Ulrich Schwaneberg

List of Publications by Year
in descending order

350	11,114	34493	75989
papers	citations	54 h-index	78 g-index

379	379	379	8556
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Kill&Repel Coatings: The Marriage of Antifouling and Bactericidal Properties to Mitigate and Treat Wound Infections. Advanced Functional Materials, 2022, 32, 2106656.	7.8	24
2	Natural Product Diversification by Oneâ€Step Biocatalysis using Human P450 3A4. ChemCatChem, 2022, 14, .	1.8	7
3	Phytase blends for enhanced phosphorous mobilization of deoiled seeds. Enzyme and Microbial Technology, 2022, 153, 109953.	1.6	4
4	Using Molecular Simulation to Guide Protein Engineering for Biocatalysis in Organic Solvents. Methods in Molecular Biology, 2022, 2397, 179-202.	0.4	3
5	Recombination of Compatible Substitutions by 2GenReP and InSiReP. Methods in Molecular Biology, 2022, 2397, 71-81.	0.4	6
6	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.	6.5	5
7	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.	1.9	7
8	Endogenous Nitric Oxide-Releasing Microgel Coating Prevents Clot Formation on Oxygenator Fibers Exposed to In Vitro Blood Flow. Membranes, 2022, 12, 73.	1.4	9
9	Preparative Production of Functionalized (N- and O-Heterocyclic) Polycyclic Aromatic Hydrocarbons by Human Cytochrome P450 3A4 in a Bioreactor. Biomolecules, 2022, 12, 153.	1.8	1
10	Polar Substitutions on the Surface of a Lipase Substantially Improve Tolerance in Organic Solvents. ChemSusChem, 2022, 15, .	3.6	17
11	Structure and Cooperativity in Substrateâ€“Enzyme Interactions: Perspectives on Enzyme Engineering and Inhibitor Design. ACS Chemical Biology, 2022, 17, 266-280.	1.6	8
12	In Silico and Experimental ADAM17 Kinetic Modeling as Basis for Future Screening System for Modulators. International Journal of Molecular Sciences, 2022, 23, 1368.	1.8	4
13	Optimized Hemolysin Type 1 Secretion System in Escherichia coli by Directed Evolution of the Hly Enhancer Fragment and Including a Terminator Region. ChemBioChem, 2022, , .	1.3	3
14	Modulating the Coupling Efficiency of P450 BM3 by Controlling Water Diffusion through Access Tunnel Engineering. ChemSusChem, 2022, 15, .	3.6	12
15	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.	3.2	15
16	Conditioning of Feed Material Prior to Feeding: Approaches for a Sustainable Phosphorus Utilization. Sustainability, 2022, 14, 3998.	1.6	5
17	Evolution of E. coli Phytase Toward Improved Hydrolysis of Inositol Tetraphosphate. Frontiers in Chemical Engineering, 2022, 4, .	1.3	5
18	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.	1.3	15

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19	Combinatorial InVitroFlowâ€assisted mutagenesis (CombIMut) yields a 41â€fold improved CelA2 cellulase. Biotechnology and Bioengineering, 2022, , .	1.7	5
20	BioAdhere: tailor-made bioadhesives for epiretinal visual prostheses. Biomaterials Science, 2022, 10, 3282-3295.	2.6	2
21	Rational Design Yields Molecular Insights on Leaf-Binding of Anchor Peptides. ACS Applied Materials & Interfaces, 2022, 14, 28412-28426.	4.0	4
22	Structure protects function - An enabler for the functionalization of component surfaces by biohybrid coatings. Procedia CIRP, 2022, 110, 133-138.	1.0	2
23	Using a bio-economic farm model to evaluate the economic potential and pesticide load reduction of the greenRelease technology. Agricultural Systems, 2022, 201, 103454.	3.2	4
24	Directed Evolution of a Cp*Rh^{III}â€Linked Biohybrid Catalyst Based on a Screening Platform with Affinity Purification. ChemBioChem, 2021, 22, 679-685.	1.3	10
25	CompassR Yields Highly Organicâ€Solventâ€Tolerant Enzymes through Recombination of Compatible Substitutions. Chemistry - A European Journal, 2021, 27, 2789-2797.	1.7	28
26	A Photoclickâ€Based Highâ€Throughput Screening for the Directed Evolution of Decarboxylase OleT. Chemistry - A European Journal, 2021, 27, 954-958.	1.7	7
27	An artificial ruthenium-containing Î²-barrel protein for alkeneâ€“alkyne coupling reaction. Organic and Biomolecular Chemistry, 2021, 19, 2912-2916.	1.5	6
28	Chemogenetic engineering of nitrobindin toward an artificial epoxygenase. Catalysis Science and Technology, 2021, 11, 4491-4499.	2.1	5
29	Understanding substrate binding and the role of gatekeeping residues in PigC access tunnels. Chemical Communications, 2021, 57, 2681-2684.	2.2	10
30	CompassR-guided recombination unlocks design principles to stabilize lipases in ILs with minimal experimental efforts. Green Chemistry, 2021, 23, 3474-3486.	4.6	26
31	Fe(iii)-complex mediated bacterial cell surface immobilization of eGFP and enzymes. Chemical Communications, 2021, 57, 4460-4463.	2.2	4
32	KnowVolution of prodigiosin ligase PigC towards condensation of short-chain prodiginines. Catalysis Science and Technology, 2021, 11, 2805-2815.	2.1	9
33	Anchor peptides promote degradation of mixed plastics for recycling. Methods in Enzymology, 2021, 648, 271-292.	0.4	10
34	A peptideâ€based coating toolbox to enable click chemistry on polymers, metals, and silicon through sortagging. Biotechnology and Bioengineering, 2021, 118, 1520-1530.	1.7	10
35	Rapid and Oriented Immobilization of Laccases on Electrodes via a Methionine-Rich Peptide. ACS Catalysis, 2021, 11, 2445-2453.	5.5	31
36	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.	1.5	8

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37	Less Unfavorable Salt Bridges on the Enzyme Surface Result in More Organic Cosolvent Resistance. Angewandte Chemie, 2021, 133, 11549-11557.	1.6	6
38	Less Unfavorable Salt Bridges on the Enzyme Surface Result in More Organic Cosolvent Resistance. Angewandte Chemie - International Edition, 2021, 60, 11448-11456.	7.2	45
39	Chemogenetic Evolution of a Peroxidase-like Artificial Metalloenzyme. ACS Catalysis, 2021, 11, 5079-5087.	5.5	21
40	Tunnel engineering for modulating the substrate preference in cytochrome P450BsÎ²HI. Bioresources and Bioprocessing, 2021, 8, .	2.0	14
41	Unraveling the Mechanism and Kinetics of Binding of an LCIâ€eGFPâ€Polymer for Antifouling Coatings. Macromolecular Bioscience, 2021, 21, e2100158.	2.1	6
42	Reprint of: Application cases of biological transformation in manufacturing technology. CIRP Journal of Manufacturing Science and Technology, 2021, 34, 95-95.	2.3	2
43	PyPEFâ€"An Integrated Framework for Data-Driven Protein Engineering. Journal of Chemical Information and Modeling, 2021, 61, 3463-3476.	2.5	20
44	MIXed plastics biodegradation and UPcycling using microbial communities: EU Horizon 2020 project MIX-UP started January 2020. Environmental Sciences Europe, 2021, 33, 99.	2.6	33
45	Generation of phytase chimeras with low sequence identities and improved thermal stability. Journal of Biotechnology, 2021, 339, 14-21.	1.9	4
46	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.	2.0	3
47	Enzyme mimetic microgel coating for endogenous nitric oxide mediated inhibition of platelet activation. Journal of Colloid and Interface Science, 2021, 601, 604-616.	5.0	14
48	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.	1.9	6
49	The molecular basis of spectral tuning in blue- and red-shifted flavin-binding fluorescent proteins. Journal of Biological Chemistry, 2021, 296, 100662.	1.6	17
50	High-throughput quantification of ochronotic pigment formation in Escherichia coli to evaluate the potency of human 4-hydroxyphenylpyruvate dioxygenase inhibitors in multi-well format. MethodsX, 2021, 8, 101181.	0.7	1
51	Aqueous ionic liquids redistribute local enzyme stability via long-range perturbation pathways. Computational and Structural Biotechnology Journal, 2021, 19, 4248-4264.	1.9	14
52	Protein Nanopore Membranes Prepared by a Simple Langmuirâ€"Schaefer Approach. Small, 2021, 17, e2102975.	5.2	3
53	Engineering and emerging applications of artificial metalloenzymes with whole cells. Nature Catalysis, 2021, 4, 814-827.	16.1	38
54	Whole-cell screening of oxidative enzymes using genetically encoded sensors. Chemical Science, 2021, 12, 14766-14772.	3.7	6

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55	Matterâ€tag: A universal immobilization platform for enzymes on polymers, metals, and siliconâ€based materials. Biotechnology and Bioengineering, 2020, 117, 49-61.	1.7	32
56	ComputerâAssisted Recombination (CompassR) Teaches us How to Recombine Beneficial Substitutions from Directed Evolution Campaigns. Chemistry - A European Journal, 2020, 26, 643-649.	1.7	57
57	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.	2.5	21
58	Advances in ultrahigh-throughput screening for directed enzyme evolution. Chemical Society Reviews, 2020, 49, 233-262.	18.7	182
59	Enhancing Robustness of Sortase A by Loop Engineering and Backbone Cyclization. Chemistry - A European Journal, 2020, 26, 13537-13537.	1.7	3
60	Designed Streptococcus pyogenes Sortase A Accepts Branched Amines as Nucleophiles in Sortagging. Bioconjugate Chemistry, 2020, 31, 2476-2481.	1.8	13
61	MicroGelzymes: pH-Independent Immobilization of Cytochrome P450 BM3 in Microgels. Biomacromolecules, 2020, 21, 5128-5138.	2.6	25
62	Enzyme Hydration Determines Resistance in Organic Cosolvents. ACS Catalysis, 2020, 10, 14847-14856.	5.5	53
63	KnowVolution of a GH5 Cellulase from Penicillium verruculosum to Improve Thermal Stability for Biomass Degradation. ACS Sustainable Chemistry and Engineering, 2020, 8, 12388-12399.	3.2	29
64	FhuAâ€“Grubbsâ€“Hoveyda Biohybrid Catalyst Embedded in a Polymer Film Enables Catalysis in Neat Substrates. ACS Catalysis, 2020, 10, 10946-10953.	5.5	5
65	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.	1.9	12
66	Display of functional nucleic acid polymerase on Escherichia coli surface and its application in directed polymerase evolution. Biotechnology and Bioengineering, 2020, 117, 3699-3711.	1.7	4
67	Biocatalytic microgels (Î¼-Gelzymes): synthesis, concepts, and emerging applications. Green Chemistry, 2020, 22, 8183-8209.	4.6	23
68	Application cases of biological transformation in manufacturing technology. CIRP Journal of Manufacturing Science and Technology, 2020, 31, 68-77.	2.3	15
69	Machine learning-assisted enzyme engineering. Methods in Enzymology, 2020, 643, 281-315.	0.4	59
70	A colourimetric high-throughput screening system for directed evolution of prodigiosin ligase PigC. Chemical Communications, 2020, 56, 8631-8634.	2.2	11
71	Effects of Proline Substitutions on the Thermostable LOV Domain from Chloroflexus aggregans. Crystals, 2020, 10, 256.	1.0	14
72	Engineering Robust Cellulases for Tailored Lignocellulosic Degradation Cocktails. International Journal of Molecular Sciences, 2020, 21, 1589.	1.8	68

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73	Enhancing Robustness of Sortase A by Loop Engineering and Backbone Cyclization. Chemistry - A European Journal, 2020, 26, 13568-13572.	1.7	11
74	Directed evolution of VanR biosensor specificity in yeast. Biotechnology Notes, 2020, 1, 9-15.	0.7	17
75	Activation of a Photoenzyme Results in Modified Structure and Dynamics. Biophysical Journal, 2020, 118, 192a-193a.	0.2	0
76	Phytase-Based Phosphorus Recovery Process for 20 Distinct Press Cakes. ACS Sustainable Chemistry and Engineering, 2020, 8, 3913-3921.	3.2	24
77	Engineering of Laccase CueO for Improved Electron Transfer in Bioelectrocatalysis by Semiâ€Rational Design. Chemistry - A European Journal, 2020, 26, 4974-4979.	1.7	11
78	Engineering of Laccase CueO for Improved Electron Transfer in Bioelectrocatalysis by Semiâ€Rational Design. Chemistry - A European Journal, 2020, 26, 4884-4884.	1.7	0
79	Engineered P450 BM3 and cpADH5 coupled cascade reaction for Î²-oxo fatty acid methyl ester production in whole cells. Enzyme and Microbial Technology, 2020, 138, 109555.	1.6	8
80	Loop engineering of aryl sulfotransferase B for improving catalytic performance in regioselective sulfation. Catalysis Science and Technology, 2020, 10, 2369-2377.	2.1	6
81	Preparativeâ€Scale Production of Testosterone Metabolites by Human Liver Cytochrome P450 Enzyme 3A4. Advanced Synthesis and Catalysis, 2020, 362, 2725-2738.	2.1	17
82	How to Engineer Organic Solvent Resistant Enzymes: Insights from Combined Molecular Dynamics and Directed Evolution Study. ChemCatChem, 2020, 12, 4073-4083.	1.8	45
83	Insights on intermolecular FMN-heme domain interaction and the role of linker length in cytochrome P450cin fusion proteins. Biological Chemistry, 2020, 401, 1249-1255.	1.2	3
84	Anchor peptides as innovative adjuvants reduce rain wash-off, but do not impair photosynthetic activity or cause oxidative damage in apple leaves. Acta Horticulturae, 2020, , 175-180.	0.1	2
85	A Semi-Rationally Engineered Bacterial Pyrrolysyl-tRNA Synthetase Genetically Encodes Phenyl Azide Chemistry. Biotechnology Journal, 2019, 14, 1800125.	1.8	10
86	Ternary Complex Formation and Photoactivation of a Photoenzyme Results in Altered Protein Dynamics. Journal of Physical Chemistry B, 2019, 123, 7372-7384.	1.2	3
87	Turning a Killing Mechanism into an Adhesion and Antifouling Advantage. Advanced Materials Interfaces, 2019, 6, 1900847.	1.9	16
88	Membrane-Mimetic Dendrimersomes Engulf Living Bacteria via Endocytosis. Nano Letters, 2019, 19, 5732-5738.	4.5	38
89	Biocatalyst Immobilization by Anchor Peptides on an Additively Manufacturable Material. Organic Process Research and Development, 2019, 23, 1852-1859.	1.3	28
90	Directed Evolution of P450 BM3 towards Functionalization of Aromatic O-Heterocycles. International Journal of Molecular Sciences, 2019, 20, 3353.	1.8	14

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91	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.	4.0	13
92	Oneâ€Pot Twoâ€Step Chemoenzymatic Cascade for the Synthesis of a Bisâ€benzofuran Derivative. European Journal of Organic Chemistry, 2019, 2019, 6341-6346.	1.2	17
93	Engineered phytases for emerging biotechnological applications beyond animal feeding. Applied Microbiology and Biotechnology, 2019, 103, 6435-6448.	1.7	24
94	Critical effect of proline on thermostability of endoglucanase II from Penicillium verruculosum. Biochemical Engineering Journal, 2019, 152, 107395.	1.8	25
95	Rapid and Robust Coating Method to Render Polydimethylsiloxane Surfaces Cell-Adhesive. ACS Applied Materials & Interfaces, 2019, 11, 41091-41099.	4.0	26
96	A 96-multiplex capillary electrophoresis screening platform for product based evolution of P450 BM3. Scientific Reports, 2019, 9, 15479.	1.6	6
97	Biadhesive Peptides for Assembling Stainless Steel and Compound Loaded Microâ€Containers. Macromolecular Bioscience, 2019, 19, e1900125.	2.1	17
98	Consensus model of a cyanobacterial light-dependent protochlorophyllide oxidoreductase in its pigment-free apo-form and photoactive ternary complex. Communications Biology, 2019, 2, 351.	2.0	9
99	Selective Functionalization of Microgels with Enzymes by Sortagging. Bioconjugate Chemistry, 2019, 30, 2859-2869.	1.8	22
100	A robust bacterial assay for high-throughput screening of human 4-hydroxyphenylpyruvate dioxygenase inhibitors. Scientific Reports, 2019, 9, 14145.	1.6	14
101	Biohybrid catalysts for sequential one-pot reactions based on an engineered transmembrane protein. Catalysis Science and Technology, 2019, 9, 942-946.	2.1	12
102	Directed Evolution of a Bacterial Laccase (CueO) for Enzymatic Biofuel Cells. Angewandte Chemie - International Edition, 2019, 58, 4562-4565.	7.2	57
103	Directed Evolution of a Bacterial Laccase (CueO) for Enzymatic Biofuel Cells. Angewandte Chemie, 2019, 131, 4610-4613.	1.6	7
104	KnowVolution of a Fungal Laccase toward Alkaline pH. ChemBioChem, 2019, 20, 1458-1466.	1.3	40
105	Anchor Peptide-Mediated Surface Immobilization of a Grubbs-Hoveyda-Type Catalyst for Ring-Opening Metathesis Polymerization. Bioconjugate Chemistry, 2019, 30, 714-720.	1.8	16
106	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.	3.2	38
107	Depolymerization of Laccase-Oxidized Lignin in Aqueous Alkaline Solution at 37 Â°C. ACS Sustainable Chemistry and Engineering, 2019, 7, 11150-11156.	3.2	25
108	Gerichtete Evolution ermÃ¶glicht das Design von maÃŸgeschneiderten Proteinen zur nachhaltigen Produktion von Chemikalien und Pharmazeutika. Angewandte Chemie, 2019, 131, 36-41.	1.6	19

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109	Rational surface engineering of an arginine deiminase (an antitumor enzyme) for increased PEGylation efficiency. Biotechnology and Bioengineering, 2019, 116, 2156-2166.	1.7	12
110	Ultrahighâ€throughput screening system for directed polymer binding peptide evolution. Biotechnology and Bioengineering, 2019, 116, 1856-1867.	1.7	26
111	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.	1.6	30
112	Directed aryl sulfotransferase evolution toward improved sulfation stoichiometry on the example of catechols. Applied Microbiology and Biotechnology, 2019, 103, 3761-3771.	1.7	7
113	Chiral separation of <scp>d</scp>/<scp>l</scp>-arginine with whole cells through an engineered FhuA nanochannel. Chemical Communications, 2019, 55, 5431-5434.	2.2	17
114	Disulfide Bond Engineering of an Endoglucanase from Penicillium verruculosum to Improve Its Thermostability. International Journal of Molecular Sciences, 2019, 20, 1602.	1.8	45
115	A bifunctional dermaseptinâ€“thanatin dipeptide functionalizes the crop surface for sustainable pest management. Green Chemistry, 2019, 21, 2316-2325.	4.6	31
116	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.	2.1	26
117	Stimuli-Responsive Poly(N-Vinyllactams) with Glycidyl Side Groups: Synthesis, Characterization, and Conjugation with Enzymes. Biomacromolecules, 2019, 20, 992-1006.	2.6	25
118	Auf dem Weg zur Evolution artifizieller Metalloenzyme â€“ aus einem Proteinâ€Engineeringâ€Blickwinkel. Angewandte Chemie, 2019, 131, 4500-4511.	1.6	7
119	Towards the Evolution of Artificial Metalloenzymesâ€”A Protein Engineer's Perspective. Angewandte Chemie - International Edition, 2019, 58, 4454-4464.	7.2	64
120	Targeting microplastic particles in the void of diluted suspensions. Environment International, 2019, 123, 428-435.	4.8	72
121	Directed Evolution Empowered Redesign of Natural Proteins for the Sustainable Production of Chemicals and Pharmaceuticals. Angewandte Chemie - International Edition, 2019, 58, 36-40.	7.2	169
122	High Throughput Screening Method for Engineering P450 Towards Terminal Hydroxylation of Fatty Acids. Journal of Biobased Materials and Bioenergy, 2019, 13, 79-85.	0.1	1
123	Cavity Size Engineering of a Î²-Barrel Protein Generates Efficient Biohybrid Catalysts for Olefin Metathesis. ACS Catalysis, 2018, 8, 3358-3364.	5.5	39
124	Unraveling the effects of amino acid substitutions enhancing lipase resistance to an ionic liquid: a molecular dynamics study. Physical Chemistry Chemical Physics, 2018, 20, 9600-9609.	1.3	22
125	Directed Evolution of Hyaluronic Acid Synthase from Pasteurella multocida towards Highâ€Molecularâ€Weight Hyaluronic Acid. ChemBioChem, 2018, 19, 1414-1423.	1.3	34
126	A Whole Cell E. coli Display Platform for Artificial Metalloenzymes: Poly(phenylacetylene) Production with a Rhodiumâ€“Nitrobindin Metalloprotein. ACS Catalysis, 2018, 8, 2611-2614.	5.5	71

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127	Sortase-Mediated High-Throughput Screening Platform for Directed Enzyme Evolution. ACS Combinatorial Science, 2018, 20, 203-211.	3.8	27
128	A robust protocol for directed aryl sulfotransferase evolution toward the carbohydrate building block GlcNAc. Biotechnology and Bioengineering, 2018, 115, 1106-1115.	1.7	12
129	A loop engineering strategy improves laccase lcc2 activity in ionic liquid and aqueous solution. Green Chemistry, 2018, 20, 2801-2812.	4.6	38
130	A Comparative Reengineering Study of cpADH5 through Iterative and Simultaneous Multisite Saturation Mutagenesis. ChemBioChem, 2018, 19, 1563-1569.	1.3	11
131	Loop engineering reveals the importance of active-site-decorating loops and gating residue in substrate affinity modulation of arginine deiminase (an anti-tumor enzyme). Biochemical and Biophysical Research Communications, 2018, 499, 233-238.	1.0	22
132	Crystallographic insights into a cobalt (III) sepulchrate based alternative cofactor system of P450 BM3 monooxygenase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 134-140.	1.1	1
133	High-Throughput Screening Assays for Lipolytic Enzymes. Methods in Molecular Biology, 2018, 1685, 209-231.	0.4	4
134	Directed evolution of polypropylene and polystyrene binding peptides. Biotechnology and Bioengineering, 2018, 115, 321-330.	1.7	42
135	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.	1.1	0
136	Millionenfach beschleunigte Evolution fÃ¼r maÎ²geschneiderte Proteine. BioSpektrum, 2018, 24, 691-693.	0.0	0
137	Olefin metathesis catalysts embedded in Î²-barrel proteins: creating artificial metalloproteins for olefin metathesis. Beilstein Journal of Organic Chemistry, 2018, 14, 2861-2871.	1.3	16
138	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.	6.6	87
139	Enzymeâ€“Polyelectrolyte Complexes Boost the Catalytic Performance of Enzymes. ACS Catalysis, 2018, 8, 10876-10887.	5.5	30
140	KnowVolution Campaign of an Aryl Sulfotransferase Increases Activity toward Cellobiose. Chemistry - A European Journal, 2018, 24, 17117-17124.	1.7	18
141	Directed sortase A evolution for efficient site-specific bioconjugations in organic co-solvents. Chemical Communications, 2018, 54, 11467-11470.	2.2	25
142	A hydroquinone-specific screening system for directed P450 evolution. Applied Microbiology and Biotechnology, 2018, 102, 9657-9667.	1.7	16
143	KnowVolution of the Polymer-Binding Peptide LCI for Improved Polypropylene Binding. Polymers, 2018, 10, 423.	2.0	47
144	How to engineer glucose oxidase for mediated electron transfer. Biotechnology and Bioengineering, 2018, 115, 2405-2415.	1.7	13

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145	Enzymeâ€Compatible Dynamic Nanoreactors from Electrostatically Bridged Likeâ€Charged Surfactants and Polyelectrolytes. Angewandte Chemie, 2018, 130, 9546-9551.	1.6	1
146	Sortase-Mediated Ligation of Purely Artificial Building Blocks. Polymers, 2018, 10, 151.	2.0	10
147	Comparison of Candida antarctica Lipase B Variants for Conversion of Îµ-Caprolactone in Aqueous Mediumâ€"Part 2. Polymers, 2018, 10, 524.	2.0	10
148	Theoretical Model of the Protochlorophyllide Oxidoreductase from a Hierarchy of Protocols. Journal of Physical Chemistry B, 2018, 122, 7668-7681.	1.2	8
149	Cyclotrimerization of phenylacetylene catalyzed by a cobalt half-sandwich complex embedded in an engineered variant of transmembrane protein FhuA. Organic and Biomolecular Chemistry, 2018, 16, 5452-5456.	1.5	12
150	Bestimmung der StabilitÃt und EnantioselektivitÃt von Lipasen. BioSpektrum, 2018, 24, 156-159.	0.0	0
151	Exploring the full natural diversity of single amino acid exchange reveals that 40â€"60% of BSLA positions improve organic solvents resistance. Bioresources and Bioprocessing, 2018, 5, .	2.0	27
152	Improved microscale cultivation of Pichia pastoris for clonal screening. Fungal Biology and Biotechnology, 2018, 5, 8.	2.5	12
153	Directed evolution of an acid Yersinia mollaretii phytase for broadened activity at neutral pH. Applied Microbiology and Biotechnology, 2018, 102, 9607-9620.	1.7	8
154	Directed OmniChange Evolution Converts P450 BM3 into an Alkyltrimethylammonium Hydroxylase. Chemistry - A European Journal, 2018, 24, 16865-16872.	1.7	15
155	Enzymeâ€Compatible Dynamic Nanoreactors from Electrostatically Bridged Likeâ€Charged Surfactants and Polyelectrolytes. Angewandte Chemie - International Edition, 2018, 57, 9402-9407.	7.2	18
156	Identification of Stable and Enantioselective Lipases for Biotechnological Applications. Croatica Chemica Acta, 2018, 91, .	0.1	0
157	Amino acid substitutions in random mutagenesis libraries: lessons from analyzing 3000 mutations. Applied Microbiology and Biotechnology, 2017, 101, 3177-3187.	1.7	8
158	Directed evolution of P450cin for mediated electron transfer. Protein Engineering, Design and Selection, 2017, 30, 119-127.	1.0	19
159	Recent Advances in Directed Phytase Evolution and Rational Phytase Engineering. , 2017, , 145-172.		19
160	Sugar-Improved Enzymatic Synthesis of Biodiesel with Yarrowia lipolytica Lipase 2. Energy & Fuels, 2017, 31, 6248-6256.	2.5	10
161	Casting epPCR (cepPCR): A simple random mutagenesis method to generate high quality mutant libraries. Biotechnology and Bioengineering, 2017, 114, 1921-1927.	1.7	36
162	Biofunctional Microgelâ€Based Fertilizers for Controlled Foliar Delivery of Nutrients to Plants. Angewandte Chemie - International Edition, 2017, 56, 7380-7386.	7.2	89

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163	Biofunktionale Mikrogelâ€basierte DÃ¼nger zur kontrollierten BlattdÃ¼ngung mit NÃhrstoffen auf Pflanzen. Angewandte Chemie, 2017, 129, 7486-7492.	1.6	7
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