

# Role of Biocatalysis in Sustainable Chemistry

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Easy Access to Enantiopure ( <i>S</i> )- and ( <i>R</i> )-Aryl Alkyl Alcohols by a Combination of Gold(III)-Catalyzed Alkyne Hydration and Enzymatic Reduction. <i>ChemCatChem</i> , 2018, 10, 920-924.	1.8	23
2	The Road to Biorenewables: Carbohydrates to Commodity Chemicals. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 4464-4480.	3.2	120
3	Enantioselective sulfoxidations employing the thermostable cyclohexanone monooxygenase from <i>Thermocrisum municipale</i> . <i>Enzyme and Microbial Technology</i> , 2018, 113, 24-28.	1.6	16
4	Advances in enzyme substrate analysis with capillary electrophoresis. <i>Methods</i> , 2018, 146, 93-106.	1.9	34
5	Conservative evolution and industrial metabolism in Green Chemistry. <i>Green Chemistry</i> , 2018, 20, 2171-2191.	4.6	45
6	Reshaping the Active Pocket of Amine Dehydrogenases for Asymmetric Synthesis of Bulky Aliphatic Amines. <i>ACS Catalysis</i> , 2018, 8, 2622-2628.	5.5	100
7	Biocatalysis in Spain: A field of success and innovation. <i>Biocatalysis and Biotransformation</i> , 2018, 36, 180-183.	1.1	0
8	Directed Evolution Mimics Allosteric Activation by Stepwise Tuning of the Conformational Ensemble. <i>Journal of the American Chemical Society</i> , 2018, 140, 7256-7266.	6.6	73
9	Recent developments and challenges of biocatalytic processes in the pharmaceutical industry. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2018, 11, 58-64.	3.2	60
10	Merging lithium carbenoid homologation and enzymatic reduction: A combinative approach to the HIV-protease inhibitor Nelfinavir. <i>Tetrahedron</i> , 2018, 74, 2211-2217.	1.0	21
11	Micelle-enabled clean and selective sulfonylation of polyfluoroarenes in water under mild conditions. <i>Green Chemistry</i> , 2018, 20, 1784-1790.	4.6	65
12	Tailor-made catalytically active inclusion bodies for different applications in biocatalysis. <i>Catalysis Science and Technology</i> , 2018, 8, 5816-5826.	2.1	24
13	Monoamine Oxidase: Tunable Activity for Amine Resolution and Functionalization. <i>ACS Catalysis</i> , 2018, 8, 11889-11907.	5.5	75
14	Biocatalytic methylation and demethylation via a shuttle catalysis concept involving corrinoid proteins. <i>Communications Chemistry</i> , 2018, 1, .	2.0	27
15	Extending the application of biocatalysis to meet the challenges of drug development. <i>Nature Reviews Chemistry</i> , 2018, 2, 409-421.	13.8	290
16	Structural Studies based on two Lysine Dioxygenases with Distinct Regioselectivity Brings Insights Into Enzyme Specificity within the Clavaminate Synthase-Like Family. <i>Scientific Reports</i> , 2018, 8, 16587.	1.6	17
17	Chemoselective Acetylation of 2-Aminophenol Using Immobilized Lipase: Process Optimization, Mechanism, and Kinetics. <i>ACS Omega</i> , 2018, 3, 18528-18534.	1.6	8
18	Self-Assembling All-Enzyme Hydrogels for Flow Biocatalysis. <i>Angewandte Chemie</i> , 2018, 130, 17274-17278.	1.6	18

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19	Harnessing Marine Biocatalytic Reservoirs for Green Chemistry Applications through Metagenomic Technologies. <i>Marine Drugs</i> , 2018, 16, 227.	2.2	22
20	Scoping the Enantioselective Desymmetrization of a Poorly Water-Soluble Diester by Recombinant Pig Liver Esterase. <i>Organic Process Research and Development</i> , 2018, 22, 1518-1523.	1.3	10
21	Oxidoreductase-Catalyzed Synthesis of Chiral Amines. <i>ACS Catalysis</i> , 2018, 8, 10985-11015.	5.5	150
22	Self-Assembling All-Enzyme Hydrogels for Flow Biocatalysis. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 17028-17032.	7.2	76
23	Recent Advances on the Use of 2-methyltetrahydrofuran (2-MeTHF) in Biotransformations. <i>Current Green Chemistry</i> , 2018, 5, 86-103.	0.7	63
24	Designed for life: biocompatible de novo designed proteins and components. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180472.	1.5	28
25	Leloir Glycosyltransferases as Biocatalysts for Chemical Production. <i>ACS Catalysis</i> , 2018, 8, 6283-6300.	5.5	133
26	Magnetic Isinglass a Nano-Bio Support for Copper Immobilization: Cu <sup>II</sup> @Fe <sub>3</sub> O <sub>4</sub> Heterogeneous Catalyst for Triazoles Synthesis. <i>ChemistrySelect</i> , 2018, 3, 5486-5493.	0.7	17
27	Discovery of a Switch Between Prelog and Anti-Prelog Reduction toward Halogen-Substituted Acetophenones in Short-Chain Dehydrogenase/Reductases. <i>ACS Catalysis</i> , 2018, 8, 6012-6020.	5.5	46
28	Enhanced phenolic compounds extraction from <i>Morus alba</i> L. leaves by deep eutectic solvents combined with ultrasonic-assisted extraction. <i>Industrial Crops and Products</i> , 2018, 120, 147-154.	2.5	119
29	Integrating biocatalysis and multicomponent reactions. <i>Drug Discovery Today: Technologies</i> , 2018, 29, 3-9.	4.0	6
30	Advancing Flow Chemistry Portability: A Simplified Approach to Scaling Up Flow Chemistry. <i>Organic Process Research and Development</i> , 2018, 22, 1015-1021.	1.3	30
31	A Magnetic Heterogeneous Biocatalyst Composed of Immobilized Laccase and 2,2,6,6-tetramethylpiperidine-1-oxyl (TEMPO) for Green One-Pot Cascade Synthesis of 2-Substituted Benzimidazole and Benzoxazole Derivatives under Mild Reaction Conditions. <i>Advanced Synthesis and Catalysis</i> , 2018, 360, 3563-3571.	2.1	30
32	Identification and Implementation of Biocatalytic Transformations in Route Discovery: Synthesis of Chiral 1,3-Substituted Cyclohexanone Building Blocks. <i>Organic Process Research and Development</i> , 2018, 22, 871-879.	1.3	21
33	Scoping Biocatalyst Performance Using Reaction Trajectory Analysis. <i>Organic Process Research and Development</i> , 2018, 22, 1101-1114.	1.3	15
34	Lipase-mediated direct in situ ring-opening polymerization of $\epsilon$ -caprolactone formed by a chemo-enzymatic method. <i>Journal of Biotechnology</i> , 2018, 281, 74-80.	1.9	8
35	Synthesis and continuous catalytic application of alkaline protease nanoflowers-PVA composite hydrogel. <i>Catalysis Communications</i> , 2018, 116, 5-9.	1.6	32
36	Techniques for Preparation of Cross-Linked Enzyme Aggregates and Their Applications in Bioconversions. <i>Catalysts</i> , 2018, 8, 174.	1.6	73

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37	Industrial Applications of Enzymes: Recent Advances, Techniques, and Outlooks. <i>Catalysts</i> , 2018, 8, 238.	1.6	509
38	Visible-Light-Driven Epoxyacylation and Hydroacylation of Olefins Using Methylene Blue/Persulfate System in Water. <i>Journal of Organic Chemistry</i> , 2018, 83, 8331-8340.	1.7	36
39	Four Atom Efficient Enzyme Cascades for All 4-Methoxyphenyl-1,2-propanediol Isomers Including Product Crystallization Targeting High Product Concentrations and Excellent E-Factors. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11819-11826.	3.2	22
40	UN Sustainable Development Goals: How can sustainable/green chemistry contribute? The view from the agrochemical industry. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2018, 13, 158-163.	3.2	9
41	Lipase Catalysed Kinetic Resolution of Racemic 1,2-Diols Containing a Chiral Quaternary Center. <i>Molecules</i> , 2018, 23, 1585.	1.7	5
42	Silica nanowires with tunable hydrophobicity for lipase immobilization and biocatalytic membrane assembly. <i>Journal of Colloid and Interface Science</i> , 2018, 531, 555-563.	5.0	22
43	Programming a Biofilm-Mediated Multienzyme-Assembly-Cascade System for the Biocatalytic Production of Glucosamine from Chitin. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 8061-8068.	2.4	33
44	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.	1.8	26
45	Smart chemistry and its application in peroxidase immobilization using different support materials. <i>International Journal of Biological Macromolecules</i> , 2018, 119, 278-290.	3.6	150
46	The limits to biocatalysis: pushing the envelope. <i>Chemical Communications</i> , 2018, 54, 6088-6104.	2.2	193
47	Hydroclassified Combinatorial Saturation Mutagenesis: Reshaping Substrate Binding Pockets of <i>KpADH</i> for Enantioselective Reduction of Bulky Ketones. <i>ACS Catalysis</i> , 2018, 8, 8336-8345.	5.5	51
48	Synthesis of 2,5-Disubstituted Pyrrolidine Alkaloids via A One-Pot Cascade Using Transaminase and Reductive Aminase Biocatalysts. <i>ChemCatChem</i> , 2018, 10, 4733-4738.	1.8	31
49	Promising catalytic synthesis pathways towards higher alcohols as suitable transport fuels based on H <sub>2</sub> and CO <sub>2</sub> . <i>Journal of CO<sub>2</sub> Utilization</i> , 2018, 27, 223-237.	3.3	33
50	Multienzyme One-Pot Cascade for the Stereoselective Hydroxyethyl Functionalization of Substituted Phenols. <i>Organic Letters</i> , 2018, 20, 5139-5143.	2.4	8
51	Biocatalysis in Drug Development—Highlights of the Recent Patent Literature. <i>Organic Process Research and Development</i> , 2018, 22, 1063-1080.	1.3	62
52	A Comparative Study on Asymmetric Reduction of Ketones Using the Growing and Resting Cells of Marine-Derived Fungi. <i>Marine Drugs</i> , 2018, 16, 62.	2.2	13
53	Screening of organic solvents for bioprocesses using aqueous-organic two-phase systems. <i>Biotechnology Advances</i> , 2018, 36, 1801-1814.	6.0	67
54	Integrating enzyme immobilization and protein engineering: An alternative path for the development of novel and improved industrial biocatalysts. <i>Biotechnology Advances</i> , 2018, 36, 1470-1480.	6.0	244

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55	Toward Upscaled Biocatalytic Preparation of Lactone Building Blocks for Polymer Applications. <i>Organic Process Research and Development</i> , 2018, 22, 803-812.	1.3	19
56	Electrochemical strategies for C-H functionalization and C-N bond formation. <i>Chemical Society Reviews</i> , 2018, 47, 5786-5865.	18.7	736
57	Photoredoxkatalyse als Strategie zur synthetischen Nutzung von CO <sub>2</sub> : Direkter Zugang zu Carbonsäuren aus einem erneuerbaren Rohstoff. <i>Angewandte Chemie</i> , 2019, 131, 5546-5556.	1.6	30
58	Catalytic Aerobic Oxidation of C(sp <sup>3</sup> )-H Bonds. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7946-7970.	7.2	202
59	Preliminary economic assessment: a valuable tool to establish biocatalytic process feasibility with an in-lab immobilized lipase. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 409-417.	1.6	8
60	Photoredox Catalysis as a Strategy for CO <sub>2</sub> Incorporation: Direct Access to Carboxylic Acids from a Renewable Feedstock. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 5492-5502.	7.2	165
61	Katalytische, aerobe Oxidation von C(sp <sup>3</sup> )-C-H-Bindungen. <i>Angewandte Chemie</i> , 2019, 131, 8028-8055.	1.6	35
62	Degradation and defluorination of 6:2 fluorotelomer sulfonamidoalkyl betaine and 6:2 fluorotelomer sulfonate by <i>Gordonia</i> sp. strain NB4-1Y under sulfur-limiting conditions. <i>Science of the Total Environment</i> , 2019, 647, 690-698.	3.9	115
63	PLP-dependent enzymes as important biocatalysts for the pharmaceutical, chemical and food industries: a structural and mechanistic perspective. <i>Catalysis Science and Technology</i> , 2019, 9, 4864-4876.	2.1	62
64	Ketosisophorone Synthesis with an Immobilized Alcohol Dehydrogenase. <i>ChemCatChem</i> , 2019, 11, 4862-4870.	1.8	8
65	Highly efficient asymmetric bioreduction of 1-aryl-2-(azaaryl)ethanones. Chemoenzymatic synthesis of lanicemine. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 8214-8220.	1.5	4
66	Enhanced Activity of Immobilized Lipase by Phosphonium-Based Ionic Liquids Used in the Support Preparation and Immobilization Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 15648-15659.	3.2	26
67	Regioselective Ring-Opening of Styrene Oxide Derivatives Using Halohydrin Dehalogenase for Synthesis of 4-Aryloxazolidinones. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 4651-4655.	2.1	24
68	Trimethyl- $\mu$ -caprolactone synthesis with a novel immobilized glucose dehydrogenase and an immobilized thermostable cyclohexanone monooxygenase. <i>Applied Catalysis A: General</i> , 2019, 585, 117187.	2.2	6
69	Model-based optimization of the enzymatic aldol addition of propanal to formaldehyde: A first step towards enzymatic synthesis of 3-hydroxybutyric acid. <i>Chemical Engineering Research and Design</i> , 2019, 150, 140-152.	2.7	6
70	Biocatalytic retrosynthesis approaches to <i>scpd</i> -(2,4,5-trifluorophenyl)alanine, key precursor of the antidiabetic sitagliptin. <i>Green Chemistry</i> , 2019, 21, 4368-4379.	4.6	20
71	Developing Multicompartment Biopolymer Hydrogel Beads for Tandem Chemoenzymatic One-Pot Process. <i>Catalysts</i> , 2019, 9, 547.	1.6	13
72	CO <sub>2</sub> fixation for malate synthesis energized by starch via in vitro metabolic engineering. <i>Metabolic Engineering</i> , 2019, 55, 152-160.	3.6	25

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73	Engineering Metalloprotein Functions in Designed and Native Scaffolds. Trends in Biochemical Sciences, 2019, 44, 1022-1040.	3.7	76
74	Developing a Protein Scaffolding System for Rapid Enzyme Immobilization and Optimization of Enzyme Functions for Biocatalysis. ACS Synthetic Biology, 2019, 8, 1867-1876.	1.9	55
75	Cascade bio-hydroxylation and dehalogenation for one-pot enantioselective synthesis of optically active $\beta$ -halohydrins from halohydrocarbons. Green Chemistry, 2019, 21, 4324-4328.	4.6	28
76	Recent trends in green and sustainable chemistry: rethinking textile waste in a circular economy. Current Opinion in Green and Sustainable Chemistry, 2019, 20, 1-10.	3.2	42
77	Clean Enzymatic Production of Flavor Esters in Spongelike Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2019, 7, 13307-13314.	3.2	22
78	Lipase-Catalyzed Oxidation of Cyclohexanone To Form $\mu$ -Caprolactone and Kinetic Modeling. ACS Sustainable Chemistry and Engineering, 2019, 7, 13294-13306.	3.2	18
79	Using Spinchem Rotating Bed Reactor Technology for Immobilized Enzymatic Reactions: A Case Study. Organic Process Research and Development, 2019, 23, 1926-1931.	1.3	16
80	Dextran Aldehyde in Biocatalysis: More Than a Mere Immobilization System. Catalysts, 2019, 9, 622.	1.6	32
81	Asymmetric Whole-Cell Bio-Reductions of (R)-Carvone Using Optimized Ene Reductases. Molecules, 2019, 24, 2550.	1.7	11
82	A Chemo-Enzymatic Cascade for the Smart Detection of Nitro- and Halogenated Phenols. Angewandte Chemie, 2019, 131, 13388-13392.	1.6	3
83	Chemo-Enzymatic Metathesis/Aromatization Cascades for the Synthesis of Furans: Disclosing the Aromatizing Activity of Laccase/TEMPO in Oxygen-Containing Heterocycles. ACS Catalysis, 2019, 9, 7264-7269.	5.5	35
84	Use of image analysis to understand enzyme stability in an aerated stirred reactor. Biotechnology Progress, 2019, 35, e2878.	1.3	7
85	One-Pot Enzyme Cascade for Controlled Synthesis of Furancarboxylic Acids from 5-Hydroxymethylfurfural by $H_2O_2$ Internal Recycling. ChemSusChem, 2019, 12, 4764-4768.	3.6	45
86	Hydrolysis of Glycosyl Thioimidates by Glycoside Hydrolase Requires Remote Activation for Efficient Activity. Catalysts, 2019, 9, 826.	1.6	5
87	Lipase-Catalyzed tert-Butoxycarbonylation of Alcohols Using Boc 2 O. ChemistrySelect, 2019, 4, 9570-9572.	0.7	1
88	Sequential Electrostatic Assembly of a Polymer Surfactant Corona Increases Activity of the Phosphotriesterase arPTE. Bioconjugate Chemistry, 2019, 30, 2771-2776.	1.8	8
89	Chemo-enzymatic cascades to produce cycloalkenes from bio-based resources. Nature Communications, 2019, 10, 5060.	5.8	55
90	Deep Eutectic Solvents as New Reaction Media to Produce Alkyl-Glycosides Using Alpha-Amylase from Thermotoga maritima. International Journal of Molecular Sciences, 2019, 20, 5439.	1.8	11

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91	Considerations when Measuring Biocatalyst Performance. <i>Molecules</i> , 2019, 24, 3573.	1.7	48
92	Construction and characterization of a nanostructured biocatalyst consisting of immobilized lipase on aminopropyl-functionalized montmorillonite. <i>Applied Clay Science</i> , 2019, 183, 105329.	2.6	25
93	The Application of Dioxygenase-Based Chemoenzymatic Processes to the Total Synthesis of Natural Products. <i>Chemistry - an Asian Journal</i> , 2019, 14, 4001-4012.	1.7	17
94	Efficiency Analysis and Improvement of an Intelligent Transportation System for the Application in Greenhouse. <i>Electronics (Switzerland)</i> , 2019, 8, 946.	1.8	11
95	Leloir Glycosyltransferases in Applied Biocatalysis: A Multidisciplinary Approach. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5263.	1.8	63
96	Chemoenzymatic Synthesis of $\alpha$ -Containing Heterocycles from $\alpha$ -Diazo Esters. <i>ChemCatChem</i> , 2019, 11, 5519-5523.	1.8	6
97	Engineering an Alcohol Dehydrogenase for Balancing Kinetics in NADPH Regeneration with 1,4-Butanediol as a Cosubstrate. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 15706-15714.	3.2	7
98	Organic-inorganic nanoflowers: from design strategy to biomedical applications. <i>Nanoscale</i> , 2019, 11, 17179-17194.	2.8	58
99	Enzymatic Synthesis of Trimethyl- $\epsilon$ -caprolactone: Process Intensification and Demonstration on a 100 L Scale. <i>Organic Process Research and Development</i> , 2019, 23, 2336-2344.	1.3	12
100	Industrial Enzymes. , 2019, , 1-13.		7
101	Valency engineering of monomeric enzymes for self-assembling biocatalytic hydrogels. <i>Chemical Science</i> , 2019, 10, 9752-9757.	3.7	33
102	Biocatalysis. , 2019, , .		8
103	Current research in biotechnology: Exploring the biotech forefront. <i>Current Research in Biotechnology</i> , 2019, 1, 34-40.	1.9	17
104	Enzymes trapped and zapped for use outside cells. <i>Nature</i> , 2019, 567, 317-318.	13.7	2
105	X-ray chimneys in the Galactic Centre. <i>Nature</i> , 2019, 567, 318-320.	13.7	1
106	Complete oxidation of hydroxymethylfurfural to furandicarboxylic acid by aryl-alcohol oxidase. <i>Biotechnology for Biofuels</i> , 2019, 12, 217.	6.2	50
107	Acceptance and Kinetic Resolution of $\alpha$ -Methyl-Substituted Aldehydes by Norcochlorine Synthases. <i>ACS Catalysis</i> , 2019, 9, 9640-9649.	5.5	30
108	Biocatalysis in Medicinal Chemistry: Challenges to Access and Drivers for Adoption. <i>ACS Medicinal Chemistry Letters</i> , 2019, 10, 1363-1366.	1.3	17

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109	Selectivity of deproteinization and demineralization using natural deep eutectic solvents for production of insect chitin ( <i>Hermetia illucens</i> ). <i>Carbohydrate Polymers</i> , 2019, 225, 115255.	5.1	53
110	Selective Functionalization of Microgels with Enzymes by Sortagging. <i>Bioconjugate Chemistry</i> , 2019, 30, 2859-2869.	1.8	22
111	A Versatile Approach for Enzyme Immobilization Using Chemically Modified 3D-Printed Scaffolds. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18048-18054.	3.2	66
112	Biocatalysis and Pharmaceuticals: A Smart Tool for Sustainable Development. <i>Catalysts</i> , 2019, 9, 792.	1.6	22
113	A Green Chemistry Continuum for a Robust and Sustainable Active Pharmaceutical Ingredient Supply Chain. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 16937-16951.	3.2	37
114	The convenient Michael addition of imidazoles to acrylates catalyzed by Lipozyme TL IM from <i>Thermomyces lanuginosus</i> in a continuous flow microreactor. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 807-812.	1.5	7
115	Application of Enzymatic Promiscuity in Pharmaceutical Synthesis: Papain-catalyzed One-pot Synthesis of 1,4-Dihydropyridine Calcium Channel Antagonists and Derivatives. <i>Chemical Research in Chinese Universities</i> , 2019, 35, 21-25.	1.3	4
116	Graphene Oxide Nanosheets Shielding of Lipase Immobilized on Magnetic Composites for the Improvement of Enzyme Stability. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 4486-4494.	3.2	51
117	Kinetic model of the enzymatic Michael addition for synthesis of mitomycin analogs catalyzed by immobilized lipase from <i>T. laibacchii</i> . <i>Molecular Catalysis</i> , 2019, 466, 146-156.	1.0	14
118	Biocatalytic Friedel-Crafts Alkylation Using a Promiscuous Biosynthetic Enzyme. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3151-3155.	7.2	37
119	Catalysts Encapsulated in Biopolymer Hydrogels for Chemoenzymatic One-Pot Processes in Aqueous Media. <i>ChemCatChem</i> , 2019, 11, 1503-1509.	1.8	20
120	Biocatalytic Friedel-Crafts Alkylation Using a Promiscuous Biosynthetic Enzyme. <i>Angewandte Chemie</i> , 2019, 131, 3183-3187.	1.6	25
121	A Prospective Life Cycle Assessment (LCA) of Monomer Synthesis: Comparison of Biocatalytic and Oxidative Chemistry. <i>ChemSusChem</i> , 2019, 12, 1349-1360.	3.6	33
122	Design of enzymatic cascade processes for the production of low-priced chemicals. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 2019, 74, 77-84.	0.6	15
123	Energising the E-factor: The E <sup>+</sup> -factor. <i>Tetrahedron</i> , 2019, 75, 1311-1314.	1.0	64
124	The challenge of using isopropylamine as an amine donor in transaminase catalysed reactions. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 1634-1642.	1.5	50
125	Landscape and opportunities for active pharmaceutical ingredient manufacturing in developing African economies. <i>Reaction Chemistry and Engineering</i> , 2019, 4, 457-489.	1.9	15
126	A critical comparison of cellular and cell-free bioproduction systems. <i>Current Opinion in Biotechnology</i> , 2019, 60, 221-229.	3.3	67



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127	Optimization of the enzymatic hydrolysis of <i>Moringa oleifera</i> Lam oil using molecular docking analysis for fatty acid specificity. <i>Biotechnology and Applied Biochemistry</i> , 2019, 66, 823-832.	1.4	37
128	Valorisation of Cashew Nut Shell Liquid Phenolics in the Synthesis of UV Absorbers. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 4778-4790.	1.2	8
129	A Chemo-Enzymatic Cascade for the Smart Detection of Nitro- and Halogenated Phenols. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 13254-13258.	7.2	19
130	Hierarchically Porous and Water-Tolerant Metal-Organic Frameworks for Enzyme Encapsulation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 12835-12844.	1.8	32
131	Autonomous motion of immobilized enzyme on Janus particles significantly facilitates enzymatic reactions. <i>Biochemical Engineering Journal</i> , 2019, 149, 107242.	1.8	17
132	Two Enantiocomplementary Ephedrine Dehydrogenases from <i>Arthrobacter</i> sp. TS-15 with Broad Substrate Specificity. <i>ACS Catalysis</i> , 2019, 9, 6202-6211.	5.5	21
133	Key sites insight on the stereoselectivity of four mined aldo-keto reductases toward $\beta$ -keto esters and halogen-substituted acetophenones. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 6119-6128.	1.7	7
134	Development of Ionic Liquid-Water-Based Thermomorphic Solvent (TMS) Systems for Biocatalytic Reactions. <i>Biotechnology Journal</i> , 2019, 14, 1900215.	1.8	16
135	Engineering enzyme-coupled hybrid nanoflowers: The quest for optimum performance to meet biocatalytic challenges and opportunities. <i>International Journal of Biological Macromolecules</i> , 2019, 135, 677-690.	3.6	53
136	Positioning-Group-Enabled Biocatalytic Oxidative Dearomatization. <i>ACS Central Science</i> , 2019, 5, 1010-1016.	5.3	14
137	The hidden enzymology of bacterial natural product biosynthesis. <i>Nature Reviews Chemistry</i> , 2019, 3, 404-425.	13.8	62
138	Metal-nucleobase hybrid nanoparticles for enhancing the activity and stability of metal-activated enzymes. <i>Chemical Communications</i> , 2019, 55, 6293-6296.	2.2	12
139	Improved Biocatalytic Activity of the <i>Debaryomyces</i> Species in Seawater. <i>ChemCatChem</i> , 2019, 11, 3085-3092.	1.8	5
140	Bridging the gap between transition metal- and bio-catalysis via aqueous micellar catalysis. <i>Nature Communications</i> , 2019, 10, 2169.	5.8	154
141	Chiral $\beta$ -lactam-based integrin ligands through Lipase-catalysed kinetic resolution and their enantioselective receptor response. <i>Bioorganic Chemistry</i> , 2019, 88, 102975.	2.0	4
142	Micellar catalysis of an iron(III)-MOF: enhanced biosensing characteristics. <i>Analytical Methods</i> , 2019, 11, 3175-3187.	1.3	18
143	Tailoring Multipurpose Biocatalysts via Protein Engineering Approaches: A Review. <i>Catalysis Letters</i> , 2019, 149, 2204-2217.	1.4	65
144	Effect of the Immobilization Strategy on the Efficiency and Recyclability of the Versatile Lipase from <i>Ophiostoma piceae</i> . <i>Molecules</i> , 2019, 24, 1313.	1.7	7

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145	Biocatalysis: A Pharma Perspective. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2421-2432.	2.1	168
146	Accelerating the implementation of biocatalysis in industry. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 4733-4739.	1.7	112
147	Sustainable bioconversion of food waste into high-value products by immobilized enzymes to meet bio-economy challenges and opportunities – A review. <i>Food Research International</i> , 2019, 123, 226-240.	2.9	123
148	Ketoreductase catalyzed stereoselective bio-reduction of $\alpha$ -nitro ketones. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 3575-3580.	1.5	23
149	Development of an integrated chromatographic system for $\alpha$ -transaminase-IMER characterization useful for flow-chemistry applications. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2019, 169, 260-268.	1.4	4
150	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.	3.6	49
151	Engineered MOFs and Enzymes for the Synthesis of Active Pharmaceutical Ingredients. <i>ChemCatChem</i> , 2019, 11, 5671-5685.	1.8	27
152	Light-Harvesting Dye-Alginate Hydrogel for Solar-Driven, Sustainable Biocatalysis of Asymmetric Hydrogenation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5632-5637.	3.2	38
153	Identification of MsrA homologues for the preparation of <i>R</i> -sulfoxides at high substrate concentrations. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 3381-3388.	1.5	16
154	Loop Swapping as a Potent Approach to Increase Ene Reductase Activity with Nicotinamide Adenine Dinucleotide (NADH). <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2505-2513.	2.1	9
155	Structural Basis for Selectivity in Flavin-Dependent Monooxygenase-Catalyzed Oxidative Dearomatization. <i>ACS Catalysis</i> , 2019, 9, 3633-3640.	5.5	28
156	Reaction Engineering for the Industrial Implementation of Biocatalysis. <i>Topics in Catalysis</i> , 2019, 62, 1202-1207.	1.3	23
157	Self-Immobilizing Biocatalysts Maximize Space-Time Yields in Flow Reactors. <i>Catalysts</i> , 2019, 9, 164.	1.6	23
158	Facile in Vitro Biocatalytic Production of Diverse Tryptamines. <i>ChemBioChem</i> , 2019, 20, 1939-1944.	1.3	17
159	CLEAs, Combi-CLEAs and Smart™ Magnetic CLEAs: Biocatalysis in a Bio-Based Economy. <i>Catalysts</i> , 2019, 9, 261.	1.6	114
160	Direct Aromatic Nitration System for Synthesis of Nitrotryptophans in <i>Escherichia coli</i> . <i>ACS Synthetic Biology</i> , 2019, 8, 857-865.	1.9	11
161	<i>Haloferax volcanii</i> as immobilised whole cell biocatalyst: new applications for halophilic systems. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 3807-3817.	1.7	17
162	Conformational Dynamics-Guided Loop Engineering of an Alcohol Dehydrogenase: Capture, Turnover and Enantioselective Transformation of Difficult-to-Reduce Ketones. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 3182-3190.	2.1	60

#	ARTICLE	IF	CITATIONS
163	Immobilization of lipases on hydrophobic supports: immobilization mechanism, advantages, problems, and solutions. <i>Biotechnology Advances</i> , 2019, 37, 746-770.	6.0	409
164	Photo-Biocatalysis: Biotransformations in the Presence of Light. <i>ACS Catalysis</i> , 2019, 9, 4115-4144.	5.5	219
165	Effects of phosphonium-based ionic liquids on the lipase activity evaluated by experimental results and molecular docking. <i>Biotechnology Progress</i> , 2019, 35, e2816.	1.3	17
166	An Enzymatic Step Cofactor and Co-product Recycling Cascade towards a Chiral 1,2-Diol. Part II: Catalytically Active Inclusion Bodies. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2616-2626.	2.1	13
167	Chemoselective Biohydrogenation of Alkenes in the Presence of Alkynes for the Homologation of 2-Alkynals/3-Alkyn-2-ones into 4-Alkynals/Alkynols. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2638-2648.	2.1	10
168	Bubble Column Enables Higher Reaction Rate for Deracemization of ( <i>R,S</i> )-1-Phenylethanol with Coupled Alcohol Dehydrogenase/NADH Oxidase System. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2574-2581.	2.1	22
169	Broadening the Scope of Biocatalysis in Sustainable Organic Synthesis. <i>ChemSusChem</i> , 2019, 12, 2859-2881.	3.6	228
170	Calcium-Based Sustainable Chemical Technologies for Total Carbon Recycling. <i>ChemSusChem</i> , 2019, 12, 1483-1516.	3.6	83
171	Cobalamin-Dependent Apparent Intramolecular Methyl Transfer for Biocatalytic Constitutional Isomerization of Catechol Monomethyl Ethers. <i>ACS Catalysis</i> , 2019, 9, 3900-3905.	5.5	13
172	A chemoenzymatic synthesis of ceramide trafficking inhibitor HPA-12. <i>Beilstein Journal of Organic Chemistry</i> , 2019, 15, 490-496.	1.3	2
173	The Promises and the Challenges of Biotransformations in Microflow. <i>Biotechnology Journal</i> , 2019, 14, e1800580.	1.8	45
174	P450 Monooxygenases Enable Rapid Late-Stage Diversification of Natural Products via C-H Bond Activation. <i>ChemCatChem</i> , 2019, 11, 2226-2242.	1.8	80
175	Cyclopentyl Methyl Ether (CPME): A Versatile Eco-Friendly Solvent for Applications in Biotechnology and Biorefineries. <i>ChemSusChem</i> , 2019, 12, 2083-2097.	3.6	99
176	Surface functionalization of SBA-15 for immobilization of lipase and its application in synthesis of alkyl levulinates: Optimization and kinetics. <i>Biocatalysis and Agricultural Biotechnology</i> , 2019, 18, 101038.	1.5	16
177	Immobilization and stabilization of different $\beta$ -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
178	Modifying bio-catalytic properties of enzymes for efficient biocatalysis: a review from immobilization strategies viewpoint. <i>Biocatalysis and Biotransformation</i> , 2019, 37, 159-182.	1.1	121
179	Identification of an Esterase Isolated Using Metagenomic Technology which Displays an Unusual Substrate Scope and its Characterisation as an Enantioselective Biocatalyst. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2466-2474.	2.1	2
180	Mixed-species biofilms for high-cell-density application of <i>Synechocystis</i> sp. PCC 6803 in capillary reactors for continuous cyclohexane oxidation to cyclohexanol. <i>Bioresource Technology</i> , 2019, 282, 171-178.	4.8	62

#	ARTICLE	IF	CITATIONS
181	Chemical, physical, and biological coordination: An interplay between materials and enzymes as potential platforms for immobilization. <i>Coordination Chemistry Reviews</i> , 2019, 388, 1-23.	9.5	167
182	Further Optimization of a Scalable Biocatalytic Route to (3 <i>R</i> )- <i>N</i> -Boc-3-aminoazepane with Immobilized $\alpha$ -Transaminase. <i>Organic Process Research and Development</i> , 2019, 23, 355-360.	1.3	10
183	Bioinspired synthesis of nanofibers on monolithic scaffolds for enzyme immobilization with enhanced loading capacity and activity recovery. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 3763-3771.	1.6	3
184	What to sacrifice? Fusions of cofactor regenerating enzymes with Baeyer-Villiger monooxygenases and alcohol dehydrogenases for self-sufficient redox biocatalysis. <i>Tetrahedron</i> , 2019, 75, 1832-1839.	1.0	21
185	Hydroxynitrile lyases covalently immobilized in continuous flow microreactors. <i>Catalysis Science and Technology</i> , 2019, 9, 1189-1200.	2.1	38
186	Imine Reductase Based All-Enzyme Hydrogel with Intrinsic Cofactor Regeneration for Flow Biocatalysis. <i>Micromachines</i> , 2019, 10, 783.	1.4	21
187	Copolymeric Hydrogel-Based Immobilization of Yeast Cells for Continuous Biotransformation of Fumaric Acid in a Microreactor. <i>Micromachines</i> , 2019, 10, 867.	1.4	16
188	Regio- and stereoselective multi-enzymatic aminohydroxylation of $\beta$ -methylstyrene using dioxygen, ammonia and formate. <i>Green Chemistry</i> , 2019, 21, 6246-6251.	4.6	33
189	Sustainable, cost-efficient manufacturing of therapeutic peptides using chemo-enzymatic peptide synthesis (CEPS). <i>Green Chemistry</i> , 2019, 21, 6451-6467.	4.6	39
190	Carboxylic Ester Hydrolases in Bacteria: Active Site, Structure, Function and Application. <i>Crystals</i> , 2019, 9, 597.	1.0	24
191	Design of an in vitro biocatalytic cascade for the manufacture of islatravir. <i>Science</i> , 2019, 366, 1255-1259.	6.0	383
192	Editorial for Special Issue: Enzyme Immobilization and Its Applications. <i>Molecules</i> , 2019, 24, 4619.	1.7	12
193	Immobilized Enzyme Reactors Based on Nucleoside Phosphorylases (NPs) and Nucleoside 2'-Deoxyribosyltransferases (NDTs) for the In-Flow Synthesis of Nucleoside Analogues. <i>Proceedings (mdpi)</i> , 2019, 22, 109.	0.2	0
194	Ionic liquids as an enabling tool to integrate reaction and separation processes. <i>Green Chemistry</i> , 2019, 21, 6527-6544.	4.6	55
195	Metagenomic ene-reductases for the bioreduction of sterically challenging enones. <i>RSC Advances</i> , 2019, 9, 36608-36614.	1.7	13
196	Simultaneous removal of heavy metals and cyanate in a wastewater sample using immobilized cyanate hydratase on magnetic-multiwall carbon nanotubes. <i>Journal of Hazardous Materials</i> , 2019, 363, 73-80.	6.5	76
197	Enzyme Fusions in Biocatalysis: Coupling Reactions by Pairing Enzymes. <i>ChemBioChem</i> , 2019, 20, 20-28.	1.3	97
198	Structural Basis for the Enantioselectivity of Esterase Est-Y29 toward ( <i>S</i> )-Ketoprofen. <i>ACS Catalysis</i> , 2019, 9, 755-767.	5.5	14

#	ARTICLE	IF	CITATIONS
199	Catalytic activity of porphyrin-catalysts immobilized on kaolinite. <i>Applied Clay Science</i> , 2019, 168, 469-477.	2.6	14
200	Advantages of Hydrogel-Based 3D-Printed Enzyme Reactors and Their Limitations for Biocatalysis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018, 6, 211.	2.0	52
201	Advances and opportunities for the design of self-sufficient and spatially organized cell-free biocatalytic systems. <i>Current Opinion in Chemical Biology</i> , 2019, 49, 97-104.	2.8	65
202	Polysaccharide-based superporous hydrogel embedded with copper nanoparticles: a green and versatile catalyst for the synthesis of 1,2,3-triazoles. <i>Catalysis Science and Technology</i> , 2019, 9, 136-145.	2.1	33
203	Recent preparative applications of redox enzymes. <i>Current Opinion in Chemical Biology</i> , 2019, 49, 105-112.	2.8	43
204	Catalytic applications of enzymes encapsulated in metal-organic frameworks. <i>Coordination Chemistry Reviews</i> , 2019, 381, 151-160.	9.5	214
205	High performing immobilized Baeyer-Villiger monooxygenase and glucose dehydrogenase for the synthesis of $\mu$ -caprolactone derivative. <i>Applied Catalysis A: General</i> , 2019, 572, 134-141.	2.2	22
206	Lipase-immobilized chitosan-crosslinked magnetic nanoparticle as a biocatalyst for ring opening esterification of itaconic anhydride. <i>Biochemical Engineering Journal</i> , 2019, 143, 141-150.	1.8	46
207	Highly efficient production of chiral amines in batch and continuous flow by immobilized $\alpha$ -transaminases on controlled porosity glass metal-ion affinity carrier. <i>Journal of Biotechnology</i> , 2019, 291, 52-60.	1.9	32
208	Biocatalytic <i>N</i> -Alkylation of Amines Using Either Primary Alcohols or Carboxylic Acids via Reductive Aminase Cascades. <i>Journal of the American Chemical Society</i> , 2019, 141, 1201-1206.	6.6	91
209	Improving biocatalytic microenvironment with biocompatible $\mu$ -poly-L-lysine for one step gluconic acid production in low pH enzymatic systems. <i>Process Biochemistry</i> , 2019, 76, 118-127.	1.8	10
210	The greening of solvents: Towards sustainable organic synthesis. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2019, 18, 13-19.	3.2	84
211	Agarose-chitosan hydrogel-immobilized horseradish peroxidase with sustainable bio-catalytic and dye degradation properties. <i>International Journal of Biological Macromolecules</i> , 2019, 124, 742-749.	3.6	130
212	Aspartic Proteases in Food Industry. <i>Energy, Environment, and Sustainability</i> , 2019, , 15-30.	0.6	8
213	Synthesis of Azobenzene Dyes Mediated by CotA Laccase. <i>Chemistry - an Asian Journal</i> , 2019, 14, 187-193.	1.7	10
214	Recyclable enzymatic recovery of pectin and punicalagin rich phenolics from waste pomegranate peels using magnetic nanobiocatalyst. <i>Food Hydrocolloids</i> , 2019, 89, 468-480.	5.6	24
215	Whole-Cell Catalytic Synthesis of Puerarin Monoesters and Analysis of Their Antioxidant Activities. <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 299-307.	2.4	20
216	Shedding light on biocatalysis: photoelectrochemical platforms for solar-driven biotransformation. <i>Current Opinion in Chemical Biology</i> , 2019, 49, 122-129.	2.8	49

#	ARTICLE	IF	CITATIONS
217	Enzyme Cascade Reactions for the Biosynthesis of Long Chain Aliphatic Amines from Renewable Fatty Acids. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 1359-1367.	2.1	25
218	All Wrapped up: Stabilization of Enzymes within Single Enzyme Nanoparticles. <i>Journal of the American Chemical Society</i> , 2019, 141, 2754-2769.	6.6	157
219	Constitutively solvent-tolerant <i>Pseudomonas taiwanensis</i> VLB120 supports particularly high styrene epoxidation activities when grown under glucose excess conditions. <i>Biotechnology and Bioengineering</i> , 2019, 116, 1089-1101.	1.7	16
220	Flavin-dependent biocatalysts in synthesis. <i>Tetrahedron</i> , 2019, 75, 1115-1121.	1.0	31
221	Enhanced Productivity in Glycerol Carbonate Synthesis under Continuous Flow Conditions: Combination of Immobilized Lipases from Porcine Pancreas and <i>Candida antarctica</i> (CALB) on Epoxy Resins. <i>ACS Omega</i> , 2019, 4, 860-869.	1.6	30
222	Enhanced Activity of Enzymes Encapsulated in Hydrophilic Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141, 2348-2355.	6.6	351
223	Application of In Situ Product Crystallization and Related Techniques in Biocatalytic Processes. <i>Chemistry - A European Journal</i> , 2019, 25, 4871-4884.	1.7	45
224	Biomimetic cofactors and methods for their recycling. <i>Current Opinion in Chemical Biology</i> , 2019, 49, 59-66.	2.8	45
225	Biocatalysis Using Immobilized Enzymes in Continuous Flow for the Synthesis of Fine Chemicals. <i>Organic Process Research and Development</i> , 2019, 23, 9-18.	1.3	201
226	Whole-cell biocatalysis platform for gram-scale oxidative dearomatization of phenols. <i>Chemical Biology and Drug Design</i> , 2019, 93, 1207-1213.	1.5	11
227	Process intensification for O <sub>2</sub> -dependent enzymatic transformations in continuous single-phase pressurized flow. <i>Biotechnology and Bioengineering</i> , 2019, 116, 503-514.	1.7	37
228	Engineering Biocatalytic and Biosorptive Materials for Environmental Applications. <i>Trends in Biotechnology</i> , 2019, 37, 661-676.	4.9	40
229	The biotechnological potential of marine bacteria in the novel lineage of <i>Pseudomonas pertucinogena</i> . <i>Microbial Biotechnology</i> , 2020, 13, 19-31.	2.0	35
230	Optimization of chemoenzymatic Baeyer-Villiger oxidation of cyclohexanone to $\epsilon$ -caprolactone using response surface methodology. <i>Biotechnology Progress</i> , 2020, 36, e2901.	1.3	2
231	Development of an efficient biocatalytic system based on bacterial laccase for the oxidation of selected 1,4-dihydropyridines. <i>Enzyme and Microbial Technology</i> , 2020, 132, 109411.	1.6	18
232	New frontiers in biocatalysis for sustainable synthesis. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2020, 21, 22-26.	3.2	81
233	Enhancing Activity by Supercritical CO <sub>2</sub> Mediated Immobilization of Lipase on Mesocellular Foam in Preparation of Hexyl Laurate. <i>Applied Biochemistry and Biotechnology</i> , 2020, 190, 686-702.	1.4	1
234	Convergent in-situ Generation of Both Transketolase Substrates via Transaminase and Aldolase Reactions for Sequential One-Pot, Three-Step Cascade Synthesis of Ketoses. <i>ChemCatChem</i> , 2020, 12, 812-817.	1.8	7

#	ARTICLE	IF	CITATIONS
235	Microbial degradation of halogenated aromatics: molecular mechanisms and enzymatic reactions. <i>Microbial Biotechnology</i> , 2020, 13, 67-86.	2.0	59
236	Valorization of Waste: Sustainable Organocatalysts from Renewable Resources. <i>ChemSusChem</i> , 2020, 13, 439-468.	3.6	33
237	A whole-cell process for the production of $\hat{\mu}$ -caprolactone in aqueous media. <i>Process Biochemistry</i> , 2020, 88, 22-30.	1.8	18
238	Dual Mechanoenzymatic Kinetic Resolution of ( $\hat{\pm}$ ) $\hat{\epsilon}$ Ketorolac. <i>ChemCatChem</i> , 2020, 12, 1782-1788.	1.8	25
239	<i>Lens culinaris</i> $\hat{2}$ -galactosidase (Lsbgal): Insights into its purification, biochemical characterization and trisaccharides synthesis. <i>Bioorganic Chemistry</i> , 2020, 95, 103543.	2.0	6
240	Making natural products from renewable feedstocks: back to the roots?. <i>Natural Product Reports</i> , 2020, 37, 380-424.	5.2	56
241	Ternary Catalysis: A Stepping Stone toward Multicatalysis. <i>ACS Catalysis</i> , 2020, 10, 3462-3489.	5.5	70
242	Inverse Pickering Emulsion Stabilized by Binary Particles with Contrasting Characteristics and Functionality for Interfacial Biocatalysis. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 4989-4997.	4.0	79
243	Rational Engineered C-Acyltransferase Transforms Sterically Demanding Acyl Donors. <i>ACS Catalysis</i> , 2020, 10, 1094-1101.	5.5	10
244	Mesoporous Core-Shell Nanostructures Bridging Metal and Biocatalyst for Highly Efficient Cascade Reactions. <i>ACS Catalysis</i> , 2020, 10, 1375-1380.	5.5	51
245	Towards Preparative Chemoenzymatic Oxidative Decarboxylation of Glutamic Acid. <i>ChemCatChem</i> , 2020, 12, 2180-2183.	1.8	11
246	Modulating the Biofunctionality of Metal-Organic Framework-Encapsulated Enzymes through Controllable Embedding Patterns. <i>Angewandte Chemie</i> , 2020, 132, 2889-2896.	1.6	25
247	Using enzyme cascades in biocatalysis: Highlight on transaminases and carboxylic acid reductases. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2020, 1868, 140322.	1.1	31
248	â€œPanzerungâ€ von Enzymen mit Metall-organischen GerÃ¼sten. <i>Angewandte Chemie</i> , 2020, 132, 8868-8881.	1.6	27
249	Deep eutectic solvents for biocatalytic transformations: focused lipase-catalyzed organic reactions. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 1481-1496.	1.7	59
250	Fabrication and characterization of epoxytated zwitterionic copolymer-grafted silica nanoparticle as a new support for lipase immobilization. <i>Chinese Journal of Chemical Engineering</i> , 2020, 28, 1129-1135.	1.7	5
251	Minimal Cells: Design, Construction, Biotechnological Applications. , 2020, , .		1
252	Biocatalytic production of 2,5-furandicarboxylic acid: recent advances and future perspectives. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 527-543.	1.7	58

#	ARTICLE	IF	CITATIONS
253	Biocatalytic Oxidation of Biobased Furan Aldehydes: Comparison of Toxicity and Inhibition of Furans toward a Whole-Cell Biocatalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 1437-1444.	3.2	25
254	Enzyme immobilized in BioMOFs: Facile synthesis and improved catalytic performance. <i>International Journal of Biological Macromolecules</i> , 2020, 144, 19-28.	3.6	26
255	Discovery and application of methionine sulfoxide reductase B for preparation of (S)-sulfoxides through kinetic resolution. <i>Catalysis Communications</i> , 2020, 136, 105908.	1.6	11
256	From Minimal to Minimized Genomes: Functional Design of Microbial Cell Factories. , 2020, , 177-210.		0
257	Biocatalytic characteristics of chitosan nanoparticle-immobilized alginate lyase extracted from a novel <i>Arthrobacter</i> species AD-10. <i>Biocatalysis and Agricultural Biotechnology</i> , 2020, 23, 101458.	1.5	16
258	Modulating the Biofunctionality of Metal-Organic Framework-Encapsulated Enzymes through Controllable Embedding Patterns. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 2867-2874.	7.2	190
259	Biocatalytic hydrogenations on carbon supports. <i>Methods in Enzymology</i> , 2020, 630, 303-325.	0.4	5
260	Biocatalytic derivatization of proteinogenic amino acids for fine chemicals. <i>Biotechnology Advances</i> , 2020, 40, 107496.	6.0	15
261	Deracemisation Processes Employing Organocatalysis and Enzyme Catalysis. <i>Advanced Synthesis and Catalysis</i> , 2020, 362, 1233-1257.	2.1	38
262	On the relationship between structure and catalytic effectiveness in solid surface-immobilized enzymes: Advances in methodology and the quest for a single-molecule perspective. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2020, 1868, 140333.	1.1	38
263	Parameters necessary to define an immobilized enzyme preparation. <i>Process Biochemistry</i> , 2020, 90, 66-80.	1.8	306
264	Armor-Plating-Enzymes with Metal-Organic Frameworks (MOFs). <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8786-8798.	7.2	244
265	Screening of Biocatalysts for Synthesis of the Wieland-Miescher Ketone. <i>Catalysts</i> , 2020, 10, 1063.	1.6	3
266	Biocatalysis at Extreme Temperatures: Enantioselective Synthesis of both Enantiomers of Mandelic Acid by Transesterification Catalyzed by a Thermophilic Lipase in Ionic Liquids at 120 Å°C. <i>Catalysts</i> , 2020, 10, 1055.	1.6	12
267	Nanostructured materials for harnessing the power of horseradish peroxidase for tailored environmental applications. <i>Science of the Total Environment</i> , 2020, 749, 142360.	3.9	31
268	Recent advances in biocatalytic derivatization of l-tyrosine. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 9907-9920.	1.7	9
269	Nature's Machinery, Repurposed: Expanding the Repertoire of Iron-Dependent Oxygenases. <i>ACS Catalysis</i> , 2020, 10, 12239-12255.	5.5	78
270	High-level expression of aryl-alcohol oxidase 2 from <i>Pleurotus eryngii</i> in <i>Pichia pastoris</i> for production of fragrances and bioactive precursors. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 9205-9218.	1.7	24



#	ARTICLE	IF	CITATIONS
271	Use of Alcalase in the production of bioactive peptides: A review. <i>International Journal of Biological Macromolecules</i> , 2020, 165, 2143-2196.	3.6	160
272	The rise of continuous flow biocatalysis – fundamentals, very recent developments and future perspectives. <i>Reaction Chemistry and Engineering</i> , 2020, 5, 2155-2184.	1.9	121
273	Structure-guided engineering of <i>Pseudomonas dacunhae</i> -aspartate $\beta$ -decarboxylase for <i>l</i> -homophenylalanine synthesis. <i>Chemical Communications</i> , 2020, 56, 13876-13879.	2.2	10
274	Recent developments in the use of peroxygenases – Exploring their high potential in selective oxyfunctionalisations. <i>Biotechnology Advances</i> , 2021, 51, 107615.	6.0	101
275	Raman hyperspectral imaging with multivariate analysis for investigating enzyme immobilization. <i>Analyst</i> , 2020, 145, 7571-7581.	1.7	19
276	Towards the sustainable production of bulk-chemicals using biotechnology. <i>New Biotechnology</i> , 2020, 59, 59-64.	2.4	32
277	Carbon as a Simple Support for Redox Biocatalysis in Continuous Flow. <i>Organic Process Research and Development</i> , 2020, 24, 2281-2287.	1.3	12
278	MicroGelzymes: pH-Independent Immobilization of Cytochrome P450 BM3 in Microgels. <i>Biomacromolecules</i> , 2020, 21, 5128-5138.	2.6	25
279	Design and Construction of Enzyme-Nanozyme Integrated Catalyst as a Multifunctional Detection Platform. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 20646-20655.	1.8	10
280	Ring-Opening of Epoxides with Amines for Synthesis of $\beta$ -Amino Alcohols in a Continuous-Flow Biocatalysis System. <i>Catalysts</i> , 2020, 10, 1419.	1.6	7
281	Open Gate of <i>Corynebacterium glutamicum</i> Threonine Deaminase for Efficient Synthesis of Bulky $\alpha$ -Keto Acids. <i>ACS Catalysis</i> , 2020, 10, 9994-10004.	5.5	36
282	Efficient enzyme formulation promotes Leloir glycosyltransferases for glycoside synthesis. <i>Journal of Biotechnology</i> , 2020, 322, 74-78.	1.9	8
283	Visible light-induced green synthesis of 2-amino-4H-chromenes. <i>Environmental Chemistry Letters</i> , 2020, 18, 2157-2163.	8.3	17
284	An (R)-Selective Transaminase From <i>Thermomyces stellatus</i> : Stabilizing the Tetrameric Form. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 707.	2.0	20
285	Immobilization of the Highly Active UDP-Glucose Pyrophosphorylase From <i>Thermocristum agreste</i> Provides a Highly Efficient Biocatalyst for the Production of UDP-Glucose. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 740.	2.0	5
286	Simple Protocol to Facilitate Students' Understanding of the Effects of Enzyme Immobilization on Kinetics of Reaction and Mass Transfer. <i>Journal of Chemical Education</i> , 2020, 97, 2308-2313.	1.1	3
287	Dual-enzyme and NADPH co-embedded organic-inorganic hybrid nanoflowers prepared using biomimetic mineralization for the asymmetric synthesis of (R)-( $\alpha$ )-pantolactone. <i>Reaction Chemistry and Engineering</i> , 2020, 5, 1973-1980.	1.9	9
288	Lipase-mediated hydrolysis of hempseed oil in a packed-bed reactor and in-line purification of PUFA as mono- and diacylglycerols. <i>Food and Bioproducts Processing</i> , 2020, 123, 345-353.	1.8	13

#	ARTICLE	IF	CITATIONS
289	Investigation of the ELP-Mediated Silicification-Based Protein Self-Immobilization Using an Acidic Target Enzyme. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 19829-19837.	1.8	5
290	Fungi in Fuel Biotechnology. <i>Fungal Biology</i> , 2020, , .	0.3	4
291	Immobilization of thermolysin enzyme on dendronized silica supports. Evaluation of its feasibility on multiple protein hydrolysis cycles. <i>International Journal of Biological Macromolecules</i> , 2020, 165, 2338-2348.	3.6	8
292	Cell-Free Biocatalysis for the Production of Platform Chemicals. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	31
293	Oxygen-Free Regioselective Biocatalytic Demethylation of Methyl-phenyl Ethers via Methyltransfer Employing Veratrol- <i>O</i> -demethylase. <i>ACS Catalysis</i> , 2020, 10, 10375-10380.	5.5	18
294	Efficient Chemo-Enzymatic Flow Synthesis of High Value Amides and Esters. <i>Catalysts</i> , 2020, 10, 939.	1.6	20
296	Immobilization of Arabidopsis thaliana Hydroxynitrile Lyase (AtHNL) on EziG Opal. <i>Catalysts</i> , 2020, 10, 899.	1.6	10
297	Enzyme-Coated Micro-Crystals: An Almost Forgotten but Very Simple and Elegant Immobilization Strategy. <i>Catalysts</i> , 2020, 10, 891.	1.6	35
298	Size-Tunable Metal-Organic Framework-Coated Magnetic Nanoparticles for Enzyme Encapsulation and Large-Substrate Biocatalysis. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 41794-41801.	4.0	47
299	Accelerated ageing reactions: towards simpler, solvent-free, low energy chemistry. <i>Green Chemistry</i> , 2020, 22, 5881-5901.	4.6	43
300	Extraction of Flavonoids from Scutellariae Radix using Ultrasound-Assisted Deep Eutectic Solvents and Evaluation of Their Anti-Inflammatory Activities. <i>ACS Omega</i> , 2020, 5, 23140-23147.	1.6	46
301	Lipase and Water in a Deep Eutectic Solvent: Molecular Dynamics and Experimental Studies of the Effects of Water-In-Deep Eutectic Solvents on Lipase Stability. <i>Journal of Physical Chemistry B</i> , 2020, 124, 8801-8810.	1.2	35
302	Green chemistry and the plastic pollution challenge: towards a circular economy. <i>Green Chemistry</i> , 2020, 22, 6310-6322.	4.6	204
303	Enzyme Scaffolds with Hierarchically Defined Properties via 3D Jet Writing. <i>Macromolecular Bioscience</i> , 2020, 20, e2000154.	2.1	14
305	Looking Back: A Short History of the Discovery of Enzymes and How They Became Powerful Chemical Tools. <i>ChemCatChem</i> , 2020, 12, 6082-6102.	1.8	59
306	Variants of the Acyltransferase from <i>Mycobacterium smegmatis</i> Enable Enantioselective Acyl Transfer in Water. <i>ACS Catalysis</i> , 2020, 10, 10500-10507.	5.5	23
307	Cell-free protein synthesis enables one-pot cascade biotransformation in an aqueous-organic biphasic system. <i>Biotechnology and Bioengineering</i> , 2020, 117, 4001-4008.	1.7	22
308	Membrane Protein Modified Electrodes in Bioelectrocatalysis. <i>Catalysts</i> , 2020, 10, 1427.	1.6	7

#	ARTICLE	IF	CITATIONS
309	Grape stalk: a first attempt to disentangle its fibres via electrostatic separation. <i>Food and Bioproducts Processing</i> , 2020, 124, 455-468.	1.8	7
310	Biocatalytic Preparation of Chloroindanol Derivatives. Antifungal Activity and Detoxification by the Phytopathogenic Fungus <i>Botrytis cinerea</i> . <i>Plants</i> , 2020, 9, 1648.	1.6	2
311	Cascade Biocatalysis for Regio- and Stereoselective Aminohydroxylation of Styrenyl Olefins to Enantiopure Arylglycinols. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 18277-18285.	3.2	20
312	Reductive Amination of Biobased Levulinic Acid to Unnatural Chiral $\beta$ -Amino Acid Using an Engineered Amine Dehydrogenase. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17054-17061.	3.2	24
313	Biocatalytic microgels ( $\beta$ -Gelzymes): synthesis, concepts, and emerging applications. <i>Green Chemistry</i> , 2020, 22, 8183-8209.	4.6	23
314	Biotransformation of Hydroxychalcones as a Method of Obtaining Novel and Unpredictable Products Using Whole Cells of Bacteria. <i>Catalysts</i> , 2020, 10, 1167.	1.6	6
315	<i>Rhizopus oryzae</i> Lipase, a Promising Industrial Enzyme: Biochemical Characteristics, Production and Biocatalytic Applications. <i>Catalysts</i> , 2020, 10, 1277.	1.6	41
316	Biocatalytic Construction of Quaternary Centers by Aldol Addition of 3,3-Disubstituted 2-Oxoacid Derivatives to Aldehydes. <i>Journal of the American Chemical Society</i> , 2020, 142, 19754-19762.	6.6	10
317	Enzymatic synthesis of N-10-undecenoyl-phenylalanine catalysed by aminoacylases from <i>Streptomyces ambofaciens</i> . <i>Process Biochemistry</i> , 2020, 99, 307-315.	1.8	8
318	D-Serine as a Key Building Block: Enzymatic Process Development and Smart Applications within the Cascade Enzymatic Concept. <i>Organic Process Research and Development</i> , 2020, 24, 769-775.	1.3	3
319	Gold-Catalyzed Spirocyclization Reactions of <i>N</i> -Propargyl Tryptamines and Tryptophans in Aqueous Media. <i>Organic Letters</i> , 2020, 22, 4344-4349.	2.4	26
320	From molasses to syrup: Engineering ultrafiltration membrane surface to improve invertase reusability. <i>Journal of Membrane Science</i> , 2020, 610, 118287.	4.1	10
321	Biocatalytic reduction of $\alpha,\beta$ -unsaturated carboxylic acids to allylic alcohols. <i>Green Chemistry</i> , 2020, 22, 3927-3939.	4.6	14
322	Broadening the scope of biocatalytic C-C bond formation. <i>Nature Reviews Chemistry</i> , 2020, 4, 334-346.	13.8	71
323	Co-immobilization of an Enzyme System on a Metal-Organic Framework to Produce a More Effective Biocatalyst. <i>Catalysts</i> , 2020, 10, 499.	1.6	29
324	Synthesis of Isopropyl Palmitate by Lipase Immobilized on a Magnetized Polymer Matrix. <i>Chemical Engineering and Technology</i> , 2020, 43, 1741-1748.	0.9	7
325	Computational Modeling of Protein Stability: Quantitative Analysis Reveals Solutions to Pervasive Problems. <i>Structure</i> , 2020, 28, 717-726.e3.	1.6	33
326	Production of formate from CO <sub>2</sub> gas under ambient conditions: towards flow-through enzyme reactors. <i>Green Chemistry</i> , 2020, 22, 3727-3733.	4.6	21

#	ARTICLE	IF	CITATIONS
327	On the thermodynamics of biocatalytic reactions with application of group-contribution correlation and prediction. <i>Fluid Phase Equilibria</i> , 2020, 518, 112623.	1.4	2
328	Micellar catalysis enabled synthesis of indolylbenzothiazoles and their functionalization via Mn(II)-catalyzed C2 $\alpha$ -H amination using pyridones. <i>Tetrahedron Letters</i> , 2020, 61, 152017.	0.7	6
329	Mechanochemical and Mechanoenzymatic Synthesis of Pharmacologically Active Compounds: A Green Perspective. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 8881-8893.	3.2	125
330	Organic solvent stability and long-term storage of myoglobin-based carbene transfer biocatalysts. <i>Biotechnology and Applied Biochemistry</i> , 2020, 67, 516-526.	1.4	11
331	Esterification using a liquid lipase to remove residual free fatty acids in biodiesel. <i>Process Biochemistry</i> , 2020, 97, 213-221.	1.8	11
332	Structural and catalytic effects of surface loop-helix transplantation within haloalkane dehalogenase family. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 1352-1362.	1.9	2
333	Taurine/Choline Chloride Deep Eutectic Solvent as a Novel Eco-Compatible Catalyst to Facilitate the Multi-Component Synthesis of Pyrano[2,3-d]Pyrimidinone (Thione), Hexahydroquinoline, and Biscoumarin Derivatives. <i>Polycyclic Aromatic Compounds</i> , 2020, , 1-22.	1.4	19
334	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
335	Enzyme immobilization inside the porous wood structure: a natural scaffold for continuous-flow biocatalysis. <i>RSC Advances</i> , 2020, 10, 20608-20619.	1.7	24
336	Stereoselective Synthesis of Terpenoids through Lipase-Mediated Resolution Approaches. <i>Catalysts</i> , 2020, 10, 504.	1.6	5
337	Catalytic Oxidations in a Bio-Based Economy. <i>Frontiers in Chemistry</i> , 2020, 8, 132.	1.8	28
338	Immobilization of enzymes and cells on lignocellulosic materials. <i>Environmental Chemistry Letters</i> , 2020, 18, 787-806.	8.3	36
339	Access to chiral 1 $\pm$ -substituted-1 $^2$ -hydroxy arylphosphonates enabled by biocatalytic dynamic reductive kinetic resolution. <i>Organic and Biomolecular Chemistry</i> , 2020, 18, 2672-2677.	1.5	9
340	Ionic liquids for enzyme-catalyzed production of biodiesel. , 2020, , 31-47.		3
341	Comparative kinetic analysis of alginate lyase and mannanase co-produced via solid-state fermentation of cow dung supplemented with seaweed wastes by a novel <i>Streptomyces</i> sp. Alg-S23. <i>Biomass Conversion and Biorefinery</i> , 2021, 11, 2013-2025.	2.9	5
342	Whole-cell fungal-mediated structural transformation of anabolic drug metenolone acetate into potent anti-inflammatory metabolites. <i>Journal of Advanced Research</i> , 2020, 24, 69-78.	4.4	9
343	Synergistic chemo/biocatalytic synthesis of 2,5-furandicarboxylic acid from 5-hydroxymethylfurfural. <i>Catalysis Communications</i> , 2020, 139, 105979.	1.6	31
344	Removal of glycerol from enzymatically produced 2 $\pm$ -d-glucosyl-glycerol by discontinuous diafiltration. <i>Separation and Purification Technology</i> , 2020, 241, 116749.	3.9	13

#	ARTICLE	IF	CITATIONS
345	Furan Carboxylic Acids Production with High Productivity by Cofactor-Engineered Whole-Cell Biocatalysts. <i>ChemCatChem</i> , 2020, 12, 3257-3264.	1.8	23
346	Ligand-Enabled Monoselective $\text{C}(\text{sp}^3)\text{-H}$ Acyloxylation of Free Carboxylic Acids Using a Practical Oxidant. <i>Journal of the American Chemical Society</i> , 2020, 142, 6769-6776.	6.6	64
347	Applications of xylochemistry from laboratory to industrial scale. <i>Green Chemistry</i> , 2020, 22, 4411-4425.	4.6	5
348	Treating a Global Health Crisis with a Dose of Synthetic Chemistry. <i>ACS Central Science</i> , 2020, 6, 1017-1030.	5.3	25
349	Immobilization of Multi-Enzymes on Support Materials for Efficient Biocatalysis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 660.	2.0	69
350	Exploration of enzyme diversity: High-throughput techniques for protein production and microscale biochemical characterization. <i>Methods in Enzymology</i> , 2020, 643, 51-85.	0.4	5
351	Estimation of immobilized horseradish peroxidase in a low salt concentration for an irreversible electrochemical system. <i>Results in Chemistry</i> , 2020, 2, 100055.	0.9	2
353	Biocatalysis and biomass conversion: enabling a circular economy. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190274.	1.6	44
354	Experimental and theoretical affinity and catalysis studies between halogenated phenols and peroxidases: Understanding the bioremediation potential. <i>Ecotoxicology and Environmental Safety</i> , 2020, 202, 110895.	2.9	7
355	Biocatalyzed Redox Processes Employing Green Reaction Media. <i>Molecules</i> , 2020, 25, 3016.	1.7	17
356	Production of enantiopure chiral aryl heteroaryl carbinols using whole-cell <i>Lactobacillus paracasei</i> biotransformation. <i>Synthetic Communications</i> , 2020, 50, 549-557.	1.1	11
357	A dual biomimetic process for the selective aerobic oxidative coupling of primary amines using pyrogallol as a precatalyst. Isolation of the [5 + 2] cycloaddition redox intermediates. <i>Green Chemistry</i> , 2020, 22, 1894-1905.	4.6	20
358	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.	5.6	22
359	Advances in biological conversion technologies: new opportunities for reaction engineering. <i>Reaction Chemistry and Engineering</i> , 2020, 5, 632-640.	1.9	15
360	Efficient Nicotinamide Adenine Dinucleotide Phosphate [NADP(H)] Recycling in Closed-Loop Continuous Flow Biocatalysis. <i>Advanced Synthesis and Catalysis</i> , 2020, 362, 2894-2901.	2.1	30
361	N-acylation of L-amino acids in aqueous media: Evaluation of the catalytic performances of <i>Streptomyces ambofaciens</i> aminoacylases. <i>Enzyme and Microbial Technology</i> , 2020, 137, 109536.	1.6	22
362	The Hitchhiker's guide to biocatalysis: recent advances in the use of enzymes in organic synthesis. <i>Chemical Science</i> , 2020, 11, 2587-2605.	3.7	188
363	Lactone monomers obtained by enzyme catalysis and their use in reversible thermoresponsive networks. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48949.	1.3	5

#	ARTICLE	IF	CITATIONS
364	<i>Candida zeylanoides</i> as whole-cell biocatalyst to perform asymmetric bioreduction of benzophenone derivatives. <i>Synthetic Communications</i> , 2020, 50, 612-619.	1.1	8
365	Computational Design of Enantiocomplementary Epoxide Hydrolases for Asymmetric Synthesis of Aliphatic and Aromatic Diols. <i>ChemBioChem</i> , 2020, 21, 1893-1904.	1.3	15
366	Continuous Flow Bioamination of Ketones in Organic Solvents at Controlled Water Activity using Immobilized $\alpha$ -Transaminases. <i>Advanced Synthesis and Catalysis</i> , 2020, 362, 1858-1867.	2.1	36
367	Fluorinated vesicles embedded with Ru-based catalysts as efficient and recyclable nanoreactors for photo-mediated aerobic oxidation. <i>Polymer Chemistry</i> , 2020, 11, 1727-1734.	1.9	8
368	Enzymes revolutionize the bioproduction of value-added compounds: From enzyme discovery to special applications. <i>Biotechnology Advances</i> , 2020, 40, 107520.	6.0	97
369	Eco-Sustainable Oilseed Biorefinery: Integrating Microwave with Magnetic Nanobiocatalysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 2716-2725.	3.2	6
370	Peroxidase Encapsulated in Peroxidase Mimics via <i>in situ</i> Assembly with Enhanced Catalytic Performance. <i>ChemCatChem</i> , 2020, 12, 1996-1999.	1.8	5
371	Emerging strategies for expanding the toolbox of enzymes in biocatalysis. <i>Current Opinion in Chemical Biology</i> , 2020, 55, 45-51.	2.8	86
372	The progress and outlook of bioelectrocatalysis for the production of chemicals, fuels and materials. <i>Nature Catalysis</i> , 2020, 3, 225-244.	16.1	190
373	Ionic liquids-modified cellulose coated magnetic nanoparticles for enzyme immobilization: Improvement of catalytic performance. <i>Carbohydrate Polymers</i> , 2020, 234, 115914.	5.1	79
374	Janus particles: from concepts to environmentally friendly materials and sustainable applications. <i>Colloid and Polymer Science</i> , 2020, 298, 841-865.	1.0	56
375	Benzoic acid production via cascade biotransformation and coupled fermentation $\rightarrow$ biotransformation. <i>Biotechnology and Bioengineering</i> , 2020, 117, 2340-2350.	1.7	21
376	Metagenomic Mining for Amine Dehydrogenase Discovery. <i>Advanced Synthesis and Catalysis</i> , 2020, 362, 2427-2436.	2.1	30
377	Protein $\rightarrow$ inorganic calcium $\rightarrow$ phosphate supraparticles as a robust platform for enzyme co-immobilization. <i>Biotechnology and Bioengineering</i> , 2020, 117, 1979-1989.	1.7	13
379	Immobilized enzyme reactors based on nucleoside phosphorylases and 2-deoxyribosyltransferase for the in-flow synthesis of pharmaceutically relevant nucleoside analogues. <i>Bioresource Technology</i> , 2020, 307, 123258.	4.8	25
380	Environmental impact of lignocellulosic wastes and their effective exploitation as smart carriers $\rightarrow$ A drive towards greener and eco-friendlier biocatalytic systems. <i>Science of the Total Environment</i> , 2020, 722, 137903.	3.9	62
381	Synthesizing Chiral Drug Intermediates by Biocatalysis. <i>Applied Biochemistry and Biotechnology</i> , 2020, 192, 146-179.	1.4	33
382	Industrial Biocatalysis: an Insight into Trends and Future Directions. <i>Current Sustainable/Renewable Energy Reports</i> , 2020, 7, 66-72.	1.2	12

#	ARTICLE	IF	CITATIONS
383	Evolution of Glucose Dehydrogenase for Cofactor Regeneration in Bioredox Processes with Denaturing Agents. <i>ChemBioChem</i> , 2020, 21, 2680-2688.	1.3	26
384	Multi-enzyme cascade for improving $\beta$ -hydroxy- $\alpha$ -amino acids production by engineering L-threonine transaldolase and combining acetaldehyde elimination system. <i>Bioresource Technology</i> , 2020, 310, 123439.	4.8	43
385	Immobilization of lipases on lignocellulosic bamboo powder for biocatalytic transformations in batch and continuous flow. <i>Catalysis Today</i> , 2021, 381, 280-287.	2.2	12
386	Rapid, Heterogeneous Biocatalytic Hydrogenation and Deuteration in a Continuous Flow Reactor. <i>ChemCatChem</i> , 2020, 12, 3913-3918.	1.8	15
387	Synthesis of Substituted 4-Arylamino-1,2-Naphthoquinones in One-Pot Reactions Using CotA Laccase as Biocatalyst. <i>Advanced Synthesis and Catalysis</i> , 2020, 362, 3380-3387.	2.1	3
388	The Quest for Xenobiotic Enzymes: From New Enzymes for Chemistry to a Novel Chemistry of Life. <i>ChemBioChem</i> , 2020, 21, 2241-2249.	1.3	13
389	Enzyme engineering for enantioselective biotransformations. , 2020, , 145-167.		1
390	Engineering Stable <i>Pseudomonas putida</i> S12 by CRISPR for 2,5-Furandicarboxylic Acid (FDCA) Production. <i>ACS Synthetic Biology</i> , 2020, 9, 1138-1149.	1.9	25
391	Organic-Solvent-Tolerant Carboxylic Ester Hydrolases for Organic Synthesis. <i>Applied and Environmental Microbiology</i> , 2020, 86, .	1.4	20
392	Robust enzymes designing for efficient biocatalysis. , 2020, , 49-63.		7
393	Biotransformations with crude enzymes and whole cells. , 2020, , 335-361.		0
394	Rapidly and Precisely Cross-Linked Enzymes Using Bio-Orthogonal Chemistry from Cell Lysate for the Synthesis of ( <i>S</i> )-1-(2,6-Dichloro-3-fluorophenyl) Ethanol. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 6466-6478.	3.2	16
395	Biocatalytic Reduction Reactions from a Chemist's Perspective. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5644-5665.	7.2	118
396	Biotechnological relevance of the lipase A from <i>Candida antarctica</i> . <i>Catalysis Today</i> , 2021, 362, 141-154.	2.2	78
397	Biokatalytische Reduktionen aus der Sicht eines Chemikers. <i>Angewandte Chemie</i> , 2021, 133, 5706-5727.	1.6	12
398	Biocatalysis: Enzymatic Synthesis for Industrial Applications. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 88-119.	7.2	711
399	Biokatalyse: Enzymatische Synthese für industrielle Anwendungen. <i>Angewandte Chemie</i> , 2021, 133, 89-123.	1.6	89
400	Arylative Allenol Cyclization via Sequential One-Pot Enzyme & Palladium Catalysis. <i>ChemCatChem</i> , 2021, 13, 763-769.	1.8	19

#	ARTICLE	IF	CITATIONS
401	Effect of shaking speed on immobilization of cephalosporin C acylase: Correlation between protein distribution and properties of the immobilized enzymes. <i>Biotechnology Progress</i> , 2021, 37, e3063.	1.3	2
402	Gelatin supports with immobilized laccase as sustainable biocatalysts for water treatment. <i>Journal of Applied Polymer Science</i> , 2021, 138, 49669.	1.3	15
403	Green fractionation of 2G and 3G feedstocks for ethanol production: advances, incentives and barriers. <i>Current Opinion in Food Science</i> , 2021, 37, 1-9.	4.1	18
404	Enzymatic Kinetic Resolution by Addition of Oxygen. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 4434-4447.	7.2	11
405	Encapsulating enzyme into metal-organic framework during in-situ growth on cellulose acetate nanofibers as self-powered glucose biosensor. <i>Biosensors and Bioelectronics</i> , 2021, 171, 112690.	5.3	90
406	Biobased polyurethanes for biomedical applications. <i>Bioactive Materials</i> , 2021, 6, 1083-1106.	8.6	191
407	Sustainable synthesis of branched-chain diesters. <i>Journal of Biotechnology</i> , 2021, 325, 91-99.	1.9	10
408	Confining the motion of enzymes in nanofiltration membrane for efficient and stable removal of micropollutants. <i>Chemical Engineering Journal</i> , 2021, 421, 127870.	6.6	11
409	Artificial metalloenzymes: The powerful alliance between protein scaffolds and organometallic catalysts. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021, 28, 100420.	3.2	9
410	Polymer grafting from a metallocentered enzyme improves activity in nonnative environments. <i>Polymer International</i> , 2021, 70, 775-782.	1.6	4
411	Opportunities for the valorization of industrial glycerol via biotransformations. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021, 28, 100430.	3.2	9
412	Self-sufficient Cytochrome P450s and their potential applications in biotechnology. <i>Chinese Journal of Chemical Engineering</i> , 2021, 30, 121-135.	1.7	11
413	Biocatalytic synthesis of vanillin by an immobilised eugenol oxidase: High biocatalyst yield by enzyme recycling. <i>Applied Catalysis A: General</i> , 2021, 610, 117934.	2.2	16
414	Crystal structure of <i>Dictyoglomus thermophilum</i> Î <sup>2</sup> -D-xylosidase DtXyl unravels the structural determinants for efficient notoginsenoside R1 hydrolysis. <i>Biochimie</i> , 2021, 181, 34-41.	1.3	8
415	A glucose oxidase-hemoglobin system for efficient oxysulfonylation of alkenes/alkynes in water. <i>Molecular Catalysis</i> , 2021, 500, 111336.	1.0	10
416	Exoskeleton for Biofunctionality Protection of Enzymes and Proteins for Intracellular Delivery. <i>Advanced NanoBiomed Research</i> , 2021, 1, 2000010.	1.7	3
417	Enzymatic Kinetic Resolution by Addition of Oxygen. <i>Angewandte Chemie</i> , 2021, 133, 4482-4495.	1.6	0
418	Repurposing Inflatable Packaging Pillows as Bioreactors: a Convenient Synthesis of Glucosone by Whole-Cell Catalysis Under Oxygen. <i>Applied Biochemistry and Biotechnology</i> , 2021, 193, 743-760.	1.4	0



#	ARTICLE	IF	CITATIONS
419	Biocatalytic routes to anti-viral agents and their synthetic intermediates. <i>Chemical Society Reviews</i> , 2021, 50, 1968-2009.	18.7	39
420	Enzymatic production of prebiotic oligosaccharides. <i>Current Opinion in Food Science</i> , 2021, 37, 160-170.	4.1	40
421	Liquid lipase preparations designed for industrial production of biodiesel. Is it really an optimal solution?. <i>Renewable Energy</i> , 2021, 164, 1566-1587.	4.3	88
422	Scalable, Telescoped Hydrogenolysis-Enzymatic Decarboxylation Process for the Asymmetric Synthesis of $\alpha$ -Heteroaryl Propionic Acids. <i>Organic Process Research and Development</i> , 2021, 25, 421-426.	1.3	9
423	Pharmaceuticals and the environment. <i>Early Human Development</i> , 2021, 155, 105218.	0.8	16
424	An efficiency strategy for extraction and recovery of ellagic acid from waste chestnut shell and its biological activity evaluation. <i>Microchemical Journal</i> , 2021, 160, 105616.	2.3	34
425	Optimization strategy for laccase immobilization on polyethylene terephthalate grafted with maleic anhydride electrospun nanofiber mat. <i>International Journal of Biological Macromolecules</i> , 2021, 166, 876-883.	3.6	25
426	NAD(P)H-Dependent Enzymes for Reductive Amination: Active Site Description and Carbonyl-Containing Compound Spectrum. <i>Advanced Synthesis and Catalysis</i> , 2021, 363, 328-351.	2.1	37
427	Continuous flow study of isoeugenol to vanillin: A bio-based iron oxide catalyst. <i>Catalysis Today</i> , 2021, 368, 281-290.	2.2	3
428	Biocatalysis in Flow for Drug Discovery. <i>Topics in Medicinal Chemistry</i> , 2021, , 275-316.	0.4	1
430	An introduction to green chemistry. , 2021, , 3-22.		1
431	Recent advances in (chemo)enzymatic cascades for upgrading bio-based resources. <i>Chemical Communications</i> , 2021, 57, 10661-10674.	2.2	28
432	Efficient enzyme-catalyzed production of diosgenin: inspired by the biotransformation mechanisms of steroid saponins in <i>Talaromyces stollii</i> CLY-6. <i>Green Chemistry</i> , 2021, 23, 5896-5910.	4.6	17
433	Biocatalysis in Continuous-Flow Microfluidic Reactors. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2021, , 211-246.	0.6	10
434	Predicting enzymatic reactions with a molecular transformer. <i>Chemical Science</i> , 2021, 12, 8648-8659.	3.7	43
435	Engineering proteinaceous colloidosomes as enzyme carriers for efficient and recyclable Pickering interfacial biocatalysis. <i>Chemical Science</i> , 2021, 12, 12463-12467.	3.7	20
436	Green solvents in the biotechnology-based pharmaceutical industry. , 2021, , 87-104.		2
437	Laccase aggregates <i>via</i> poly-lysine-supported immobilization onto PEGA resin, with efficient activity and high operational stability and can be used to degrade endocrine-disrupting chemicals. <i>Catalysis Science and Technology</i> , 2021, 11, 934-942.	2.1	12

#	ARTICLE	IF	CITATIONS
438	Flow biocatalysis 101: design, development and applications. <i>Reaction Chemistry and Engineering</i> , 2021, 6, 599-611.	1.9	59
439	Potential of Biocatalysis in Pharmaceuticals. , 0, , .		0
440	Engineering of an oleate hydratase for efficient C10-Functionalization of oleic acid. <i>Biochemical and Biophysical Research Communications</i> , 2021, 537, 64-70.	1.0	8
441	Ionic liquids for biocatalysis. , 2021, , 235-252.		0
442	State of the art and perspectives of green solvents in biocatalysis. , 2021, , 163-191.		0
443	Rational Construction of an Artificial Binuclear Copper Monooxygenase in a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2021, 143, 1107-1118.	6.6	70
444	CompassR-guided recombination unlocks design principles to stabilize lipases in ILs with minimal experimental efforts. <i>Green Chemistry</i> , 2021, 23, 3474-3486.	4.6	26
445	Structure and evolutionary trace-assisted screening of a residue swapping the substrate ambiguity and chiral specificity in an esterase. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 2307-2317.	1.9	6
446	Enzyme Cascade Reaction Engineering. , 2021, , 109-124.		1
447	Development of a continuous-flow system with immobilized biocatalysts towards sustainable bioprocessing. <i>Reaction Chemistry and Engineering</i> , 2021, 6, 1771-1790.	1.9	17
448	Characterisation of a hyperthermophilic transketolase from <i>Thermotoga maritima</i> DSM3109 as a biocatalyst for 7-keto-octuronic acid synthesis. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 6493-6500.	1.5	8
449	Solar fuels and feedstocks: the quest for renewable black gold. <i>Energy and Environmental Science</i> , 2021, 14, 1402-1419.	15.6	25
450	Biomimetic Metal-Organic Frameworks: Construction and Catalytic Performance. <i>Monographs in Supramolecular Chemistry</i> , 2021, , 370-395.	0.2	0
451	Green and Sustainable Chemistry as Regulatory Levers. , 2021, , 1-15.		0
452	Design of a synthetic enzyme cascade for the <i>in vitro</i> fixation of a C <sub>1</sub> carbon source to a functional C <sub>4</sub> sugar. <i>Green Chemistry</i> , 2021, 23, 6583-6590.	4.6	17
453	Green and Sustainable Chemistry as Regulatory Levers. , 2021, , 539-553.		0
454	Nature Inspired Multienzyme Immobilization: Strategies and Concepts. <i>ACS Applied Bio Materials</i> , 2021, 4, 1077-1114.	2.3	55
455	New frontiers in enzyme immobilisation: robust biocatalysts for a circular bio-based economy. <i>Chemical Society Reviews</i> , 2021, 50, 5850-5862.	18.7	168

#	ARTICLE	IF	CITATIONS
456	Mutation Maker, An Open Source Oligo Design Platform for Protein Engineering. ACS Synthetic Biology, 2021, 10, 357-370.	1.9	5
457	Application of robust ketoreductase from Hansenula polymorpha for the reduction of carbonyl compounds. Molecular Catalysis, 2021, 502, 111364.	1.0	5
458	Grand Challenges in Biocatalysis. Frontiers in Catalysis, 2021, 1, .	1.8	7
459	Enzyme engineering and its industrial applications. Biotechnology and Applied Biochemistry, 2022, 69, 389-409.	1.4	44
460	Expanding the Biocatalytic Toolbox with a New Type of ene/ylneâ€Reductase from <i>Cyclocybe aegerita</i>. ChemCatChem, 2021, 13, 2191-2199.	1.8	7
461	Controlling Stereopreferences of Carbonyl Reductases for Enantioselective Synthesis of Atorvastatin Precursor. ACS Catalysis, 2021, 11, 2572-2582.	5.5	22
462	Effect of Concentrated Salts Solutions on the Stability of Immobilized Enzymes: Influence of Inactivation Conditions and Immobilization Protocol. Molecules, 2021, 26, 968.	1.7	17
463	Ï‰-Transaminase-Mediated Asymmetric Synthesis of (S)-1-(4-Trifluoromethylphenyl)Ethylamine. Catalysts, 2021, 11, 307.	1.6	4
465	Biocatalysed reductions of ð±-ketoesters employing Cyrene<sup>TM</sup> as cosolvent. Biocatalysis and Biotransformation, 2022, 40, 252-257.	1.1	14
466	Biocatalytic Transformation of 5-Hydroxymethylfurfural into 2,5-di(hydroxymethyl)furan by a Newly Isolated Fusarium striatum Strain. Catalysts, 2021, 11, 216.	1.6	14
467	Experiments with immobilized enzymes as a contribution to learning about green chemistry in chemistry classes. Chemkon - Chemie Konkret, Forum Fuer Unterricht Und Didaktik, 0, , .	0.2	1
468	Enzyme Catalyst Engineering toward the Integration of Biocatalysis and Chemocatalysis. Trends in Biotechnology, 2021, 39, 1173-1183.	4.9	58
469	Biodiesel production from alternative raw materials using a heterogeneous low ordered biosilicified enzyme as biocatalyst. Biotechnology for Biofuels, 2021, 14, 67.	6.2	26
470	Controlled Ligand Exchange Between Ruthenium Organometallic Cofactor Precursors and a Na <sup>-ve</sup> Protein Scaffold Generates Artificial Metalloenzymes Catalysing Transfer Hydrogenation. Angewandte Chemie - International Edition, 2021, 60, 10919-10927.	7.2	3
471	Production of the Carboxylate Reductase from <i>Nocardia otitidiscaviarum</i> in a Soluble, Active Form for <i>inâ€..vitro</i> Applications. ChemBioChem, 2021, 22, 1823-1832.	1.3	5
472	Positive effect of glycerol on the stability of immobilized enzymes: Is it a universal fact?. Process Biochemistry, 2021, 102, 108-121.	1.8	15
474	Controlled Ligand Exchange Between Ruthenium Organometallic Cofactor Precursors and a Na <sup>-ve</sup> Protein Scaffold Generates Artificial Metalloenzymes Catalysing Transfer Hydrogenation. Angewandte Chemie, 2021, 133, 11014-11022.	1.6	0
475	Programing Integrative Multienzyme Systems and Ionic Strength For Recyclable Synthesis of Glutathione. Journal of Agricultural and Food Chemistry, 2021, 69, 3887-3894.	2.4	1

#	ARTICLE	IF	CITATIONS
476	Oxygen mass transfer intensification in an inner-loop rotor-stator reactor: Production of sodium gluconate as an example. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 160, 108290.	1.8	8
477	Agroindustrial Wastes as a Support for the Immobilization of Lipase from <i>Thermomyces lanuginosus</i> : Synthesis of Hexyl Laurate. <i>Biomolecules</i> , 2021, 11, 445.	1.8	10
479	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.	1.6	12
480	Superporous neutral, anionic, and cationic cryogel reactors to improved enzymatic activity and stability of Î±-Glucosidase enzyme via entrapment method. <i>Chemical Engineering Journal</i> , 2021, 409, 128233.	6.6	14
481	Enzymatic Synthesis and Characterization of Different Families of Chitooligosaccharides and Their Bioactive Properties. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3212.	1.3	27
482	Roadmap to Biodegradable Plasticsâ€”Current State and Research Needs. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 6170-6187.	3.2	112
483	Tailoring an aldo-keto reductase KmAKR for robust thermostability and catalytic efficiency by stepwise evolution and structure-guided consensus engineering. <i>Bioorganic Chemistry</i> , 2021, 109, 104712.	2.0	10
485	Insights into metalloproteins and metallodrugs from electron paramagnetic resonance spectroscopy. <i>Current Opinion in Chemical Biology</i> , 2021, 61, 114-122.	2.8	5
486	The Î²-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.	3.6	18
487	Biocatalysis with Baker's yeast: A green and sustainable approach for C=C bond cleavage of aryl/heteroarylboronic acids and boronate esters at room temperature. <i>Sustainable Chemistry and Pharmacy</i> , 2021, 19, 100363.	1.6	4
488	Enzyme polymer engineered structure strategy to enhance cross-linked enzyme aggregate stability: a step forward in laccase exploitation for cannabidiol removal from wastewater. <i>Environmental Science and Pollution Research</i> , 2021, 28, 44051-44063.	2.7	8
490	Hybrid chemoenzymatic heterogeneous catalysts. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021, 28, 100437.	3.2	23
491	<i>E. coli</i> Nickel-Iron Hydrogenase 1 Catalyses Non-native Reduction of Flavins: Demonstration for Alkene Hydrogenation by Old Yellow Enzyme Ene-reductases**. <i>Angewandte Chemie</i> , 2021, 133, 13943-13947.	1.6	0
492	Biocatalytic synthesis of peptidic natural products and related analogues. <i>iScience</i> , 2021, 24, 102512.	1.9	12
493	Computational and experimental analysis on the preferential selectivity of lipases for triglycerides in Licuri oil. <i>Bioprocess and Biosystems Engineering</i> , 2021, 44, 2141-2151.	1.7	6
494	carba-Nicotinamid-Adenin-Dinukleotid-Phosphat: Robuster Cofaktor fÃ¼r die Redox-Biokatalyse. <i>Angewandte Chemie</i> , 2021, 133, 14822-14828.	1.6	4
495	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.	3.6	76
496	Identification of functional cytochrome P450 and ferredoxin from <i>Streptomyces</i> sp. EAS-AB2608 by transcriptional analysis and their heterologous expression. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 4177-4187.	1.7	4

#	ARTICLE	IF	CITATIONS
498	Efficient biosynthesis of (2S, 3R)-4-methylsulfonylphenylserine by artificial self-assembly of enzyme complex combined with an intensified acetaldehyde elimination system. <i>Bioorganic Chemistry</i> , 2021, 110, 104766.	2.0	8
499	Enzymatic Cascade Reactions Mediated by Highly Efficient Biomimetic Quasi Metal-Organic Frameworks. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 22240-22253.	4.0	37
501	Enzymatic treatment of phenolic pollutants by a small laccase immobilized on APTES-functionalised magnetic nanoparticles. <i>3 Biotech</i> , 2021, 11, 302.	1.1	11
502	In Situ Encapsulation of Cellulase in a Novel Mesoporous Metal-Organic Framework. <i>Catalysis Letters</i> , 2022, 152, 699-706.	1.4	10
503	Biotechnological production and high potential of furan-based renewable monomers and polymers. <i>Biotechnology Advances</i> , 2021, 48, 107707.	6.0	42
504	Unlocking Iminium Catalysis in Artificial Enzymes to Create a Friedel-Crafts Alkylase. <i>ACS Catalysis</i> , 2021, 11, 6763-6770.	5.5	19
505	A Highly Efficient Three-Liquid-Phase-Based Enzymatic One-Pot Multistep Reaction System with Recoverable Enzymes for the Synthesis of Biodiesel. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 5481-5490.	2.4	6
506	Construction of Magnetic Nanoparticle-Enzyme Complexes with High Loading Efficiency by In Situ Embedding Iron Oxide into Enzymes. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 9002-9011.	1.8	1
507	Strategies towards Reduction of Cellulases Consumption: Debottlenecking the Economics of Lignocellulosics Valorization Processes. <i>Polysaccharides</i> , 2021, 2, 287-310.	2.1	18
508	Nickel-Carnosine complex: A new carrier for enzymes immobilization by affinity adsorption. <i>Chinese Journal of Chemical Engineering</i> , 2021, 38, 237-246.	1.7	4
509	carba Nicotinamide Adenine Dinucleotide Phosphate: Robust Cofactor for Redox Biocatalysis. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14701-14706.	7.2	22
510	<i>E. coli</i> Nickel-Iron Hydrogenase 1 Catalyses Non-native Reduction of Flavins: Demonstration for Alkene Hydrogenation by Old Yellow Enzyme $\alpha$ -reductases**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 13824-13828.	7.2	8
511	Reactive Deep Eutectic Solvents (RDESs): A New Tool for Phospholipase D-Catalyzed Preparation of Phospholipids. <i>Catalysts</i> , 2021, 11, 655.	1.6	14
512	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.	3.2	37
513	The Chemical Recycling of Polyesters for a Circular Plastics Economy: Challenges and Emerging Opportunities. <i>ChemSusChem</i> , 2021, 14, 4041-4070.	3.6	176
514	DFT Mechanism Studies: Biomimetic 1,4-NADH Chemoselective, Co-factor Regeneration with [Cp*Rh(bpy)H] <sup>+</sup> , in Tandem with the Biocatalysis Pathways of a Core Model of the (HLADH)-Zn(II) Mediated Enzyme, in the Enantioselective Reduction of Achiral Ketones to Chiral S-Alcohols. <i>Journal of Organometallic Chemistry</i> , 2021, 943, 121810.	0.8	13
515	Biocatalysis. <i>Nature Reviews Methods Primers</i> , 2021, 1, .	11.8	255
516	<sc>Polydopamine-Encapsulated</sc> Dendritic Organosilica Nanoparticles as Amphiphilic Platforms for Highly Efficient Heterogeneous Catalysis in Water. <i>Chinese Journal of Chemistry</i> , 2021, 39, 1975-1982.	2.6	8

#	ARTICLE	IF	CITATIONS
517	Can Deep Eutectic Solvents Sustain Oxygen-Dependent Bioprocesses? Measurements of Oxygen Transfer Rates. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 8347-8353.	3.2	12
518	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.	3.6	93
519	Insight into the structure-function relationships of the solubility of chitin/chitosan in natural deep eutectic solvents. <i>Materials Today Communications</i> , 2021, 27, 102374.	0.9	16
520	Altering the Stereoselectivity of Whole-Cell Biotransformations via the Physicochemical Parameters Impacting the Processes. <i>Catalysts</i> , 2021, 11, 781.	1.6	4
521	Outperformance in Acrylation: Supported D-Glucose-Based Ionic Liquid Phase on MWCNTs for Immobilized Lipase B from <i>Candida antarctica</i> as Catalytic System. <i>Materials</i> , 2021, 14, 3090.	1.3	12
522	Fundamentals to function: Quantitative and scalable approaches for measuring protein stability. <i>Cell Systems</i> , 2021, 12, 547-560.	2.9	13
523	Alkaloids in Contemporary Drug Discovery to Meet Global Disease Needs. <i>Molecules</i> , 2021, 26, 3800.	1.7	28
524	Microfluidic Chips for Formulation of Silica Nanoparticles and Enzyme Immobilization. <i>Chemical Engineering and Technology</i> , 2021, 44, 1423-1431.	0.9	3
525	State-of-the-Art Biocatalysis. <i>ACS Central Science</i> , 2021, 7, 1105-1116.	5.3	59
526	Accelerated Reaction Engineering of Photo(bio)catalytic Reactions through Parallelization with an Open-Source Photoreactor. <i>ChemPhotoChem</i> , 2021, 5, 957-965.	1.5	14
527	Electrochemical Activation of Galactose Oxidase: Mechanistic Studies and Synthetic Applications. <i>ACS Catalysis</i> , 2021, 11, 7270-7280.	5.5	21
528	A general Ca-MOM platform with enhanced acid-base stability for enzyme biocatalysis. <i>Chem Catalysis</i> , 2021, 1, 146-161.	2.9	26
529	Streamlining Design, Engineering, and Applications of Enzymes for Sustainable Biocatalysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 8032-8052.	3.2	60
530	Site-directed spin labeling-electron paramagnetic resonance spectroscopy in biocatalysis: Enzyme orientation and dynamics in nanoscale confinement. <i>Chem Catalysis</i> , 2021, 1, 207-231.	2.9	17
531	Chemo-Enzymatic Baeyer-Villiger Oxidation Facilitated with Lipases Immobilized in the Supported Ionic Liquid Phase. <i>Materials</i> , 2021, 14, 3443.	1.3	9
532	Reaction-diffusion hydrogels from urease enzyme particles for patterned coatings. <i>Communications Chemistry</i> , 2021, 4, .	2.0	19
534	Synthesis of a new quinine dimer biocatalysed by the coconut water. <i>Biocatalysis and Biotransformation</i> , 2022, 40, 209-218.	1.1	3
535	Stabilization of an enzyme cytochrome c in a metal-organic framework against denaturing organic solvents. <i>IScience</i> , 2021, 24, 102641.	1.9	15

#	ARTICLE	IF	CITATIONS
537	Endophytic Fungi-Mediated Biocatalysis and Biotransformations Paving the Way Toward Green Chemistry. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 664705.	2.0	18
538	Efficient biosynthesis of (S)-1-[2-(trifluoromethyl)phenyl]ethanol by a novel isolate <i>Geotrichum silvicola</i> ZJPH1811 in deep eutectic solvent/cyclodextrin-containing system. <i>Bioresource Technology</i> , 2021, 329, 124832.	4.8	9
539	Functionalized Materials as a Versatile Platform for Enzyme Immobilization in Wastewater Treatment. <i>Current Pollution Reports</i> , 2021, 7, 263-276.	3.1	13
540	Continuous-Flow Asymmetric Synthesis of (R)-3-Hydroxyl-5-hexenoates with Co-Immobilized Ketoreductase and <i>Lactobacillus kefir</i> Dehydrogenase Integrating Greener Inline Microfluidic Liquid-Liquid Extractors and Membrane Separators. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 8990-9000.	3.2	15
541	Polymeric Nanoparticles Decorated with Monoclonal Antibodies: A New Immobilization Strategy for Increasing Lipase Activity. <i>Catalysts</i> , 2021, 11, 744.	1.6	2
542	Computational Enzyme Engineering Pipelines for Optimized Production of Renewable Chemicals. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 673005.	2.0	14
543	Continuous process technology for glucoside production from sucrose using a whole cell-derived solid catalyst of sucrose phosphorylase. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 5383-5394.	1.7	8
544	Textile Dye Biodecolorization by Manganese Peroxidase: A Review. <i>Molecules</i> , 2021, 26, 4403.	1.7	24
545	Enhanced Production of (S)-2-arylpropionic Acids by Protein Engineering and Whole-Cell Catalysis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 697677.	2.0	1
546	Repetitive Synthesis of High-Molecular-Weight Hyaluronic Acid with Immobilized Enzyme Cascades. <i>ChemSusChem</i> , 2022, 15, .	3.6	15
547	Practical Enzymatic Production of Carbocycles. <i>Chemistry - A European Journal</i> , 2021, 27, 11773-11794.	1.7	3
548	Designing Modular Cell-free Systems for Tunable Biotransformation of l-phenylalanine to Aromatic Compounds. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 730663.	2.0	11
549	Enzymatic Kinetic Resolution of Bulky Spiro-Epoxyoxindoles via Halohydrin Dehalogenase-Catalyzed Enantio- and Regioselective Azidolysis. <i>ACS Catalysis</i> , 2021, 11, 9066-9072.	5.5	25
551	Agarose vs. Methacrylate as Material Supports for Enzyme Immobilization and Continuous Processing. <i>Catalysts</i> , 2021, 11, 814.	1.6	20
552	Photocatalyst-enzyme hybrid systems for light-driven biotransformation. <i>Biotechnology Advances</i> , 2022, 54, 107808.	6.0	25
553	Robust nanocarriers to engineer nanobiocatalysts for bioprocessing applications. <i>Advances in Colloid and Interface Science</i> , 2021, 293, 102438.	7.0	34
554	Applications of Ionic Liquids in Whole-Cell and Isolated Enzyme Biocatalysis. <i>Molecules</i> , 2021, 26, 4791.	1.7	26
555	Leloir glycosyltransferases enabled to flow synthesis: Continuous production of the natural C-glycoside nothofagin. <i>Biotechnology and Bioengineering</i> , 2021, 118, 4402-4413.	1.7	20

#	ARTICLE	IF	CITATIONS
556	Ionic Liquids for Development of Heterogeneous Catalysts Based on Nanomaterials for Biocatalysis. <i>Nanomaterials</i> , 2021, 11, 2030.	1.9	35
557	Enzyme-Inspired Lysine-Modified Carbon Quantum Dots Performing Carbonylation Using Urea and a Cascade Reaction for Synthesizing 2-Benzoxazolinone. <i>ACS Catalysis</i> , 2021, 11, 10778-10788.	5.5	10
558	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.	3.6	47
559	Analysis of Engineered Tobacco Mosaic Virus and Potato Virus X Nanoparticles as Carriers for Biocatalysts. <i>Frontiers in Plant Science</i> , 2021, 12, 710869.	1.7	7
560	Manganese peroxidase mediated oxidation of sulfamethoxazole: Integrating the computational analysis to reveal the reaction kinetics, mechanistic insights, and oxidation pathway. <i>Journal of Hazardous Materials</i> , 2021, 415, 125719.	6.5	35
561	APTES modified SBA15 and meso-macro silica materials for the immobilization of aminoacylases from <i>Streptomyces ambofaciens</i> . <i>Microporous and Mesoporous Materials</i> , 2021, 323, 111226.	2.2	15
562	Regiodivergent and stereoselective hydroxyazidation of alkenes by biocatalytic cascades. <i>IScience</i> , 2021, 24, 102883.	1.9	15
563	Chemoenzymatic access to enantiopure N-containing furfuryl alcohol from chitin-derived N-acetyl-D-glucosamine. <i>Bioresources and Bioprocessing</i> , 2021, 8, .	2.0	7
564	Use of Vitamin B <sub>12</sub> as a Nontoxic and Natural Catalyst for the Synthesis of Benzoxazoles via Catechols and Primary Amines in Water under Aerobic Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 11163-11170.	3.2	6
565	<i>Saccharomyces cerevisiae</i> as host for the recombinant production of polyketides and nonribosomal peptides. <i>Microbial Cell Factories</i> , 2021, 20, 161.	1.9	19
566	Toward Reproducible Enzyme Modeling with Isothermal Titration Calorimetry. <i>ACS Catalysis</i> , 2021, 11, 10695-10704.	5.5	5
567	Biolubricant production under zero-waste <i>Moringa oleifera</i> Lam biorefinery approach for boosting circular economy. <i>Industrial Crops and Products</i> , 2021, 167, 113542.	2.5	22
568	Cascade Synthesis of L-Homoserine Catalyzed by Lyophilized Whole Cells Containing Transaminase and Aldolase Activities: The Mathematical Modeling Approach. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 13846-13858.	1.8	4
569	Engineering of a Novel, Magnetic, Bi-Functional, Enzymatic Nanobiocatalyst for the Highly Efficient Synthesis of Enantiopure (R)-3-quinuclidinol. <i>Catalysts</i> , 2021, 11, 1126.	1.6	1
570	Microbial fuel cells for remediation of environmental pollutants and value addition: Special focus on coupling diatom microbial fuel cells with photocatalytic and photoelectric fuel cells. <i>Journal of Biotechnology</i> , 2021, 338, 5-19.	1.9	62
571	Application of Biocatalytic Reductive Amination for the Synthesis of a Key Intermediate to a CDK 2/4/6 Inhibitor. <i>Organic Process Research and Development</i> , 2022, 26, 879-890.	1.3	20
572	Surface and stability analysis of immobilized laccase on poly(ethylene terephthalate) grafted maleic anhydride nanofiber mat. <i>Journal of Chemical Technology and Biotechnology</i> , 2022, 97, 140-146.	1.6	4
573	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.	3.6	61



#	ARTICLE	IF	CITATIONS
574	Nitrene transfers mediated by natural and artificial iron enzymes. <i>Journal of Inorganic Biochemistry</i> , 2021, 225, 111613.	1.5	5
575	Immobilized Forms of the <i>Ophiostoma piceae</i> Lipase for Green Synthesis of Biodiesel. Comparison with Eversa Transform 2.0 and Cal A. <i>Journal of Fungi (Basel, Switzerland)</i> , 2021, 7, 822.	1.5	7
576	Getting the Most Out of Enzyme Cascades: Strategies to Optimize In Vitro Multi-Enzymatic Reactions. <i>Catalysts</i> , 2021, 11, 1183.	1.6	43
577	Protocol for resolving enzyme orientation and dynamics in advanced porous materials via SDSL-EPR. <i>STAR Protocols</i> , 2021, 2, 100676.	0.5	15
578	Structural and Biochemical Studies Enlighten the Unspecific Peroxygenase from <i>Hypoxyylon</i> sp. EC38 as an Efficient Oxidative Biocatalyst. <i>ACS Catalysis</i> , 2021, 11, 11511-11525.	5.5	39
579	Opportunities of biodiesel industry waste conversion into value-added products. <i>Materials Today: Proceedings</i> , 2022, 57, 1014-1020.	0.9	8
580	One-Pot Enzyme Cascade Catalyzed Asymmetrization of Primary Alcohols: Synthesis of Enantiocomplementary Chiral Nitroalcohols. <i>Advanced Synthesis and Catalysis</i> , 2021, 363, 5310-5318.	2.1	8
581	Sustainability in drug discovery. <i>Medicine in Drug Discovery</i> , 2021, 12, 100107.	2.3	5
582	Microbial biofilms in biorefinery – Towards a sustainable production of low-value bulk chemicals and fuels. <i>Biotechnology Advances</i> , 2021, 50, 107766.	6.0	12
583	Green preparation of covalently co-immobilized multienzymes on silica nanoparticles for clean production of reducing sugar from lignocellulosic biomass. <i>Journal of Cleaner Production</i> , 2021, 314, 127994.	4.6	22
584	Challenges and Opportunities for the Encapsulation of Enzymes over Porous Solids for Biodiesel Production and Cellulose Valorization into Glucose. <i>ChemCatChem</i> , 2021, 13, 4679-4693.	1.8	12
585	Synthesis of (âˆ“)âˆ“ deoxypodophyllotoxin and (âˆ“)âˆ“ epipodophyllotoxin via a multi-enzyme cascade in <i>E. coli</i> . <i>Microbial Cell Factories</i> , 2021, 20, 183.	1.9	8
586	Chemoenzymatic and Protecting-Group-Free Synthesis of 1,4-Substituted 1,2,3-Triazole- $\beta$ -glucosides with Potent Inhibitory Activity toward Lysosomal $\beta$ -Glucosidase. <i>ACS Omega</i> , 2021, 6, 25710-25719.	1.6	5
587	Modulation of laccase catalysed oxidations at the surface of magnetic nanoparticles. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 206, 111963.	2.5	1
588	Enhancing bio-catalytic performance of lipase immobilized on ionic liquids modified magnetic polydopamine. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 206, 111960.	2.5	21
589	Biomimetic and biopolymer-based enzyme encapsulation. <i>Enzyme and Microbial Technology</i> , 2021, 150, 109864.	1.6	21
590	Nanobiocatalysts: Advancements and applications in enzyme technology. <i>Bioresource Technology</i> , 2021, 337, 125491.	4.8	38
591	Immobilization of papain: A review. <i>International Journal of Biological Macromolecules</i> , 2021, 188, 94-113.	3.6	42

#	ARTICLE	IF	CITATIONS
592	Bio-based resources, bioprocesses and bioproducts in value creation architectures for bioeconomy markets and beyond – What really matters. EFB Bioeconomy Journal, 2021, 1, 100009.	1.1	7
593	Stabilization of enzymes via immobilization: Multipoint covalent attachment and other stabilization strategies. Biotechnology Advances, 2021, 52, 107821.	6.0	280
594	Trends in the development of innovative nanobiocatalysts and their application in biocatalytic transformations. Biotechnology Advances, 2021, 51, 107738.	6.0	45
595	Advances in enzymatic oxyfunctionalization of aliphatic compounds. Biotechnology Advances, 2021, 51, 107703.	6.0	31
596	Immobilization of a peroxidase from Moringa oleifera Lam. roots (MoPOX) on chitosan beads enhanced the decolorization of textile dyes. Process Biochemistry, 2021, 110, 129-141.	1.8	7
597	Characterisation and optimisation of a novel laccase from Sulfitobacter indolifex for the decolourisation of organic dyes. International Journal of Biological Macromolecules, 2021, 190, 574-584.	3.6	10
598	Biocatalytic process intensification via efficient biocatalyst immobilization, miniaturization, and process integration. Current Opinion in Green and Sustainable Chemistry, 2021, 32, 100546.	3.2	31
599	3D-Printed Aldo-keto reductase within biocompatible polymers as catalyst for chiral drug intermediate. Chemical Engineering Journal, 2022, 429, 132293.	6.6	10
600	Catalytically active inclusion bodies (CatIBs) induced by terminally attached self-assembling coiled-coil domains: To enhance the stability of (R)-hydroxynitrile lyase. Enzyme and Microbial Technology, 2022, 153, 109915.	1.6	5
601	Enzyme Cascade Kinetic Modelling. , 2021, , 91-108.		4
602	Enzyme Cascade Process Design and Modelling. , 2021, , 125-139.		2
603	Preparation and application of solvent-free liquid proteins with enhanced thermal and anhydrous stabilities. New Journal of Chemistry, 2021, 45, 6577-6585.	1.4	5
604	Sustainable chemo-enzymatic synthesis of glycerol carbonate (meth)acrylate from glycidol and carbon dioxide enabled by ionic liquid technologies. Green Chemistry, 2021, 23, 4191-4200.	4.6	12
605	Enzyme entrapment, biocatalyst immobilization without covalent attachment. Green Chemistry, 2021, 23, 4980-5005.	4.6	125
606	Process intensification using immobilized enzymes for the development of white biotechnology. Catalysis Science and Technology, 2021, 11, 1994-2020.	2.1	15
607	Lipase-Catalyzed Kinetic Resolution of Alcohols as Intermediates for the Synthesis of Heart Rate Reducing Agent Ivabradine. Catalysts, 2021, 11, 53.	1.6	0
609	Synthesis of astaxanthin and its esters. , 2021, , 3-18.		0
610	Flow Biocatalysis: A Challenging Alternative for the Synthesis of APIs and Natural Compounds. International Journal of Molecular Sciences, 2021, 22, 990.	1.8	55

#	ARTICLE	IF	CITATIONS
611	CapiPy: python-based GUI-application to assist in protein immobilization. <i>Bioinformatics</i> , 2021, 37, 2761-2762.	1.8	12
612	Biocatalytic oxidation of alcohols using galactose oxidase and a manganese(III) activator for the synthesis of islatravir. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 1620-1625.	1.5	12
613	Enzymes in Food and Feed Industries: Where Tradition Meets Innovation. , 2019, , 233-253.		1
614	Efficient chemoenzymatic synthesis of (S)- $\alpha$ -amino-4-fluorobenzeneacetic acid using immobilized penicillin amidase. <i>Bioorganic Chemistry</i> , 2018, 80, 174-179.	2.0	10
615	Valorization of refractory keratinous waste using a new and sustainable bio-catalysis. <i>Chemical Engineering Journal</i> , 2020, 397, 125420.	6.6	23
616	Natural heterogeneous catalysis with immobilised oxidase biocatalysts. <i>RSC Advances</i> , 2020, 10, 19501-19505.	1.7	16
617	Fungal Biotransformation: An Efficient Approach for Stereoselective Chemical Reactions. <i>Current Organic Chemistry</i> , 2020, 24, 2902-2953.	0.9	5
618	Enhanced Reusability of Horseradish Peroxidase Immobilized onto Graphene Oxide/Magnetic Chitosan Beads for Cost Effective Cholesterol Oxidase Assay. <i>Open Biotechnology Journal</i> , 2019, 13, 93-104.	0.6	13
619	Immobilisation and flow chemistry: tools for implementing biocatalysis. <i>Chemical Communications</i> , 2021, 57, 11416-11428.	2.2	23
620	Nanomicelle-enhanced, asymmetric ERED-catalyzed reductions of activated olefins. Applications to 1-pot chemo- and bio-catalysis sequences in water. <i>Chemical Communications</i> , 2021, 57, 11847-11850.	2.2	35
621	Assessment of the Safety of BioBased Products. , 2021, , 343-363.		1
622	Enantioselective Chromatographic Separation and Lipase Catalyzed Asymmetric Resolution of Biologically Important Chiral Amines. <i>Separations</i> , 2021, 8, 165.	1.1	2
623	Current Status and Future Perspectives of Supports and Protocols for Enzyme Immobilization. <i>Catalysts</i> , 2021, 11, 1222.	1.6	81
624	Asymmetric Synthesis of <i>N</i> -Substituted $\alpha$ -Amino Esters and $\alpha$ -Lactams Containing $\alpha$ , $\beta$ -Stereogenic Centers via a Stereoselective Enzymatic Cascade. <i>Advanced Synthesis and Catalysis</i> , 2022, 364, 372-379.	2.1	10
625	Multi-gram preparation of cinnamoyl tryptamines as skin whitening agents through a chemo-enzymatic flow process. <i>Tetrahedron Letters</i> , 2021, 86, 153453.	0.7	8
626	Engineering of a Plant Isoprenyl Diphosphate Synthase for Development of Irregular Coupling Activity. <i>ChemBioChem</i> , 2022, 23, .	1.3	5
627	Co-Immobilized Carrier-Free Enzymes For Lactose Upgrading. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021, , 100553.	3.2	7
628	Structure-guided steric hindrance engineering of <i>Bacillus badius</i> phenylalanine dehydrogenase for efficient L-homophenylalanine synthesis. <i>Biotechnology for Biofuels</i> , 2021, 14, 207.	6.2	17

#	ARTICLE	IF	CITATIONS
629	Engineering and emerging applications of artificial metalloenzymes with whole cells. <i>Nature Catalysis</i> , 2021, 4, 814-827.	16.1	38
632	Renewable Starting Materials, Biocatalysis, and Multicomponent Reactions: A Powerful Trio for the Green Synthesis of Highly Valued Chemicals. <i>RSC Green Chemistry</i> , 2019, , 115-140.	0.0	1
633	Enzymatic Reactions and Biocatalytic Processes. , 2019, , .		1
634	Noncovalent Interactions in Biocatalysis " A Theoretical Perspective. <i>RSC Catalysis Series</i> , 2019, , 608-627.	0.1	0
635	Ionic Liquids in Clean and Sustainable Biocatalytic Organic Reactions. , 2019, , 1-13.		0
636	Green Biotransformations under Flow Conditions. <i>RSC Green Chemistry</i> , 2019, , 50-85.	0.0	2
638	Thermal Stabilization of HEWL by Adsorption on Biochar. <i>Journal of Materials Science Research</i> , 2020, 8, 30.	0.1	0
640	Bio-catalysis as a Green Approach for Industrial Waste Treatment. <i>Nanotechnology in the Life Sciences</i> , 2020, , 359-405.	0.4	3
642	Comparison of the thermo-oxidative stability of murici oil ( <i>Byrsonima crassifolia</i> L. Kunt) obtained by enzymatic hydrolysis assisted by ultrasound and classical method. <i>Research, Society and Development</i> , 2020, 9, e808974877.	0.0	0
644	Improved method for the extraction of high-quality DNA from lignocellulosic compost samples for metagenomic studies. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 8881-8893.	1.7	9
645	CHAPTER 6. Bio-catalyzed Aerobic Oxidation Reactions. <i>RSC Catalysis Series</i> , 2020, , 131-180.	0.1	0
646	Process Design in Fungal-Based Biofuel Production Systems. <i>Fungal Biology</i> , 2020, , 177-198.	0.3	0
647	Current Advances in the Bacterial Toolbox for the Biotechnological Production of Monoterpene-Based Aroma Compounds. <i>Molecules</i> , 2021, 26, 91.	1.7	24
648	Valorization of Passion Fruit Stalk by the Preparation of Cellulose Nanofibers and Immobilization of Trypsin. <i>Fibers and Polymers</i> , 2020, 21, 2807-2816.	1.1	6
649	Enzyme-photo-coupled catalytic systems. <i>Chemical Society Reviews</i> , 2021, 50, 13449-13466.	18.7	61
650	Whole-cell screening of oxidative enzymes using genetically encoded sensors. <i>Chemical Science</i> , 2021, 12, 14766-14772.	3.7	6
651	Biotech Green Approaches to Unravel the Potential of Residues into Valuable Products. <i>Nanotechnology in the Life Sciences</i> , 2020, , 97-150.	0.4	3
652	Continuous-flow chemistry toward sustainable chemical synthesis. , 2020, , 49-69.		0

#	ARTICLE	IF	CITATIONS
653	Bioenzyme-assisted green organic synthesis. , 2020, , 303-349.		1
654	A stretchable electrode for single enzymatic biofuel cells. <i>Materials Today Energy</i> , 2021, 22, 100886.	2.5	5
655	Simple experiments with immobilized enzymes as a contribution to green and sustainable chemistry education in the high school laboratory. <i>Chemistry Teacher International</i> , 2022, 4, 121-126.	0.9	3
656	Hydrogel-Based Enzyme and Cofactor Co-Immobilization for Efficient Continuous Transamination in a Microbioreactor. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 752064.	2.0	17
657	New Trends and Future Opportunities in the Enzymatic Formation of C—C, C—N, and C—O bonds. <i>ChemBioChem</i> , 2022, 23, .	1.3	17
658	A chemoenzymatic cascade with the potential to feed the world and allow humans to live in space. <i>Engineering Microbiology</i> , 2022, 2, 100006.	2.2	2
659	Data-driven enzyme immobilisation: a case study using DNA to immobilise galactose oxidase. <i>Engineering Biology</i> , 2020, 4, 43-46.	0.8	0
660	A one-pot two-step synthesis of tertiary alcohols combining the biocatalytic laccase/TEMPO oxidation system with organolithium reagents in aerobic aqueous media at room temperature. <i>Chemical Communications</i> , 2021, 57, 13534-13537.	2.2	9
661	Biological macromolecules for enzyme immobilization. , 2022, , 529-546.		1
662	Dendritic Fibrous Colloidal Silica Internally Cross-linked by Bivalent Organic Cations: An Efficient Support for Dye Removal and the Reduction of Nitrobenzene Derivatives. <i>Langmuir</i> , 2021, 37, 13676-13688.	1.6	10
663	A bound iron porphyrin is redox active in hybrid bacterial reaction centers modified to possess a four-helix bundle domain. <i>Photochemical and Photobiological Sciences</i> , 2022, 21, 91-99.	1.6	2
664	Shortening Synthetic Routes to Small Molecule Active Pharmaceutical Ingredients Employing Biocatalytic Methods. <i>Chemical Reviews</i> , 2022, 122, 1052-1126.	23.0	105
665	Enzymatic Production of Ascorbic Acid-2-Phosphate by Engineered <i>Pseudomonas aeruginosa</i> Acid Phosphatase. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 14215-14221.	2.4	5
666	Computational Enzyme Design at Zymvol. <i>Methods in Molecular Biology</i> , 2022, 2397, 249-259.	0.4	0
667	Mutagenesis of the l-Amino Acid Ligase RizA Increased the Production of Bioactive Dipeptides. <i>Catalysts</i> , 2021, 11, 1385.	1.6	2
668	Recent Advances in Emerging Metal- and Covalent Organic Frameworks for Enzyme Encapsulation. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 56752-56776.	4.0	67
669	Chemical Reaction Engineering to Understand Applied Kinetics in Free Enzyme Homogeneous Reactors. <i>Methods in Molecular Biology</i> , 2022, 2397, 277-320.	0.4	1
670	Advanced Enzyme Immobilization Technologies: An Eco-friendly Support, a Polymer-Stabilizing Immobilization Strategy, and an Improved Cofactor Co-immobilization Technique. <i>Methods in Molecular Biology</i> , 2022, 2397, 263-276.	0.4	2

#	ARTICLE	IF	CITATIONS
671	Ultrahigh-Throughput Screening of Metagenomic Libraries Using Droplet Microfluidics. <i>Methods in Molecular Biology</i> , 2022, 2397, 19-32.	0.4	3
672	Transamination-Like Reaction Catalyzed by Leucine Dehydrogenase for Efficient Co-Synthesis of $\alpha$ -Amino Acids and $\beta$ -Keto Acids. <i>Molecules</i> , 2021, 26, 7287.	1.7	3
673	Biocatalytic one pot three component approach: Facile synthesis, characterization, molecular modelling and hypoglycemic studies of new thiazolidinedione festooned quinoline analogues catalyzed by alkaline protease from <i>Aspergillus niger</i> . <i>Bioorganic Chemistry</i> , 2022, 119, 105533.	2.0	7
674	Simulation of deep eutectic solvents: Progress to promises. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2022, 12, e1598.	6.2	22
675	Electrocatalysis as a key strategy for the total synthesis of natural products. <i>Organic and Biomolecular Chemistry</i> , 2022, 20, 727-748.	1.5	12
676	Reinforcing sorbitol bio-oxidative conversion with <i>Gluconobacter oxydans</i> whole-cell catalysis by acetate-assistance. <i>Biochemical Engineering Journal</i> , 2022, 179, 108328.	1.8	1
677	Design and construction of a semi-cycle system of oxygen supplied intensification using hydrogen peroxide for high-performance glucose oxidation. <i>Molecular Catalysis</i> , 2022, 519, 112119.	1.0	0
678	Magnetic nanomaterials assisted nanobiocatalysis systems and their applications in biofuels production. <i>Fuel</i> , 2022, 312, 122927.	3.4	29
679	Desenvolvimento de um método alternativo de baixo custo para extração e quantificação de lipídios em alimentos. <i>Research, Society and Development</i> , 2020, 9, e4959108927.	0.0	0
680	Unraveling the mechanism of enantio-controlling switches of an alcohol dehydrogenase toward sterically small ketone. <i>Catalysis Science and Technology</i> , 2022, 12, 1777-1787.	2.1	6
681	Ionic Liquid Modification Optimizes the Interface between Lipase and Magnetic GO for Enhancing Biocatalysis. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 1277-1284.	1.8	6
682	Prebiotics and synbiotics. , 2022, , 19-37.		0
683	Utilization of nanocellulose fibers, nanocrystalline cellulose and bacterial cellulose in biomedical and pharmaceutical applications. , 2022, , 409-470.		1
684	White biotechnology and the production of bio-products. <i>Systems Microbiology and Biomanufacturing</i> , 2022, 2, 413-429.	1.5	9
685	Design of enzyme-metal hybrid catalysts for organic synthesis. <i>Cell Reports Physical Science</i> , 2022, 3, 100742.	2.8	8
686	Lipase-catalyzed esterification in water enabled by nanomicelles. Applications to 1-pot multi-step sequences. <i>Chemical Science</i> , 2022, 13, 1440-1445.	3.7	32
687	Ensuring the Sustainability of Biocatalysis. <i>ChemSusChem</i> , 2022, 15, .	3.6	8
688	Kombination einer genetisch engineerter Oxidase mit wasserstoffbrückenengebundenen organischen Gerüsten (HOFs) für hocheffiziente Biokomposite. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	3

#	ARTICLE	IF	CITATIONS
689	Designing for sustainability with biocatalytic and chemoenzymatic cascade processes. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2022, 34, 100591.	3.2	14
691	A Green Method of Extracting and Recovering Flavonoids from <i>Acanthopanax senticosus</i> Using Deep Eutectic Solvents. <i>Molecules</i> , 2022, 27, 923.	1.7	24
692	Recent developments in enzyme immobilization for food production. , 2022, , 453-466.		1
693	Substrate and Process Engineering for Biocatalytic Synthesis and Facile Purification of Human Milk Oligosaccharides. <i>ChemSusChem</i> , 2022, 15, .	3.6	8
694	Polymers and metal-organic frameworks as supports in biocatalysis: applications and future trend. , 2022, , 323-338.		0
695	Separation of bio-based glucaric acid via antisolvent crystallization and azeotropic drying. <i>Green Chemistry</i> , 2022, 24, 1350-1361.	4.6	4
696	Metabolic engineering of <i>Corynebacterium glutamicum</i> for de novo production of 3-hydroxycadaverine. <i>Current Research in Biotechnology</i> , 2022, 4, 32-46.	1.9	11
697	Construction of a colorimetric sensor array based on the coupling reaction to identify phenols. <i>Analytical Methods</i> , 2022, 14, 892-899.	1.3	2
698	Mass transport through capillary, biocatalytic membrane reactor. , 2022, , 281-307.		0
699	Green Chemistry, Biocatalysis, and the Chemical Industry of the Future. <i>ChemSusChem</i> , 2022, 15, .	3.6	63
700	Enzymatic synthesis of 2-phenethyl acetate in water catalyzed by an immobilized acyltransferase from <i>Mycobacterium smegmatis</i> . <i>RSC Advances</i> , 2022, 12, 2310-2318.	1.7	0
701	Combining a Genetically Engineered Oxidase with Hydrogen-Bonded Organic Frameworks (HOFs) for Highly Efficient Biocomposites. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	46
702	Bio-click chemistry: a bridge between biocatalysis and click chemistry. <i>RSC Advances</i> , 2022, 12, 1932-1949.	1.7	7
703	Mass-based biocatalyst metrics to guide protein engineering and bioprocess development. <i>Nature Catalysis</i> , 2022, 5, 2-4.	16.1	15
704	Immobilization of Baeyer-Villiger monooxygenase from acetone grown <i>Fusarium sp.</i> . <i>Biotechnology Letters</i> , 2022, 44, 461-471.	1.1	5
705	Enzymatic Bromocyclization of $\alpha$ - and $\beta$ -Allenols by Chloroperoxidase from <i>Curvularia inaequalis</i> . <i>ChemistryOpen</i> , 2022, 11, e202100236.	0.9	5
706	Lipase-Catalyzed Synthesis of Anthrone Functionalized Benzylic Amines via a Multicomponent Reaction in Supercritical Carbon Dioxide. <i>ChemistrySelect</i> , 2022, 7, .	0.7	5
707	Bioprocess intensification: A route to efficient and sustainable biocatalytic transformations for the future. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, 172, 108793.	1.8	41

#	ARTICLE	IF	CITATIONS
708	Exploring the enzyme-catalyzed synthesis of isotope labeled cyclopropanes. Journal of Labelled Compounds and Radiopharmaceuticals, 2022, , .	0.5	2
709	Synthesis of photo-crosslinkable hydrogel membranes for entrapment of lactase enzyme. Reactive and Functional Polymers, 2022, 172, 105159.	2.0	8
710	Enzymatic ethanolysis of high free fatty acid jatropha oil using Eversa Transform. Energy Advances, 0, , .	1.4	3
711	Luciferin Synthesis and Pesticide Detection by Luminescence Enzymatic Cascades. Angewandte Chemie - International Edition, 2022, 61, .	7.2	10
712	Tandem Friedel-Crafts Alkylation-Enantioselective-Protonation by Artificial Enzyme Iminium Catalysis. ChemCatChem, 2022, 14, .	1.8	7
713	Tools for computational design and high-throughput screening of therapeutic enzymes. Advanced Drug Delivery Reviews, 2022, 183, 114143.	6.6	23
714	Luciferin Synthesis and Pesticide Detection by Luminescence Enzymatic Cascades. Angewandte Chemie, 2022, 134, .	1.6	3
715	Enzyme immobilized nanomaterials as electrochemical biosensors for detection of biomolecules. Enzyme and Microbial Technology, 2022, 156, 110006.	1.6	61
716	Green Chemistry in the Synthesis of Pharmaceuticals. Chemical Reviews, 2022, 122, 3637-3710.	23.0	155
717	Value Addition to Chemical Compounds Through Biotransformation. , 2022, , 335-378.		2
719	Enzymatic Production of Different Types of Chitooligosaccharides. , 2022, , 27-57.		1
720	A one-pot biocatalytic and organocatalytic cascade delivers high titers of 2-ethyl-2-hexenal from <i>n</i> -butanol. Reaction Chemistry and Engineering, 2022, 7, 1328-1334.	1.9	8
721	Preparation and characterization of stable core/shell Fe <sub>3</sub> O <sub>4</sub> @Au decorated with an amine group for immobilization of lipase by covalent attachment. RSC Advances, 2022, 12, 5971-5977.	1.7	2
722	Alcohol Dehydrogenases with <i>anti</i> -Prelog Stereopreference in Synthesis of Enantiopure Alcohols. ChemistryOpen, 2022, 11, e202100251.	0.9	10
723	The future of Organic Chemistry: an irreversible path towards sustainability. Mini-Reviews in Organic Chemistry, 2022, 19, .	0.6	1
724	Protein Mediated Enzyme Immobilization. Small, 2022, 18, e2106425.	5.2	22
725	Biocatalysed synthesis planning using data-driven learning. Nature Communications, 2022, 13, 964.	5.8	36
726	Integrating protein engineering into biocatalytic process scale-up. Trends in Chemistry, 2022, 4, 371-373.	4.4	4



#	ARTICLE	IF	CITATIONS
727	Immobilization and stabilization of enzymes using biomimetic silicification reactions. Journal of Sol-Gel Science and Technology, 2022, 102, 86-95.	1.1	5
728	A Career in Biocatalysis: Kurt Faber. ACS Catalysis, 2022, 12, 3909-3922.	5.5	0
729	Short-chain alcohols inactivate an immobilized industrial lipase through two different mechanisms. Biotechnology Journal, 2022, 17, e2100712.	1.8	16
730	Photobiocatalysis for Abiological Transformations. Accounts of Chemical Research, 2022, 55, 1087-1096.	7.6	73
731	Enzyme Immobilization and Co-Immobilization: Main Framework, Advances and Some Applications. Processes, 2022, 10, 494.	1.3	44
732	A Pair of Atypical KAS III Homologues with Initiation and Elongation Functions Program the Polyketide Biosynthesis in Asukamycin. Angewandte Chemie - International Edition, 2022, , .	7.2	3
733	On the reproducibility of enzyme reactions and kinetic modelling. Biological Chemistry, 2022, 403, 717-730.	1.2	3
734	Enhanced hydrogen fuel production using synergistic combination of solar radiation and TiO <sub>2</sub> photocatalyst coupled with Burkholderia cepacia lipase. International Journal of Hydrogen Energy, 2022, 47, 14483-14492.	3.8	7
735	Designing Sites in Heterogeneous Catalysis: Are We Reaching Selectivities Competitive With Those of Homogeneous Catalysts?. Chemical Reviews, 2022, 122, 8594-8757.	23.0	118
736	Industrially Relevant Enzyme Cascades for Drug Synthesis and Their Ecological Assessment. International Journal of Molecular Sciences, 2022, 23, 3605.	1.8	15
737	Self-assembling protein scaffold-mediated enzymes' immobilization enhances <i>in vitro</i> tagatose production from lactose. , 2022, 1, 47-57.		4
739	Rational Design of a <i>De Novo</i> Enzyme Cascade for Scalable Continuous Production of Antidepressant Prodrugs. ACS Catalysis, 2022, 12, 3767-3775.	5.5	9
740	A Pair of Atypical KAS III Homologues with Initiation and Elongation Functions Program the Polyketide Biosynthesis in Asukamycin. Angewandte Chemie, 0, , .	1.6	0
741	Biocatalysis as Key to Sustainable Industrial Chemistry. ChemSusChem, 2022, 15, e202102709.	3.6	52
742	An Insight in Developing Carrier-Free Immobilized Enzymes. Frontiers in Bioengineering and Biotechnology, 2022, 10, 794411.	2.0	19
743	Making Enzymes Suitable for Organic Chemistry by Rational Protein Design. ChemBioChem, 2022, 23, .	1.3	28
744	Oxygenating Biocatalysts for Hydroxyl Functionalisation in Drug Discovery and Development. ChemMedChem, 2022, 17, .	1.6	15
745	Tyrosinase-functionalized polyhydroxyalkanoate bio-beads as a novel biocatalyst for degradation of bisphenol analogues. Environment International, 2022, 163, 107225.	4.8	7

#	ARTICLE	IF	CITATIONS
746	Concurrent production of cellulase, xylanase, pectinase and immobilization by combined Cross-linked enzyme aggregate strategy- advancing tri-enzyme biocatalysis. <i>Bioresource Technology Reports</i> , 2022, 18, 101019.	1.5	10
747	Biocatalysts used for multi-step reactions in continuous flow. <i>Chemical Engineering Journal</i> , 2022, 437, 135400.	6.6	11
748	Alginate@polydopamine@SiO <sub>2</sub> microcapsules with controlled porosity for whole-cell based enantioselective biosynthesis of (S)-1-phenylethanol. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 214, 112454.	2.5	6
749	Whole-cell biocatalysis: Advancements toward the biosynthesis of fuels. <i>Biofuels, Bioproducts and Biorefining</i> , 2022, 16, 859-876.	1.9	13
750	Synergistic interaction of renewable nipagin and eugenol for aromatic copoly(ether ester) materials with desired performance. <i>Scientific Reports</i> , 2021, 11, 24119.	1.6	0
751	Screening of some vegetables for the biotransformation of bicyclo[3.3.1]nonane-2,6-diol diacetate. <i>Green Chemistry Letters and Reviews</i> , 2022, 15, 45-50.	2.1	0
752	Chemistry and Sustainable Development. <i>International Journal of Advanced Research in Science, Communication and Technology</i> , 0, , 329-331.	0.0	0
753	Making Sustainability Assessment Accessible: Tools Developed by the ACS Green Chemistry Institute Pharmaceutical Roundtable. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 16862-16864.	3.2	10
754	Engineering Enzyme Properties for Improved Biocatalytic Processes in Batch and Continuous Flow. <i>Organic Process Research and Development</i> , 2022, 26, 1914-1924.	1.3	24
755	Mechanoenzymatic Reactions with Whole Cell Transaminases: Shaken, not Stirred. <i>Green Chemistry</i> , 0, , .	4.6	3
756	High-Yield Synthesis of Enantiopure 1,2-Amino Alcohols from L-Phenylalanine via Linear and Divergent Enzymatic Cascades. <i>Organic Process Research and Development</i> , 2022, 26, 2085-2095.	1.3	15
757	Toward the Sustainable Production of the Active Pharmaceutical Ingredient Metaraminol. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 5117-5128.	3.2	8
758	The Catalytic Formation of Atropisomers and Stereocenters via Asymmetric Suzuki-Miyaura Couplings. <i>ACS Catalysis</i> , 2022, 12, 4918-4937.	5.5	54
759	Distal Mutations Shape Substrate-Binding Sites during Evolution of a Metallo-Oxidase into a Laccase. <i>ACS Catalysis</i> , 2022, 12, 5022-5035.	5.5	9
760	Enzyme Kits to Facilitate the Integration of Biocatalysis into Organic Chemistry – First Aid for Synthetic Chemists. <i>ChemCatChem</i> , 2022, 14, .	1.8	6
764	Recent advances in the green synthesis of Betti bases and their applications: a review. <i>Molecular Diversity</i> , 2023, 27, 543-569.	2.1	10
765	Chirality-Driven Self-Assembly: Application Toward Renewable/Exchangeable Resin-Immobilized Catalysts. <i>Organic and Biomolecular Chemistry</i> , 2022, , .	1.5	2
766	Characterization of lipase from <i>Candida rugosa</i> entrapped in alginate beads to enhance its thermal stability and recyclability. <i>New Journal of Chemistry</i> , 2022, 46, 10037-10047.	1.4	8

#	ARTICLE	IF	CITATIONS
767	Pore Architecture Influences the Enzyme Immobilization Performance of Mesoporous Silica Nanospheres. SSRN Electronic Journal, 0, , .	0.4	0
769	Electrifying enzymatic cascades for organic synthesis. Chem Catalysis, 2022, 2, 661-663.	2.9	1
770	Computer-designed repurposing of chemical wastes into drugs. Nature, 2022, 604, 668-676.	13.7	30
771	Enzymatic <i>N</i> -Allylation of Primary and Secondary Amines Using Renewable Cinnamic Acids Enabled by Bacterial Reductive Aminases. ACS Sustainable Chemistry and Engineering, 2022, 10, 6794-6806.	3.2	9
772	A Magnetosome-Based Platform for Flow Biocatalysis. ACS Applied Materials & Interfaces, 2022, 14, 22138-22150.	4.0	8
773	Multistep enzyme cascades as a route towards green and sustainable pharmaceutical syntheses. Nature Chemistry, 2022, 14, 489-499.	6.6	109
774	A review on the immobilization of pepsin: A Lys-poor enzyme that is unstable at alkaline pH values. International Journal of Biological Macromolecules, 2022, 210, 682-702.	3.6	26
775	Design of Artificial Enzymes Bearing Several Active Centers: New Trends, Opportunities and Problems. International Journal of Molecular Sciences, 2022, 23, 5304.	1.8	16
776	Pickering Emulsion Catalysis: Interfacial Chemistry, Catalyst Design, Challenges, and Perspectives. Angewandte Chemie, 2022, 134, .	1.6	10
777	Cascade Catalysis Through Bifunctional Lipase Metal Biohybrids for the Synthesis of Enantioenriched $\alpha$ -Heterocycles from Allenes. ChemCatChem, 2022, 14, .	1.8	11
778	Alcohol Dehydrogenases as Catalysts in Organic Synthesis. Frontiers in Catalysis, 2022, 2, .	1.8	21
779	Fermentation medium optimization, molecular modelling and docking analysis of the alginate lyase of a novel <i>Pseudomonas</i> sp. LB56 isolated from seaweed waste. Biotechnology and Biotechnological Equipment, 2022, 36, 281-291.	0.5	1
780	Process Development for Benzyl Alcohol Production by Whole-Cell Biocatalysis in Stirred and Packed Bed Reactors. Microorganisms, 2022, 10, 966.	1.6	7
781	Advanced Insights into Catalytic and Structural Features of the Zinc-Dependent Alcohol Dehydrogenase from <i>Thauera aromatica</i> . ChemBioChem, 2022, 23, .	1.3	2
782	Pickering Emulsion Catalysis: Interfacial Chemistry, Catalyst Design, Challenges, and Perspectives. Angewandte Chemie - International Edition, 2022, 61, .	7.2	60
783	<i>In Situ</i> Cofactor Regeneration Using NAD(P)H Oxidase: Enzyme Stability in a Bubble Column. ChemCatChem, 2022, 14, .	1.8	4
784	Emerging biotechnological strategies for food waste management: A green leap towards achieving high-value products and environmental abatement. Energy Nexus, 2022, 6, 100077.	3.3	14
785	Recent advances in immobilized $\alpha$ -transaminase for chiral amine synthesis. Materials Today Chemistry, 2022, 24, 100922.	1.7	5

#	ARTICLE	IF	CITATIONS
786	Pore architecture influences the enzyme immobilization performance of mesoporous silica nanospheres. <i>Microporous and Mesoporous Materials</i> , 2022, 338, 111963.	2.2	10
787	Laccases: Thriving the domain of bio-electrocatalysis. <i>Bioelectrochemistry</i> , 2022, 146, 108144.	2.4	8
788	Biocatalytic Carbene Transfer Using Diazirines. <i>Journal of the American Chemical Society</i> , 2022, 144, 8892-8896.	6.6	21
789	3D Printing: An Emerging Technology for Biocatalyst Immobilization. <i>Macromolecular Bioscience</i> , 2022, 22, e2200110.	2.1	14
790	New Horizons for Biocatalytic Science. <i>Frontiers in Catalysis</i> , 2022, 2, .	1.8	2
791	Discovery and Process Development of a Scalable Biocatalytic Kinetic Resolution toward Synthesis of a Sterically Hindered Chiral Ketone. <i>Organic Process Research and Development</i> , 2022, 26, 1820-1830.	1.3	6
792	Thermoadaptation in an Ancestral Diterpene Cyclase by Altered Loop Stability. <i>Journal of Physical Chemistry B</i> , 2022, 126, 3809-3821.	1.2	5
794	<i>Mycobacterium smegmatis</i> acyltransferase: The big new player in biocatalysis. <i>Biotechnology Advances</i> , 2022, 59, 107985.	6.0	7
795	Chitosan-EDTA-Cellulose network as a green, recyclable and multifunctional biopolymeric organocatalyst for the one-pot synthesis of 2-amino-4H-pyran derivatives. <i>Scientific Reports</i> , 2022, 12, .	1.6	25
796	Mo <sup>3+</sup> hydride as the common origin of H <sub>2</sub> evolution and selective NADH regeneration in molybdenum sulfide electrocatalysts. <i>Nature Catalysis</i> , 2022, 5, 397-404.	16.1	38
797	Assessing Peroxygenase-Mediated Oxidations in the Presence of High Concentrations of Water-Miscible Co-Solvents. <i>Frontiers in Catalysis</i> , 2022, 2, .	1.8	12
798	Ionic liquids as a tunable solvent and modifier for biocatalysis. <i>Catalysis Reviews - Science and Engineering</i> , 0, , 1-47.	5.7	15
799	Rational Design of P450 aMOx for Improving Anti-Markovnikov Selectivity Based on the "Butterfly" Model. <i>Frontiers in Molecular Biosciences</i> , 2022, 9, .	1.6	2
800	Biodiesel as renewable biofuel produced via enzyme-based catalyzed transesterification. <i>Energy Nexus</i> , 2022, 6, 100087.	3.3	32
801	Alternative Synthesis of Cefamandole with Biocatalytic Acylation Catalyzed by Immobilized Cephalosporin-Acid Synthetase. <i>Applied Biochemistry and Microbiology</i> , 2022, 58, 251-260.	0.3	2
802	Aryl-Alcohol-Oxidase-Mediated Synthesis of Piperonal and Other Valuable Aldehydes. <i>Advanced Synthesis and Catalysis</i> , 2022, 364, 2364-2372.	2.1	7
803	Stabilization of immobilized lipases by treatment with metallic phosphate salts. <i>International Journal of Biological Macromolecules</i> , 2022, 213, 43-54.	3.6	10
804	Biological transformation as a technique in pollution decontamination. , 2022, , 123-150.		0

#	ARTICLE	IF	CITATIONS
806	Temperature-responsive Pickering high internal phase emulsions for recyclable efficient interfacial biocatalysis. <i>Chemical Science</i> , 2022, 13, 8766-8772.	3.7	12
808	In silico screening and heterologous expression of soluble dimethyl sulfide monooxygenases of microbial origin in <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 4523-4537.	1.7	4
809	Biocatalytic synthesis of dioctyl sebacate in toluene using an immobilised lipase. <i>Biocatalysis and Biotransformation</i> , 2023, 41, 395-402.	1.1	0
810	Biocatalytic Production of a Nylon-6 Precursor from Caprolactone in Continuous Flow. <i>ChemSusChem</i> , 2022, 15, .	3.6	11
811	Engineering the Activity of Old Yellow Enzyme NemR-PS for Efficient Reduction of (E/Z)-Citral to (S)-Citronellol. <i>Catalysts</i> , 2022, 12, 631.	1.6	2
812	A photonanozyme with light-empowered specific peroxidase-mimicking activity. <i>Nano Research</i> , 2022, 15, 9073-9081.	5.8	16
813	Immobilization of d-allulose 3-epimerase into magnetic metal-organic framework nanoparticles for efficient biocatalysis. <i>World Journal of Microbiology and Biotechnology</i> , 2022, 38, .	1.7	6
814	Biocatalytic hydrogen-transfer to access enantiomerically pure proxiphylline, xanthinol, and diprophylline. <i>Bioorganic Chemistry</i> , 2022, 127, 105967.	2.0	3
815	Lipase immobilization via cross-linked enzyme aggregates: Problems and prospects – A review. <i>International Journal of Biological Macromolecules</i> , 2022, 215, 434-449.	3.6	45
816	Integrated microsphere-packed bed enzymatic membrane reactor for enhanced bioconversion efficiency and stability: A proof-of-concept study. <i>Journal of Membrane Science</i> , 2022, 658, 120732.	4.1	6
817	Designing robust nano-biocatalysts using nanomaterials as multifunctional carriers - expanding the application scope of bio-enzymes. <i>Topics in Catalysis</i> , 2023, 66, 625-648.	1.3	7
818	Laccase Cross-Linked Ultraporous Aluminas for Sustainable Biodegradation of Remazol Brilliant Blue R. <i>Catalysts</i> , 2022, 12, 744.	1.6	2
819	Covalent Organic Frameworks as a Biomacromolecule Immobilization Platform for Biomedical and Related Applications. <i>Advanced Therapeutics</i> , 2022, 5, .	1.6	11
820	Improvement of enzymatic activity and stability of lipase A from <i>Candida antartica</i> onto halloysite nanotubes with Taguchi method for optimized immobilization. <i>Applied Clay Science</i> , 2022, 228, 106634.	2.6	26
821	Stress-Tolerant, Recyclable, and Renewable Biocatalyst Platform Enabled by Engineered Bacterial Spores. <i>ACS Synthetic Biology</i> , 2022, 11, 2857-2868.	1.9	4
822	Witnessing the Birth of Directed Evolution of Stereoselective Enzymes as Catalysts in Organic Chemistry. <i>Advanced Synthesis and Catalysis</i> , 2022, 364, 3326-3335.	2.1	8
823	A novel 4-hydroxyacetophenone monooxygenase featuring aromatic substrates preference for enantioselective access to sulfoxides. <i>Molecular Catalysis</i> , 2022, 528, 112496.	1.0	0
824	Engineered Cytochrome P450-Catalyzed Oxidative Biaryl Coupling Reaction Provides a Scalable Entry into Arylomycin Antibiotics. <i>Journal of the American Chemical Society</i> , 2022, 144, 14838-14845.	6.6	15

#	ARTICLE	IF	CITATIONS
825	Lipase-Mediated Mechanoenzymatic Synthesis of Sugar Esters in Dissolved Unconventional and Neat Reaction Systems. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 10192-10202.	3.2	8
826	Biomacromolecule-Assisted Screening for Reaction Discovery and Catalyst Optimization. <i>Chemical Reviews</i> , 2022, 122, 13800-13880.	23.0	2
827	Targeting of the intracellular redox balance by metal complexes towards anticancer therapy. <i>Frontiers in Chemistry</i> , 0, 10, .	1.8	13
828	From Biotechnology to Bioeconomy: A Review of Development Dynamics and Pathways. <i>Sustainability</i> , 2022, 14, 10413.	1.6	8
829	Really biomimetic: A synthetic hydrolase matching the proficiency of enzymes. <i>Chem Catalysis</i> , 2022, 2, 1851-1852.	2.9	0
830	(Chemo)biocatalytic Upgrading of Biobased Furanic Platforms to Chemicals, Fuels, and Materials: A Comprehensive Review. <i>ACS Catalysis</i> , 2022, 12, 10080-10114.	5.5	50
831	Biocatalysis: A smart and green tool for the preparation of chiral drugs. <i>Chirality</i> , 2022, 34, 1403-1418.	1.3	17
832	<a href="#">MD-DFT Computational Studies on the Mechanistic and Conformational Parameters for the Chemoselective Tyrosine Residue Reactions of G-Protein-Coupled Receptor Peptides with [Cp*Rh(H<sub>2</sub>O)<sub>3</sub>](OTf)<sub>2</sub> in Water To Form Their [(<sup>6</sup>I-Cp*Rh-Tyr)<sup>#</sup>]-GPCR peptide]<sub>2+</sub> Complexes: Noncovalent H-Bonding Interactions. Molecular Orbital Analysis, Thermodynamics, and Lowest Energy Conformations. <i>Organometallics</i>, 2022, 41, 2252-2267.</a>	1.1	1
833	Redesigning Robust Biocatalysts by Engineering Enzyme Microenvironment and Enzyme Immobilization. <i>Catalysis Letters</i> , 2023, 153, 1587-1601.	1.4	5
834	Bioeconomic production of high-quality chitobiose from chitin food wastes using an in-house chitinase from <i>Vibrio campbellii</i> . <i>Bioresources and Bioprocessing</i> , 2022, 9, .	2.0	6
835	Probing the Biotransformation Process of Sclareol by Resting Cells of <i>Hyphozyma roseonigra</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 10563-10570.	2.4	7
836	Epoxide hydrolase activity in the aqueous extracts of vegetable flours and application to the stereoselective hydrolysis of limonene oxide. <i>Molecular Catalysis</i> , 2022, 530, 112626.	1.0	0
837	Trypsin-catalyzed aldol reactions of isatins with ketones and the mechanism probe of substrate selectivity by molecular simulations. <i>Molecular Catalysis</i> , 2022, 530, 112573.	1.0	2
838	Study on Biological Pathway of Carbon Dioxide Methanation Based on Microbial Electrolysis Cell. <i>Journal of Renewable Materials</i> , 2023, 11, 197-207.	1.1	0
839	How to identify and characterize novel transaminases? Two novel transaminases with opposite enantioselectivity for the synthesis of optically active amines. <i>Molecular Catalysis</i> , 2022, 531, 112660.	1.0	1
840	Switch off/switch on of a cysteinyl protease as a way to preserve the active catalytic group by modification with a reversible covalent thiol modifier: Immobilization of ficin on vinyl-sulfone activated supports. <i>International Journal of Biological Macromolecules</i> , 2022, 220, 1155-1162.	3.6	3
841	A critical review on biomass-based sustainable biorefineries using nanobiocatalysts: Opportunities, challenges, and future perspectives. <i>Bioresource Technology</i> , 2022, 363, 127926.	4.8	20
842	Enzyme Immobilization and Its Application Strategies in Food Products. , 2022, , 411-438.		0

#	ARTICLE	IF	CITATIONS
843	Nonconventional biocatalysis: from organic solvents to green solvents. , 2022, , 23-55.		3
844	Confining enzymes in porous organic frameworks: from synthetic strategy and characterization to healthcare applications. <i>Chemical Society Reviews</i> , 2022, 51, 6824-6863.	18.7	108
845	Biocatalysis in biphasic systems based on ionic liquids. , 2022, , 183-207.		1
846	Activation and stabilization of enzymes using ionic liquid engineering. , 2022, , 57-83.		0
847	Aspartic acid based metal-organic frameworks with dual function of NADH peroxidase and glycerol dehydrogenase-mimicking activities. <i>Materials Chemistry Frontiers</i> , 2022, 6, 3391-3401.	3.2	5
848	Enzymes Applied to Lignocellulosic Biorefinery. , 2022, , 485-501.		0
849	Biocatalysis and green solvents: trends, needs, and opportunities. , 2022, , 511-527.		1
850	Novel tributyl phosphate-based hydrophobic deep eutectic solvent: application in simultaneous liquid-liquid microextraction of parabens and their metabolite in surface water samples. <i>Green Chemistry</i> , 2022, 24, 8005-8013.	4.6	5
851	Putting precision and elegance in enzyme immobilisation with bio-orthogonal chemistry. <i>Chemical Society Reviews</i> , 2022, 51, 7281-7304.	18.7	25
852	Biocatalysis in subcritical and supercritical fluids. , 2022, , 377-401.		1
853	Clean biocatalysis in sponge-like ionic liquids. , 2022, , 155-182.		1
854	Biocatalysis, solvents, and green metrics in sustainable chemistry. , 2022, , 1-22.		3
855	TiO <sub>2</sub> nanoparticles decorated with Co-Schiff base-g-C <sub>3</sub> N <sub>4</sub> as an efficient photocatalyst for one-pot visible light-assisted synthesis of benzimidazoles. <i>RSC Advances</i> , 2022, 12, 22526-22541.	1.7	7
856	The Pioneering Role of Enzymes in the Valorization of Waste: An Insight into the Mechanism of Action. <i>Clean Energy Production Technologies</i> , 2022, , 79-123.	0.3	0
857	Multicomponent Reaction: Palladium-Catalyzed Carbonylation of Aryl Halides and Alkyl Halides to Aromatic Esters. <i>Journal of Organic Chemistry</i> , 2023, 88, 5153-5160.	1.7	3
858	New additions to the arsenal of biocatalysts for noncanonical amino acid synthesis. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2022, 38, 100701.	3.2	11
859	Rhodococcus strains as a good biotool for neutralizing pharmaceutical pollutants and obtaining therapeutically valuable products: Through the past into the future. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	12
860	Hydrophilicity-Based Engineering of the Active Pocket of Amino Acid Oxidase Leading to Highly Improved Specificity toward Glufosinate. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	11

#	ARTICLE	IF	CITATIONS
861	Hydrophilicity-Based Engineering of the Active Pocket of $\alpha$ -Amino Acid Oxidase Leading to Highly Improved Specificity toward $\alpha$ -Glufosinate. <i>Angewandte Chemie</i> , 0, , .	1.6	0
862	Three-Component Stereoselective Enzymatic Synthesis of Amino-Diols and Amino-Polyols. <i>Jacs Au</i> , 2022, 2, 2251-2258.	3.6	2
863	Silica-Based Supported Ionic Liquid-like Phases as Heterogeneous Catalysts. <i>Molecules</i> , 2022, 27, 5900.	1.7	27
864	Continuous Flow Biocatalytic Reductive Amination by Co-Entrapping Dehydrogenases with Agarose Gel in a 3D-Printed Mould Reactor. <i>ChemBioChem</i> , 2022, 23, .	1.3	7
865	Microbial Lipases and Their Potential in the Production of Pharmaceutical Building Blocks. <i>International Journal of Molecular Sciences</i> , 2022, 23, 9933.	1.8	21
866	Coupled Natural Fusion Enzymes in a Novel Biocatalytic Cascade Convert Fatty Acids to Amines. <i>ACS Catalysis</i> , 2022, 12, 12701-12710.	5.5	4
867	Atroposelective Synthesis of $C^{\alpha}$ -C Axially Chiral Compounds via Mono- and Dinuclear Vanadium Catalysis. <i>Accounts of Chemical Research</i> , 2022, 55, 2949-2965.	7.6	26
868	Combined chemoenzymatic strategy for sustainable continuous synthesis of the natural product hordenine. <i>Green Chemistry</i> , 2022, 24, 8434-8440.	4.6	4
869	Near infrared light-induced dynamic modulation of enzymatic activity through polyphenol-functionalized liquid metal nanodroplets. <i>Chinese Chemical Letters</i> , 2023, 34, 107795.	4.8	4
870	The synergism of lytic polysaccharide monoxygenases with lichenase and their co-immobilization on silica nanospheres for green conversion of lichen biomass. <i>Frontiers in Nutrition</i> , 0, 9, .	1.6	0
871	Metal-organic-framework-involved nanobiocatalysis for biomedical applications. <i>Chem Catalysis</i> , 2022, 2, 2552-2589.	2.9	8
872	Mimicking Natural Metabolisms: Cell-Free Flow Preparation of Dopamine. <i>ChemBioChem</i> , 2022, 23, .	1.3	2
873	Industrially useful enzymology: Translating biocatalysis from laboratory to process. <i>Chem Catalysis</i> , 2022, 2, 2499-2505.	2.9	5
874	Rational and mechanistic approaches for improving biocatalyst performance. <i>Chem Catalysis</i> , 2022, 2, 2614-2643.	2.9	4
875	Tuning Immobilized Enzyme Features by Combining Solid-Phase Physicochemical Modification and Mineralization. <i>International Journal of Molecular Sciences</i> , 2022, 23, 12808.	1.8	4
876	Highly Efficient Synthesis of Cinnamamides from Methyl Cinnamates and Phenylethylamines Catalyzed by Lipozyme <sup>®</sup> TL IM under Continuous-Flow Microreactors. <i>Catalysts</i> , 2022, 12, 1265.	1.6	0
877	$Fe_3O_4$ - $\alpha$ - $SO_3H$ : A Retrievable Solid-Acid Nanocatalyst for the Green Synthesis of Imidazole and Tetrazole Derivatives. <i>ChemistrySelect</i> , 2022, 7, .	0.7	0
878	Helping Incorporate Safe and Sustainability into Materials Research: A Checklist Tool Designed for Early Career Researchers. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 14658-14664.	3.2	1



#	ARTICLE	IF	CITATIONS
879	Palladium supported on pyrrole functionalized hypercrosslinked polymer: Synthesis and its catalytic evaluations towards Suzuki-Miyaura coupling reactions in aqueous media. <i>Journal of Molecular Liquids</i> , 2022, 368, 120679.	2.3	5
880	Catalysis by Nature's photoenzymes. <i>Current Opinion in Structural Biology</i> , 2022, 77, 102491.	2.6	6
881	Process intensification in continuous flow biocatalysis by up and downstream processing strategies. <i>Current Opinion in Biotechnology</i> , 2022, 78, 102835.	3.3	18
882	Chemo-enzymatic synthesis of sugar acid by pyranose 2-oxidase. <i>Molecular Catalysis</i> , 2022, 533, 112753.	1.0	1
883	Inert enzyme nanoaggregates for simultaneous biodecarboxylation and CO <sub>2</sub> conversion. <i>Separation and Purification Technology</i> , 2023, 305, 122447.	3.9	2
884	A cleaning and reusable biochemical degumming method for hemp fibers through immobilized pectinase lyase on calcium alginate microspheres. <i>New Journal of Chemistry</i> , 2022, 46, 23155-23164.	1.4	2
885	Biotransformation as a source of potential controlling natural mixtures of <i>Sitophilus zeamais</i> . <i>Biocatalysis and Agricultural Biotechnology</i> , 2022, 45, 102536.	1.5	1
886	Immobilization of Penicillin G Acylase on Vinyl Sulfone-Agarose: An Unexpected Effect of the Ionic Strength on the Performance of the Immobilization Process. <i>Molecules</i> , 2022, 27, 7587.	1.7	4
887	Directed evolution engineering to improve activity of glucose dehydrogenase by increasing pocket hydrophobicity. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	2
888	Mechanochemistry-guided reticular assembly for stabilizing enzymes with covalent organic frameworks. <i>Cell Reports Physical Science</i> , 2022, 3, 101153.	2.8	14
889	Structural features, temperature adaptation and industrial applications of microbial lipases from psychrophilic, mesophilic and thermophilic origins. <i>International Journal of Biological Macromolecules</i> , 2023, 225, 822-839.	3.6	13
891	A comprehensive review on bio-mimicked multimolecular frameworks and supramolecules as scaffolds for enzyme immobilization. <i>Biotechnology and Bioengineering</i> , 2023, 120, 352-398.	1.7	3
892	Glucose/Furfural Substrate Mixtures in Non-Engineered Yeast: Potential for Massive Rerouting of Fermentation to C-C Bond Formation on Furfural. <i>ChemCatChem</i> , 0, , .	1.8	2
893	Polyester fabric modification by chemical treatment to enhancing the Î²-glucosidase immobilization. <i>Heliyon</i> , 2022, 8, e11660.	1.4	6
894	Immobilization of Lipase B from <i>Candida antarctica</i> in Octyl-Vinyl Sulfone Agarose: Effect of the Enzyme-Support Interactions on Enzyme Activity, Specificity, Structure and Inactivation Pathway. <i>International Journal of Molecular Sciences</i> , 2022, 23, 14268.	1.8	5
895	Immobilization of multienzymes: Problems and solutions. , 2023, , 317-340.		2
896	Future perspectives in enzyme immobilization. , 2023, , 403-426.		0
897	The enzyme, the support, and the immobilization strategy: The key findings to a desirable biocatalyst. , 2023, , 1-16.		0

#	ARTICLE	IF	CITATIONS
898	Dephytinization of wheat and rice bran by cross-linked enzyme aggregates of <i>Mucor indicus</i> phytase: a viable prospect for food and feed industries. <i>Journal of the Science of Food and Agriculture</i> , 2023, 103, 1935-1945.	1.7	2
899	The use of tyrosinases in a chemoenzymatic cascade as a peptide ligation strategy. <i>RSC Chemical Biology</i> , 2023, 4, 132-137.	2.0	1
900	A chemoenzymatic strategy for the efficient synthesis of amphenicol antibiotic chloramphenicol mediated by an engineered <i>l</i> -threonine transaldolase with high activity and stereoselectivity. <i>Catalysis Science and Technology</i> , 2023, 13, 684-693.	2.1	4
901	Halohydrin dehalogenase-catalysed synthesis of enantiopure fluorinated building blocks: bottlenecks found and explained by applying a reaction engineering approach. <i>Reaction Chemistry and Engineering</i> , 2023, 8, 673-686.	1.9	1
902	Utilizing biocatalysis and a sulfolane-mediated reductive acetal opening to access nemtabrutinib from cyrene. <i>Green Chemistry</i> , 2023, 25, 606-613.	4.6	13
903	Albumin-catalysed synthesis of flavanones. <i>Process Biochemistry</i> , 2023, 125, 1-6.	1.8	0
904	Designing multifunctional biocatalytic cascade system by multi-enzyme co-immobilization on biopolymers and nanostructured materials. <i>International Journal of Biological Macromolecules</i> , 2023, 227, 535-550.	3.6	10
905	Synthesis of organic-inorganic hybrid nanoflowers of lipases from <i>Candida antarctica</i> type B (CALB) and <i>Thermomyces lanuginosus</i> (TLL): Improvement of thermal stability and reusability. <i>Enzyme and Microbial Technology</i> , 2023, 163, 110167.	1.6	6
906	Transforming Lignin Biomass to Value: Interplay Between Ligninolytic Enzymes and Lignocellulose Depolymerization. <i>Bioenergy Research</i> , 2023, 16, 1246-1263.	2.2	5
907	CO <sub>2</sub> Photoactivation Study of Adenine Nucleobase: Role of Hydrogen Bonding Traction. <i>Small</i> , 2022, 18, 2206724.	5.2	0
908	Protein trap-engineered metal-organic frameworks for advanced enzyme encapsulation and mimicking. <i>Nano Research</i> , 2023, 16, 3364-3371.	5.8	9
909	Fabrication of Earth-Abundant Electrocatalysts Based on Green-Chemistry Approaches to Achieve Efficient Alkaline Water Splitting—A Review. <i>Sustainability</i> , 2022, 14, 16359.	1.6	2
910	Sustainable and Robust Closed-Loop Enzymatic Platform for Continuous/Semi-continuous Synthesis of Ursodeoxycholic Acid. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 16916-16923.	3.2	2
911	Reshaping Substrate-Binding Pocket of Leucine Dehydrogenase for Bidirectionally Accessing Structurally Diverse Substrates. <i>ACS Catalysis</i> , 2023, 13, 158-168.	5.5	11
912	Pyrene-Based DCA Molecules as Efficient Heterogeneous Catalysts for Visible-Light-Induced Aerobic Organic Transformations. <i>ChemSusChem</i> , 2023, 16, .	3.6	1
913	3D Printed Porous Nanocellulose-Based Scaffolds As Carriers for Immobilization of Glycosyltransferases. <i>ACS Applied Bio Materials</i> , 2022, 5, 5728-5740.	2.3	3
914	Chitosan-EDTA-Cellulose bio-based network: A recyclable multifunctional organocatalyst for green and expeditious synthesis of Hantzsch esters. <i>Carbohydrate Polymer Technologies and Applications</i> , 2023, 5, 100279.	1.6	5
915	Integrating Carbohydrate and C1 Utilization for Chemicals Production. <i>ChemSusChem</i> , 2023, 16, .	3.6	2

#	ARTICLE	IF	CITATIONS
916	Rational enzyme design for enabling biocatalytic Baldwin cyclization and asymmetric synthesis of chiral heterocycles. <i>Nature Communications</i> , 2022, 13, .	5.8	7
917	Comparative Life Cycle Assessment of Chemical and Biocatalytic 2â€™3â€™â€Cyclic GMPâ€™AMP Synthesis. <i>ChemSusChem</i> , 2023, 16, .	3.6	6
918	Co-Enzymes with Dissimilar Stabilities: A Discussion of the Likely Biocatalyst Performance Problems and Some Potential Solutions. <i>Catalysts</i> , 2022, 12, 1570.	1.6	3
919	Lipase-Entrapped Colloidosomes with Tunable Positioning at the Oilâ€™Water Interface for Pickering Emulsion-Enhanced Biocatalysis. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 54781-54789.	4.0	6
921	A growth selection system for the directed evolution of amine-forming or converting enzymes. <i>Nature Communications</i> , 2022, 13, .	5.8	14
922	Colourimetric Plate Assays Based on Functionalized Gelatine Hydrogel Useful for Various Screening Purposes in Enzymology. <i>International Journal of Molecular Sciences</i> , 2023, 24, 33.	1.8	0
923	Green and sustainable solvents for biocatalytic oxidations. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2023, 39, 100741.	3.2	5
924	Chemoenzymatic Synthesis of Optically Active Alcohols Possessing 1,2,3,4-Tetrahydroquinoline Moiety Employing Lipases or Variants of the Acyltransferase from <i>Mycobacterium smegmatis</i> . <i>Catalysts</i> , 2022, 12, 1610.	1.6	1
925	Engineering approaches for O <sub>2</sub> -dependent enzymes. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2023, 40, 100733.	3.2	3
926	Asymmetric Ene-Reduction of Î±,Î²-Unsaturated Compounds by F <sub>420</sub> -Dependent Oxidoreductases A Enzymes from <i>Mycobacterium smegmatis</i> . <i>Biochemistry</i> , 2023, 62, 873-891.	1.2	3
927	Continuous flow synthesis of phenyl glucosazone and its conversion to 2H-1,2,3-Triazole building blocks. <i>Journal of Flow Chemistry</i> , 2023, 13, 211-215.	1.2	2
928	Lipase-Catalyzed Synthesis and Biological Evaluation of <i>N</i> -Picolineamides as <i>Trypanosoma cruzi</i> Antiproliferative Agents. <i>ACS Medicinal Chemistry Letters</i> , 2023, 14, 59-65.	1.3	1
929	Tapping into abiological reaction chemistries in biocatalysis. <i>Chem Catalysis</i> , 2023, , 100493.	2.9	0
930	Enzyme Anchoring Amphiphilic Polymer Nanoparticles for Enhanced Pickering Interfacial Biocatalysis. <i>ACS Applied Polymer Materials</i> , 2023, 5, 1747-1755.	2.0	1
931	The E factor at 30: a passion for pollution prevention. <i>Green Chemistry</i> , 2023, 25, 1704-1728.	4.6	54
932	Immobilization of Nuclease P1 Based on Hybrid Nanoflowers with Tremendously Enhanced Catalytic Activity and Stability. <i>Industrial &amp; Engineering Chemistry Research</i> , 0, , .	1.8	0
933	Enzyme-immobilized microfluidic devices for biomolecule detection. <i>TrAC - Trends in Analytical Chemistry</i> , 2023, 159, 116908.	5.8	16
934	Yeast Lipid Produced through Glycerol Conversions and Its Use for Enzymatic Synthesis of Amino Acid-Based Biosurfactants. <i>International Journal of Molecular Sciences</i> , 2023, 24, 714.	1.8	6

#	ARTICLE	IF	CITATIONS
935	Chemoenzymatic Protocol for the Synthesis of Enantiopure $\beta^2$ -Blocker (S)-Bisoprolol. <i>Catalysts</i> , 2023, 13, 54.	1.6	2
936	Levoglucosenone-derived synthesis of bio-based solvents and polyesters. <i>Green Chemistry Letters and Reviews</i> , 2023, 16, .	2.1	6
937	Development of a yeast whole-cell biocatalyst for MHET conversion into terephthalic acid and ethylene glycol. <i>Microbial Cell Factories</i> , 2022, 21, .	1.9	5
938	Engineered, Scalable Production of Optically Pure $\alpha$ -Phenylalanines Using Phenylalanine Ammonia-Lyase from <i>Arabidopsis thaliana</i> . <i>Journal of Organic Chemistry</i> , 2023, 88, 852-862.	1.7	3
939	Metal Nanoparticles Incorporated within Graphene-Enzyme Preparations for Synergistic Multiactive Catalysts. <i>ACS Applied Nano Materials</i> , 2023, 6, 704-713.	2.4	4
940	Enzymatic synthesis of amlodipine amides and evaluation of their anti- <i>Trypanosoma cruzi</i> activity. <i>Organic and Biomolecular Chemistry</i> , 0, , .	1.5	0
941	Efficient synthesis of Ala-Tyr by L-amino acid ligase coupled with ATP regeneration system. <i>Applied Biochemistry and Biotechnology</i> , 2023, 195, 4336-4346.	1.4	1
942	Structural analysis of an anthrol reductase inspires enantioselective synthesis of enantiopure hydroxycycloketones and $\beta^2$ -halohydrins. <i>Nature Communications</i> , 2023, 14, .	5.8	5
943	Enzyme immobilization on a 3D-printed reactor for aldehyde oxidation to carboxylic acid under mild conditions. <i>Reaction Chemistry and Engineering</i> , 0, , .	1.9	0
944	Metagenomics and new enzymes for the bioeconomy to 2030. , 2023, , 165-178.		1
945	Bioinspired Coassembly of Copper Ions and Nicotinamide Adenine Dinucleotides for Single-Site Nanozyme with Dual Catalytic Functions. <i>Analytical Chemistry</i> , 2023, 95, 2865-2873.	3.2	19
946	Advances in the One-Step Approach of Polymeric Materials Using Enzymatic Techniques. <i>Polymers</i> , 2023, 15, 703.	2.0	1
948	Using Defect Control To Break the Stability-Activity Trade-Off in Enzyme Immobilization via Competitive Coordination. <i>Langmuir</i> , 2023, 39, 2312-2321.	1.6	0
949	Immobilization of the Amidohydrolase MxcM and Its Application for Biocatalytic Flow Synthesis of Pseudocheilin A. <i>Catalysts</i> , 2023, 13, 229.	1.6	0
950	Rational design of enzyme activity and enantioselectivity. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 11, .	2.0	14
951	Asymmetric ene-reduction by F420-dependent oxidoreductases B (FDOR $\beta$ ) enzymes from <i>Mycobacterium smegmatis</i> . <i>ChemBioChem</i> , 0, , .	1.3	1
952	Stereoselective Reduction of $\beta^2$ -Fluoro- $\beta^2$ -ketoesters: Ketoreductases and Dynamic Reductive Kinetic Resolution. <i>Journal of Chemical Education</i> , 2023, 100, 745-750.	1.1	0
953	Non-canonical amino acids as a tool for the thermal stabilization of enzymes. <i>Protein Engineering, Design and Selection</i> , 2023, 36, .	1.0	1

#	ARTICLE	IF	CITATIONS
954	Investigation of the electrocatalytic reaction for the oxidation of alcohols through the formation of a metal organic framework (Mn-MIL-100)/polymer matrix on the surface of an Au electrode. <i>New Journal of Chemistry</i> , 2023, 47, 6730-6738.	1.4	10
955	An Immobilised Silicon-Carbon Bond-Forming Enzyme for Anaerobic Flow Biocatalysis. <i>ChemCatChem</i> , 2023, 15, .	1.8	1
956	Improving cold-adaptability of mesophilic cellulase complex with a novel mushroom cellobiohydrolase for efficient low-temperature ensiling. <i>Bioresource Technology</i> , 2023, 376, 128888.	4.8	4
957	Industrial Applications of Asymmetric Biocatalytic C-C Bond Forming Reactions. , 2022, , .		0
958	Engineering Cytochrome P450BM3 Enzymes for Direct Nitration of Unsaturated Hydrocarbons. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0
959	Engineering Cytochrome P450BM3 Enzymes for Direct Nitration of Unsaturated Hydrocarbons. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	8
960	Improved terephthalic acid production from p-xylene using metabolically engineered <i>Pseudomonas putida</i> . <i>Metabolic Engineering</i> , 2023, 76, 75-86.	3.6	7
961	Ionic Liquids in Clean and Sustainable Biocatalytic Organic Reactions. , 2022, , 727-740.		0
962	Construction of a Bifunctional Pd(0)-CALB@SiO <sub>2</sub> Hybrid Catalyst for the Synthesis and Arylation of Imidazo[1,2-a]pyridine in One Pot. <i>European Journal of Organic Chemistry</i> , 2023, 26, .	1.2	3
963	Hydrated Ionic Liquids: Perspective for Bioscience. <i>Chemical Record</i> , 2023, 23, .	2.9	1
964	Bioorganometallic Chemistry at the Interface with Biocatalysis: Chemoselective Reduction of Biomimetic NAD <sup>+</sup> Cofactors with [Cp*Rh(bpy)H] <sup>+</sup> , Tandem Catalysis with 1,4-NADH-Dependent Enzymes, Chiral Synthesis, Organotin Metabolites, and DFT Mechanism Studies. <i>Organometallics</i> , 2023, 42, 288-306.	1.1	6
965	Diversity-Oriented Biosynthesis Yields Kynurenine Derivative-Based Neurological Drug Candidate Collection. <i>ACS Synthetic Biology</i> , 2023, 12, 608-617.	1.9	0
966	Chicken tallow, a low-cost feedstock for the two-step lipase-catalysed synthesis of biolubricant. <i>Biocatalysis and Biotransformation</i> , 2024, 42, 212-226.	1.1	2
967	Lipase-catalyzed organic transformations: a recent update. , 2023, , 297-321.		0
968	Circular Economy and Green Chemistry: The Need for Radical Innovative Approaches in the Design for New Products. <i>Energies</i> , 2023, 16, 1752.	1.6	31
969	One-Pot Chemoenzymatic Cascade for the Enantioselective C(1)-Allylation of Tetrahydroisoquinolines. <i>Journal of the American Chemical Society</i> , 2023, 145, 4431-4437.	6.6	4
970	Machine learning-enabled retrobiosynthesis of molecules. <i>Nature Catalysis</i> , 2023, 6, 137-151.	16.1	32
971	Carrier-Free Enzyme Immobilizates for Flow Chemistry. <i>Chemie-Ingenieur-Technik</i> , 2023, 95, 531-542.	0.4	2

#	ARTICLE	IF	CITATIONS
973	Synergism of ionic liquids and lipases for lignocellulosic biomass valorization. <i>Chemical Engineering Journal</i> , 2023, 461, 142011.	6.6	9
974	The Evolving Nature of Biocatalysis in Pharmaceutical Research and Development. <i>Jacs Au</i> , 2023, 3, 715-735.	3.6	21
975	Immobilized biocatalysts for hydrolysis of polysaccharides. , 2023, , 385-407.		0
976	Climatic Chamber Stability Tests of Lipase-Catalytic Octyl-Sepharose Systems. <i>Catalysts</i> , 2023, 13, 501.	1.6	1
977	Heterogeneous enzymatic catalysts: Comparing their efficiency in the production of biodiesel from alternative oils**. <i>ChemistrySelect</i> , 2023, 8, .	0.7	2
978	Hydrophilic metal-chelated membrane for biocatalytic membrane reactor application. <i>Materials Today: Proceedings</i> , 2023, , .	0.9	0
980	MAHOMES II: A webserver for predicting if a metal binding site is enzymatic. <i>Protein Science</i> , 2023, 32, .	3.1	1
981	Combining the Power of Biocatalysis and Membrane-Based Purification To Access NADP <sup>+</sup> . <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 4662-4669.	3.2	1
982	Direct Z-Scheme Polymer/Polymer Double-Shell Hollow Nanostructures for Efficient NADH Regeneration and Biocatalytic Artificial Photosynthesis under Visible Light. <i>ACS Catalysis</i> , 2023, 13, 4433-4443.	5.5	5
983	A pharmacophore-based approach to demonstrating the scope of alcohol dehydrogenases. <i>Bioorganic and Medicinal Chemistry</i> , 2023, 83, 117255.	1.4	1
984	Rational Design of a Biocatalyst Based on Immobilized CALB onto Nanostructured SiO <sub>2</sub> . <i>Catalysts</i> , 2023, 13, 625.	1.6	1
985	Green Oxidative Catalytic Processes for the Preparation of APIs and Precursors. <i>Catalysts</i> , 2023, 13, 638.	1.6	1
986	Biocatalytic asymmetric reduction of prochiral bulky-bulky ketones. <i>Molecular Catalysis</i> , 2023, 541, 113099.	1.0	5
987	Crystallization-based downstream processing of 1%-transaminase- and amine dehydrogenase-catalyzed reactions. <i>Reaction Chemistry and Engineering</i> , 2023, 8, 1427-1439.	1.9	2
988	Biocatalytic amide bond formation. <i>Green Chemistry</i> , 2023, 25, 2958-2970.	4.6	20
989	Biofunctionalized 3D printed structures for biomedical applications: A critical review of recent advances and future prospects. <i>Progress in Materials Science</i> , 2023, 137, 101124.	16.0	6
990	Self-adaptive Metal-Organic Framework Assembles Di-iron Active Sites to Mimic Monooxygenases. <i>Journal of the American Chemical Society</i> , 0, , .	6.6	2
991	Environmental concerns and bioaccumulation of psychiatric drugs in water bodies – Conventional versus biocatalytic systems of mitigation. <i>Environmental Research</i> , 2023, 229, 115892.	3.7	1

#	ARTICLE	IF	CITATIONS
992	A selective and atom-economic rearrangement of uridine by cascade biocatalysis for production of pseudouridine. <i>Nature Communications</i> , 2023, 14, .	5.8	5
993	Optimization of asymmetric bioreduction conditions of 1-indanone by <i>Leuconostoc mesenteroides</i> N6 using a face-centered design-based multi-objective optimization model. <i>Preparative Biochemistry and Biotechnology</i> , 2024, 54, 12-18.	1.0	0
994	What's new in flow biocatalysis? A snapshot of 2020-2022. <i>Frontiers in Catalysis</i> , 0, 3, .	1.8	5
1001	Continuous flow-mode synthesis of (chiral) amines with transaminase: a strategic biocatalytic approach to essential building blocks. <i>Reaction Chemistry and Engineering</i> , 2023, 8, 1505-1544.	1.9	4
1022	Biocatalysis for Lead Discovery and Optimization. , 2022, , .		1
1023	Biocatalytic Syntheses of Antiviral Nucleosides Islatravir and Molnupiravir. , 2022, , .		0
1025	Immobilization of proteases for biomedical and industrial applications. , 2023, , 403-425.		0
1030	Versatile Chemo-Biocatalytic Cascade Driven by a Thermophilic and Irreversible C-C Bond-Forming $\alpha$ -Oxoamine Synthase. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 7997-8002.	3.2	0
1036	Flow bioprocessing of citrus glycosides for high-value aglycone preparation. <i>Catalysis Science and Technology</i> , 2023, 13, 4348-4352.	2.1	3
1041	Ionic Liquids for the Surface Modification of Polymers and Medical Devices. , 2023, , 354-379.		0
1055	Insights into the quantitative structure-activity relationship for ionic liquids: a bibliometric mapping analysis. <i>Environmental Science and Pollution Research</i> , 2023, 30, 95054-95076.	2.7	1
1059	Immobilization of enzymes on nanomaterials. , 2023, , 419-450.		0
1061	Biocatalysis of Steroids by <i>Mycobacterium</i> sp. in Aqueous and Organic Media. <i>Methods in Molecular Biology</i> , 2023, , 221-229.	0.4	0
1071	Electroresponsive Materials for Soft Robotics. <i>Nanobiotechnology Reports</i> , 2023, 18, 189-206.	0.2	0
1073	Enzyme Engineering Strategies for the Bioenhancement of L-Asparaginase Used as a Biopharmaceutical. <i>BioDrugs</i> , 2023, 37, 793-811.	2.2	1
1077	Green Gasoline: Integrated Production Processes, Future Perspectives and Technoeconomic Feasibility. , 2023, , 145-166.		0
1080	Bi- or multienzymatic nanobiocatalytic systems. , 2023, , 27-56.		0
1083	Novel biocatalysts based on enzymes in complexes with nano- and micromaterials. <i>Biophysical Reviews</i> , 2023, 15, 1127-1158.	1.5	1

#	ARTICLE	IF	CITATIONS
1086	Novel enzymatic tools for C–C bond formation through the development of new-to-nature biocatalysis. <i>Advances in Catalysis</i> , 2023, , .	0.1	0
1110	Multidisciplinary approaches for enzyme biocatalysis in pharmaceuticals: protein engineering, computational biology, and nanoarchitectonics. , 0, , .		0
1115	Use of Lipases as a Sustainable and Efficient Method for the Synthesis and Degradation of Polymers. <i>Journal of Polymers and the Environment</i> , 0, , .	2.4	0
1129	Carbon–Carbon Bond Formation Via Biocatalytic Transformations. , 2023, , .		0
1131	Harnessing the potential: advances in cyanobacterial natural product research and biotechnology. <i>Natural Product Reports</i> , 0, , .	5.2	0
1136	Engineered enzymes for the synthesis of pharmaceuticals and other high-value products. , 2024, 3, 19-32.		2
1139	Recent advances in porous materials for photocatalytic NADH regeneration. <i>Journal of Materials Chemistry A</i> , 2024, 12, 3209-3229.	5.2	2
1140	Understanding Enzymatic Kinetic Resolution. <i>Springer Briefs in Molecular Science</i> , 2023, , 1-8.	0.1	0
1142	Novel applications of photobiocatalysts in chemical transformations. <i>RSC Advances</i> , 2024, 14, 2590-2601.	1.7	0
1156	Advances in cofactor immobilization for enhanced continuous-flow biocatalysis. <i>Journal of Flow Chemistry</i> , 2024, 14, 219-238.	1.2	0