beads: Improved stability and reusability. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2019 , 1867, 741-747	3.8	29
224	Optimized immobilization of polygalacturonase from <i>Aspergillus niger</i> following different protocols: Improved stability and activity under drastic conditions. <i>International Journal of Biological Macromolecules</i> , 2019 , 138, 234-243	7.7	29
223	Enzymatic synthesis of ethyl esters from waste oil using mixtures of lipases in a plug-flow packed-bed continuous reactor. <i>Biotechnology Progress</i> , 2018 , 34, 952-959	2.8	28
222	Identification of Bioactive Compounds From <i>Vitis labrusca</i> L. Variety Concord Grape Juice Treated With Commercial Enzymes: Improved Yield and Quality Parameters. <i>Food and Bioprocess Technology</i> , 2016 , 9, 365-377	5	28
221	Evaluation of Strategies to Produce Highly Porous Cross-Linked Aggregates of Porcine Pancreas Lipase with Magnetic Properties. <i>Molecules</i> , 2018 , 23,	4.7	28
220	Effect of solid-phase chemical modification on the features of the lipase from <i>Thermomyces lanuginosus</i> . <i>Process Biochemistry</i> , 2012 , 47, 460-466	4.7	28
219	Optimization of pineapple flavour synthesis by esterification catalysed by immobilized lipase from <i>Rhizomucor miehei</i> . <i>Flavour and Fragrance Journal</i> , 2012 , 27, 196-200	2.4	28
218	Immobilization of an α -galactosidase from <i>Thermus</i> sp. strain T2 by covalent immobilization on highly activated supports: Selection of the optimal immobilization strategy. <i>Enzyme and Microbial Technology</i> , 2008 , 42, 265-271	3.7	28
217	Selective adsorption of large proteins on highly activated IMAC supports in the presence of high imidazole concentrations: Purification, reversible immobilization and stabilization of thermophilic β - and γ -galactosidases. <i>Enzyme and Microbial Technology</i> , 2007 , 40, 242-248	3.7	28
216	Immobilization of γ -galactosidase in glutaraldehyde-chitosan and its application to the synthesis of lactulose using cheese whey as feedstock. <i>Process Biochemistry</i> , 2018 , 73, 65-73	4.7	26
215	Tuning lipase B from <i>Candida antarctica</i> C α bond promiscuous activity by immobilization on poly-styrene-divinylbenzene beads. <i>RSC Advances</i> , 2014 , 4, 6219	3.6	27
214	Stabilization of the quaternary structure of a hexameric α -galactosidase from <i>Thermus</i> sp. T2 by immobilization and post-immobilization techniques. <i>Process Biochemistry</i> , 2008 , 43, 193-198	4.7	26
213	Partial and enantioselective hydrolysis of diethyl phenylmalonate by immobilized preparations of lipase from <i>Thermomyces lanuginosus</i> . <i>Enzyme and Microbial Technology</i> , 2007 , 40, 1280-1285	3.7	27
212	Directed covalent immobilization of aminated DNA probes on aminated plates. <i>Biomacromolecules</i> , 2004 , 5, 883-8	6.7	27
211	Modulation of the properties of penicillin G acylase by acyl donor substrates during n-protection of amino compounds. <i>Enzyme and Microbial Technology</i> , 1998 , 22, 583-587	3.7	27
210	Modification of Enzyme Properties by the use of Inhibitors During Their Stabilisation by Multipoint Covalent Attachment. <i>Biocatalysis and Biotransformation</i> , 1995 , 12, 67-76	2.4	27
209	Immobilization of the acylase from <i>Escherichia coli</i> on glyoxyl-agarose gives efficient catalyst for the synthesis of cephalosporins. <i>Enzyme and Microbial Technology</i> , 2008 , 42, 121-9	3.7	26

208	Purification, immobilization and stabilization of a highly enantioselective alcohol dehydrogenase from <i>Thermus thermophilus</i> HB27 cloned in <i>E. coli</i> . <i>Process Biochemistry</i> , 2009 , 44, 1004-1012	4.7	26
207	Enzymatic synthesis of amoxicillin: avoiding limitations of the mechanistic approach for reaction kinetics. <i>Biotechnology and Bioengineering</i> , 2002 , 80, 622-31	4.7	26
206	Improving the activity of lipases from thermophilic organisms at mesophilic temperatures for biotechnology applications. <i>Biomacromolecules</i> , 2004 , 5, 249-54	6.7	26
205	Evaluation of the performance of differently immobilized recombinant lipase B from <i>Candida antarctica</i> preparations for the synthesis of pharmacological derivatives in organic media. <i>RSC Advances</i> , 2016 , 6, 4043-4052	3.6	25
204	Reactivation of lipases by the unfolding and refolding of covalently immobilized biocatalysts. <i>RSC Advances</i> , 2015 , 5, 55588-55594	3.6	25
203	Ethyl Butyrate Synthesis Catalyzed by Lipases A and B from Immobilized onto Magnetic Nanoparticles. Improvement of Biocatalysts' Performance under Ultrasonic Irradiation. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.1	25
202	Genipin as An Emergent Tool in the Design of Biocatalysts: Mechanism of Reaction and Applications. <i>Catalysts</i> , 2019 , 9, 1035	3.9	25
201	Preparation of Magnetic Cross-Linked Amyloglucosidase Aggregates: Solving Some Activity Problems. <i>Catalysts</i> , 2018 , 8, 496	3.9	26
200	Immobilization of <i>Thermomyces lanuginosus</i> lipase by different techniques on Immobead 150 support: characterization and applications. <i>Applied Biochemistry and Biotechnology</i> , 2014 , 172, 2507-20	3.1	25
199	Modulating the properties of the lipase from <i>Thermomyces lanuginosus</i> immobilized on octyl agarose beads by altering the immobilization conditions. <i>Enzyme and Microbial Technology</i> , 2020 , 133, 109461	3.7	24
198	Improved reactivation of immobilized-stabilized lipase from <i>Thermomyces lanuginosus</i> by its coating with highly hydrophilic polymers. <i>Journal of Biotechnology</i> , 2009 , 144, 113-9	3	25
197	A new heterofunctional amino-vinyl sulfone support to immobilize enzymes: Application to the stabilization of β -galactosidase from <i>Aspergillus oryzae</i> . <i>Process Biochemistry</i> , 2018 , 64, 200-205	4.7	24
196	Multipoint covalent immobilization of lipases on aldehyde-activated support: Characterization and application in transesterification reaction. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2013 , 94, 57-62		24
195	Improved immobilization of lipase from <i>Thermomyces lanuginosus</i> on a new chitosan-based heterofunctional support: Mixed ion exchange plus hydrophobic interactions. <i>International Journal of Biological Macromolecules</i> , 2020 , 163, 550-561	7.7	24
194	Separation and immobilization of lipase from <i>Penicillium simplicissimum</i> by selective adsorption on hydrophobic supports. <i>Applied Biochemistry and Biotechnology</i> , 2009 , 156, 133-45	3.1	24
193	Penicillin G acylase catalyzed acylation of 7-ACA in aqueous two-phase systems using kinetically and thermodynamically controlled strategies: improved enzymatic synthesis of 7-[(1-hydroxy-1-phenyl)-acetamido]-3-acetoxymethyl- β -cephem-4-carboxylic acid. <i>Enzyme and Microbial Technology</i> , 2005 , 36, 672-679	3.7	24
192	Reuse of Lipase from <i>Pseudomonas fluorescens</i> via Its Step-by-Step Coimmobilization on Glyoxyl-Octyl Agarose Beads with Least Stable Lipases. <i>Catalysts</i> , 2019 , 9, 487	3.9	24
191	Reversible immobilization of a hexameric β -galactosidase from <i>Thermus</i> sp. strain T2 on polymeric ionic exchangers. <i>Process Biochemistry</i> , 2008 , 43, 1142-1146	4.7	24

190	Coimmobilization of different lipases: Simple layer by layer enzyme spatial ordering. <i>International Journal of Biological Macromolecules</i> , 2020 , 145, 856-864	7-7	22
189	Influence of phosphate anions on the stability of immobilized enzymes. Effect of enzyme nature, immobilization protocol and inactivation conditions. <i>Process Biochemistry</i> , 2020 , 95, 288-296	4-7	23
188	Resolution of (-)-5-substituted-6-(5-chloropyridin-2-yl)-7-oxo-5,6-dihydropyrrolo[3,4b]pyrazine derivatives-precursors of (S)-(+)-Zopiclone, catalyzed by immobilized <i>Candida antarctica</i> B lipase in aqueous media. <i>Tetrahedron: Asymmetry</i> , 2003 , 14, 429-438		23
187	Selective and mild adsorption of large proteins on lowly activated immobilized metal ion affinity chromatography matrices. Purification of multimeric thermophilic enzymes overexpressed in <i>Escherichia coli</i> . <i>Journal of Chromatography A</i> , 2004 , 1055, 93-8	4-3	23
186	Optimization of the modification of carrier proteins with aminated haptens. <i>Journal of Immunological Methods</i> , 2005 , 307, 144-9	2-4	23
185	A kinetic study of synthesis of amoxicillin using penicillin G acylase immobilized on agarose. <i>Applied Biochemistry and Biotechnology</i> , 2000 , 84-86, 931-45	3-1	23
184	Comparing methods of determining <i>Legionella</i> spp. in complex water matrices. <i>BMC Microbiology</i> , 2015 , 15, 91	4-3	23
183	Reversible immobilization of glutaryl acylase on sephabeads coated with polyethyleneimine. <i>Biotechnology Progress</i> , 2004 , 20, 533-6	2-8	22
182	Enzyme production of D-gluconic acid and glucose oxidase: successful tales of cascade reactions. <i>Catalysis Science and Technology</i> , 2020 , 10, 5740-5771	5-4	22
181	Enzyme Stabilization by Multipoint Covalent Attachment to Activated Pre-Existing Supports. <i>Studies in Organic Chemistry</i> , 1993 , 47, 55-62		22
180	Industrial design of enzymic processes catalysed by very active immobilized derivatives: utilization of diffusional limitations (gradients of pH) as a profitable tool in enzyme engineering. <i>Biotechnology and Applied Biochemistry</i> , 1994 , 20, 357-69	2-7	22
179	Optical fibre biosensors using enzymatic transducers to monitor glucose. <i>Measurement Science and Technology</i> , 2007 , 18, 3177-3186	1-9	22
178	Purification, stabilization, and concentration of very weak protein-protein complexes: Shifting the association equilibrium via complex selective adsorption on lowly activated supports. <i>Proteomics</i> , 2005 , 5, 4062-9	4-1	22
177	Immobilization of pectinase on chitosan-magnetic particles: Influence of particle preparation protocol on enzyme properties for fruit juice clarification. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2019 , 24, e00373	5-2	20
176	Influence of reaction parameters in the polymerization between genipin and chitosan for enzyme immobilization. <i>Process Biochemistry</i> , 2019 , 84, 73-80	4-7	21
175	Maltose Production Using Starch from Cassava Bagasse Catalyzed by Cross-Linked α -Amylase Aggregates. <i>Catalysts</i> , 2018 , 8, 170	3-9	22
174	Performance of Different Immobilized Lipases in the Syntheses of Short- and Long-Chain Carboxylic Acid Esters by Esterification Reactions in Organic Media. <i>Molecules</i> , 2018 , 23,	4-7	20
173	Pilot-scale development of core-shell polymer supports for the immobilization of recombinant lipase B from <i>Candida antarctica</i> and their application in the production of ethyl esters from residual fatty acids. <i>Journal of Applied Polymer Science</i> , 2018 , 135, 46727	2-8	21

172	Dextran Aldehyde in Biocatalysis: More Than a Mere Immobilization System. <i>Catalysts</i> , 2019 , 9, 622	3.9	20
171	Complete reactivation of immobilized derivatives of a trimeric glutamate dehydrogenase from <i>Thermus thermophilus</i> . <i>Process Biochemistry</i> , 2010 , 45, 107-113	4.7	21
170	Evaluation of Different Glutaryl Acylase Mutants to Improve the Hydrolysis of Cephalosporin C in the Absence of Hydrogen Peroxide. <i>Advanced Synthesis and Catalysis</i> , 2008 , 350, 343-348	5.5	21
169	Preparation of linear oligosaccharides by a simple monoprotective chemo-enzymatic approach. <i>Tetrahedron</i> , 2008 , 64, 9286-9292	2.3	21
168	Ficin: A protease extract with relevance in biotechnology and biocatalysis. <i>International Journal of Biological Macromolecules</i> , 2020 , 162, 394-404	7.7	20
167	Solid phase proteomics: dramatic reinforcement of very weak protein-protein interactions. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2007 , 849, 243-50	3.1	21
166	Detection of polyclonal antibody against any area of the protein-antigen using immobilized protein-antigens: the critical role of the immobilization protocol. <i>Biomacromolecules</i> , 2006 , 7, 540-4	6.7	21
165	Chemoenzymatic one-pot synthesis of cefazolin from cephalosporin C in fully aqueous medium, involving three consecutive biotransformations catalyzed by D-aminoacid oxidase, glutaryl acylase and penicillin G acylase. <i>Tetrahedron Letters</i> , 1997 , 38, 4693-4696	2	21
164	Lecitase ultra: A phospholipase with great potential in biocatalysis. <i>Molecular Catalysis</i> , 2019 , 473, 1104053	9.3	20
163	Improved features of a highly stable protease from <i>Penaeus vannamei</i> by immobilization on glutaraldehyde activated graphene oxide nanosheets. <i>International Journal of Biological Macromolecules</i> , 2019 , 130, 564-572	7.7	20
162	Supports coated with PEI as a new tool in chromatography. <i>Enzyme and Microbial Technology</i> , 2006 , 39, 711-716	3.7	20
161	Enantioselective enzymatic hydrolysis of racemic glycidyl esters by using immobilized porcine pancreas lipase with improved catalytic properties. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2001 , 11, 757-763		20
160	Immobilization of rennet from <i>Mucor miehei</i> via its sugar chain. Its use in milk coagulation. <i>Biomacromolecules</i> , 2004 , 5, 2029-33	6.7	20
159	Synergistic effects of Pectinex Ultra Clear and Lallzyme Beta on yield and bioactive compounds extraction of Concord grape juice. <i>LWT - Food Science and Technology</i> , 2016 , 72, 157-165	5.3	18
158	Rapid determination of the synthetic activity of lipases/esterases via transesterification and esterification zymography. <i>Fuel</i> , 2016 , 177, 123-129	7	19
157	Combi-CLEAs of Glucose Oxidase and Catalase for Conversion of Glucose to Gluconic Acid Eliminating the Hydrogen Peroxide to Maintain Enzyme Activity in a Bubble Column Reactor. <i>Catalysts</i> , 2019 , 9, 657	3.9	17
156	Production and immobilization of <i>Geotrichum candidum</i> lipase via physical adsorption on eco-friendly support: Characterization of the catalytic properties in hydrolysis and esterification reactions. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015 , 118, 43-51		18
155	Improving the Yields and Reaction Rate in the Ethanolysis of Soybean Oil by Using Mixtures of Lipase CLEAs. <i>Molecules</i> , 2019 , 24,	4.7	20

154	Regioselective monohydrolysis of per-O-acetylated-1-substituted-β-glucopyranosides catalyzed by immobilized lipases. <i>Tetrahedron</i> , 2008 , 64, 10721-10727	2.3	19
153	Enzymatic synthesis of neopentyl glycol-bases biolubricants using biodiesel from soybean and castor bean as raw materials. <i>Renewable Energy</i> , 2020 , 148, 689-696	8	19
152	Preparation of a very stable immobilized <i>Solanum tuberosum</i> epoxide hydrolase. <i>Tetrahedron: Asymmetry</i> , 2007 , 18, 1233-1238		18
151	Detection and purification of two antibody-antigen complexes via selective adsorption on lowly activated anion exchangers. <i>Journal of Chromatography A</i> , 2004 , 1059, 89-94	4.3	19
150	1,3-Regiospecific ethanolysis of soybean oil catalyzed by crosslinked porcine pancreas lipase aggregates. <i>Biotechnology Progress</i> , 2018 , 34, 910-920	2.8	18
149	Modulation of Lecitase properties via immobilization on differently activated Immobead-350: Stabilization and inversion of enantiospecificity. <i>Process Biochemistry</i> , 2019 , 87, 128-137	4.7	18
148	Increasing the Enzyme Loading Capacity of Porous Supports by a Layer-by-Layer Immobilization Strategy Using PEI as Glue. <i>Catalysts</i> , 2019 , 9, 576	3.9	18
147	Optimized butyl butyrate synthesis catalyzed by <i>Thermomyces lanuginosus</i> lipase. <i>Biotechnology Progress</i> , 2013 , 29, 1416-21	2.8	18
146	Asymmetric hydrolysis of dimethyl 3-phenylglutarate catalyzed by Lecitase Ultra [®] . <i>Enzyme and Microbial Technology</i> , 2008 , 43, 531-536	3.7	18
145	Oriented covalent immobilization of antibodies on physically inert and hydrophilic support surfaces through their glycosidic chains. <i>Biomacromolecules</i> , 2008 , 9, 719-23	6.7	18
144	Modulation of a lipase from <i>Staphylococcus warneri</i> EX17 using immobilization techniques. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2009 , 60, 125-132		18
143	The role of 6-aminopenicillanic acid on the kinetics of amoxicillin enzymatic synthesis catalyzed by penicillin G acylase immobilized onto glyoxyl-agarose. <i>Enzyme and Microbial Technology</i> , 2002 , 31, 464-477	2.7	18
142	Essential role of the concentration of immobilized ligands in affinity chromatography: purification of guanidinobenzoate on an ionized ligand. <i>Biomedical Applications</i> , 2000 , 740, 211-8		18
141	Selective synthesis of partial glycerides of conjugated linoleic acids via modulation of the catalytic properties of lipases by immobilization on different supports. <i>Food Chemistry</i> , 2018 , 245, 39-46	8.3	17
140	Kinetic characterization of carbonic anhydrase immobilized on magnetic nanoparticles as biocatalyst for CO ₂ capture. <i>Biochemical Engineering Journal</i> , 2018 , 138, 1-11	4.2	17
139	Solid phase chemical modification of agarose glyoxyl-ficin: Improving activity and stability properties by amination and modification with glutaraldehyde. <i>Process Biochemistry</i> , 2018 , 73, 109-116	4.7	17
138	Use of Lecitase-Ultra immobilized on styrene-divinylbenzene beads as catalyst of esterification reactions: Effects of ultrasounds. <i>Catalysis Today</i> , 2015 , 255, 27-32	5.2	17
137	Preparation of Crosslinked Enzyme Aggregates of a Thermostable Cyclodextrin Glucosyltransferase from <i>Thermoanaerobacter</i> sp. Critical Effect of the Crosslinking Agent. <i>Catalysts</i> , 2019 , 9, 120	3.9	17

136	Biotechnological prospects of the lipase from <i>Mucor javanicus</i> . <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2013 , 93, 34-43		17
135	Efficient purification-immobilization of an organic solvent-tolerant lipase from <i>Staphylococcus warneri</i> EX17 on porous styrene-divinylbenzene beads. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014 , 99, 51-55		17
134	Different derivatives of a lipase display different regioselectivity in the monohydrolysis of per-O-acetylated 1-O-substituted- β -galactopyranosides. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2009 , 58, 36-40		17
133	Unusual enzymatic resolution of (-)-glycidyl-butyrate for the production of (S)-glycidyl derivatives. <i>Enzyme and Microbial Technology</i> , 2006 , 38, 429-435	3.7	17
132	Enzymatic synthesis of cephalosporins. The immobilized acylase from <i>Arthrobacter viscosus</i> : a new useful biocatalyst. <i>Applied Microbiology and Biotechnology</i> , 2007 , 77, 579-87	5.6	17
131	A simple strategy for the purification of large thermophilic proteins overexpressed in mesophilic microorganisms: application to multimeric enzymes from <i>Thermus</i> sp. strain T2 expressed in <i>Escherichia coli</i> . <i>Biotechnology Progress</i> , 2004 , 20, 1507-11	2.8	17
130	Stabilization of a tetrameric enzyme (β -amino acid ester hydrolase from <i>Acetobacter turbidans</i>) enables a very improved performance of ampicillin synthesis. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2001 , 11, 633-638		17
129	Regioselective hydrolysis of peracetylated alpha-D-glycopyranose catalyzed by immobilized lipases in aqueous medium. A facile preparation of useful intermediates for oligosaccharide synthesis. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1999 , 9, 633-6	2.8	17
128	Immobilization of Lipases on Heterofunctional Octyl-Glyoxyl Agarose Supports: Improved Stability and Prevention of the Enzyme Desorption. <i>Methods in Enzymology</i> , 2016 , 571, 73-85	1.6	15
127	Simple strategy of reactivation of a partially inactivated penicillin G acylase biocatalyst in organic solvent and its impact on the synthesis of beta-lactam antibiotics. <i>Biotechnology and Bioengineering</i> , 2009 , 103, 472-9	4.7	16
126	Simple purification of immunoglobulins from whey proteins concentrate. <i>Biotechnology Progress</i> , 2006 , 22, 590-4	2.8	16
125	Influence of Substrate Structure on PGA-Catalyzed Acylations. Evaluation of Different Approaches for the Enzymatic Synthesis of Cefonicid. <i>Advanced Synthesis and Catalysis</i> , 2005 , 347, 121-128	5.5	16
124	Resolution of racemic mixtures by synthesis reactions catalyzed by immobilized derivatives of the enzyme penicillin G acylase. <i>Journal of Molecular Catalysis</i> , 1993 , 84, 365-371		16
123	Amination of ficin extract to improve its immobilization on glyoxyl-agarose: Improved stability and activity versus casein. <i>International Journal of Biological Macromolecules</i> , 2019 , 133, 412-419	7.7	15
122	Multipurpose fixed-bed bioreactor to simplify lipase production by solid-state fermentation and application in biocatalysis. <i>Biochemical Engineering Journal</i> , 2019 , 144, 1-7	4.2	15
121	Effect of feather meal as proteic feeder on combi-CLEAs preparation for grape juice clarification. <i>Process Biochemistry</i> , 2017 , 62, 122-127	4.7	14
120	Solid-phase modification with succinic polyethyleneglycol of aminated lipase B from <i>Candida antarctica</i> : Effect of the immobilization protocol on enzyme catalytic properties. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2013 , 87, 75-82		14
119	Use of glyoxyl-agarose immobilized ficin extract in milk coagulation: Unexpected importance of the ficin loading on the biocatalysts. <i>International Journal of Biological Macromolecules</i> , 2020 , 144, 419-426	7.7	15

118	Immobilized Biocatalysts of Eversa [®] Transform 2.0 and Lipase from <i>Thermomyces Lanuginosus</i> : Comparison of Some Properties and Performance in Biodiesel Production. <i>Catalysts</i> , 2020 , 10, 738	3.9	14
117	Adsorption behavior of bovine serum albumin on lowly activated anionic exchangers suggests a new strategy for solid-phase proteomics. <i>Biomacromolecules</i> , 2006 , 7, 1357-61	6.7	15
116	Fast immunosensing technique to detect <i>Legionella pneumophila</i> in different natural and anthropogenic environments: comparative and collaborative trials. <i>BMC Microbiology</i> , 2013 , 13, 88	4.3	14
115	Enzyme-Coated Micro-Crystals: An Almost Forgotten but Very Simple and Elegant Immobilization Strategy. <i>Catalysts</i> , 2020 , 10, 891	3.9	14
114	Enzymatic synthesis of biolubricants from by-product of soybean oil processing catalyzed by different biocatalysts of <i>Candida rugosa</i> lipase. <i>Catalysis Today</i> , 2021 , 362, 122-129	5.2	14
113	Immobilization of Eversa Transform via CLEA Technology Converts It in a Suitable Biocatalyst for Biolubricant Production Using Waste Cooking Oil. <i>Molecules</i> , 2021 , 26,	4.7	13
112	Resolution of paroxetine precursor using different lipases: Influence of the reaction conditions on the enantioselectivity of lipases. <i>Enzyme and Microbial Technology</i> , 2004 , 34, 264-269	3.7	14
111	Tuning dimeric formate dehydrogenases reduction/oxidation activities by immobilization. <i>Process Biochemistry</i> , 2019 , 85, 97-105	4.7	13
110	Preparation of an immobilized/stabilized catalase derivative from <i>Aspergillus niger</i> having its multimeric structure stabilized: The effect of Zn ²⁺ on enzyme stability. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2008 , 55, 142-145		13
109	Use of polyethylenimine to produce immobilized lipase multilayers biocatalysts with very high volumetric activity using octyl-agarose beads: Avoiding enzyme release during multilayer production. <i>Enzyme and Microbial Technology</i> , 2020 , 137, 109535	3.7	12
108	Stabilization of enzymes by multipoint attachment via reversible immobilization on phenylboronic activated supports. <i>Journal of Biotechnology</i> , 2005 , 120, 396-401	3	13
107	Reducing enzyme conformational flexibility by multi-point covalent immobilisation. <i>Biotechnology Letters</i> , 1995 , 9, 1-6		13
106	Heterogeneous Enzyme Kinetics 2008 , 155-203		13
105	Structural differences of commercial and recombinant lipase B from <i>Candida antarctica</i> : An important implication on enzymes thermostability. <i>International Journal of Biological Macromolecules</i> , 2019 , 140, 761-770	7.7	12
104	Cooperativity of covalent attachment and ion exchange on alcalase immobilization using glutaraldehyde chemistry: Enzyme stabilization and improved proteolytic activity. <i>Biotechnology Progress</i> , 2019 , 35, e2768	2.8	12
103	Synthesis of butyl esters via ultrasound-assisted transesterification of maca [®] (<i>Acrocomia aculeata</i>) acid oil using a biomass-derived fermented solid as biocatalyst. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016 , 133, S213-S219		12
102	Combination of ultrasound, enzymes and mechanical stirring: A new method to improve <i>Vitis vinifera</i> Cabernet Sauvignon must yield, quality and bioactive compounds. <i>Food and Bioprocess Processing</i> , 2017 , 105, 197-204	4.7	12
101	Further Stabilization of Alcalase Immobilized on Glyoxyl Supports: Amination Plus Modification with Glutaraldehyde. <i>Molecules</i> , 2018 , 23,	4.7	13

100	Solvent-free esterifications mediated by immobilized lipases: a review from thermodynamic and kinetic perspectives. <i>Catalysis Science and Technology</i> , 2021 , 11, 5696-5711	5.4	12
99	Effects of oxygen volumetric mass transfer coefficient and pH on lipase production by <i>Staphylococcus warneri</i> EX17. <i>Biotechnology and Bioprocess Engineering</i> , 2009 , 14, 105-111	3	12
98	ULTRASOUND-ASSISTED TRANSESTERIFICATION OF SOYBEAN OIL USING COMBI-LIPASE BIOCATALYSTS. <i>Brazilian Journal of Chemical Engineering</i> , 2019 , 36, 995-1005	1.6	12
97	Screening of lipases for regioselective hydrolysis of peracetylated β monosaccharides. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2007 , 49, 12-17		12
96	Enantioselective synthesis of phenylacetamides in the presence of high organic cosolvent concentrations catalyzed by stabilized penicillin G acylase. Effect of the acyl donor. <i>Biotechnology Progress</i> , 2004 , 20, 984-8	2.8	12
95	Inhibitory effects in the side reactions occurring during the enzymic synthesis of amoxicillin: p-hydroxyphenylglycine methyl ester and amoxicillin hydrolysis. <i>Biotechnology and Applied Biochemistry</i> , 2003 , 38, 77-85	2.7	12
94	Rapid and high yield production of phospholipids enriched in CLA via acidolysis: The critical role of the enzyme immobilization protocol. <i>Food Chemistry</i> , 2019 , 296, 123-131	8.3	11
93	Production and optimization of isopropyl palmitate via biocatalytic route using home-made enzymatic catalysts. <i>Journal of Chemical Technology and Biotechnology</i> , 2019 , 94, 389-397	3.4	11
92	Thermodynamically controlled synthesis of amide bonds catalyzed by highly organic solvent-resistant penicillin acylase derivatives. <i>Biotechnology Progress</i> , 2004 , 20, 117-21	2.8	11
91	Sustainable Enzymatic Synthesis of a Solketal Ester: Process Optimization and Evaluation of Its Antimicrobial Activity. <i>Catalysts</i> , 2020 , 10, 218	3.9	10
90	Directed immobilization of CGTase: The effect of the enzyme orientation on the enzyme activity and its use in packed-bed reactor for continuous production of cyclodextrins. <i>Process Biochemistry</i> , 2017 , 58, 120-127	4.7	11
89	Production of a Thermoresistant Alpha-galactosidase from <i>Thermus</i> sp. Strain T2 for Food Processing. <i>Food Biotechnology</i> , 2007 , 21, 91-103	2.1	11
88	Design and activity of novel lactoferrampin analogues against O157:H7 enterohemorrhagic <i>Escherichia coli</i> . <i>Biopolymers</i> , 2014 , 101, 319-28	2.1	10
87	Purification, immobilization, and characterization of a specific lipase from <i>Staphylococcus warneri</i> EX17 by enzyme fractionating via adsorption on different hydrophobic supports. <i>Biotechnology Progress</i> , 2011 , 27, 717-23	2.8	10
86	Multi-CombiLipases: Co-Immobilizing Lipases with Very Different Stabilities Combining Immobilization via Interfacial Activation and Ion Exchange. The Reuse of the Most Stable Co-Immobilized Enzymes after Inactivation of the Least Stable Ones. <i>Catalysts</i> , 2020 , 10, 1207	3.9	10
85	Effects of immobilization, pH and reaction time in the modulation of β -, γ - or ϵ -cyclodextrins production by cyclodextrin glycosyltransferase: Batch and continuous process. <i>Carbohydrate Polymers</i> , 2017 , 169, 41-49	10.1	10
84	Magnetic micro-macro biocatalysts applied to industrial bioprocesses. <i>Bioresource Technology</i> , 2021 , 322, 124547	11	10
83	Modified silicates and carbon nanotubes for immobilization of lipase from <i>Rhizomucor miehei</i> : Effect of support and immobilization technique on the catalytic performance of the immobilized biocatalysts. <i>Enzyme and Microbial Technology</i> , 2021 , 144, 109739	3.7	10

82	Use of an antisense RNA strategy to investigate the functional significance of Mn-catalase in the extreme thermophile <i>Thermus thermophilus</i> . <i>Journal of Bacteriology</i> , 2004 , 186, 7804-6	3.4	10
81	Lipase Regioselective O-Acetylations of a myo-Inositol Derivative: Efficient Desymmetrization of 1,3-Di-O-benzyl-myo-inositol. <i>European Journal of Organic Chemistry</i> , 2018 , 2018, 386-391	3.1	8
80	Modification of Immobead 150 support for protein immobilization: Effects on the properties of immobilized <i>Aspergillus oryzae</i> β -galactosidase. <i>Biotechnology Progress</i> , 2018 , 34, 934-943	2.8	8
79	Physico-chemical properties, kinetic parameters, and glucose inhibition of several beta-glucosidases for industrial applications. <i>Process Biochemistry</i> , 2019 , 78, 82-90	4.7	8
78	Stability/activity features of the main enzyme components of rohapect 10L. <i>Biotechnology Progress</i> , 2019 , 35, e2877	2.8	8
77	Dextranucrase immobilized on activated-chitosan particles as a novel biocatalyst. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016 , 133, S143-S149		8
76	Bioactive peptides from fisheries residues: A review of use of papain in proteolysis reactions. <i>International Journal of Biological Macromolecules</i> , 2021 , 184, 415-428	7.7	8
75	Advantages of Supports Activated with Divinyl Sulfone in Enzyme Coimmobilization: Possibility of Multipoint Covalent Immobilization of the Most Stable Enzyme and Immobilization via Ion Exchange of the Least Stable Enzyme. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 7508-7518	8.2	8
74	Insolubilized Enzyme Derivatives in Organic Solvents: Mechanisms of Inactivation and Strategies for Reactivation. <i>Progress in Biotechnology</i> , 1992 , 8, 221-228		8
73	Partial purification and immobilization/stabilization on highly activated glyoxyl-agarose supports of different proteases from flavourzyme. <i>Journal of Agricultural and Food Chemistry</i> , 2007 , 55, 6503-8	5.5	7
72	Asymmetric hydrolysis of dimethyl phenylmalonate by immobilized penicillin G acylase from <i>E. coli</i> . <i>Enzyme and Microbial Technology</i> , 2007 , 40, 997-1000	3.7	8
71	Purification of a catalase from <i>Thermus thermophilus</i> via IMAC chromatography: effect of the support. <i>Biotechnology Progress</i> , 2004 , 20, 1578-82	2.8	8
70	Aldehyde-dextran-protein conjugates to immobilize amino-haptens: avoiding cross-reactions in the immunodetection. <i>Enzyme and Microbial Technology</i> , 2005 , 36, 510-513	3.7	8
69	Syntheses of pharmaceutical oligosaccharides catalyzed by immobilized-stabilized derivatives of different β -galactosidases. <i>Journal of Molecular Catalysis</i> , 1993 , 84, 373-379		8
68	Immobilization-Stabilization of Penicillin G Acylase. <i>Annals of the New York Academy of Sciences</i> , 1990 , 613, 552-558	6.3	8
67	Preparation and characterization of cross-linked enzyme aggregates of dextranucrase from <i>Leuconostoc mesenteroides</i> B-512F. <i>Process Biochemistry</i> , 2018 , 71, 101-108	4.7	7
66	Crystallization and preliminary X-ray diffraction studies of the BTL2 lipase from the extremophilic microorganism <i>Bacillus thermocatenuatus</i> . <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2008 , 64, 1043-5		7
65	Glyoxyl-Activated Agarose as Support for Covalently Link Novo-Pro D: Biocatalysts Performance in the Hydrolysis of Casein. <i>Catalysts</i> , 2020 , 10, 466	3.9	7

64	Optimization of simultaneous saccharification and isomerization of dextrin to high fructose syrup using a mixture of immobilized amyloglucosidase and glucose isomerase. <i>Catalysis Today</i> , 2021 , 362, 175-183	5.2	7
63	Effect of amine length in the interference of the multipoint covalent immobilization of enzymes on glyoxyl agarose beads. <i>Journal of Biotechnology</i> , 2021 , 329, 128-142	3	7
62	Multi-Point Covalent Immobilization of Enzymes on Supports Activated with Epoxy Groups: Stabilization of Industrial Enzymes. <i>Methods in Molecular Biology</i> , 2020 , 2100, 109-117	1.4	6
61	Composites of Crosslinked Aggregates of Eversa [®] Transform and Magnetic Nanoparticles. Performance in the Ethanolsis of Soybean Oil. <i>Catalysts</i> , 2020 , 10, 817	3.9	6
60	High Lipase Production from <i>Geotrichum candidum</i> in Reduced Time using Cottonseed Oil: Optimization, Easy Purification and Specificity Characterization. <i>Journal of Chemical Engineering Research Updates</i> , 2017 , 3, 60-69	0.1	3
59	Very Strong But Reversible Immobilization of Enzymes on Supports Coated With Ionic Polymers. <i>Methods in Biotechnology</i> , 2006 , 205-216		6
58	Affinity chromatography of plasma proteins (guanidinobenzoate): use of mimetic matrices and mimetic soluble ligands to prevent the binding of albumin on target affinity matrices. <i>Biomedical Applications</i> , 1999 , 732, 165-72		6
57	Eco-friendly production of trimethylolpropane triesters from refined and used soybean cooking oils using an immobilized low-cost lipase (Eversa [®] Transform 2.0) as heterogeneous catalyst. <i>Biomass and Bioenergy</i> , 2021 , 155, 106302	5.3	6
56	Optimization and characterization of CLEAs of the very thermostable dimeric peroxidase from <i>Roystonea regia</i> . <i>RSC Advances</i> , 2015 , 5, 53047-53053	3.6	5
55	Enzymatic clarification of orange juice in continuous bed reactors: Fluidized-bed versus packed-bed reactor. <i>Catalysis Today</i> , 2021 , 362, 184-191	5.2	5
54	Positive effect of glycerol on the stability of immobilized enzymes: Is it a universal fact?. <i>Process Biochemistry</i> , 2021 , 102, 108-121	4.7	5
53	The β -galactosidase immobilization protocol determines its performance as catalysts in the kinetically controlled synthesis of lactulose. <i>International Journal of Biological Macromolecules</i> , 2021 , 176, 468-478	7.7	5
52	Use of polyvalent cations to improve the adsorption strength between adsorbed enzymes and supports coated with dextran sulfate. <i>Enzyme and Microbial Technology</i> , 2006 , 39, 332-336	3.7	5
51	Enzyme-support interactions and inactivation conditions determine <i>Thermomyces lanuginosus</i> lipase inactivation pathways: Functional and fluorescence studies. <i>International Journal of Biological Macromolecules</i> , 2021 , 191, 79-91	7.7	5
50	Understanding the degree of estolide enzymatic polymerization and the effects on its lubricant properties. <i>Fuel</i> , 2019 , 245, 286-293	7	4
49	Effects of Reaction Operation Policies on Properties of Core-Shell Polymer Supports Used for Preparation of Highly Active Biocatalysts. <i>Macromolecular Reaction Engineering</i> , 2019 , 13, 1800055	1.5	4
48	Immobilization and stabilization of d-hydantoinase from <i>Vigna angularis</i> and its use in the production of N-carbamoyl-d-phenylglycine. Improvement of the reaction yield by allowing chemical racemization of the substrate. <i>Process Biochemistry</i> , 2020 , 95, 251-259	4.7	4
47	Effect of Concentrated Salts Solutions on the Stability of Immobilized Enzymes: Influence of Inactivation Conditions and Immobilization Protocol. <i>Molecules</i> , 2021 , 26,	4.7	4

46	Immobilization of the Peroxygenase from <i>Agrocybe aegerita</i> . The Effect of the Immobilization pH on the Features of an Ionically Exchanged Dimeric Peroxygenase. <i>Catalysts</i> , 2021 , 11, 560	3.9	4
45	STABILIZATION STUDY OF TETRAMERIC <i>Kluyveromyces lactis</i> β -GALACTOSIDASE BY IMMOBILIZATION ON IMMOBEAD: THERMAL, PHYSICO-CHEMICAL, TEXTURAL AND CATALYTIC PROPERTIES. <i>Brazilian Journal of Chemical Engineering</i> , 2019 , 36, 1403-1417	1.6	4
44	Fully Dispersed and Covalently Attached Chymotrypsin Derivatives as Industrial Catalysts in Biphasic Systems.. <i>Annals of the New York Academy of Sciences</i> , 1992 , 672, 158-166	6.3	4
43	Resolution of Racemic Mixtures through Stereospecific Kinetically Controlled Synthesis Catalyzed by Penicillin G Acylase Derivatives. <i>Annals of the New York Academy of Sciences</i> , 1995 , 750, 425-428	6.3	4
42	Aqueous enzymatic extraction of <i>Ricinus communis</i> seeds oil using Viscozyme L. <i>Industrial Crops and Products</i> , 2021 , 170, 113811	5.8	4
41	Immobilization of papain: A review. <i>International Journal of Biological Macromolecules</i> , 2021 , 188, 94-113	7.7	4
40	Application of <i>Rhizomucor miehei</i> lipase-displaying <i>Pichia pastoris</i> whole cell for biodiesel production using agro-industrial residuals as substrate. <i>International Journal of Biological Macromolecules</i> , 2021 , 189, 734-743	7.7	4
39	Recovery of starch from cassava bagasse for cyclodextrin production by sequential treatment with α -amylase and cyclodextrin glycosyltransferase. <i>Biocatalysis and Agricultural Biotechnology</i> , 2019 , 22, 101411	4.1	3
38	Study Cases of Enzymatic Processes 2008 , 253-378		3
37	Stabilization of an Amylase from <i>Neurospora crassa</i> by Immobilization on Highly Activated Supports. <i>Food Biotechnology</i> , 2008 , 22, 262-275	2.1	3
36	One-Step Purification, Immobilization, and Stabilization of Poly-Histidine-Tagged Enzymes Using Metal Chelate-Epoxy Supports. <i>Methods in Biotechnology</i> , 2006 , 117-128		2
35	Design of novel biocatalysts by "bioimprinting" during unfolding-refolding of fully dispersed covalently immobilized enzymes. <i>Annals of the New York Academy of Sciences</i> , 1995 , 750, 349-56	6.3	2
34	Coimmobilization of lipases exhibiting three very different stability ranges. Reuse of the active enzymes and selective discarding of the inactivated ones.. <i>International Journal of Biological Macromolecules</i> , 2022 ,	7.7	3
33	The combination of covalent and ionic exchange immobilizations enables the coimmobilization on vinyl sulfone activated supports and the reuse of the most stable immobilized enzyme.. <i>International Journal of Biological Macromolecules</i> , 2021 , 199, 51-51	7.7	3
32	β -Galactosidase from <i>Kluyveromyces lactis</i> : Characterization, production, immobilization and applications - A review. <i>International Journal of Biological Macromolecules</i> , 2021 , 191, 881-898	7.7	3
31	Use of aqueous two-phase systems for in situ extraction of water soluble antibiotics during their synthesis by enzymes immobilized on porous supports. <i>Biotechnology and Bioengineering</i> , 1998 , 59, 73-94	4.7	3
30	Preparation of immobilized/stabilized biocatalysts of β -glucosidases from different sources: Importance of the support active groups and the immobilization protocol. <i>Biotechnology Progress</i> , 2019 , 35, e2890	2.8	2
29	Prolongation of secondary drying step of phospholipid lyophilization greatly improves acidolysis reactions catalyzed by immobilized lecithase ultra. <i>Enzyme and Microbial Technology</i> , 2020 , 132, 109388	3.7	2

28	Aqueous Extraction of Seed Oil from Mamey Sapote (<i>Pouteria sapota</i>) after Viscozyme L Treatment. <i>Catalysts</i> , 2021 , 11, 748	3.9	2
27	Lipozyme 435-Mediated Synthesis of Xylose Oleate in Methyl Ethyl Ketone. <i>Molecules</i> , 2021 , 26,	4.7	2
26	Modulation of the Biocatalytic Properties of a Novel Lipase from Psychrophilic sp. (USBA-GBX-513) by Different Immobilization Strategies. <i>Molecules</i> , 2021 , 26,	4.7	2
25	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. <i>Molecular Catalysis</i> , 2021 , 505, 111529	3.3	2
24	Effect of Tris Buffer in the Intensity of the Multipoint Covalent Immobilization of Enzymes in Glyoxyl-Agarose Beads. <i>Applied Biochemistry and Biotechnology</i> , 2021 , 193, 2843-2857	3.1	2
23	Design of Bactericidal Peptides Against <i>Escherichia coli</i> O157:H7, <i>Pseudomonas aeruginosa</i> and methicillin-resistant <i>Staphylococcus aureus</i> . <i>Medicinal Chemistry</i> , 2018 , 14, 741-752	1.7	2
22	Preparation of a Six-Enzyme Multilayer Combi-Biocatalyst: Reuse of the Most Stable Enzymes after Inactivation of the Least Stable One. <i>ACS Sustainable Chemistry and Engineering</i> , 2022 , 10, 3920-3934	8.2	2
21	Chemical amination of immobilized enzymes for enzyme coimmobilization: Reuse of the most stable immobilized and modified enzyme.. <i>International Journal of Biological Macromolecules</i> , 2022 ,	7.7	2
20	Design of a sustainable process for enzymatic production of ethylene glycol diesters via hydroesterification of used soybean cooking oil. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 10, 107062	6.7	2
19	Immobilization of <i>Yarrowia lipolytica</i> Lipase: A Comparison of Stability of Physical Adsorption and Covalent Attachment Techniques 2007 , 169-176		2
18	Modulation of Activity/Stability Properties of Lipase from <i>Pseudomonas Fluorescens</i> by Multipoint Covalent Immobilization on Glyoxyl-Supports 1996 , 243-256		2
17	Chemical modification of lipase B from <i>Candida antarctica</i> for improving biochemical properties of activity, stability and selectivity. <i>New Biotechnology</i> , 2014 , 31, S85	6.3	1
16	Chemoenzymatic Synthesis of the New 3-((2,3-Diacetoxypropanoyl)oxy)propane-1,2-diyl Diacetate Using Immobilized Lipase B from and Pyridinium Chlorochromate as an Oxidizing Agent. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.1	1
15	Stabilization of immobilized enzymes against organic solvents: Complete hydrophylization of enzymes environments by solidphase chemistry with poly-functional macromolecules.. <i>Progress in Biotechnology</i> , 1998 , 405-410		1
14	Selective Enzymatic Oxidations by using Oxygen as oxidizing agent: Immobilization and Stabilization of FNR, a NADP+ regenerating enzyme. <i>Studies in Surface Science and Catalysis</i> , 1994 , 82, 685-692	1.8	1
13	Simplified Method to Optimize Enzymatic Esters Syntheses in Solvent-Free Systems: Validation Using Literature and Experimental Data. <i>Catalysts</i> , 2021 , 11, 1357	3.9	1
12	Immobilization of xylanase on differently functionalized silica gel supports for orange juice clarification. <i>Process Biochemistry</i> , 2022 , 113, 270-280	4.7	1
11	Immobilization-stabilization of proteases as a tool to improve the industrial design of peptide synthesis. <i>Biomedica Biochimica Acta</i> , 1991 , 50, S110-3		1

10	Immobilization and Stabilization of Proteins by Multipoint Covalent Attachment on Novel Amino-Epoxy-Sepabeads . <i>Methods in Biotechnology</i> , 2006 , 153-162		1
9	Very Strong but Reversible Immobilization of Enzymes on Supports Coated with Ionic Polymers. <i>Methods in Molecular Biology</i> , 2020 , 2100, 129-141	1.4	1
8	Stabilization and operational selectivity alteration of Lipozyme 435 by its coating with polyethyleneimine: Comparison of the biocatalyst performance in the synthesis of xylose fatty esters. <i>International Journal of Biological Macromolecules</i> , 2021 , 192, 665-674	7.7	1
7	Production of Jet Biofuels by Catalytic Hydroprocessing of Esters and Fatty Acids: A Review. <i>Catalysts</i> , 2022 , 12, 237	3.9	0
6	Decyl esters production from soybean-based oils catalyzed by lipase immobilized on differently functionalized rice husk silica and their characterization as potential biolubricants.. <i>Enzyme and Microbial Technology</i> , 2022 , 157, 110019	3.7	0
5	Performance of Liquid Eversa on Fatty Acid Ethyl Esters Production by Simultaneous Esterification/Transesterification of Low-to-High Acidity Feedstocks. <i>Catalysts</i> , 2021 , 11, 1486	3.9	0
4	Phenolic compounds in mango fruit: a review. <i>Journal of Food Measurement and Characterization</i> , 2022 , 16, 619	2.7	0
3	Design of Artificial Enzymes Bearing Several Active Centers: New Trends, Opportunities and Problems. <i>International Journal of Molecular Sciences</i> , 2022 , 23, 5304	6.1	0
2	Stabilization of immobilized lipases by treatment with metallic phosphate salts. <i>International Journal of Biological Macromolecules</i> , 2022 , 213, 43-54	7.7	0
1	Preparation of an Industrial Biocatalyst of Penicillin G Acylase on Sepabeads 2005 , 273-288		