Jing Zhao

List of Publications by Year in descending order

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157 papers	4,981 citations	81900 39 h-index	128289 60 g-index
165 all docs	165 docs citations	165 times ranked	3861 citing authors

#	Article	IF	Citations
1	Laboratory evolution of cytochrome P450 BM-3 monooxygenase for organic cosolvents. Biotechnology and Bioengineering, 2004, 85, 351-358.	3.3	184
2	Directed Evolution Empowered Redesign of Natural Proteins for the Sustainable Production of Chemicals and Pharmaceuticals. Angewandte Chemie - International Edition, 2019, 58, 36-40.	13.8	169
3	Advances in generating functional diversity for directed protein evolution. Current Opinion in Chemical Biology, 2009, 13, 19-25.	6.1	156
4	A Continuous Spectrophotometric Assay for P450 BM-3, a Fatty Acid Hydroxylating Enzyme, and Its Mutant F87A. Analytical Biochemistry, 1999, 269, 359-366.	2.4	143
5	A Statistical Analysis of Random Mutagenesis Methods Used for Directed Protein Evolution. Journal of Molecular Biology, 2006, 355, 858-871.	4.2	132
6	Directed evolution 2.0: improving and deciphering enzyme properties. Chemical Communications, 2015, 51, 9760-9772.	4.1	122
7	Reengineering CelA2 cellulase for hydrolysis in aqueous solutions of deep eutectic solvents and concentrated seawater. Green Chemistry, 2012, 14, 2719.	9.0	120
8	Applying metagenomics for the identification of bacterial cellulases that are stable in ionic liquids. Green Chemistry, 2009, 11, 957.	9.0	113
9	Phosphorothioate-based ligase-independent gene cloning (PLICing): An enzyme-free and sequence-independent cloning method. Analytical Biochemistry, 2010, 406, 141-146.	2.4	109
10	Structural Insight into Enantioselective Inversion of an Alcohol Dehydrogenase Reveals a â€œPolar Gateâ€•in Stereorecognition of Diaryl Ketones. Journal of the American Chemical Society, 2018, 140, 12645-12654.	13.7	87
11	OmniChange: The Sequence Independent Method for Simultaneous Site-Saturation of Five Codons. PLoS ONE, 2011, 6, e26222.	2.5	83
12	Regioselective oâ€Hydroxylation of Monosubstituted Benzenes by P450 BM3. Angewandte Chemie - International Edition, 2013, 52, 8459-8462.	13.8	77
13	Directed Evolution of Oxygenases: Screening Systems, Success Stories and Challenges. Combinatorial Chemistry and High Throughput Screening, 2007, 10, 197-217.	1.1	72
14	Increasing activity and thermal resistance of Bacillus gibsonii alkaline protease (BgAP) by directed evolution. Biotechnology and Bioengineering, 2013, 110, 711-720.	3.3	72
15	Cellulolytic RoboLector â€“ towards an automated high-throughput screening platform for recombinant cellulase expression. Journal of Biological Engineering, 2017, 11, 1.	4.7	71
16	A Whole Cell E. coli Display Platform for Artificial Metalloenzymes: Poly(phenylacetylene) Production with a Rhodiumâ€“Nitrobindin Metalloprotein. ACS Catalysis, 2018, 8, 2611-2614.	11.2	71
17	Laboratory evolution of P450 BM3 for mediated electron transfer yielding an activity-improved and reductase-independent variant. Protein Engineering, Design and Selection, 2007, 21, 29-35.	2.1	68
18	A Highly Active Biohybrid Catalyst for Olefin Metathesis in Water: Impact of a Hydrophobic Cavity in a Î²-Barrel Protein. ACS Catalysis, 2015, 5, 7519-7522.	11.2	68

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19	Engineering Robust Cellulases for Tailored Lignocellulosic Degradation Cocktails. International Journal of Molecular Sciences, 2020, 21, 1589.	4.1	68
20	Directed evolution of a highly active Yersinia mollaretii phytase. Applied Microbiology and Biotechnology, 2012, 95, 405-418.	3.6	64
21	Directed laccase evolution for improved ionic liquid resistance. Green Chemistry, 2013, 15, 1348.	9.0	64
22	A Screening System for the Directed Evolution of Epoxygenases: Importance of Position 184 in P450â€‰BM3 for Stereoselective Styrene Epoxidation. Angewandte Chemie - International Edition, 2006, 45, 5380-5383.	13.8	59
23	To get what we aim forÂâ€“Âprogress in diversity generation methods. FEBS Journal, 2013, 280, 2961-2978.	4.7	59
24	Machine learning-assisted enzyme engineering. Methods in Enzymology, 2020, 643, 281-315.	1.0	59
25	A roadmap to directed enzyme evolution and screening systems for biotechnological applications. Biological Research, 2013, 46, 395-405.	3.4	57
26	Directed Evolution of a Bacterial Laccase (CueO) for Enzymatic Biofuel Cells. Angewandte Chemie - International Edition, 2019, 58, 4562-4565.	13.8	57
27	Computerâ€Assisted Recombination (CompassR) Teaches us How to Recombine Beneficial Substitutions from Directed Evolution Campaigns. Chemistry - A European Journal, 2020, 26, 643-649.	3.3	57
28	Enzyme Hydration Determines Resistance in Organic Cosolvents. ACS Catalysis, 2020, 10, 14847-14856.	11.2	53
29	COMPUTER-AIDED PROTEIN DIRECTED EVOLUTION: A REVIEW OF WEB SERVERS, DATABASES AND OTHER COMPUTATIONAL TOOLS FOR PROTEIN ENGINEERING. Computational and Structural Biotechnology Journal, 2012, 2, e201209008.	4.1	52
30	Ionic liquid and deep eutectic solvent-activated CelA2 variants generated by directed evolution. Applied Microbiology and Biotechnology, 2014, 98, 5775-5785.	3.6	47
31	KnowVolution of the Polymer-Binding Peptide LCI for Improved Polypropylene Binding. Polymers, 2018, 10, 423.	4.5	47
32	Ionic liquid effects on the activity of monooxygenase P450 BM-3. Green Chemistry, 2008, 10, 117-123.	9.0	46
33	Reengineered glucose oxidase for amperometric glucose determination in diabetes analytics. Biosensors and Bioelectronics, 2013, 50, 84-90.	10.1	46
34	Towards Understanding Directed Evolution: More than Half of All Amino Acid Positions Contribute to Ionic Liquid Resistance of Bacillus subtilis Lipase A. ChemBioChem, 2015, 16, 937-945.	2.6	45
35	Disulfide Bond Engineering of an Endoglucanase from Penicillium verruculosum to Improve Its Thermostability. International Journal of Molecular Sciences, 2019, 20, 1602.	4.1	45
36	Less Unfavorable Salt Bridges on the Enzyme Surface Result in More Organic Cosolvent Resistance. Angewandte Chemie - International Edition, 2021, 60, 11448-11456.	13.8	45

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37	Multi-site saturation by OmniChange yields a pH- and thermally improved phytase. Journal of Biotechnology, 2014, 170, 68-72.	3.8	43
38	Directed Evolution of Pâ€‰450 BMâ€‰3 into a pâ€Xylene Hydroxylase. ChemCatChem, 2012, 4, 771-773.	3.7	40
39	Lessons from diversity of directed evolution experiments by an analysis of 3,000 mutations. Biotechnology and Bioengineering, 2014, 111, 2380-2389.	3.3	40
40	Surface charge engineering of a Bacillus gibsonii subtilisin protease. Applied Microbiology and Biotechnology, 2013, 97, 6793-6802.	3.6	39
41	QM/MM Calculations Revealing the Resting and Catalytic States in Zinc-Dependent Medium-Chain Dehydrogenases/Reductases. ACS Catalysis, 2015, 5, 3207-3215.	11.2	39
42	Cavity Size Engineering of a Î²-Barrel Protein Generates Efficient Biohybrid Catalysts for Olefin Metathesis. ACS Catalysis, 2018, 8, 3358-3364.	11.2	39
43	In Vitro Double Oxidation of nâ€Heptane with Direct Cofactor Regeneration. Advanced Synthesis and Catalysis, 2013, 355, 1787-1798.	4.3	38
44	How To Engineer Ionic Liquids Resistant Enzymes: Insights from Combined Molecular Dynamics and Directed Evolution Study. ACS Sustainable Chemistry and Engineering, 2019, 7, 11293-11302.	6.7	38
45	Engineering and emerging applications of artificial metalloenzymes with whole cells. Nature Catalysis, 2021, 4, 814-827.	34.4	38
46	Progress toward a bicarbonate-based microalgae production system. Trends in Biotechnology, 2022, 40, 180-193.	9.3	37
47	Directed Evolution of an Antitumor Drug (Arginine Deiminase PpADI) for Increased Activity at Physiological pH. ChemBioChem, 2010, 11, 691-697.	2.6	35
48	Artificial Dielsâ€“Alderase based on the transmembrane protein FhuA. Beilstein Journal of Organic Chemistry, 2016, 12, 1314-1321.	2.2	33
49	MIXed plastics biodegradation and UPcycling using microbial communities: EU Horizon 2020 project MIX-UP started January 2020. Environmental Sciences Europe, 2021, 33, 99.	5.5	33
50	Matterâ€‹tag: A universal immobilization platform for enzymes on polymers, metals, and siliconâ€based materials. Biotechnology and Bioengineering, 2020, 117, 49-61.	3.3	32
51	A Competitive Flow Cytometry Screening System for Directed Evolution of Therapeutic Enzyme. ACS Synthetic Biology, 2015, 4, 768-775.	3.8	31
52	Water-Soluble Reactive Copolymers Based on Cyclic N-Vinylamides with Succinimide Side Groups for Bioconjugation with Proteins. Macromolecules, 2015, 48, 4256-4268.	4.8	31
53	Enzymeâ€“Polyelectrolyte Complexes Boost the Catalytic Performance of Enzymes. ACS Catalysis, 2018, 8, 10876-10887.	11.2	30
54	A thermostable flavin-based fluorescent protein from Chloroflexus aggregans: a framework for ultra-high resolution structural studies. Photochemical and Photobiological Sciences, 2019, 18, 1793-1805.	2.9	30

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55	Directed arginine deiminase evolution for efficient inhibition of arginine-auxotrophic melanomas. Applied Microbiology and Biotechnology, 2015, 99, 1237-1247.	3.6	29
56	Engineering Enhanced Pore Sizes Using FhuA Î”1-160 from E. coli Outer Membrane as Template. ACS Sensors, 2017, 2, 1619-1626.	7.8	29
57	KnowVolution of a GH5 Cellulase from Penicillium verruculosum to Improve Thermal Stability for Biomass Degradation. ACS Sustainable Chemistry and Engineering, 2020, 8, 12388-12399.	6.7	29
58	Challenges of the genetic code for exploring sequence space in directed protein evolution. Biocatalysis and Biotransformation, 2007, 25, 229-241.	2.0	28
59	Iterative key-residues interrogation of a phytase with thermostability increasing substitutions identified in directed evolution. Applied Microbiology and Biotechnology, 2016, 100, 227-242.	3.6	28
60	An Enzymatic Route to Î±â€Tocopherol Synthons: Aromatic Hydroxylation of Pseudocumene and Mesitylene with P450 BM3. Chemistry - A European Journal, 2017, 23, 17981-17991.	3.3	28
61	CompassR Yields Highly Organicâ€Solventâ€Tolerant Enzymes through Recombination of Compatible Substitutions. Chemistry - A European Journal, 2021, 27, 2789-2797.	3.3	28
62	Grafting PNIPAAm from Î²-barrel shaped transmembrane nanopores. Biomaterials, 2016, 107, 115-123.	11.4	27
63	Sortase-Mediated High-Throughput Screening Platform for Directed Enzyme Evolution. ACS Combinatorial Science, 2018, 20, 203-211.	3.8	27
64	Whole-cell double oxidation of n-heptane. Journal of Biotechnology, 2014, 191, 196-204.	3.8	26
65	Rapid and Robust Coating Method to Render Polydimethylsiloxane Surfaces Cell-Adhesive. ACS Applied Materials & Interfaces, 2019, 11, 41091-41099.	8.0	26
66	Chemoenzymatic cascade for stilbene production from cinnamic acid catalyzed by ferulic acid decarboxylase and an artificial metathease. Catalysis Science and Technology, 2019, 9, 5572-5576.	4.1	26
67	CompassR-guided recombination unlocks design principles to stabilize lipases in ILs with minimal experimental efforts. Green Chemistry, 2021, 23, 3474-3486.	9.0	26
68	Stimuli-Responsive Poly(N-Vinyllactams) with Glycidyl Side Groups: Synthesis, Characterization, and Conjugation with Enzymes. Biomacromolecules, 2019, 20, 992-1006.	5.4	25
69	MicroGelzymes: pH-Independent Immobilization of Cytochrome P450 BM3 in Microgels. Biomacromolecules, 2020, 21, 5128-5138.	5.4	25
70	Engineered phytases for emerging biotechnological applications beyond animal feeding. Applied Microbiology and Biotechnology, 2019, 103, 6435-6448.	3.6	24
71	Phytase-Based Phosphorus Recovery Process for 20 Distinct Press Cakes. ACS Sustainable Chemistry and Engineering, 2020, 8, 3913-3921.	6.7	24
72	Phosphorothioate-based DNA recombination: an enzyme-free method for the combinatorial assembly of multiple DNA fragments. BioTechniques, 2012, 52, 1-6.	1.8	23

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73	Mediated electron transfer with monooxygenasesâ€"Insight in interactions between reduced mediators and the co-substrate oxygen. Journal of Molecular Catalysis B: Enzymatic, 2014, 108, 51-58.	1.8	23
74	Biocatalytic microgels (Î¼-Gelzymes): synthesis, concepts, and emerging applications. Green Chemistry, 2020, 22, 8183-8209.	9.0	23
75	Ionic liquid activated Bacillus subtilis lipase A variants through cooperative surface substitutions. Biotechnology and Bioengineering, 2015, 112, 1997-2004.	3.3	22
76	Are transversion mutations better? A Mutagenesis Assistant Program analysis on P450 BM-3 heme domain. Biotechnology Journal, 2007, 2, 133-142.	3.5	21
77	Directed Evolution of Subtilisin E into a Highly Active and Guanidinium Chlorideâ€•and Sodium Dodecylsulfateâ€Tolerant Protease. ChemBioChem, 2012, 13, 691-699.	2.6	21
78	Systematically Scrutinizing the Impact of Substitution Sites on Thermostability and Detergent Tolerance for Bacillus subtilis Lipase A. Journal of Chemical Information and Modeling, 2020, 60, 1568-1584.	5.4	21
79	Chemogenetic Evolution of a Peroxidase-like Artificial Metalloenzyme. ACS Catalysis, 2021, 11, 5079-5087.	11.2	21
80	P-LinK: A method for generating multicomponent cytochrome P450 fusions with variable linker length. BioTechniques, 2014, 57, 13-20.	1.8	20
81	CaLB Catalyzed Conversion of Îµ-Caprolactone in Aqueous Medium. Part 1: Immobilization of CaLB to Microgels. Polymers, 2016, 8, 372.	4.5	20
82	PyPEFâ€"An Integrated Framework for Data-Driven Protein Engineering. Journal of Chemical Information and Modeling, 2021, 61, 3463-3476.	5.4	20
83	MAP^{2.0}3D: A Sequence/Structure Based Server for Protein Engineering. ACS Synthetic Biology, 2012, 1, 139-150.	3.8	19
84	Protein consensus-based surface engineering (ProCoS): a computer-assisted method for directed protein evolution. BioTechniques, 2016, 61, 305-314.	1.8	19
85	Recent Advances in Directed Phytase Evolution and Rational Phytase Engineering. , 2017, , 145-172.		19
86	A first continuous 4-aminoantipyrine (4-AAP)-based screening system for directed esterase evolution. Applied Microbiology and Biotechnology, 2015, 99, 5237-5246.	3.6	18
87	KnowVolution Campaign of an Aryl Sulfotransferase Increases Activity toward Cellobiose. Chemistry - A European Journal, 2018, 24, 17117-17124.	3.3	18
88	Enzymeâ€Compatible Dynamic Nanoreactors from Electrostatically Bridged Likeâ€Charged Surfactants and Polyelectrolytes. Angewandte Chemie - International Edition, 2018, 57, 9402-9407.	13.8	18
89	Activity prediction of substrates in NADH-dependent carbonyl reductase by docking requires catalytic constraints and charge parameterization of catalytic zinc environment. Journal of Computer-Aided Molecular Design, 2015, 29, 1057-1069.	2.9	17
90	Oneâ€Pot Twoâ€Step Chemoenzymatic Cascade for the Synthesis of a Bisâ€benzofuran Derivative. European Journal of Organic Chemistry, 2019, 2019, 6341-6346.	2.4	17

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91	Preparativeâ€Scale Production of Testosterone Metabolites by Human Liver Cytochrome P450 Enzyme 3A4. Advanced Synthesis and Catalysis, 2020, 362, 2725-2738.	4.3	17
92	The molecular basis of spectral tuning in blue- and red-shifted flavin-binding fluorescent proteins. Journal of Biological Chemistry, 2021, 296, 100662.	3.4	17
93	Polar Substitutions on the Surface of a Lipase Substantially Improve Tolerance in Organic Solvents. ChemSusChem, 2022, 15, .	6.8	17
94	A whole cell biocatalyst for double oxidation of cyclooctane. Journal of Industrial Microbiology and Biotechnology, 2016, 43, 1641-1646.	3.0	16
95	Olefin metathesis catalysts embedded in Î²-barrel proteins: creating artificial metalloproteins for olefin metathesis. Beilstein Journal of Organic Chemistry, 2018, 14, 2861-2871.	2.2	16
96	A hydroquinone-specific screening system for directed P450 evolution. Applied Microbiology and Biotechnology, 2018, 102, 9657-9667.	3.6	16
97	Anchor Peptide-Mediated Surface Immobilization of a Grubbs-Hoveyda-Type Catalyst for Ring-Opening Metathesis Polymerization. Bioconjugate Chemistry, 2019, 30, 714-720.	3.6	16
98	Conformational dynamics of active site loop in Escherichia coli phytase. Biopolymers, 2010, 93, 994-1002.	2.4	15
99	Directed OmniChange Evolution Converts P450 BM3 into an Alkyltrimethylammonium Hydroxylase. Chemistry - A European Journal, 2018, 24, 16865-16872.	3.3	15
100	How Does Surface Charge Engineering of Bacillus subtilis Lipase A Improve Ionic Liquid Resistance? Lessons Learned from Molecular Dynamics Simulations. ACS Sustainable Chemistry and Engineering, 2022, 10, 2689-2698.	6.7	15
101	High-Yield Synthesis of Enantiopure 1,2-Amino Alcohols from <scp>l</scp>-Phenylalanine via Linear and Divergent Enzymatic Cascades. Organic Process Research and Development, 2022, 26, 2085-2095.	2.7	15
102	Substrate thiophosphorylation by Arabidopsis mitogen-activated protein kinases. BMC Plant Biology, 2016, 16, 48.	3.6	14
103	Directed Evolution of P450 BM3 towards Functionalization of Aromatic O-Heterocycles. International Journal of Molecular Sciences, 2019, 20, 3353.	4.1	14
104	Effects of Proline Substitutions on the Thermostable LOV Domain from Chloroflexus aggregans. Crystals, 2020, 10, 256.	2.2	14
105	Enzyme mimetic microgel coating for endogenous nitric oxide mediated inhibition of platelet activation. Journal of Colloid and Interface Science, 2021, 601, 604-616.	9.4	14
106	Aqueous ionic liquids redistribute local enzyme stability via long-range perturbation pathways. Computational and Structural Biotechnology Journal, 2021, 19, 4248-4264.	4.1	14
107	Investigation of Structural Determinants for the Substrate Specificity in the Zincâ€Dependent Alcohol Dehydrogenase CPCR2 from Candida parapsilosis. ChemBioChem, 2015, 16, 1512-1519.	2.6	13
108	In Situ Monitoring of Membrane Protein Insertion into Block Copolymer Vesicle Membranes and Their Spreading via Potential-Assisted Approach. ACS Applied Materials & Interfaces, 2019, 11, 29276-29289.	8.0	13

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109	Designed Streptococcus pyogenes Sortase A Accepts Branched Amines as Nucleophiles in Sortagging. Bioconjugate Chemistry, 2020, 31, 2476-2481.	3.6	13
110	Exploring the mineralization of hydrophobins at a liquid interface. Soft Matter, 2012, 8, 11343.	2.7	12
111	Conformational Dynamics of the FMN-Binding Reductase Domain of Monooxygenase P450BM-3. Journal of Chemical Theory and Computation, 2013, 9, 96-105.	5.3	12
112	2-Methyl-2,4-pentanediol (MPD) boosts as detergent-substitute the performance of ÃŸ-barrel hybrid catalyst for phenylacetylene polymerization. Beilstein Journal of Organic Chemistry, 2017, 13, 1498-1506.	2.2	12
113	A robust protocol for directed aryl sulfotransferase evolution toward the carbohydrate building block GlcNAc. Biotechnology and Bioengineering, 2018, 115, 1106-1115.	3.3	12
114	Improved microscale cultivation of Pichia pastoris for clonal screening. Fungal Biology and Biotechnology, 2018, 5, 8.	5.1	12
115	Incorporation of a Cp*Rh(III)-dithiophosphate Cofactor with Latent Activity into a Protein Scaffold Generates a Biohybrid Catalyst Promoting C(sp²)â€“H Bond Functionalization. Inorganic Chemistry, 2020, 59, 14457-14463.	4.0	12
116	A colourimetric high-throughput screening system for directed evolution of prodigiosin ligase PigC. Chemical Communications, 2020, 56, 8631-8634.	4.1	11
117	Enhancing Robustness of Sortase A by Loop Engineering and Backbone Cyclization. Chemistry - A European Journal, 2020, 26, 13568-13572.	3.3	11
118	Engineering of Laccase CueO for Improved Electron Transfer in Bioelectrocatalysis by Semiâ€Rational Design. Chemistry - A European Journal, 2020, 26, 4974-4979.	3.3	11
119	Comparison of Candida antarctica Lipase B Variants for Conversion of Îµ-Caprolactone in Aqueous Mediumâ€”Part 2. Polymers, 2018, 10, 524.	4.5	10
120	Directed Evolution of a Cp*Rh^{III}â€Linked Biohybrid Catalyst Based on a Screening Platform with Affinity Purification. ChemBioChem, 2021, 22, 679-685.	2.6	10
121	Anchor peptides promote degradation of mixed plastics for recycling. Methods in Enzymology, 2021, 648, 271-292.	1.0	10
122	A High-Throughput Screening Method to Reengineer DNA Polymerases for Random Mutagenesis. Molecular Biotechnology, 2014, 56, 274-283.	2.4	9
123	Amino acid substitutions in random mutagenesis libraries: lessons from analyzing 3000 mutations. Applied Microbiology and Biotechnology, 2017, 101, 3177-3187.	3.6	8
124	Theoretical Model of the Protochlorophyllide Oxidoreductase from a Hierarchy of Protocols. Journal of Physical Chemistry B, 2018, 122, 7668-7681.	2.6	8
125	Directed evolution of an acid Yersinia mollaretii phytase for broadened activity at neutral pH. Applied Microbiology and Biotechnology, 2018, 102, 9607-9620.	3.6	8
126	Construction of a whole-cell biohybrid catalyst using a Cp*Rh(III)-dithiophosphate complex as a precursor of a metal cofactor. Journal of Inorganic Biochemistry, 2021, 216, 111352.	3.5	8

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127	Structure and Cooperativity in Substrateâ€“Enzyme Interactions: Perspectives on Enzyme Engineering and Inhibitor Design. ACS Chemical Biology, 2022, 17, 266-280.	3.4	8
128	Recombinant RNA Polymerase from Geobacillus sp. GHH01 as tool for rapid generation of metagenomic RNAs using in vitro technologies. Biotechnology and Bioengineering, 2017, 114, 2739-2752.	3.3	7
129	Directed aryl sulfotransferase evolution toward improved sulfation stoichiometry on the example of catechols. Applied Microbiology and Biotechnology, 2019, 103, 3761-3771.	3.6	7
130	A Photoclickâ€Based Highâ€Throughput Screening for the Directed Evolution of Decarboxylase OleT. Chemistry - A European Journal, 2021, 27, 954-958.	3.3	7
131	Critical assessment of structure-based approaches to improve protein resistance in aqueous ionic liquids by enzyme-wide saturation mutagenesis. Computational and Structural Biotechnology Journal, 2022, 20, 399-409.	4.1	7
132	Unraveling Binding Effects of Cobalt(II) Sepulchrate with the Monooxygenase P450 BM-3 Heme Domain Using Molecular Dynamics Simulations. Journal of Chemical Theory and Computation, 2016, 12, 353-363.	5.3	6
133	A 96-multiplex capillary electrophoresis screening platform for product based evolution of P450 BM3. Scientific Reports, 2019, 9, 15479.	3.3	6
134	Loop engineering of aryl sulfotransferase B for improving catalytic performance in regioselective sulfation. Catalysis Science and Technology, 2020, 10, 2369-2377.	4.1	6
135	Can constraint network analysis guide the identification phase of KnowVolution? A case study on improved thermostability of an endo-Î²-glucanase. Computational and Structural Biotechnology Journal, 2021, 19, 743-751.	4.1	6
136	Whole-cell screening of oxidative enzymes using genetically encoded sensors. Chemical Science, 2021, 12, 14766-14772.	7.4	6
137	Recombination of Compatible Substitutions by 2GenReP and InSiReP. Methods in Molecular Biology, 2022, 2397, 71-81.	0.9	6
138	FhuAâ€“Grubbsâ€“Hoveyda Biohybrid Catalyst Embedded in a Polymer Film Enables Catalysis in Neat Substrates. ACS Catalysis, 2020, 10, 10946-10953.	11.2	5
139	Chemogenetic engineering of nitrobindin toward an artificial epoxygenase. Catalysis Science and Technology, 2021, 11, 4491-4499.	4.1	5
140	A plea for the integration of Green Toxicology in sustainable bioeconomy strategies â€“ Biosurfactants and microgel-based pesticide release systems as examples. Journal of Hazardous Materials, 2022, 426, 127800.	12.4	5
141	Conditioning of Feed Material Prior to Feeding: Approaches for a Sustainable Phosphorus Utilization. Sustainability, 2022, 14, 3998.	3.2	5
142	Evolution of E. coli Phytase Toward Improved Hydrolysis of Inositol Tetraphosphate. Frontiers in Chemical Engineering, 2022, 4, .	2.7	5
143	Generation of phytase chimeras with low sequence identities and improved thermal stability. Journal of Biotechnology, 2021, 339, 14-21.	3.8	4
144	Phytase blends for enhanced phosphorous mobilization of deoiled seeds. Enzyme and Microbial Technology, 2022, 153, 109953.	3.2	4

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145	In Silico and Experimental ADAM17 Kinetic Modeling as Basis for Future Screening System for Modulators. International Journal of Molecular Sciences, 2022, 23, 1368.	4.1	4
146	Rational Design Yields Molecular Insights on Leaf-Binding of Anchor Peptides. ACS Applied Materials & Interfaces, 2022, 14, 28412-28426.	8.0	4
147	Ternary Complex Formation and Photoactivation of a Photoenzyme Results in Altered Protein Dynamics. Journal of Physical Chemistry B, 2019, 123, 7372-7384.	2.6	3
148	Enhancing Robustness of Sortase A by Loop Engineering and Backbone Cyclization. Chemistry - A European Journal, 2020, 26, 13537-13537.	3.3	3
149	Expression and Refolding of the Plant Chitinase From Drosera capensis for Applications as a Sustainable and Integrated Pest Management. Frontiers in Bioengineering and Biotechnology, 2021, 9, 728501.	4.1	3
150	Protein Nanopore Membranes Prepared by a Simple Langmuirâ€“Schaefer Approach. Small, 2021, 17, e2102975.	10.0	3
151	Optimized Hemolysin Type 1 Secretion System in Escherichia coli by Directed Evolution of the Hly Enhancer Fragment and Including a Terminator Region. ChemBioChem, 2022, , .	2.6	3
152	BioAdhere: tailor-made bioadhesives for epiretinal visual prostheses. Biomaterials Science, 2022, 10, 3282-3295.	5.4	2
153	Enzymeâ€Compatible Dynamic Nanoreactors from Electrostatically Bridged Likeâ€Charged Surfactants and Polyelectrolytes. Angewandte Chemie, 2018, 130, 9546-9551.	2.0	1
154	High Throughput Screening Method for Engineering P450 Towards Terminal Hydroxylation of Fatty Acids. Journal of Biobased Materials and Bioenergy, 2019, 13, 79-85.	0.3	1
155	Preparative Production of Functionalized (N- and O-Heterocyclic) Polycyclic Aromatic Hydrocarbons by Human Cytochrome P450 3A4 in a Bioreactor. Biomolecules, 2022, 12, 153.	4.0	1
156	Selecting of a cytochrome P450cam SeSaM library with 3-chloroindole and endosulfan â€“ Identification of mutants that dehalogenate 3-chloroindole. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 68-79.	2.3	0
157	Engineering of Laccase CueO for Improved Electron Transfer in Bioelectrocatalysis by Semiâ€Rational Design. Chemistry - A European Journal, 2020, 26, 4884-4884.	3.3	0