Karl-Erich Jaeger

List of Publications by Year
in descending order

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245 papers	15,543 citations	20817 60 h-index	22166 113 g-index
263 all docs	263 docs citations	263 times ranked	12021 citing authors

#	Article	IF	Citations
1	Lipases for biotechnology. Current Opinion in Biotechnology, 2002, 13, 390-397.	6.6	1,156
2	Bacterial lipolytic enzymes: classification and properties. Biochemical Journal, 1999, 343, 177-183.	3.7	1,015
3	Bacterial lipases. FEMS Microbiology Reviews, 1994, 15, 29-63.	8.6	867
4	Multivalent glycoconjugates as anti-pathogenic agents. Chemical Society Reviews, 2013, 42, 4709-4727.	38.1	464
5	Bacterial lipolytic enzymes: classification and properties. Biochemical Journal, 1999, 343, 177.	3.7	399
6	Creation of Enantioselective Biocatalysts for Organic Chemistry by In Vitro Evolution. Angewandte Chemie International Edition in English, 1997, 36, 2830-2832.	4.4	359
7	Reporter proteins for in vivo fluorescence without oxygen. Nature Biotechnology, 2007, 25, 443-445.	17.5	336
8	Pseudomonas aeruginosa lectin LecB is located in the outer membrane and is involved in biofilm formation. Microbiology (United Kingdom), 2005, 151, 1313-1323.	1.8	303
9	Crystal Structure of Pseudomonas aeruginosa Lipase in the Open Conformation. Journal of Biological Chemistry, 2000, 275, 31219-31225.	3.4	248
10	The crystal structure of Bacillus subtili lipase: a minimal Î±/Î² hydrolase fold enzyme. Journal of Molecular Biology, 2001, 309, 215-226.	4.2	242
11	Directed evolution of an enantioselective lipase. Chemistry and Biology, 2000, 7, 709-718.	6.0	231
12	Inhibition and Dispersion of Pseudomonas aeruginosa Biofilms by Glycopeptide Dendrimers Targeting the Fucose-Specific Lectin LecB. Chemistry and Biology, 2008, 15, 1249-1257.	6.0	211
13	Advances in Recovery of Novel Biocatalysts from Metagenomes. Journal of Molecular Microbiology and Biotechnology, 2009, 16, 25-37.	1.0	200
14	Directed Evolution of an Enantioselective Enzyme through Combinatorial Multiple-Cassette Mutagenesis. Angewandte Chemie - International Edition, 2001, 40, 3589.	13.8	194
15	A Novel Polyester Hydrolase From the Marine Bacterium Pseudomonas aestusnigri â€“ Structural and Functional Insights. Frontiers in Microbiology, 2020, 11, 114.	3.5	172
16	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
17	Bacterial lipases from Pseudomonas: Regulation of gene expression and mechanisms of secretion. Biochimie, 2000, 82, 1023-1032.	2.6	160
18	Enantioselective biocatalysis optimized by directed evolution. Current Opinion in Biotechnology, 2004, 15, 305-313.	6.6	152

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19	The Autotransporter Esterase EstA of <i>Pseudomonas aeruginosa</i> Is Required for Rhamnolipid Production, Cell Motility, and Biofilm Formation. Journal of Bacteriology, 2007, 189, 6695-6703.	2.2	151
20	Optimization of Protease Secretion in <i>Bacillus subtilis</i> and <i>Bacillus licheniformis</i> by Screening of Homologous and Heterologous Signal Peptides. Applied and Environmental Microbiology, 2010, 76, 6370-6376.	3.1	147
21	A Novel Lipolytic Enzyme Located in the Outer Membrane of <i>Pseudomonas aeruginosa</i>. Journal of Bacteriology, 1999, 181, 6977-6986.	2.2	145
22	Enantioselective Enzymes for Organic Synthesis Created by Directed Evolution. Chemistry - A European Journal, 2000, 6, 407-412.	3.3	143
23	Erzeugung enantioselektiver Biokatalysatoren fÃ¼r die Organische Chemie durch Inâ€vitroâ€Evolution. Angewandte Chemie, 1997, 109, 2961-2963.	2.0	122
24	Structural Basis of Carbohydrate Recognition by the Lectin LecB from Pseudomonas aeruginosa. Journal of Molecular Biology, 2003, 331, 861-870.	4.2	117
25	Topological characterization and modeling of the 3D structure of lipase fromPseudomonas aeruginosa. FEBS Letters, 1993, 332, 143-149.	2.8	112
26	Rapid gene inactivation inPseudomonas aeruginosa. FEMS Microbiology Letters, 2000, 193, 201-205.	1.8	111
27	The lid is a structural and functional determinant of lipase activity and selectivity. Journal of Molecular Catalysis B: Enzymatic, 2006, 39, 166-170.	1.8	110
28	Learning from Directed Evolution: Further Lessons from Theoretical Investigations into Cooperative Mutations in Lipase Enantioselectivity. ChemBioChem, 2007, 8, 106-112.	2.6	107
29	Determinants and Prediction of Esterase Substrate Promiscuity Patterns. ACS Chemical Biology, 2018, 13, 225-234.	3.4	106
30	Superior Biocatalysts by Directed Evolution. Topics in Current Chemistry, 1999, , 31-57.	4.0	103
31	Extracellular enzymes affect biofilm formation of mucoid Pseudomonas aeruginosa. Microbiology (United Kingdom), 2010, 156, 2239-2252.	1.8	102
32	Real-time determination of intracellular oxygen in bacteria using a genetically encoded FRET-based biosensor. BMC Biology, 2012, 10, 28.	3.8	102
33	A novel extracellular esterase from Bacillus subtilis and its conversion to a monoacylglycerol hydrolase. FEBS Journal, 2000, 267, 6459-6469.	0.2	97
34	Marine Biosurfactants: Biosynthesis, Structural Diversity and Biotechnological Applications. Marine Drugs, 2019, 17, 408.	4.6	97
35	Homogenizing bacterial cell factories: Analysis and engineering of phenotypic heterogeneity. Metabolic Engineering, 2017, 42, 145-156.	7.0	96
36	Distribution and Phylogeny of Light-Oxygen-Voltage-Blue-Light-Signaling Proteins in the Three Kingdoms of Life. Journal of Bacteriology, 2009, 191, 7234-7242.	2.2	95

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37	The photophysics of LOV-based fluorescent proteins â€" new tools for cell biology. Photochemical and Photobiological Sciences, 2014, 13, 875-883.	2.9	95
38	Flavin Mononucleotide-Based Fluorescent Reporter Proteins Outperform Green Fluorescent Protein-Like Proteins as Quantitative <i>In Vivo</i> Real-Time Reporters. Applied and Environmental Microbiology, 2010, 76, 5990-5994.	3.1	94
39	Prospecting for biocatalysts and drugs in the genomes of non-cultured microorganisms. Current Opinion in Biotechnology, 2004, 15, 285-290.	6.6	91
40	Learning from Directed Evolution: Theoretical Investigations into Cooperative Mutations in Lipase Enantioselectivity. ChemBioChem, 2004, 5, 214-223.	2.6	88
41	A Calcium-gated Lid and a Large Î²-Roll Sandwich Are Revealed by the Crystal Structure of Extracellular Lipase from Serratia marcescens. Journal of Biological Chemistry, 2007, 282, 31477-31483.	3.4	88
42	Alginate acetylation influences initial surface colonization by mucoid Pseudomonas aeruginosa. Microbiological Research, 2005, 160, 165-176.	5.3	87
43	Overexpression, immobilization and biotechnological application of Pseudomonas lipases. Chemistry and Physics of Lipids, 1998, 93, 3-14.	3.2	84
44	The environment shapes microbial enzymes: five cold-active and salt-resistant carboxylesterases from marine metagenomes. Applied Microbiology and Biotechnology, 2015, 99, 2165-2178.	3.6	83
45	Singleâ€Cell Highâ€Throughput Screening To Identify Enantioselective Hydrolytic Enzymes. Angewandte Chemie - International Edition, 2008, 47, 5085-5088.	13.8	81
46	Alternative hosts for functional (meta)genome analysis. Applied Microbiology and Biotechnology, 2014, 98, 8099-8109.	3.6	77
47	A generic system for theEscherichia colicell-surface display of lipolytic enzymes. FEBS Letters, 2005, 579, 1177-1182.	2.8	76
48	TREX: A Universal Tool for the Transfer and Expression of Biosynthetic Pathways in Bacteria. ACS Synthetic Biology, 2013, 2, 22-33.	3.8	76
49	Efficient recombinant production of prodigiosin in Pseudomonas putida. Frontiers in Microbiology, 2015, 6, 972.	3.5	76
50	Hexadecane and Tween 80 Stimulate Lipase Production in Burkholderia glumae by Different Mechanisms. Applied and Environmental Microbiology, 2007, 73, 3838-3844.	3.1	75
51	Interaction between extracellular lipase LipA and the polysaccharide alginate of Pseudomonas aeruginosa. BMC Microbiology, 2013, 13, 159.	3.3	75
52	Glycopeptide Dendrimers with High Affinity for the Fucoseâ€Binding Lectin LecB from <i>Pseudomonas aeruginosa</i>. ChemMedChem, 2009, 4, 562-569.	3.2	74
53	Metagenomic discovery of novel enzymes and biosurfactants in a slaughterhouse biofilm microbial community. Scientific Reports, 2016, 6, 27035.	3.3	74
54	The Metagenome-Derived Enzymes LipS and LipT Increase the Diversity of Known Lipases. PLoS ONE, 2012, 7, e47665.	2.5	72

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55	Probing Enzyme Promiscuity of SGNH Hydrolases. ChemBioChem, 2010, 11, 2158-2167.	2.6	71
56	Bacterial lipases for biotechnological applications. Journal of Molecular Catalysis B: Enzymatic, 1997, 3, 3-12.	1.8	70
57	Lipase-Specific Foldases. ChemBioChem, 2004, 5, 152-161.	2.6	68
58	Directed Evolution of an EnantioselectiveBacillus subtilisLipase. Biocatalysis and Biotransformation, 2003, 21, 67-73.	2.0	64
59	Catalytically-active inclusion bodiesâ€"Carrier-free protein immobilizates for application in biotechnology and biomedicine. Journal of Biotechnology, 2017, 258, 136-147.	3.8	64
60	Structural Rigidity and Protein Thermostability in Variants of Lipase A from Bacillus subtilis. PLoS ONE, 2015, 10, e0130289.	2.5	64
61	DsbA and DsbC Affect Extracellular Enzyme Formation in Pseudomonas aeruginosa. Journal of Bacteriology, 2001, 183, 587-596.	2.2	63
62	A novel T7 RNA polymerase dependent expression system for high-level protein production in the phototrophic bacterium Rhodobacter capsulatus. Protein Expression and Purification, 2010, 69, 137-146.	1.3	62
63	Agar plateâ€based screening methods for the identification of polyester hydrolysis by <i>Pseudomonas</i> species. Microbial Biotechnology, 2020, 13, 274-284.	4.2	62
64	Disulfide Bond in Pseudomonas aeruginosa Lipase Stabilizes the Structure but Is Not Required for Interaction with Its Foldase. Journal of Bacteriology, 2001, 183, 597-603.	2.2	61
65	Lights on and action! Controlling microbial gene expression by light. Applied Microbiology and Biotechnology, 2011, 90, 23-40.	3.6	58
66	Conformational analysis of the blue-light sensing protein YtvA reveals a competitive interface for LOVâ€"LOV dimerization and interdomain interactions. Photochemical and Photobiological Sciences, 2007, 6, 41-49.	2.9	57
67	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
68	Fusion of a Coiledâ€Coil Domain Facilitates the Highâ€Level Production of Catalytically Active Enzyme Inclusion Bodies. ChemCatChem, 2016, 8, 142-152.	3.7	56
69	Integration of Genetic and Process Engineering for Optimized Rhamnolipid Production Using Pseudomonas putida. Frontiers in Bioengineering and Biotechnology, 2020, 8, 976.	4.1	56
70	Lipolytic enzymes LipA and LipB fromBacillus subtilisdiffer in regulation of gene expression, biochemical properties, and three-dimensional structure. FEBS Letters, 2001, 502, 89-92.	2.8	55
71	Mutual Exchange of Kinetic Properties by Extended Mutagenesis in Two Short LOV Domain Proteins from <i>Pseudomonas putida</i>. Biochemistry, 2009, 48, 10321-10333.	2.5	55
72	Structural Basis for the Slow Dark Recovery of a Full-Length LOV Protein from Pseudomonas putida. Journal of Molecular Biology, 2012, 417, 362-374.	4.2	54

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73	Disruption of microbial community composition and identification of plant growth promoting microorganisms after exposure of soil to rapeseed-derived glucosinolates. PLoS ONE, 2018, 13, e0200160.	2.5	54
74	Enzyme Hydration Determines Resistance in Organic Cosolvents. ACS Catalysis, 2020, 10, 14847-14856.	11.2	53
75	Combinatorial variation of branching length and multivalency in a large (390â€‰625 member) glycopeptide dendrimer library: ligands for fucose-specific lectins. New Journal of Chemistry, 2007, 31, 1291.	2.8	51
76	Structural and Functional Characterisation of TesA - A Novel Lysophospholipase A from Pseudomonas aeruginosa. PLoS ONE, 2013, 8, e69125.	2.5	51
77	Heterologous production of long-chain rhamnolipids from Burkholderia glumae in Pseudomonas putidaâ€"a step forward to tailor-made rhamnolipids. Applied Microbiology and Biotechnology, 2018, 102, 1229-1239.	3.6	51
78	New Prodigiosin Derivatives Obtained by Mutasynthesis in <i>Pseudomonas putida</i>. ACS Synthetic Biology, 2017, 6, 1757-1765.	3.8	49
79	Inhibition of Pseudomonas aeruginosa biofilms with a glycopeptide dendrimer containing D-amino acids. MedChemComm, 2011, 2, 418.	3.4	48
80	Application of Rigidity Theory to the Thermostabilization of Lipase A from Bacillus subtilis. PLoS Computational Biology, 2016, 12, e1004754.	3.2	48
81	Biochemical properties and three-dimensional structures of two extracellular lipolytic enzymes from Bacillus subtilis. Colloids and Surfaces B: Biointerfaces, 2002, 26, 37-46.	5.0	47
82	Ultrahigh-Throughput Screening to IdentifyE. coli Cells Expressing Functionally Active Enzymes on their Surface. ChemBioChem, 2007, 8, 943-949.	2.6	47
83	Novel biocatalysts for white biotechnology. Biotechnology Journal, 2006, 1, 777-786.	3.5	46
84	Exchange of single amino acids at different positions of a recombinant protein affects metabolic burden in Escherichia coli. Microbial Cell Factories, 2015, 14, 10.	4.0	46
85	Structural features determining thermal adaptation of esterases. Protein Engineering, Design and Selection, 2016, 29, 65-76.	2.1	46
86	Catalytically-active inclusion bodies for biotechnologyâ€"general concepts, optimization, and application. Applied Microbiology and Biotechnology, 2020, 104, 7313-7329.	3.6	46
87	Heterologous production of the lipopeptide biosurfactant serrawettin W1 in Escherichia coli. Journal of Biotechnology, 2014, 181, 27-30.	3.8	45
88	Towards Understanding Directed Evolution: More than Half of All Amino Acid Positions Contribute to Ionic Liquid Resistance of <i>Bacillus subtilis</i> Lipase A. ChemBioChem, 2015, 16, 937-945.	2.6	45
89	Electron transfer pathways in a light, oxygen, voltage (LOV) protein devoid of the photoactive cysteine. Scientific Reports, 2017, 7, 13346.	3.3	45
90	How to Engineer Organic Solvent Resistant Enzymes: Insights from Combined Molecular Dynamics and Directed Evolution Study. ChemCatChem, 2020, 12, 4073-4083.	3.7	45

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91	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
92	Novel broad host range shuttle vectors for expression in Escherichia coli, Bacillus subtilis and Pseudomonas putida. Journal of Biotechnology, 2012, 161, 71-79.	3.8	44
93	Discovery of the first lightâ€dependent protochlorophyllide oxidoreductase in anoxygenic phototrophic bacteria. Molecular Microbiology, 2014, 93, 1066-1078.	2.5	44
94	Exploring the Protein Stability Landscape: <i>Bacillus subtilis</i> Lipase A as a Model for Detergent Tolerance. ChemBioChem, 2015, 16, 930-936.	2.6	44
95	Towards robust <i>Pseudomonas</i> cell factories to harbour novel biosynthetic pathways. Essays in Biochemistry, 2021, 65, 319-336.	4.7	44
96	Genome-Wide RNA Sequencing Analysis of Quorum Sensing-Controlled Regulons in the Plant-Associated Burkholderia glumae PG1 Strain. Applied and Environmental Microbiology, 2015, 81, 7993-8007.	3.1	43
97	Extracellular lipases fromBacillus subtilis: regulation of gene expression and enzyme activity by amino acid supply and external pH. FEMS Microbiology Letters, 2003, 225, 319-324.	1.8	42
98	Pseudomonas aeruginosa lectins I and II and their interaction with human airway cilia. Journal of Laryngology and Otology, 2005, 119, 595-599.	0.8	42
99	LOVely enzymes â€" towards engineering lightâ€controllable biocatalysts. Microbial Biotechnology, 2010, 3, 15-23.	4.2	41
100	Photophysics of the LOV-Based Fluorescent Protein Variant iLOV-Q489K Determined by Simulation and Experiment. Journal of Physical Chemistry B, 2016, 120, 3344-3352.	2.6	41
101	Natural biocide cocktails: Combinatorial antibiotic effects of prodigiosin and biosurfactants. PLoS ONE, 2018, 13, e0200940.	2.5	41
102	Pressure adaptation is linked to thermal adaptation in saltâ€saturated marine habitats. Environmental Microbiology, 2015, 17, 332-345.	3.8	40
103	Light-Controlled Cell Factories: Employing Photocaged Isopropyl-Î²- <scp>d</scp> -Thiogalactopyranoside for Light-Mediated Optimization of <i>lac</i> Promoter-Based Gene Expression and (+)-Valencene Biosynthesis in Corynebacterium glutamicum. Applied and Environmental Microbiology, 2016, 82, 6141-6149.	3.1	40
104	Enlightened Enzymes: Strategies to Create Novel Photoresponsive Proteins. Chemistry - A European Journal, 2011, 17, 2552-2560.	3.3	39
105	Light-responsive control of bacterial gene expression: precise triggering of the<i>lac</i>promoter activity using photocaged IPTG. Integrative Biology (United Kingdom), 2014, 6, 755-765.	1.3	39
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.	6.7	38
107	Interaction of carbohydrate-binding modules with poly(ethylene terephthalate). Applied Microbiology and Biotechnology, 2019, 103, 4801-4812.	3.6	38
108	Interdomain signalling in the blue-light sensing and GTP-binding protein YtvA: A mutagenesis study uncovering the importance of specific protein sites. Photochemical and Photobiological Sciences, 2010, 9, 47-56.	2.9	37

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109	An optogenetic toolbox of LOV-based photosensitizers for light-driven killing of bacteria. Scientific Reports, 2018, 8, 15021.	3.3	37
110	Determination of Lipolytic Enzyme Activities. Methods in Molecular Biology, 2014, 1149, 111-134.	0.9	37
111	Specific Association of Lectin LecB with the Surface of Pseudomonas aeruginosa: Role of Outer Membrane Protein OprF. PLoS ONE, 2012, 7, e46857.	2.5	36
112	Structure and function of a short LOV protein from the marine phototrophic bacterium Dinoroseobacter shibae. BMC Microbiology, 2015, 15, 30.	3.3	36
113	Rapid generation of recombinant Pseudomonas putida secondary metabolite producers using yTREX. Synthetic and Systems Biotechnology, 2017, 2, 310-319.	3.7	36
114	A Synthetic Reaction Cascade Implemented by Colocalization of Two Proteins within Catalytically Active Inclusion Bodies. ACS Synthetic Biology, 2018, 7, 2282-2295.	3.8	36
115	Lipase LipC affects motility, biofilm formation and rhamnolipid production in Pseudomonas aeruginosa. FEMS Microbiology Letters, 2010, 309, no-no.	1.8	35
116	Identification of amino acids involved in the hydrolytic activity of lipase LipBL from Marinobacter lipolyticus. Microbiology (United Kingdom), 2012, 158, 2192-2203.	1.8	35
117	Detection of Prion Protein Particles in Blood Plasma of Scrapie Infected Sheep. PLoS ONE, 2012, 7, e36620.	2.5	35
118	Directionality of substrate translocation of the hemolysin A Type I secretion system. Scientific Reports, 2015, 5, 12470.	3.3	35
119	The biotechnological potential of marine bacteria in the novel lineage of <i>Pseudomonas pertucinogena</i>. Microbial Biotechnology, 2020, 13, 19-31.	4.2	35
120	Comparative Single-Cell Analysis of Different E. coli Expression Systems during Microfluidic Cultivation. PLoS ONE, 2016, 11, e0160711.	2.5	35
121	Are Directed Evolution Approaches Efficient in Exploring Natureâ€™s Potential to Stabilize a Lipase in Organic Cosolvents?. Catalysts, 2017, 7, 142.	3.5	34
122	The photosynthetic bacteria Rhodobacter capsulatus and Synechocystis sp. PCC 6803 as new hosts for cyclic plant triterpene biosynthesis. PLoS ONE, 2017, 12, e0189816.	2.5	33
123	The structureâ€“function relationship of the lipases from Pseudomonas aeruginosa and Bacillus subtilis. Protein Engineering, Design and Selection, 1994, 7, 523-529.	2.1	32
124	Combination of computational prescreening and experimental library construction can accelerate enzyme optimization by directed evolution. Protein Engineering, Design and Selection, 2005, 18, 509-514.	2.1	32
125	Light-induced gene expression with photocaged IPTG for induction profiling in a high-throughput screening system. Microbial Cell Factories, 2016, 15, 63.	4.0	32
126	The subcellular localization of a C-terminal processing protease in Pseudomonas aeruginosa. FEMS Microbiology Letters, 2011, 316, 23-30.	1.8	31

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127	Autotransporters with GDSL Passenger Domains: Molecular Physiology and Biotechnological Applications. ChemBioChem, 2011, 12, 1476-1485.	2.6	31
128	Signaling States of a Short Blue-Light Photoreceptor Protein PpSB1-LOV Revealed from Crystal Structures and Solution NMR Spectroscopy. Journal of Molecular Biology, 2016, 428, 3721-3736.	4.2	31
129	A novel FbFP-based biosensor toolbox for sensitive in vivo determination of intracellular pH. Journal of Biotechnology, 2017, 258, 25-32.	3.8	31
130	Engineered Rhodobacter capsulatus as a Phototrophic Platform Organism for the Synthesis of Plant Sesquiterpenoids. Frontiers in Microbiology, 2019, 10, 1998.	3.5	31
131	Functional Cell-Surface Display of a Lipase-Specific Chaperone. ChemBioChem, 2007, 8, 55-60.	2.6	30
132	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
133	Novel Tools for the Functional Expression of Metagenomic DNA. Methods in Molecular Biology, 2010, 668, 117-139.	0.9	30
134	CompassR Yields Highly Organicâ€Solventâ€Tolerant Enzymes through Recombination of Compatible Substitutions. Chemistry - A European Journal, 2021, 27, 2789-2797.	3.3	28
135	Induction of Inflammatory Mediator Release (12-Hydroxyeicosatetraenoic Acid) from Human Platelets by <i>Pseudomonas aeruginosa</i>. International Archives of Allergy and Immunology, 1994, 104, 33-41.	2.1	27
136	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, .	4.2	27
137	Photocaged Arabinose: A Novel Optogenetic Switch for Rapid and Gradual Control of Microbial Gene Expression. ChemBioChem, 2016, 17, 296-299.	2.6	26
138	Decoding the ocean's microbiological secrets for marine enzyme biodiscovery. FEMS Microbiology Letters, 2019, 366, .	1.8	26
139	CompassR-guided recombination unlocks design principles to stabilize lipases in ILs with minimal experimental efforts. Green Chemistry, 2021, 23, 3474-3486.	9.0	26
140	Emerging Solutions for <i>in Vivo</i> Biocatalyst Immobilization: Tailor-Made Catalysts for Industrial Biocatalysis. ACS Sustainable Chemistry and Engineering, 2021, 9, 8919-8945.	6.7	26
141	Preparation of Cyclic Prodiginines by Mutasynthesis in Pseudomonas putida KT2440. ChemBioChem, 2018, 19, 1545-1552.	2.6	25
142	Multiplex-PCR-Based Recombination as a Novel High-Fidelity Method for Directed Evolution. ChemBioChem, 2005, 6, 1062-1067.	2.6	24
143	Synthesis of Chiral Cyanohydrins by Recombinant Escherichia coli Cells in a Micro-Aqueous Reaction System. Applied and Environmental Microbiology, 2012, 78, 5025-5027.	3.1	24
144	Tailor-made catalytically active inclusion bodies for different applications in biocatalysis. Catalysis Science and Technology, 2018, 8, 5816-5826.	4.1	24

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145	Genetically Encoded Photosensitizers as Light-Triggered Antimicrobial Agents. International Journal of Molecular Sciences, 2019, 20, 4608.	4.1	24
146	Enantioselective kinetic resolution of phenylalkyl carboxylic acids using metagenomeâ€derived esterases. Microbial Biotechnology, 2010, 3, 59-64.	4.2	23
147	Novel Biocatalysts by Identification and Design. Biocatalysis and Biotransformation, 2004, 22, 141-146.	2.0	22
148	Ionic liquid activated <i>Bacillus subtilis</i> lipase A variants through cooperative surface substitutions. Biotechnology and Bioengineering, 2015, 112, 1997-2004.	3.3	22
149	Novel Thermostable Flavinâ€binding Fluorescent Proteins from Thermophilic Organisms. Photochemistry and Photobiology, 2017, 93, 849-856.	2.5	22
150	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.	2.8	22
151	Phototrophic purple bacteria as optoacoustic in vivo reporters of macrophage activity. Nature Communications, 2019, 10, 1191.	12.8	22
152	Biocatalytic production of enantiopure cyclohexane-trans-1,2-diol using extracellular lipases from Bacillus subtilis. Applied Microbiology and Biotechnology, 2006, 72, 1107-1116.	3.6	21
153	Light-induced structural changes in a short light, oxygen, voltage (LOV) protein revealed by molecular dynamics simulationsâ€"implications for the understanding of LOV photoactivation. Frontiers in Molecular Biosciences, 2015, 2, 55.	3.5	21
154	Activity-independent screening of secreted proteins using split GFP. Journal of Biotechnology, 2017, 258, 110-116.	3.8	21
155	Systematically Scrutinizing the Impact of Substitution Sites on Thermostability and Detergent Tolerance for <i>Bacillus subtilis</i> Lipase A. Journal of Chemical Information and Modeling, 2020, 60, 1568-1584.	5.4	21
156	Interaction Between Extracellular Polysaccharides and Enzymes. , 1999, , 231-251.		21
157	Lectin-based affinity tag for one-step protein purification. BioTechniques, 2006, 41, 327-332.	1.8	20
158	Glycosylation Is Required for Outer Membrane Localization of the Lectin LecB in<i>Pseudomonas aeruginosa</i>. Journal of Bacteriology, 2011, 193, 1107-1113.	2.2	20
159	Pseudomonas putida rDNA is a favored site for the expression of biosynthetic genes. Scientific Reports, 2019, 9, 7028.	3.3	20
160	A Straightforward Assay for Screening and Quantification of Biosurfactants in Microbial Culture Supernatants. Frontiers in Bioengineering and Biotechnology, 2020, 8, 958.	4.1	20
161	Organic-Solvent-Tolerant Carboxylic Ester Hydrolases for Organic Synthesis. Applied and Environmental Microbiology, 2020, 86, .	3.1	20
162	Targeting 16S rDNA for Stable Recombinant Gene Expression in <i>Pseudomonas</i>. ACS Synthetic Biology, 2019, 8, 1901-1912.	3.8	19

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163	Gerichtete Evolution ermÃ¶glicht das Design von maÃŸgeschneiderten Proteinen zur nachhaltigen Produktion von Chemikalien und Pharmazeutika. Angewandte Chemie, 2019, 131, 36-41.	2.0	19
164	The length of ribosomal binding site spacer sequence controls the production yield for intracellular and secreted proteins by Bacillus subtilis. Microbial Cell Factories, 2020, 19, 154.	4.0	19
165	A novel transposon for functional expression of DNA libraries. Journal of Biotechnology, 2006, 123, 281-287.	3.8	18
166	A particular silent codon exchange in a recombinant gene greatly influences host cell metabolic activity. Microbial Cell Factories, 2015, 14, 156.	4.0	18
167	Novel Tools for the Functional Expression of Metagenomic DNA. Methods in Molecular Biology, 2017, 1539, 159-196.	0.9	17
168	Contribution of single amino acid and codon substitutions to the production and secretion of a lipase by Bacillus subtilis. Microbial Cell Factories, 2017, 16, 160.	4.0	17
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