

## List of Publications by Year in descending order

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100  
papers

11,770  
citations

38660

50  
h-index

30848

102  
g-index

106  
all docs

106  
docs citations

106  
times ranked

7854  
citing authors

#	ARTICLE	IF	CITATIONS
1	Modifying enzyme activity and selectivity by immobilization. <i>Chemical Society Reviews</i> , 2013, 42, 6290-6307.	18.7	1,552
2	Potential of Different Enzyme Immobilization Strategies to Improve Enzyme Performance. <i>Advanced Synthesis and Catalysis</i> , 2011, 353, 2885-2904.	2.1	1,389
3	Glutaraldehyde in bio-catalysts design: a useful crosslinker and a versatile tool in enzyme immobilization. <i>RSC Advances</i> , 2014, 4, 1583-1600.	1.7	669
4	Strategies for the one-step immobilization and purification of enzymes as industrial biocatalysts. <i>Biotechnology Advances</i> , 2015, 33, 435-456.	6.0	568
5	Importance of the Support Properties for Immobilization or Purification of Enzymes. <i>ChemCatChem</i> , 2015, 7, 2413-2432.	1.8	466
6	Heterofunctional Supports in Enzyme Immobilization: From Traditional Immobilization Protocols to Opportunities in Tuning Enzyme Properties. <i>Biomacromolecules</i> , 2013, 14, 2433-2462.	2.6	429
7	Immobilization of lipases on hydrophobic supports: immobilization mechanism, advantages, problems, and solutions. <i>Biotechnology Advances</i> , 2019, 37, 746-770.	6.0	409
8	Novozym 435: the "perfect" lipase immobilized biocatalyst?. <i>Catalysis Science and Technology</i> , 2019, 9, 2380-2420.	2.1	393
9	Coupling Chemical Modification and Immobilization to Improve the Catalytic Performance of Enzymes. <i>Advanced Synthesis and Catalysis</i> , 2011, 353, 2216-2238.	2.1	329
10	Stabilization of enzymes via immobilization: Multipoint covalent attachment and other stabilization strategies. <i>Biotechnology Advances</i> , 2021, 52, 107821.	6.0	280
11	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.	1.8	241
12	Polyethylenimine: a very useful ionic polymer in the design of immobilized enzyme biocatalysts. <i>Journal of Materials Chemistry B</i> , 2017, 5, 7461-7490.	2.9	228
13	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.	1.8	225
14	Chemical Modification in the Design of Immobilized Enzyme Biocatalysts: Drawbacks and Opportunities. <i>Chemical Record</i> , 2016, 16, 1436-1455.	2.9	183
15	Chitosan crosslinked with genipin as support matrix for application in food process: Support characterization and $\beta$ -D-galactosidase immobilization. <i>Carbohydrate Polymers</i> , 2016, 137, 184-190.	5.1	181
16	Enzyme co-immobilization: Always the biocatalyst designers' choice or not?. <i>Biotechnology Advances</i> , 2021, 51, 107584.	6.0	152
17	Enzymatic reactors for biodiesel synthesis: Present status and future prospects. <i>Biotechnology Advances</i> , 2015, 33, 511-525.	6.0	141
18	Hydrogen Peroxide in Biocatalysis. A Dangerous Liaison. <i>Current Organic Chemistry</i> , 2012, 16, 2652-2672.	0.9	133

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19	Effect of the Support Size on the Properties of Î²-Galactosidase Immobilized on Chitosan: Advantages and Disadvantages of Macro and Nanoparticles. <i>Biomacromolecules</i> , 2012, 13, 2456-2464.	2.6	131
20	Amination of enzymes to improve biocatalyst performance: coupling genetic modification and physicochemical tools. <i>RSC Advances</i> , 2014, 4, 38350-38374.	1.7	117
21	Ultrasound-assisted butyl acetate synthesis catalyzed by Novozym 435: Enhanced activity and operational stability. <i>Ultrasonics Sonochemistry</i> , 2013, 20, 1155-1160.	3.8	105
22	Rapid and high yields of synthesis of butyl acetate catalyzed by Novozym 435: Reaction optimization by response surface methodology. <i>Process Biochemistry</i> , 2011, 46, 2311-2316.	1.8	104
23	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.	1.8	102
24	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.	3.8	102
25	Improved production of butyl butyrate with lipase from <i>Thermomyces lanuginosus</i> immobilized on styrene- <i>divinylbenzene</i> beads. <i>Bioresource Technology</i> , 2013, 134, 417-422.	4.8	94
26	Comparison of acid, basic and enzymatic catalysis on the production of biodiesel after RSM optimization. <i>Renewable Energy</i> , 2019, 135, 1-9.	4.3	94
27	Immobilization- <i>stabilization</i> of the lipase from <i>Thermomyces lanuginosus</i> : Critical role of chemical amination. <i>Process Biochemistry</i> , 2009, 44, 963-968.	1.8	92
28	High stability of immobilized Î²-d-galactosidase for lactose hydrolysis and galactooligosaccharides synthesis. <i>Carbohydrate Polymers</i> , 2013, 95, 465-470.	5.1	90
29	Enzyme production of <i>D</i> -gluconic acid and glucose oxidase: successful tales of cascade reactions. <i>Catalysis Science and Technology</i> , 2020, 10, 5740-5771.	2.1	80
30	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.	1.7	77
31	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.	2.2	75
32	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.	1.7	74
33	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.	1.8	72
34	Fructooligosaccharides synthesis by highly stable immobilized Î²-fructofuranosidase from <i>Aspergillus aculeatus</i> . <i>Carbohydrate Polymers</i> , 2014, 103, 193-197.	5.1	72
35	Immobilization and stabilization of different Î²-glucosidases using the glutaraldehyde chemistry: Optimal protocol depends on the enzyme. <i>International Journal of Biological Macromolecules</i> , 2019, 129, 672-678.	3.6	71
36	Two step ethanolysis: A simple and efficient way to improve the enzymatic biodiesel synthesis catalyzed by an immobilized- <i>stabilized</i> lipase from <i>Thermomyces lanuginosus</i> . <i>Process Biochemistry</i> , 2010, 45, 1268-1273.	1.8	70

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37	Stabilizing hyperactivated lecithase structures through physical treatment with ionic polymers. <i>Process Biochemistry</i> , 2014, 49, 1511-1515.	1.8	70
38	Production and characterization of biodiesel from oil of fish waste by enzymatic catalysis. <i>Renewable Energy</i> , 2020, 153, 1346-1354.	4.3	67
39	Immobilization of lipase B from <i>Candida antarctica</i> on porous styrene-divinylbenzene beads improves butyl acetate synthesis. <i>Biotechnology Progress</i> , 2012, 28, 406-412.	1.3	66
40	High operational stability of invertase from <i>Saccharomyces cerevisiae</i> immobilized on chitosan nanoparticles. <i>Carbohydrate Polymers</i> , 2013, 92, 462-468.	5.1	64
41	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.	1.6	63
42	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.	1.4	63
43	Pectin lyase immobilization using the glutaraldehyde chemistry increases the enzyme operation range. <i>Enzyme and Microbial Technology</i> , 2020, 132, 109397.	1.6	63
44	Evaluation of Styrene-Divinylbenzene Beads as a Support to Immobilize Lipases. <i>Molecules</i> , 2014, 19, 7629-7645.	1.7	62
45	Immobilization of Proteins in Poly-Styrene-Divinylbenzene Matrices: Functional Properties and Applications. <i>Current Organic Chemistry</i> , 2015, 19, 1707-1718.	0.9	62
46	Improving the catalytic properties of immobilized Lecithase via physical coating with ionic polymers. <i>Enzyme and Microbial Technology</i> , 2014, 60, 1-8.	1.6	61
47	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.	1.8	58
48	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.	1.7	55
49	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.	3.6	55
50	One Pot Use of Combilipases for Full Modification of Oils and Fats: Multifunctional and Heterogeneous Substrates. <i>Catalysts</i> , 2020, 10, 605.	1.6	55
51	Continuous production of $\beta$ -cyclodextrin from starch by highly stable cyclodextrin glycosyltransferase immobilized on chitosan. <i>Carbohydrate Polymers</i> , 2013, 98, 1311-1316.	5.1	53
52	A new bioprocess for the production of prebiotic lactosucrose by an immobilized $\beta$ -galactosidase. <i>Process Biochemistry</i> , 2017, 55, 96-103.	1.8	53
53	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.	1.8	52
54	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.	1.8	51

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55	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.	1.8	49
56	Immobilization of Glycoside Hydrolase Families GH1, GH13, and GH70: State of the Art and Perspectives. <i>Molecules</i> , 2016, 21, 1074.	1.7	47
57	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.	1.6	46
58	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.	1.8	45
59	Lecitase ultra: A phospholipase with great potential in biocatalysis. <i>Molecular Catalysis</i> , 2019, 473, 110405.	1.0	43
60	Combined Effects of Ultrasound and Immobilization Protocol on Butyl Acetate Synthesis Catalyzed by CALB. <i>Molecules</i> , 2014, 19, 9562-9576.	1.7	42
61	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.	3.6	41
62	Influence of reaction parameters in the polymerization between genipin and chitosan for enzyme immobilization. <i>Process Biochemistry</i> , 2019, 84, 73-80.	1.8	41
63	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.	2.6	40
64	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.	1.2	37
65	Immobilization of pectinase on chitosan-magnetic particles: Influence of particle preparation protocol on enzyme properties for fruit juice clarification. <i>Biotechnology Reports (Amsterdam)</i> , 2019, 1, 0784314.	1.4	37
66	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.	1.3	36
67	Reactivation of covalently immobilized lipase from <i>Thermomyces lanuginosus</i> . <i>Process Biochemistry</i> , 2009, 44, 641-646.	1.8	35
68	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.	1.6	33
69	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, 2507-2520.	1.4	32
70	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, 113-119.	1.9	29
71	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.	2.5	27
72	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.	1.8	26

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73	Aqueous enzymatic extraction of Ricinus communis seeds oil using Viscozyme L. Industrial Crops and Products, 2021, 170, 113811.	2.5	25
74	Complete reactivation of immobilized derivatives of a trimeric glutamate dehydrogenase from Thermus thermophilus. Process Biochemistry, 2010, 45, 107-113.	1.8	24
75	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. Process Biochemistry, 2017, 58, 120-127.	1.8	22
76	Biotechnological prospects of the lipase from Mucor javanicus. Journal of Molecular Catalysis B: Enzymatic, 2013, 93, 34-43.	1.8	21
77	Optimized butyl butyrate synthesis catalyzed by <i>Thermomyces lanuginosus</i> lipase. Biotechnology Progress, 2013, 29, 1416-1421.	1.3	21
78	Efficient purification-immobilization of an organic solvent-tolerant lipase from Staphylococcus warneri EX17 on porous styrene-divinylbenzene beads. Journal of Molecular Catalysis B: Enzymatic, 2014, 99, 51-55.	1.8	21
79	Enzymatic clarification of orange juice in continuous bed reactors: Fluidized-bed versus packed-bed reactor. Catalysis Today, 2021, 362, 184-191.	2.2	21
80	Modulation of a lipase from Staphylococcus warneri EX17 using immobilization techniques. Journal of Molecular Catalysis B: Enzymatic, 2009, 60, 125-132.	1.8	20
81	Use of Lecitase-Ultra immobilized on styrene-divinylbenzene beads as catalyst of esterification reactions: Effects of ultrasounds. Catalysis Today, 2015, 255, 27-32.	2.2	18
82	Effect of feather meal as proteic feeder on combi-CLEAs preparation for grape juice clarification. Process Biochemistry, 2017, 62, 122-127.	1.8	18
83	Modification of Immobead 150 support for protein immobilization: Effects on the properties of immobilized <i>Aspergillus oryzae</i> Î²-galactosidase. Biotechnology Progress, 2018, 34, 934-943.	1.3	17
84	ULTRASOUND-ASSISTED TRANSESTERIFICATION OF SOYBEAN OIL USING COMBI-LIPASE BIOCATALYSTS. Brazilian Journal of Chemical Engineering, 2019, 36, 995-1005.	0.7	17
85	Synthesis of butyl esters via ultrasound-assisted transesterification of macaãba (Acrocomia aculeata) acid oil using a biomass-derived fermented solid as biocatalyst. Journal of Molecular Catalysis B: Enzymatic, 2016, 133, S213-S219.	1.8	16
86	Effects of immobilization, pH and reaction time in the modulation of Î±-, Î²- or Î³-cyclodextrins production by cyclodextrin glycosyltransferase: Batch and continuous process. Carbohydrate Polymers, 2017, 169, 41-49.	5.1	16
87	Combination of ultrasound, enzymes and mechanical stirring: A new method to improve Vitis vinifera Cabernet Sauvignon must yield, quality and bioactive compounds. Food and Bioproducts Processing, 2017, 105, 197-204.	1.8	16
88	Production and optimization of isopropyl palmitate via biocatalytic route using home-made enzymatic catalysts. Journal of Chemical Technology and Biotechnology, 2019, 94, 389-397.	1.6	16
89	Effects of oxygen volumetric mass transfer coefficient and pH on lipase production by Staphylococcus warneri EX17. Biotechnology and Bioprocess Engineering, 2009, 14, 105-111.	1.4	15
90	Physico-chemical properties, kinetic parameters, and glucose inhibition of several beta-glucosidases for industrial applications. Process Biochemistry, 2019, 78, 82-90.	1.8	14

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91	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, 717-723.	1.3	12
92	Stability/activity features of the main enzyme components of rohapect 10L. <i>Biotechnology Progress</i> , 2019, 35, e2877.	1.3	10
93	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.	1.4	10
94	Preparation and characterization of cross-linked enzyme aggregates of dextransucrase from <i>Leuconostoc mesenteroides</i> B-512F. <i>Process Biochemistry</i> , 2018, 71, 101-108.	1.8	9
95	Aqueous Extraction of Seed Oil from Mamey Sapote ( <i>Pouteria sapota</i> ) after Viscozyme L Treatment. <i>Catalysts</i> , 2021, 11, 748.	1.6	9
96	Dextransucrase immobilized on activated-chitosan particles as a novel biocatalyst. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2016, 133, S143-S149.	1.8	8
97	Optimization and characterization of CLEAs of the very thermostable dimeric peroxidase from <i>Roystonea regia</i> . <i>RSC Advances</i> , 2015, 5, 53047-53053.	1.7	5
98	Preparation of immobilized/stabilized biocatalysts of $\alpha$ -glucosidases from different sources: Importance of the support active groups and the immobilization protocol. <i>Biotechnology Progress</i> , 2019, 35, e2890.	1.3	5
99	STABILIZATION STUDY OF TETRAMERIC <i>Kluyveromyces lactis</i> $\beta$ -GALACTOSIDASE BY IMMOBILIZATION ON IMMOBEAD: THERMAL, PHYSICO-CHEMICAL, TEXTURAL AND CATALYTIC PROPERTIES. <i>Brazilian Journal of Chemical Engineering</i> , 2019, 36, 1403-1417.	0.7	4
100	ESTUDO DAS CONDIÇÕES DE IMOBILIZAÇÃO DA LIPASE DE <i>Thermomyces lanuginosus</i> PARA A PRODUÇÃO DE BIODIESEL. , 0, , .		0