

CITATION REPORT

List of articles citing

Production and use of immobilized lipases in/on nanomaterials: A review from the waste to biodiesel production

DOI: 10.1016/j.ijbiomac.2020.02.258

International Journal of Biological Macromolecules, 2020, 152, 207-222.

Source: <https://exaly.com/paper-pdf/77343152/citation-report.pdf>

Version: 2024-04-26

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
175	Lipase immobilization with support materials, preparation techniques, and applications: Present and future aspects. <i>International Journal of Biological Macromolecules</i> , 2020 , 163, 1624-1639	7.9	52
174	Immobilized lipases for biodiesel production: Current and future greening opportunities. 2020 , 134, 110355		30
173	Nanostructured materials as a host matrix to develop robust peroxidases-based nanobiocatalytic systems. <i>International Journal of Biological Macromolecules</i> , 2020 , 162, 1906-1923	7.9	16
172	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. 2020 , 10, 1207		10
171	Microbial lipases and their industrial applications: a comprehensive review. 2020 , 19, 169		154
170	Application of Heterogeneous Catalysts for Biodiesel Production from Microalgal Oil: A Review. 2020 , 10, 1025		52
169	Role of microbial lipases in transesterification process for biodiesel production. 2020 , 3, 257-266		7
168	Enzyme Immobilization in Covalent Organic Frameworks: Strategies and Applications in Biocatalysis. 2020 , 85, 2051-2066		12
167	Recent Advances in Enzymatic Conversion of Microalgal Lipids into Biodiesel. 2020 , 34, 6735-6750		16
166	One Pot Use of Combilipases for Full Modification of Oils and Fats: Multifunctional and Heterogeneous Substrates. 2020 , 10, 605		35
165	A Review on Bio-Based Catalysts (Immobilized Enzymes) Used for Biodiesel Production. 2020 , 13, 3013		34
164	Oil from <i>Koelreuteria paniculata</i> Laxm. 1772 as possible feedstock for biodiesel production. <i>Fuel</i> , 2020 , 277, 118162	7.1	5
163	Lipase From Immobilized on Magnetic Nanoparticles: Performance in Fatty Acid Ethyl Ester (FAEE) Optimized Production by the Taguchi Method. 2020 , 8, 693		38
162	Utility of Silane-Modified Magnesium-Based Magnetic Nanoparticles for Efficient Immobilization of <i>Bacillus thermoamylovorans</i> Lipase. <i>Applied Biochemistry and Biotechnology</i> , 2020 , 192, 1029-1043	3.2	3
161	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	7.9	27
160	Optimization of the Production of Enzymatic Biodiesel from Residual Babassu Oil (<i>Orbignya</i> sp.) via RSM. 2020 , 10, 414		33
159	Opportunities for improving biodiesel production via lipase catalysis. <i>Fuel</i> , 2021 , 288, 119577	7.1	72

158	Sulfonic acid-functionalized heterogeneous catalytic materials for efficient biodiesel production: A review. <i>Journal of Environmental Chemical Engineering</i> , 2021 , 9, 104719	6.8	20
157	Lipase immobilized graphene oxide biocatalyst assisted enzymatic transesterification of Pongamia pinnata (Karanja) oil and downstream enrichment of biodiesel by solar-driven direct contact membrane distillation followed by ultrafiltration. <i>Fuel Processing Technology</i> , 2021 , 211, 106577	7.2	17
156	Covalent organic frameworks as emerging host platforms for enzyme immobilization and robust biocatalysis - A review. <i>International Journal of Biological Macromolecules</i> , 2021 , 167, 502-515	7.9	41
155	Armoring bio-catalysis via structural and functional coordination between nanostructured materials and lipases for tailored applications. <i>International Journal of Biological Macromolecules</i> , 2021 , 166, 818-838	7.9	17
154	Kinetic and thermodynamic characterization of lipase from <i>Aspergillus melleus</i> and its biocatalytic performance for degradation of poly(ϵ -caprolactone). 2021 ,		2
153	Liquid lipase preparations designed for industrial production of biodiesel. Is it really an optimal solution?. 2021 , 164, 1566-1587		42
152	Metal-organic framework-based functional catalytic materials for biodiesel production: a review. 2021 , 23, 2595-2618		15
151	Insight into the green doping of clinoptilolite with Na ⁺ ions (Na ⁺ /Clino) as nanocatalyst in the conversion of palm oil into biodiesel; optimization and mechanism. 2020 ,		9
150	Immobilization of Amano lipase AK from <i>Pseudomonas fluorescens</i> on different types of chitosan-containing supports: use in the kinetic resolution of rac-indanol. 2021 , 44, 785-792		1
149	Biodiesel production by lipase-catalyzed reactions: bibliometric analysis and study of trends. <i>Biofuels, Bioproducts and Biorefining</i> , 2021 , 15, 1141	5.3	9
148	Nanobiocatalysts for Biodiesel Synthesis through Transesterification: A Review. 2021 , 11, 171		4
147	Proline-Modified UIO-66 as Nanocarriers to Enhance Lipase Catalytic Activity and Stability for Electrochemical Detection of Nitrofen. 2021 , 13, 4146-4155		7
146	Biodiesel production on bench scale from different sources of waste oils by using NiZn magnetic heterogeneous nanocatalyst. <i>International Journal of Energy Research</i> , 2021 , 45, 10924-10945	4.5	2
145	Effect of cross-linked enzyme aggregate strategy on characterization of sn-1,3 extracellular lipase from <i>Aspergillus niger</i> GZUF36. 2021 , 105, 1925-1941		1
144	Improvement of biodiesel production from palm oil by co-immobilization of <i>Thermomyces lanuginosa</i> lipase and <i>Candida antarctica</i> lipase B: Optimization using response surface methodology. <i>International Journal of Biological Macromolecules</i> , 2021 , 170, 490-502	7.9	20
143	Preparation of cross-linked enzyme aggregates of lipase from <i>Aspergillus niger</i> : process optimization, characterization, stability, and application for epoxidation of lemongrass oil. 2021 , 44, 1383-1404 ⁴		
142	Evaluation of Different Ionic Liquids as Additives in the Immobilization of Lipase CAL B by Sol-Gel Technique. <i>Applied Biochemistry and Biotechnology</i> , 2021 , 193, 2162-2181	3.2	0
141	Modulation of the Biocatalytic Properties of a Novel Lipase from Psychrophilic sp. (USBA-GBX-513) by Different Immobilization Strategies. <i>Molecules</i> , 2021 , 26,	4.8	3

140	New frontiers and prospects of metal-organic frameworks for removal, determination, and sensing of pesticides. 2021 , 194, 110654		9
139	Production and Characterization of Whole-Cell <i>Rhizopus oryzae</i> CCT3759 to be Applied as Biocatalyst in Vegetable Oils Hydrolysis. 1		1
138	Statistical Optimization of Biodiesel Production from Salmon Oil via Enzymatic Transesterification: Investigation of the Effects of Various Operational Parameters. 2021 , 9, 700		2
137	Exergy and Energy Analysis of Fe ₂ O ₃ -Doped Al ₂ O ₃ Nanocatalyst-Based Biodiesel Blends Performance and Emission Characteristics. 2021 , 143,		12
136	Methods of Encapsulation of Biomacromolecules and Living Cells. Prospects of Using Metal-Organic Frameworks. 2021 , 57, 491-505		0
135	Design of Switchable Enzyme Carriers Based on Stimuli-Responsive Porous Polymer Membranes for Bioapplications.. 2021 , 4, 4706-4719		3
134	Different strategies for the lipase immobilization on the chitosan based supports and their applications. <i>International Journal of Biological Macromolecules</i> , 2021 , 179, 170-195	7.9	27
133	Biodiesel production from new algal sources using response surface methodology and microwave application. <i>Biomass Conversion and Biorefinery</i> , 1	2.3	5
132	Sustainable conversion of waste corn oil into biofuel over different forms of synthetic muscovite based K ⁺ /Na ⁺ sodalite as basic catalysts; characterization and mechanism. 2021 , 8, 065502		1
131	A Review on the Use of Bio/Nanostructured Heterogeneous Catalysts in Biodiesel Production. 2021 , 59-91		2
130	Lipase-Immobilized Magnetic Nanoparticles: Promising Nanobiocatalysts for Biodiesel Production. 2021 , 295-312		1
129	Activated magnetic lipase-inorganic hybrid nanoflowers: A highly active and recyclable nanobiocatalyst for biodiesel production. 2021 , 171, 825-832		19
128	Advances in Enzyme and Ionic Liquid Immobilization for Enhanced in MOFs for Biodiesel Production. <i>Molecules</i> , 2021 , 26,	4.8	7
127	One-step direct transesterification of wet yeast for biodiesel production catalyzed by magnetic nanoparticle-immobilized lipase. 2021 , 171, 11-21		10
126	Enhancement lipase activity via immobilization onto chitosan beads used as seed particles during fluidized bed drying: Application in butyl butyrate production. 2021 , 622, 118217		11
125	Influence of the chain length of the fatty acids present in different oils and the pore diameter of the support on the catalytic activity of immobilized lipase for ethyl ester production. 2021 , 38, 511-522		3
124	The enhanced fatty acids flavor release for low-fat cheeses by carrier immobilized lipases on O/W Pickering emulsions. 2021 , 116, 106651		7
123	Magnetic COFs as satisfied support for lipase immobilization and recovery to effectively achieve the production of biodiesel by great maintenance of enzyme activity. 2021 , 14, 156		8

122	SiO ₂ -Coated Fe ₃ O ₄ Nanoparticle/Polyacrylonitrile Beads for One-Step Lipase Immobilization. 2021 , 4, 7856-7869		4
121	Biodiesel Production Using Homogeneous, Heterogeneous, and Enzyme Catalysts via Transesterification and Esterification Reactions: a Critical Review. 2021 , 1-27		19
120	Constitutive Expression in <i>Komagataella phaffii</i> of Mature <i>Rhizopus oryzae</i> Lipase Jointly with Its Truncated Prosequence Improves Production and the Biocatalyst Operational Stability. 2021 , 11, 1192		1
119	Understanding intricacies of bioinspired organic-inorganic hybrid nanoflowers: A quest to achieve enhanced biomolecules immobilization for biocatalytic, biosensing and bioremediation applications. 2021 , 295, 102484		1
118	Exploring the structural and catalytic features of lipase enzymes immobilized on g-C ₃ N ₄ : A novel platform for biocatalytic and photocatalytic reactions. 2021 , 337, 116612		4
117	Insight into the catalytic properties zeolitized kaolinite/diatomite geopolymer as an environmental catalyst for the sustainable conversion of spent cooking oil into biodiesel; optimization and kinetics. 2021 , 22, 100473		1
116	Multi-enzyme co-immobilized nano-assemblies: Bringing enzymes together for expanding bio-catalysis scope to meet biotechnological challenges. <i>International Journal of Biological Macromolecules</i> , 2021 , 186, 735-749	7.9	19
115	Hydrophobic poly(ionic liquid)s as "two-handed weapons" Maximizing lipase catalytic efficiency in transesterification of soybean oil toward biodiesel. 2021 , 626, 118350		5
114	Temperature-resistant and solvent-tolerant lipases as industrial biocatalysts: Biotechnological approaches and applications. <i>International Journal of Biological Macromolecules</i> , 2021 , 187, 127-142	7.9	9
113	Improvement of fuel properties of used palm oil derived biodiesel with butyl ferulate as an additive. 2021 , 175, 1052-1068		1
112	Optimization of nutrient medium composition for the production of lipase from waste cooking oil using response surface methodology and artificial neural networks. 1-11		2
111	Challenges and Opportunities for the Encapsulation of Enzymes over Porous Solids for Biodiesel Production and Cellulose Valorization into Glucose.		1
110	Melia azedarach leaf powder stabilizing <i>Pseudomonas fluorescens</i> lipase to catalyze synthesis of geranyl acetate. 2021 , 37, 102170		0
109	Enhancing bio-catalytic performance of lipase immobilized on ionic liquids modified magnetic polydopamine. 2021 , 206, 111960		7
108	Expanding the bio-catalysis scope and applied perspectives of nanocarrier immobilized asparaginases. 2021 , 11, 453		2
107	Employment of polysaccharides in enzyme immobilization. 2021 , 167, 105005		8
106	Enzyme immobilization on metal organic frameworks: Laccase from <i>Aspergillus</i> sp. is better adapted to ZIF-zn rather than Fe-BTC. 2021 , 208, 112147		2
105	Pesticide degradation by immobilised metalloenzymes provides an attractive avenue for bioremediation. 2021 , 1, 100015		3

104	Laccase-loaded functionalized graphene oxide assemblies with improved biocatalytic properties and decolorization performance. 2021 , 24, 101884		3
103	Enhanced enzymatic performance of immobilized lipase on metal organic frameworks with superhydrophobic coating for biodiesel production. 2021 , 602, 426-436		17
102	Effect of the biological functionalization of nanoparticles on magnetic CLEA preparation. <i>International Journal of Biological Macromolecules</i> , 2021 , 191, 689-698	7.9	1
101	Insights on sustainable approaches for production and applications of value added products. 2022 , 286, 131623		10
100	Sonocogreen Decoration of Clinoptilolite by CaO Nanorods as Ecofriendly Catalysts in the Transesterification of Castor Oil into Biodiesel; Response Surface Studies. <i>ACS Omega</i> , 2021 , 6, 1556-1567	3.9	4
99	Nb-MCM-Type Mesoporous Material Synthesis Using Ionic Solid as Structure-Directing Agent for In Situ Lipase Immobilization. <i>Applied Biochemistry and Biotechnology</i> , 2021 , 193, 1072-1085	3.2	3
98	An efficient and recyclable Pickering magnetic interface biocatalyst: application in biodiesel production. 2021 , 23, 966-972		9
97	Biolubricant Production from Several Oleaginous Feedstocks Using Lipases as Catalysts: Current Scenario and Future Perspectives. 1		16
96	Application of lipase immobilized on a hydrophobic support for the synthesis of aromatic esters. 2021 , 68, 538-546		9
95	Immobilization of Alkaline Protease From <i>Bacillus brevis</i> Using Ca-Alginate Entrapment Strategy for Improved Catalytic Stability, Silver Recovery, and Dehairing Potentialities. 2020 , 150, 3572-3583		30
94	Current Status and Future Perspectives of Supports and Protocols for Enzyme Immobilization. 2021 , 11, 1222		19
93	Bioprospecting microbial hosts to valorize lignocellulose biomass - Environmental perspectives and value-added bioproducts. 2021 , 132574		8
92	Rice straw enhancing catalysis of <i>Pseudomonas fluorescens</i> lipase for synthesis of citronellyl acetate. 2021 , 1		1
91	Immobilization of a cold-adaptive recombinant <i>Penicillium cyclopium</i> lipase on modified palygorskite for biodiesel preparation. <i>Biomass Conversion and Biorefinery</i> , 1	2.3	4
90	Nanomaterial conjugated lignocellulosic waste: cost-effective production of sustainable bioenergy using enzymes. 2021 , 11, 480		1
89	An encapsulated report on enzyme-assisted transesterification with an allusion to lipase. 2021 , 11, 481		0
88	Biodiesel production in oil biorefinery and by-products utilization. 2022 , 109-150		0
87	Immobilization of <i>Candida rugosa</i> Lipase on Magnetic Biosilica Particles: Hydrolysis and Transesterification Studies. 2021 , 26, 827-840		0

86	A review of sustainable biodiesel production using biomass derived heterogeneous catalysts.. 2021 , 21, 790-824		1
85	Emerging sustainable opportunities for waste to bioenergy: an overview. 2022 , 1-55		0
84	Biodiesel production using enzymatic catalyst. 2022 , 133-169		1
83	Sulfonation of Natural Carbonaceous Bentonite as a Low-Cost Acidic Catalyst for Effective Transesterification of Used Sunflower Oil into Diesel; Statistical Modeling and Kinetic Properties. <i>ACS Omega</i> , 2021 , 6, 31260-31271	3.9	2
82	-SO ₃ H-functionalization of sub-bituminous coal as a highly active acidic catalyst during the transesterification of spent sunflower oil; characterization, application, and mechanism. 2021 , 7, 8699-8710		1
81	Fe ₂ O ₃ /Chitosan coated superparamagnetic nanoparticles supporting lipase enzyme from <i>Candida Antarctica</i> for microwave assisted biodiesel production. 2021 , 185, 1362-1362		4
80	Biological Methods in Biodiesel Production and Their Environmental Impact. 2021 , 11, 10946		3
79	Biocatalytic membranes in anti-fouling and emerging pollutant degradation applications: Current state and perspectives. 2021 , 282, 120098		2
78	Mitigation of methanol inactivation of lipases by reaction medium engineering with glycine betaine for enzymatic biodiesel synthesis. <i>Fuel</i> , 2021 , 313, 122637	7.1	0
77	Microbial lipases: Propitious biocatalysts for the food industry. 2022 , 45, 101509		4
76	Biodiesel production from microalgae using lipase-based catalysts: Current challenges and prospects. 2022 , 62, 102616		16
75	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	6.8	5
74	Investigation of CaO nanocatalyst synthesized from <i>Acalypha indica</i> leaves and its application in biodiesel production using waste cooking oil. <i>Fuel</i> , 2022 , 312, 122958	7.1	3
73	Biodiesel production from waste cooking oil using a novel biocatalyst of lipase enzyme immobilized magnetic nanocomposite. <i>Fuel</i> , 2022 , 313, 123057	7.1	10
72	The flow direction effect on double-duty micro-reactor for coproduction of aniline and hydrogen. <i>Chemical Engineering and Technology</i> ,	2	
71	Laccases: catalytic and functional attributes for robust biocatalysis. 2022 , 567-594		0
70	Carbon nanotubes/nanorods in biocatalysis. 2022 , 339-376		
69	A review on biodiesel production using various heterogeneous nanocatalysts: Operation mechanisms and performances. <i>Biomass and Bioenergy</i> , 2022 , 158, 106356	5.3	11

68	Applications of immobilized lipases in enzymatic reactors: A review. <i>Process Biochemistry</i> , 2022 , 114, 1-20	4.8	5
67	Nanomaterial-immobilized lipases for sustainable recovery of biodiesel [A review. <i>Fuel</i> , 2022 , 316, 123429.1		2
66	Green synthesis of polydopamine functionalized magnetic mesoporous biochar for lipase immobilization and its application in interesterification for novel structured lipids production.. <i>Food Chemistry</i> , 2022 , 379, 132148	8.5	0
65	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	9
64	Membrane-Enabled Sustainable Biofuel Production. 2022 , 343-365		
63	Experimental research of the effects of organic manganese-added biodiesel produced from crambe orientalis oil on engine performance, combustion, and emissions. <i>Environmental Progress and Sustainable Energy</i> ,	2.5	
62	Emerging 3D Printing Strategies for Enzyme Immobilization: Materials, Methods, and Applications.. <i>ACS Omega</i> , 2022 , 7, 11530-11543	3.9	6
61	Recent developments of lipase immobilization technology and application of immobilized lipase mixtures for biodiesel production. <i>Biofuels, Bioproducts and Biorefining</i> ,	5.3	3
60	Upgrading recalcitrant lignocellulosic biomass hydrolysis by immobilized cellulolytic enzyme based nanobiocatalytic systems: a review. <i>Biomass Conversion and Biorefinery</i> , 1	2.3	0
59	Enzymatic catalysis as a tool in biofuels production in Brazil: Current status and perspectives. <i>Energy for Sustainable Development</i> , 2022 , 68, 103-119	5.4	7
58	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	3.8	2
57	Enhanced production of biodiesel using nanomaterials: A detailed review on the mechanism and influencing factors. <i>Fuel</i> , 2022 , 319, 123862	7.1	3
56	Microorganisms-promoted biodiesel production from biomass: A review. <i>Energy Conversion and Management: X</i> , 2021 , 12, 100137	2.5	4
55	Site-Specific and Covalent Immobilization of Lipase on Natural Polyphenol-Modified Magnetic Nanoparticles for Effective Biodiesel Production. <i>ACS Sustainable Chemistry and Engineering</i> ,	8.3	0
54	Mechano-chemical and biological energetics of immobilized enzymes onto functionalized polymers and their applications.. <i>Bioengineered</i> , 2022 , 13, 10518-10539	5.7	1
53	Enhanced performance of <i>Rhizopus oryzae</i> lipase immobilized onto a hybrid-nanocomposite matrix and its application for biodiesel production under the assistance of ultrasonic technique. <i>Fuel Processing Technology</i> , 2022 , 232, 107274	7.2	0
52	Nanotechnological Interventions for Sustainable Production of Microbial Biofuel and Bioenergy. <i>Clean Energy Production Technologies</i> , 2022 , 191-226	0.8	
51	Enzymatic Synthesis of Fatty Acid Isoamyl Monoesters from Soybean Oil Deodorizer Distillate: A Renewable and Ecofriendly Base Stock for Lubricant Industries.. <i>Molecules</i> , 2022 , 27,	4.8	1

50	Sustainable Biosynthesis of Silver Nanoparticles and Their Application to Recover "Single Cell Oil" from <i>Yarrowia lipolytica</i> for Biodiesel Synthesis. <i>BioNanoScience</i> ,	3.4	0
49	Insights into the role of nanotechnology on the performance of biofuel cells and the production of viable biofuels: A review. <i>Fuel</i> , 2022 , 323, 124277	7.1	2
48	The potential use of essential oils as natural biocides against plant pathogens. 2022 , 419-435		
47	Surface-modified nanomaterial-based catalytic materials for the production of liquid fuels. 2022 , 131-169		
46	Cascade chiral amine synthesis catalyzed by site-specifically co-immobilized alcohol and amine dehydrogenases. <i>Catalysis Science and Technology</i> ,	5.5	
45	Sustainability of biodiesel production using immobilized enzymes: A strategy to meet future bio-economy challenges. <i>International Journal of Energy Research</i> ,	4.5	2
44	Towards rapid and sustainable synthesis of biodiesel: A review of effective parameters and scale-up potential of intensification technologies for enzymatic biodiesel production. <i>Journal of Industrial and Engineering Chemistry</i> , 2022 ,	6.3	1
43	Evaluation of <i>Candida rugosa</i> Lipase Immobilized on Magnetic Nanoparticles in Enzymatic/Chemical Hydroesterification for Biodiesel Production. <i>Applied Biochemistry and Biotechnology</i> ,	3.2	
42	Tuning Immobilized Commercial Lipase Preparations Features by Simple Treatment with Metallic Phosphate Salts. <i>Molecules</i> , 2022 , 27, 4486	4.8	1
41	Study on the modification of magnetic graphene oxide and the effect of immobilized lipase. <i>International Journal of Biological Macromolecules</i> , 2022 , 216, 498-509	7.9	0
40	Amphiphilic Nanointerface: Inducing the Interfacial Activation for Lipase.		1
39	Biochemical and Physical Characterization of Immobilized <i>Candida rugosa</i> Lipase on Metal Oxide Hybrid Support. 2022 , 12, 854		1
38	Copper Phthalocyanine Improving Nonaqueous Catalysis of <i>Pseudomonas cepacia</i> Lipase for Ester Synthesis.		
37	Lipase-Ca ²⁺ hybrid nanobiocatalysts through interfacial protein-inorganic self-assembly in deep-eutectic solvents (DES)/water two-phase system for biodiesel production. 2022 , 197, 110-124		2
36	A critical review on biomass-based sustainable biorefineries using nanobiocatalysts: Opportunities, challenges, and future perspectives. 2022 , 363, 127926		0
35	Graphene-based nanoarchitectures as ideal supporting materials to develop multifunctional nanobiocatalytic systems for strengthening the biotechnology industry. 2023 , 452, 139509		0
34	TiO ₂ nanotube immobilised 5-lipoxygenase-mediated screening and isolation of anti-inflammatory active compounds from the leaves of <i>Ionicera japonica</i> thunb. 2022 , 37, 2540-2550		0
33	Hotspots and Mechanisms of Action of the Thermostable Framework of a Microbial Thermolipase.		1

32	Current progress and perspective of heterogeneous nanocatalytic transesterification towards biodiesel production from edible and inedible feedstock: A review. 2022 , 270, 116292	3
31	Biosynthesis of alkanes/alkenes from fatty acids or derivatives (triacylglycerols or fatty aldehydes). 2022 , 61, 108045	0
30	Facile preparation of amorphous cobalt phosphate as inorganic carrier for direct separation and immobilization of his-tagged β -glucosidase from cell lysate.	0
29	Preparation and Characterization of Magnetic Metal-Organic Frameworks Functionalized by Ionic Liquid as Supports for Immobilization of Pancreatic Lipase. 2022 , 27, 6800	1
28	Tuning Immobilized Enzyme Features by Combining Solid-Phase Physicochemical Modification and Mineralization. 2022 , 23, 12808	0
27	Engineering magnetic nanobiocatalytic systems with multipurpose functionalities for biocatalysis, biotechnology and bioprocess applications. 2022 , 30, 100866	2
26	Biodiesel production by transesterification of waste cooking oil in the presence of graphitic carbon nitride supported molybdenum catalyst. 2023 , 332, 126309	0
25	Application of <i>Anoxybacillus gonensis</i> UF7 lipase as a catalyst for biodiesel production from waste frying oils. 2023 , 334, 126672	2
24	The response surface methodology for optimization of <i>Halomonas</i> sp. C2SS100 lipase immobilization onto CaCO_3 for treatment of tuna wash processing wastewater. 1-13	0
23	Effect of triblock copolymers on the lipase catalytic behavior at the interface of conventional O/W emulsions. 2022 , 114178	0
22	Nanotechnology as a vital science in accelerating biofuel production, a boon or bane.	1
21	Process optimization for enzymatic production of a valuable biomass-based ester from levulinic acid.	0
20	Efficient biodiesel production from waste cooking oil by fast co-immobilization of lipases from <i>Aspergillus oryzae</i> and <i>Rhizomucor miehei</i> in magnetic chitosan microcapsules. 2022 ,	2
19	Metal-Organic Frameworks as bio- and heterogeneous catalyst supports for biodiesel production. 2022 ,	0
18	Development of Microalgae Biodiesel: Current Status and Perspectives. 2023 , 11, 34	0
17	MOF-derived hierarchically ordered porous carbon for the immobilization of Eversa [®] Transform 2.0 and its post-immobilization hydrophobization in biodiesel production. 2023 , 339, 127426	0
16	Kinetic, Thermodynamic, and Mechanistic Studies on the Effect of the Preparation Method on the Catalytic Activity of Synthetic Zeolite-A during the Transesterification of Waste Cooking Oil. 2023 , 13, 30	2
15	Novel approach for isolation and immobilization of a recombinant transaminase applying an advanced nanocomposite system.	0

- 14 Biotechnological production of biofuels. **2023**, 151-197 ○
- 13 CuI nanoparticle-immobilized on a hybrid material composed of IRMOF-3 and a sulfonamide-based porous organic polymer as an efficient nanocatalyst for one-pot synthesis of 2,4-diaryl-quinolines. **2023**, 13, 11480-11494 ○
- 12 Recent advances and challenges in the utilization of nanomaterials in transesterification for biodiesel production. **2023**, e15475 ○
- 11 Immobilization of *Aspergillus* sp. laccase on hierarchical silica MFI zeolite with embedded macropores. **2023**, 226, 113311 ○
- 10 Removal of Nitrate Nitrogen in Groundwater by Attapulgite Loaded with Nano-Zero-Valent Iron. **2023**, 2023, 1-11 ○
- 9 State of knowledge about biotechnological uses of digestive enzymes of marine fishery resources: A worldwide systematic review. **2023**, ○
- 8 Heterogeneous enzymatic catalysts: Comparing their efficiency in the production of biodiesel from alternative oils**. **2023**, 8, ○
- 7 Immobilization of Hyperthermostable Carboxylesterase EstD9 from *Anoxybacillus geothermalis* D9 onto Polymer Material and Its Physicochemical Properties. **2023**, 15, 1361 ○
- 6 Performance of Eversa Transform 2.0 Lipase in Ester Production Using Babassu Oil (*Orbignya* sp.) and Tucuman Oil (*Astrocaryum vulgare*): A Comparative Study between Liquid and Immobilized Forms in Fe₃O₄ Nanoparticles. **2023**, 13, 571 1
- 5 Rational Design of a Biocatalyst Based on Immobilized CALB onto Nanostructured SiO₂. **2023**, 13, 625 ○
- 4 Nanostructured supports for multienzyme co-immobilization for biotechnological applications: Achievements, challenges and prospects. **2023**, 315, 102889 ○
- 3 Smart nanomaterials based on metals and metal oxides for photocatalytic applications. **2023**, 351-421 ○
- 2 Immobilization of laccase on organic/inorganic nanocomposites and its application in the removal of phenolic pollutants. ○
- 1 Lipase enzyme immobilized over magnetic titanium graphene oxide as catalyst for biodiesel synthesis from waste cooking oil. **2023**, 173, 106794 ○