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Optimization protocols and improved strategies of cross-linked enzyme aggregates technology: current development and future challenges

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#	Paper	IF	Citations
192	Pectin cross-linked enzyme aggregates (pectin-CLEAs) of glucoamylase. 2014 , 4, 59444-59453		55
191	Mesoporous CLEAs-silica composite microparticles with high activity and enhanced stability. 2015 , 5, 14203		19
190	Solid state fermentation with recovery of Amyloglucosidase from extract by direct immobilization in cross linked enzyme aggregate for starch hydrolysis. 2015 , 4, 486-492		18
189	A Ca-alginate particle co-immobilized with Phanerochaete chrysosporium cells and the combined cross-linked enzyme aggregates from Trametes versicolor. 2015 , 198, 464-9		19
188	Immobilization of Glycoside Hydrolase Families GH1, GH13, and GH70: State of the Art and Perspectives. <i>Molecules</i> , 2016 , 21,	4.8	34
187	Cross-linked enzyme aggregates (CLEA) in enzyme improvement \square review. 2016 , 1,		53
186	Preparation of crosslinked enzyme aggregates (CLEAs) of acid urease with urethanase activity and their application. 2016 , 56, 422-31		16
185	Fusion of a Coiled-Coil Domain Facilitates the High-Level Production of Catalytically Active Enzyme Inclusion Bodies. 2016 , 8, 142-152		46
184	Lectin Agglutinated Multienzyme Catalyst with Enhanced Substrate Affinity and Activity. 2016 , 6, 3789-3795		40
183	Hybrid Cross-Linked Lipase Aggregates with Magnetic Nanoparticles: A Robust and Recyclable Biocatalysis for the Epoxidation of Oleic Acid. <i>Journal of Agricultural and Food Chemistry</i> , 2016 , 64, 7179-87	5.7	59
182	Structural and functional characterization of a highly stable endo- \square 1,4-xylanase from <i>Fusarium oxysporum</i> and its development as an efficient immobilized biocatalyst. 2016 , 9, 191		17
181	Magnetic combined cross-linked enzyme aggregates of horseradish peroxidase and glucose oxidase: an efficient biocatalyst for dye decolourization. 2016 , 6, 90061-90068		22
180	Enzymatic Production of Galacto-Oligosaccharides. 2016 , 111-189		2
179	Optimizing the preparation conditions and characterization of cross-linked enzyme aggregates of a monoamine oxidase. 2016 , 25, 1421-1425		8
178	Surfactant-activated lipase hybrid nanoflowers with enhanced enzymatic performance. 2016 , 6, 27928		69
177	Improvement of microbial \square mylase stability: Strategic approaches. <i>Process Biochemistry</i> , 2016 , 51, 1380-1390	4.890	34
176	Cross-linked enzyme aggregates of <i>Cerrena</i> laccase: Preparation, enhanced NaCl tolerance and decolorization of Remazol Brilliant Blue Reactive. 2016 , 65, 1-7		28

175	Entrapment of cross-linked cellulase colloids in alginate beads for hydrolysis of cellulose. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016 , 145, 862-869	6	24
174	Macromolecular cross-linked enzyme aggregates (M-CLEAs) of α -amylase. <i>International Journal of Biological Macromolecules</i> , 2016 , 84, 69-78	7.9	102
173	Immobilized enzyme mediated synthesis of silver nanoparticles using cross-linked enzyme aggregates (CLEAs) of NADH-dependent nitrate reductase. 2016 , 6, 23-33		31
172	A facile technique to prepare cross-linked enzyme aggregates of bovine pancreatic lipase using bovine serum albumin as an additive. 2016 , 33, 610-615		24
171	Mesoporous phenylalanine ammonia lyase microspheres with improved stability through calcium carbonate templating. <i>International Journal of Biological Macromolecules</i> , 2017 , 98, 887-896	7.9	22
170	Mesoporous Metal-Organic Framework with Well-Defined Cruciate Flower-Like Morphology for Enzyme Immobilization. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 10587-10594	9.5	122
169	Solid-binding peptides for immobilisation of thermostable enzymes to hydrolyse biomass polysaccharides. 2017 , 10, 29		22
168	Characterization of cross-linked enzyme aggregates (CLEAs) of the fusion protein FUS-PepN_PepX and their application for milk protein hydrolysis. 2017 , 243, 1815-1828		6
167	Strategies and perspectives of assembling multi-enzyme systems. <i>Critical Reviews in Biotechnology</i> , 2017 , 37, 1024-1037	9.4	30
166	Enzyme Shielding in a Large Mesoporous Hollow Silica Shell for Improved Recycling and Stability Based on CaCO ₃ Microtemplates and Biomimetic Silicification. <i>Journal of Agricultural and Food Chemistry</i> , 2017 , 65, 3883-3890	5.7	14
165	Preparation of glutaraldehyde-treated lipase-inorganic hybrid nanoflowers and their catalytic performance as immobilized enzymes. 2017 , 105, 24-29		51
164	A new cross-linked enzyme aggregate biocatalyst for NAD ⁺ -booster production. 2017 , 7, 14272-14278		4
163	Sequential application of waste whey as a medium component for <i>Kluyveromyces lactis</i> cultivation and a co-feeder for lipase immobilization by CLEA method. <i>Applied Microbiology and Biotechnology</i> , 2017 , 101, 3617-3626	5.7	4
162	Preparation of spherical cross-linked lipase aggregates with improved activity, stability and reusability characteristic in water-in-ionic liquid microemulsion. <i>Journal of Chemical Technology and Biotechnology</i> , 2017 , 92, 1785-1793	3.5	27
161	Encapsulation of Spherical Cross-Linked Phenylalanine Ammonia Lyase Aggregates in Mesoporous Biosilica. <i>Journal of Agricultural and Food Chemistry</i> , 2017 , 65, 618-625	5.7	26
160	Organic-Inorganic hybrid nanoflowers: A novel host platform for immobilizing biomolecules. 2017 , 352, 249-263		121
159	Structure and activity of magnetic cross-linked enzyme aggregates of bovine carbonic anhydrase as promoters of enzymatic CO ₂ capture. <i>Biochemical Engineering Journal</i> , 2017 , 127, 188-195	4.2	20
158	Preparation, activity and structure of cross-linked enzyme aggregates (CLEAs) with nanoparticle. 2017 , 107, 22-31		23

157	Synthesis of mesoporous silica with different pore sizes for cellulase immobilization: pure physical adsorption. 2017 , 41, 9338-9345		30
156	Degradation of tetracycline by immobilized laccase and the proposed transformation pathway. <i>Journal of Hazardous Materials</i> , 2017 , 322, 525-531	12.8	111
155	Preparation of cross-linked enzyme aggregates of nitrile hydratase ES-NHT-118 from <i>E. coli</i> by macromolecular cross-linking agent. <i>Chinese Journal of Chemical Engineering</i> , 2017 , 25, 487-492	3.2	11
154	The Road to Biorenewables: Carbohydrates to Commodity Chemicals. 2018 , 6, 4464-4480		93
153	Synthesis and characterization of cross linked enzyme aggregates of serine hydroxyl methyltransferase from <i>Idiomarina leihiensis</i> . <i>International Journal of Biological Macromolecules</i> , 2018 , 117, 683-690	7.9	14
152	Multifunctional Hollow Shell Microspheres Derived from Cross-Linking of MnO ₂ Nanoneedles by Zirconium-Based Coordination Polymer: Enzyme Mimicking, Micromotors, and Protein Immobilization. 2018 , 30, 1625-1634		25
151	Engineering aspects of immobilized lipases on esterification: A special emphasis of crowding, confinement and diffusion effects. 2018 , 18, 308-316		5
150	Enhancement of n-3 polyunsaturated fatty acid glycerides in Sardine oil by a bioimprinted cross-linked <i>Candida rugosa</i> lipase. 2018 , 110, 20-29		14
149	Cross-linked enzyme aggregates (CLEAs) of halohydrin dehalogenase from <i>Agrobacterium radiobacter</i> AD1: Preparation, characterization and application as a biocatalyst. 2018 , 272-273, 48-55		25
148	Streptavidin-Enzyme Linked Aggregates for the One-Step Assembly and Purification of Enzyme Cascades. 2018 , 10, 2810-2816		1
147	Shielding effects of Fe ³⁺ -tannic acid nanocoatings for immobilized enzyme on magnetic Fe ₃ O ₄ @silica core shell nanosphere. 2018 , 343, 629-637		53
146	Cross-linked enzyme aggregates of alginate lyase: A systematic engineered approach to controlled degradation of alginate hydrogel. <i>International Journal of Biological Macromolecules</i> , 2018 , 115, 176-184	7.9	19
145	Highly efficient production of 1-cyanocyclohexanecarboxylic acid by cross-linked cell aggregates (CLCAs) of recombinant <i>E. coli</i> harboring nitrilase gene. <i>Process Biochemistry</i> , 2018 , 65, 93-99	4.8	14
144	Role of Biocatalysis in Sustainable Chemistry. 2018 , 118, 801-838		770
143	Combined Cross-Linked Enzyme Aggregates as Biocatalysts. <i>Catalysts</i> , 2018 , 8, 460	4	48
142	Evaluation of Strategies to Produce Highly Porous Cross-Linked Aggregates of Porcine Pancreas Lipase with Magnetic Properties. <i>Molecules</i> , 2018 , 23,	4.8	29
141	Preparation of Magnetic Cross-Linked Amyloglucosidase Aggregates: Solving Some Activity Problems. <i>Catalysts</i> , 2018 , 8, 496	4	25
140	Optimization protocols and improved strategies for metal-organic frameworks for immobilizing enzymes: Current development and future challenges. 2018 , 370, 22-41		110

139	Immobilized carbonic anhydrase on mesoporous cruciate flower-like metal organic framework for promoting CO sequestration. <i>International Journal of Biological Macromolecules</i> , 2018 , 117, 189-198	7.9	41
138	Glycyrrhetic Acid 3-O-Mono-β-glucuronide (GAMG): An Innovative High-Potency Sweetener with Improved Biological Activities. 2018 , 17, 905-919		12
137	Enzyme shielding by mesoporous organosilica shell on FeO@silica yolk-shell nanospheres. <i>International Journal of Biological Macromolecules</i> , 2018 , 117, 673-682	7.9	31
136	Effectiveness of cross-linked enzyme aggregates of cellulolytic enzymes in hydrolyzing wheat straw. 2018 , 126, 445-450		12
135	Silica encapsulated catalase@metal-organic framework composite: A highly stable and recyclable biocatalyst. 2018 , 351, 506-514		54
134	Protease-based cross-linked enzyme aggregates with improved catalytic stability, silver removal, and dehairing potentials. <i>International Journal of Biological Macromolecules</i> , 2018 , 118, 1247-1256	7.9	26
133	Kinetic and thermodynamic features of nanomagnetic cross-linked enzyme aggregates of naringinase nanobiocatalyst in naringin hydrolysis. <i>International Journal of Biological Macromolecules</i> , 2018 , 119, 717-725	7.9	13
132	Protein crosslinking improves the thermal resistance of plastocyanin immobilized on a modified gold electrode. <i>Bioelectrochemistry</i> , 2018 , 124, 127-132	5.6	1
131	Cross-Linked Enzyme Aggregates of Feruloyl Esterase Preparations from <i>Thermothelomyces thermophila</i> and <i>Talaromyces wortmannii</i> . <i>Catalysts</i> , 2018 , 8, 208	4	13
130	Preparation and Characterization of Sugar-Assisted Cross-Linked Enzyme Aggregates (CLEAs) of Recombinant Cellobiose 2-epimerase from <i>Caldicellulosiruptor saccharolyticus</i> (CsCE). <i>Journal of Agricultural and Food Chemistry</i> , 2018 , 66, 7712-7721	5.7	14
129	Synthesis of butyl oleate catalyzed by cross-linked enzyme aggregates with magnetic nanoparticles in rotating magneto-micro-reactor. 2018 , 281, 123-129		12
128	Combined CLEAs of invertase and soy protein for economically feasible conversion of sucrose in a fed-batch reactor. 2018 , 110, 145-157		15
127	Cross-linked cytochrome P450 BM3 aggregates promoted by Ru(II)-diimine complexes bearing aldehyde groups. 2018 , 186, 130-134		6
126	Precipitation-Based Nanoscale Enzyme Reactor with Improved Loading, Stability, and Mass Transfer for Enzymatic CO ₂ Conversion and Utilization. 2018 , 8, 6526-6536		24
125	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	4	19
124	Directed evolution of a genetically encoded immobilized lipase for the efficient production of biodiesel from waste cooking oil. 2019 , 12, 165		24
123	Formation lipase cross-linked enzyme aggregates on octyl-modified mesocellular foams with oxidized sodium alginate. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019 , 184, 110501	6	11
122	Activation of cellulase cross-linked enzyme aggregates (CLEAs) in scCO ₂ . 2019 , 154, 104629		12

121	Acid-resistant enzyme@MOF nanocomposites with mesoporous silica shells for enzymatic applications in acidic environments. 2019 , 306, 54-61		16
120	Recent Advances of Cellulase Immobilization onto Magnetic Nanoparticles: An Update Review. 2019 , 5, 36		32
119	Enzyme Immobilization in MOF-derived Porous NiO with Hierarchical Structure: An Efficient and Stable Enzymatic Reactor. 2019 , 11, 2828-2836		10
118	Driving Immobilized Lipases as Biocatalysts: 10 Years State of the Art and Future Prospects. 2019 , 58, 5358-5378		59
117	Cross-linked enzyme aggregates of recombinant <i>Candida antarctica</i> lipase B for the efficient synthesis of olvanil, a nonpungent capsaicin analogue. 2019 , 35, e2807		15
116	Preparation of lipase cross-linked enzyme aggregates in octyl-modified mesocellular foams. <i>International Journal of Biological Macromolecules</i> , 2019 , 130, 342-347	7.9	8
115	CLEAs, Combi-CLEAs and Smart Magnetic CLEAs: Biocatalysis in a Bio-Based Economy. <i>Catalysts</i> , 2019 , 9, 261	4	79
114	Adsorption of cholesterol oxidase and entrapment of horseradish peroxidase in metal-organic frameworks for the colorimetric biosensing of cholesterol. <i>Talanta</i> , 2019 , 200, 293-299	6.2	31
113	Composite beads of silica gel, alginate and poly(aspartic acid) for the immobilization of a lipase enzyme. 2019 , 13, 512-523		7
112	Novozym 435: the perfect lipase immobilized biocatalyst?. 2019 , 9, 2380-2420		241
111	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	4	18
110	Modifying bio-catalytic properties of enzymes for efficient biocatalysis: a review from immobilization strategies viewpoint. 2019 , 37, 159-182		79
109	Cross-linked esterase aggregates (CLEAs) using nanoparticles as immobilization matrix. <i>Preparative Biochemistry and Biotechnology</i> , 2019 , 49, 270-278	2.4	20
108	A Phenolic Acid Decarboxylase-Based All-Enzyme Hydrogel for Flow Reactor Technology. 2019 , 10,		16
107	Cross-linked enzyme aggregates of recombinant cyclodextrin glycosyltransferase for high-purity cyclodextrin production. <i>Journal of Chemical Technology and Biotechnology</i> , 2019 , 94, 1528-1533	3.5	6
106	Characterization of free and immobilized laccase from <i>Cyberlindnera fabianii</i> and application in degradation of bisphenol A. <i>International Journal of Biological Macromolecules</i> , 2019 , 125, 856-864	7.9	49
105	Enzymes@ZIF-8 Nanocomposites with Protection Nanocoating: Stability and Acid-Resistant Evaluation. 2018 , 11,		29
104	Characterization of cross-linked amyloglucosidase aggregates from <i>Aspergillus fumigatus</i> KIBGE-IB33 for continuous production of glucose. <i>International Journal of Biological Macromolecules</i> , 2019 , 135, 1252-1260	7.9	9

103	Biodegradation of polyvinyl alcohol using cross-linked enzyme aggregates of degrading enzymes from <i>Bacillus niacini</i> . <i>International Journal of Biological Macromolecules</i> , 2019 , 124, 10-16	7.9	35
102	Catalytic phenol removal using entrapped cross-linked laccase aggregates. <i>International Journal of Biological Macromolecules</i> , 2019 , 122, 359-366	7.9	43
101	Self-assembly of lipase hybrid nanoflowers with bifunctional Ca for improved activity and stability. 2020 , 132, 109408		19
100	Multienzymatic Nanoassemblies: Recent Progress and Applications. 2020 , 38, 202-216		32
99	Cross-linked enzyme aggregates of arylamidase from <i>Cupriavidus oxalaticus</i> ICTDB921: process optimization, characterization, and application for mitigation of acrylamide in industrial wastewater. <i>Bioprocess and Biosystems Engineering</i> , 2020 , 43, 457-471	3.7	8
98	General Overview on Immobilization Techniques of Enzymes for Biocatalysis. 2020 , 409-435		7
97	Mechanisms by Which Organic Solvent Exchange Transforms Responsive Pure Protein Hydrogels into Responsive Organogels. 2020 , 21, 839-853		3
96	Stimuli-Responsive Pure Protein Organogel Sensors and Biocatalytic Materials. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 238-249	9.5	7
95	A new design strategy with stochastic optimization on the preparation of magnetite cross-linked tyrosinase aggregates (MCLTA). <i>Process Biochemistry</i> , 2020 , 99, 131-138	4.8	4
94	Challenges and Opportunities: Porous Supports in Carbonic Anhydrase Immobilization. <i>Journal of CO2 Utilization</i> , 2020 , 42, 101305	7.6	9
93	Recent developments in enzyme immobilization technology for high-throughput processing in food industries. <i>Critical Reviews in Food Science and Nutrition</i> , 2021 , 61, 3160-3196	11.5	20
92	3D coral-like gold/carbon paper electrode modified with covalent and cross-linked enzyme aggregates for electrochemical sensing of glucose. <i>Microchemical Journal</i> , 2020 , 159, 105347	4.8	8
91	Immobilized laccase in the form of (magnetic) cross-linked enzyme aggregates for sustainable diclofenac (bio)degradation. <i>Journal of Cleaner Production</i> , 2020 , 275, 124121	10.3	38
90	Developments in the Use of Lipase Transesterification for Biodiesel Production from Animal Fat Waste. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 5085	2.6	16
89	Composites of Crosslinked Aggregates of Eversa□ Transform and Magnetic Nanoparticles. Performance in the Ethanolysis of Soybean Oil. <i>Catalysts</i> , 2020 , 10, 817	4	7
88	Ionic liquid synergistic effect between preparation of hybrid supports and immobilization of lipase applied to esters production. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020 , 1	4.1	3
87	Coupling Two Sequential Biocatalysts with Close Proximity into Metal-Organic Frameworks for Enhanced Cascade Catalysis. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 25565-25571	9.5	27
86	Improved development in magnetic Xyl-CLEAs technology for biotransformation of agro-industrial by-products through the use of a novel macromolecular cross-linker. <i>Reactive and Functional Polymers</i> , 2020 , 154, 104676	4.6	5

85	Co-immobilization of multiple enzymes by self-assembly and chemical crosslinking for cofactor regeneration and robust biocatalysis. <i>International Journal of Biological Macromolecules</i> , 2020 , 162, 445-453	7.9	12
84	Instrument-Free Detection of FXD3 Using Vial-Based Immunosensor for Earlier and Faster Urothelial Carcinoma Diagnosis. <i>ACS Sensors</i> , 2020 , 5, 928-935	9.2	3
83	Carrier-Free Immobilization of Rutin Degrading Enzyme Extracted From spp. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 470	5.8	2
82	Lipase immobilization on ceramic supports: An overview on techniques and materials. <i>Biotechnology Advances</i> , 2020 , 42, 107581	17.8	36
81	Soluble enzyme cross-linking via multi-component reactions: a new generation of cross-linked enzymes. <i>Chemical Communications</i> , 2020 , 56, 9683-9686	5.8	12
80	Improvement in biochemical characteristics of cross-linked enzyme aggregates (CLEAs) with magnetic nanoparticles as support matrix. <i>Methods in Enzymology</i> , 2020 , 630, 133-158	1.7	1
79	Greener production of low methoxyl pectin via recyclable enzymatic de-esterification using pectin methylesterase cross-linked enzyme aggregates captured from citrus peels. <i>Food Hydrocolloids</i> , 2020 , 108, 105786	10.6	6
78	Production and use of immobilized lipases in/on nanomaterials: A review from the waste to biodiesel production. <i>International Journal of Biological Macromolecules</i> , 2020 , 152, 207-222	7.9	135
77	On the taught new tricks of enzymes immobilization: An all-inclusive overview. <i>Reactive and Functional Polymers</i> , 2020 , 152, 104613	4.6	90
76	Fabrication of a porous polymer membrane enzyme reactor and its enzymatic kinetics study in an artificial kidney model. <i>Talanta</i> , 2020 , 216, 120963	6.2	3
75	Synthesis of dehydroepiandrosterone by co-immobilization of keto reductase and glucose dehydrogenase. <i>Journal of Chemical Technology and Biotechnology</i> , 2020 , 95, 2530-2536	3.5	0
74	Bio-based and cost effective method for phenolic compounds removal using cross-linked enzyme aggregates. <i>Journal of Hazardous Materials</i> , 2021 , 403, 124021	12.8	13
73	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
72	Future prospects, opportunities, and challenges in the application of nanomaterials in biofuel production systems. 2021 , 797-806		
71	Continuous Clarification of Barberry Juice with Pectinase Immobilised by Oxidized Polysaccharides. <i>Food Technology and Biotechnology</i> , 2021 , 59, 174-184	2.1	0
70	Effect of cross-linked enzyme aggregate strategy on characterization of sn-1,3 extracellular lipase from <i>Aspergillus niger</i> GZUF36. <i>Applied Microbiology and Biotechnology</i> , 2021 , 105, 1925-1941	5.7	1
69	Preparation of cross-linked enzyme aggregates of lipase from <i>Aspergillus niger</i> : process optimization, characterization, stability, and application for epoxidation of lemongrass oil. <i>Bioprocess and Biosystems Engineering</i> , 2021 , 44, 1383-1404	3.7	4
68	Preparation, characterization and stability studies of cross-linked α -amylase aggregates (CLAAs) for continuous liquefaction of starch. <i>International Journal of Biological Macromolecules</i> , 2021 , 173, 267-276	7.9	5

67	From Enzyme Stability to Enzymatic Bioelectrode Stabilization Processes. <i>Catalysts</i> , 2021 , 11, 497	4	10
66	Biomass Processing with Biocatalysis. 2021 , 113-146		
65	Strategies towards Reduction of Cellulases Consumption: Debottlenecking the Economics of Lignocellulosics Valorization Processes. <i>Polysaccharides</i> , 2021 , 2, 287-310	3	8
64	Nickel-Carnosine complex: A new carrier for enzymes immobilization by affinity adsorption. <i>Chinese Journal of Chemical Engineering</i> , 2021 ,	3.2	0
63	Immobilization of carbonic anhydrase for CO ₂ capture and its industrial implementation: A review. <i>Journal of CO₂ Utilization</i> , 2021 , 47, 101475	7.6	18
62	High throughput urease immobilization onto a new metal-organic framework called nanosized electroactive quasi-coral-340 (NEQC-340) for water treatment and safe blood cleaning. <i>Process Biochemistry</i> , 2021 , 105, 79-90	4.8	3
61	Chemical and physical Chitosan modification for designing enzymatic industrial biocatalysts: How to choose the best strategy?. <i>International Journal of Biological Macromolecules</i> , 2021 , 181, 1124-1170	7.9	34
60	Enzymatic characteristics of immobilized carbonic anhydrase and its applications in CO conversion. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021 , 204, 111779	6	7
59	Peroxidase enzymes as green catalysts for bioremediation and biotechnological applications: A review. <i>Science of the Total Environment</i> , 2022 , 806, 150500	10.2	5
58	A feasible electrochemical biosensor for determination of glucose based on Prussian blue - Enzyme aggregates cascade catalytic system. <i>Bioelectrochemistry</i> , 2021 , 141, 107838	5.6	5
57	Employment of polysaccharides in enzyme immobilization. <i>Reactive and Functional Polymers</i> , 2021 , 167, 105005	4.6	8
56	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
55	Immobilization of Enzymes as Cross-Linked Enzyme Aggregates: General Strategy to Obtain Robust Biocatalysts. <i>Methods in Molecular Biology</i> , 2020 , 2100, 345-361	1.4	5
54	Cross-linked Enzyme Aggregates: Current Developments and Applications. 2019 , 83-112		4
53	Enzymatic Conversion of First- and Second-Generation Sugars. 2018 , 169-189		5
52	Catalase immobilized in polypeptide/silica nanocomposites via emulsion and biomineralization with improved activities. <i>International Journal of Biological Macromolecules</i> , 2020 , 159, 931-940	7.9	7
51	Fabrication of an organic/inorganic nanocomposite carrier for enzyme immobilization based on metal/organic coordination. <i>Process Biochemistry</i> , 2020 , 95, 47-54	4.8	9
50	Co-Immobilized Carrier-Free Enzymes For Lactose Upgrading. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021 , 100553	7.9	4

49	Current perspective on production and applications of microbial cellulases: a review. <i>Bioresources and Bioprocessing</i> , 2021 , 8,	5.2	13
48	Biotechnological Improvements of Cold-Adapted Enzymes: Commercialization via an Integrated Approach. 2017 , 477-512		0
47	Challenges in Applying Cross-Linked Laccase Aggregates in Bioremediation of Emerging Contaminants from Municipal Wastewater. <i>Microbiology Monographs</i> , 2020 , 147-171	0.8	
46	Immobilization of <i>Candida rugosa</i> Lipase on Magnetic Biosilica Particles: Hydrolysis and Transesterification Studies. <i>Biotechnology and Bioprocess Engineering</i> , 2021 , 26, 827-840	3.1	0
45	Preparation of combined cross-linked enzyme aggregates containing galactitol dehydrogenase and NADH oxidase for L-tagatose synthesis via in situ cofactor regeneration. <i>Bioprocess and Biosystems Engineering</i> , 2021 , 45, 353	3.7	0
44	Biocatalytic membranes in anti-fouling and emerging pollutant degradation applications: Current state and perspectives. <i>Separation and Purification Technology</i> , 2021 , 282, 120098	8.3	2
43	Cross-linked β Mannanase Aggregates: Preparation, Characterization, and Application for Producing Partially Hydrolyzed Guar Gum.. <i>Applied Biochemistry and Biotechnology</i> , 2022 , 1	3.2	0
42	An effective immobilization of β glucosidases by partly cross-linking enzyme aggregates.. <i>Preparative Biochemistry and Biotechnology</i> , 2022 , 1-9	2.4	0
41	Synthesis of photo-crosslinkable hydrogel membranes for entrapment of lactase enzyme. <i>Reactive and Functional Polymers</i> , 2022 , 172, 105159	4.6	0
40	Efficient Immobilization of Enzymes on Amino Functionalized MIL-125-NH ₂ Metal Organic Framework. <i>Biotechnology and Bioprocess Engineering</i> , 2022 , 27, 135	3.1	3
39	Utilization of Soybean Oil Waste for a High-Level Production of Ceramide by a Novel Phospholipase C as an Environmentally Friendly Process.. <i>Journal of Agricultural and Food Chemistry</i> , 2022 ,	5.7	0
38	Emerging 3D Printing Strategies for Enzyme Immobilization: Materials, Methods, and Applications.. <i>ACS Omega</i> , 2022 , 7, 11530-11543	3.9	6
37	An Insight in Developing Carrier-Free Immobilized Enzymes.. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022 , 10, 794411	5.8	0
36	Optimization and characterization of immobilized <i>E. coli</i> for engineered thermostable xylanase excretion and cell viability. <i>Arabian Journal of Chemistry</i> , 2022 , 15, 103803	5.9	
35	Immobilized phytases: an overview of different strategies, support material, and their applications in improving food and feed nutrition.. <i>Critical Reviews in Food Science and Nutrition</i> , 2021 , 1-23	11.5	1
34	Cross-linked enzyme aggregates immobilization: preparation, characterization, and applications.. <i>Critical Reviews in Biotechnology</i> , 2022 , 1-15	9.4	1
33	Data_Sheet_1.docx. 2020 ,		
32	Zwitterionic polymer-mediated immobilization of organophosphorus hydrolase enhances hydrolysis of methyl parathion by substrate enrichment. <i>Biochemical Engineering Journal</i> , 2022 , 108491	4.2	1

31	Editorial: Designing Carrier-Free Immobilized Enzymes for Biocatalysis. <i>Frontiers in Bioengineering and Biotechnology</i> , 10,	5.8	2
30	Lipase immobilization via cross-linked enzyme aggregates: Problems and prospects [A review]. <i>International Journal of Biological Macromolecules</i> , 2022 , 215, 434-449	7.9	3
29	The Chemistry and Applications of Metal-Organic Frameworks (MOFs) as Industrial Enzyme Immobilization Systems. <i>Molecules</i> , 2022 , 27, 4529	4.8	4
28	Carbonic Anhydrase Membranes For Carbon Capture and Storage. 2022 , 100031		
27	Preparation, characterization and stability of cross linked nitrilase aggregates (nitrilase-LEAs) for hydroxylation of 2-chloroisonicotinonitrile to 2-chloroisonicotinic acid. 2022 , 45, 1559-1579		1
26	Robust and recyclable cross-linked enzyme aggregates of sucrose isomerase for isomaltulose production. 2023 , 399, 134000		1
25	Co-Immobilizing Two Glycosidases Based on Cross-Linked Enzyme Aggregates to Enhance Enzymatic Properties for Achieving High Titer Icaritin Biosynthesis. 2022 , 70, 11631-11642		0
24	Tailoring the Properties of Self-Assembled Carbonic Anhydrase Supraparticles for CO ₂ Capture. 2022 , 10, 12374-12385		0
23	An enzyme-assembled gel monolithic microreactor for continuous flow asymmetric synthesis of aryl alcohols.		0
22	Inert enzyme nanoaggregates for simultaneous biodecarboxylation and CO ₂ conversion. 2023 , 305, 122447		0
21	On the influence of protein aggregate sizes for the formation of solid and hollow protein microparticles. 2023 , 631, 181-190		0
20	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
19	Newly Synthesized Multifunctional Biopolymer Coated Magnetic Core/Shell Fe ₃ O ₄ @Au Nanoparticles for Evaluation of L-asparaginase Immobilization.		0
18	A multi-component approach for co-immobilization of lipases on silica-coated magnetic nanoparticles: improving biodiesel production from waste cooking oil.		1
17	A versatile tag for simple preparation of cutinase towards enhanced biodegradation of polyethylene terephthalate. 2022 ,		1
16	A Comprehensive Review On Bio Mimicked Multimolecular Frameworks & Supramolecules As Scaffolds For Enzyme Immobilization.		0
15	Enhanced production of cytidine 5'-monophosphate using biocatalysis of di-enzymes immobilized on amino-functionalized sepharose. 2022 ,		0
14	Support-free immobilization. 2023 , 87-114		0

- 13 Immobilization of multienzymes: Problems and solutions. **2023**, 317-340 ○
- 12 Future perspectives in enzyme immobilization. **2023**, 403-426 ○
- 11 Crystal Contact Engineering for Enhanced Cross-Linking Efficiency of HheG Crystals. **2022**, 12, 1553 ○
- 10 Enzyme Immobilization. **2023**, 35-51 ○
- 9 Enzyme hybrid nanoflowers and enzyme@metal-organic frameworks composites: fascinating hybrid nanobiocatalysts. 1-24 ○
- 8 Continuous fixed-bed column studies to remove polycyclic aromatic hydrocarbons by degrading enzymes immobilized on polyimide aerogels. **2023**, 53, 103597 ○
- 7 Construction of Macroporous β -Glucosidase@MOFs by a Metal Competitive Coordination and Oxidation Strategy for Efficient Cellulose Conversion at 120 °C. **2023**, 15, 8157-8168 ○
- 6 Progress on Lipase Immobilization Technology in Edible Oil and Fat Modifications. 1-47 ○
- 5 Tyrosinase Immobilization Strategies for the Development of Electrochemical Biosensors: A Review. **2023**, 13, 760 ○
- 4 Nano-biocatalytic Systems for Cellulose de-polymerization: A Drive from Design to Applications. ○
- 3 Bioinspired Framework Catalysts: From Enzyme Immobilization to Biomimetic Catalysis. ○
- 2 Fabrication of magnetically recyclable porous cross-linked aggregates of *Trametes versicolor* MTCC 138 laccase for the efficient removal of pentachlorophenol from aqueous solution. **2023**, 115899 ○
- 1 Organic-inorganic hybrid nanoflowers: A comprehensive review of current trends, advances, and future perspectives. **2023**, 489, 215191 ○