Anton Glieder

List of Publications by Year
in descending order

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138 papers	7,563 citations	43973 48 h-index	56606 83 g-index
154 all docs	154 docs citations	154 times ranked	6053 citing authors

#	Article	IF	Citations
1	Laboratory evolution of a soluble, self-sufficient, highly active alkane hydroxylase. Nature Biotechnology, 2002, 20, 1135-1139.	9.4	379
2	Regio- and Enantioselective Alkane Hydroxylation with Engineered Cytochromes P450 BM-3. Journal of the American Chemical Society, 2003, 125, 13442-13450.	6.6	316
3	Promoter library designed for fine-tuned gene expression in Pichia pastoris. Nucleic Acids Research, 2008, 36, e76-e76.	6.5	245
4	Monooxygenases as biocatalysts: Classification, mechanistic aspects and biotechnological applications. Journal of Biotechnology, 2010, 146, 9-24.	1.9	227
5	Regulation of Pichia pastoris promoters and its consequences for protein production. New Biotechnology, 2013, 30, 385-404.	2.4	223
6	Deletion of the Pichia pastoris KU70 Homologue Facilitates Platform Strain Generation for Gene Expression and Synthetic Biology. PLoS ONE, 2012, 7, e39720.	1.1	198
7	Combinatorial optimization of CRISPR/Cas9 expression enables precision genome engineering in the methylotrophic yeast Pichia pastoris. Journal of Biotechnology, 2016, 235, 139-149.	1.9	198
8	Regulation of methanol utilisation pathway genes in yeasts. Microbial Cell Factories, 2006, 5, 39.	1.9	192
9	Microbials for the production of monoclonal antibodies and antibody fragments. Trends in Biotechnology, 2014, 32, 54-60.	4.9	192
10	An updated view on horseradish peroxidases: recombinant production and biotechnological applications. Applied Microbiology and Biotechnology, 2015, 99, 1611-1625.	1.7	163
11	New opportunities by synthetic biology for biopharmaceutical production in Pichia pastoris. Current Opinion in Biotechnology, 2013, 24, 1094-1101.	3.3	159
12	Recombinant protein expression in Pichia pastoris strains with an engineered methanol utilization pathway. Microbial Cell Factories, 2012, 11, 22.	1.9	151
13	Directed Evolution of a Cytochrome P450 Monooxygenase for Alkane Oxidation. Advanced Synthesis and Catalysis, 2001, 343, 601-606.	2.1	148
14	Carbon source dependent promoters in yeasts. Microbial Cell Factories, 2014, 13, 5.	1.9	147
15	High-quality genome sequence of Pichia pastoris CBS7435. Journal of Biotechnology, 2011, 154, 312-320.	1.9	146
16	Reliable high-throughput screening with by limiting yeast cell death phenomena. FEMS Yeast Research, 2004, 5, 179-189.	1.1	143
17	A Toolbox of Diverse Promoters Related to Methanol Utilization: Functionally Verified Parts for Heterologous Pathway Expression in Pichia pastoris. ACS Synthetic Biology, 2016, 5, 172-186.	1.9	127
18	One-Way Biohydrogen Transfer for Oxidation of sec-Alcohols. Organic Letters, 2008, 10, 2155-2158.	2.4	121

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19	Implementing CRISPR-Cas technologies in conventional and non-conventional yeasts: Current state and future prospects. Biotechnology Advances, 2018, 36, 641-665.	6.0	120
20	Realâ€time PCRâ€based determination of gene copy numbers in Pichia pastoris. Biotechnology Journal, 2010, 5, 413-420.	1.8	115
21	Stereoselective Bioreduction of Bulky-Bulky Ketones by a Novel ADH from Ralstonia sp.. Journal of Organic Chemistry, 2008, 73, 6003-6005.	1.7	114
22	Comprehensive Step-by-Step Engineering of an (R)-Hydroxynitrile Lyase for Large-Scale Asymmetric Synthesis. Angewandte Chemie - International Edition, 2003, 42, 4815-4818.	7.2	109
23	Biochemical Evidence That Berberine Bridge Enzyme Belongs to a Novel Family of Flavoproteins Containing a Bi-covalently Attached FAD Cofactor. Journal of Biological Chemistry, 2006, 281, 21276-21285.	1.6	107
24	Yeast cell factories for fine chemical and API production. Microbial Cell Factories, 2008, 7, 25.	1.9	98
25	Expanding the CRISPR/Cas9 toolkit for Pichia pastoris with efficient donor integration and alternative resistance markers. Journal of Cellular Biochemistry, 2018, 119, 3183-3198.	1.2	96
26	Acetylacetone-cleaving enzyme Dke1: a novel C-C-bond-cleaving enzyme from Acinetobacter johnsonii. Biochemical Journal, 2003, 369, 573-581.	1.7	95
27	Engineering primary metabolic pathways of industrial micro-organisms. Journal of Biotechnology, 2007, 129, 6-29.	1.9	95
28	Enantioselective trans-Dihydroxylation of Aryl Olefins by Cascade Biocatalysis with Recombinant Escherichia coli Coexpressing Monooxygenase and Epoxide Hydrolase. ACS Catalysis, 2014, 4, 409-420.	5.5	93
29	Structure of the xylanase from Penicillium simplicissimum. Protein Science, 1998, 7, 2081-2088.	3.1	86
30	The Hydroxynitrile Lyase from Almond. Structure, 2001, 9, 803-815.	1.6	86
31	Synthetic Core Promoters for Pichia pastoris. ACS Synthetic Biology, 2014, 3, 188-191.	1.9	84
32	Refined Pichia pastoris reference genome sequence. Journal of Biotechnology, 2016, 235, 121-131.	1.9	84
33	Synthetic Core Promoters as Universal Parts for Fine-Tuning Expression in Different Yeast Species. ACS Synthetic Biology, 2017, 6, 471-484.	1.9	80
34	Cloning and characterization of the gene for the thermostable xylanase XynA from Thermomyces lanuginosus. Journal of Biotechnology, 1996, 49, 211-218.	1.9	75
35	Engineered bidirectional promoters enable rapid multi-gene co-expression optimization. Nature Communications, 2018, 9, 3589.	5.8	73
36	Expression of lignocellulolytic enzymes in Pichia pastoris. Microbial Cell Factories, 2012, 11, 61.	1.9	71

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37	Current advances in engineering tools for Pichia pastoris. Current Opinion in Biotechnology, 2019, 59, 175-181.	3.3	66
38	Tuning microbial hosts for membrane protein production. Microbial Cell Factories, 2009, 8, 69.	1.9	64
39	Compact multi-enzyme pathways in P. pastoris. Chemical Communications, 2015, 51, 1643-1646.	2.2	64
40	Methanol independent induction in Pichia pastoris by simple derepressed overexpression of single transcription factors. Biotechnology and Bioengineering, 2018, 115, 1037-1050.	1.7	64
41	Knockout of an endogenous mannosyltransferase increases the homogeneity of glycoproteins produced in Pichia pastoris. Scientific Reports, 2013, 3, 3279.	1.6	62
42	Engineering the Pichia pastoris methanol oxidation pathway for improved NADH regeneration during whole-cell biotransformation. Metabolic Engineering, 2010, 12, 8-17.	3.6	59
43	Investigation of lipase-catalyzed Michael-type carbonâ€“carbon bond formations. Tetrahedron, 2009, 65, 5663-5668.	1.0	58
44	Recombinant Expression of Trichoderma reesei Cel61A in Pichia pastoris: Optimizing Yield and N-terminal Processing. Molecular Biotechnology, 2015, 57, 1010-1017.	1.3	57
45	Stereoselective hydroxylation of an achiral cyclopentanecarboxylic acid derivative using engineered P450s BM-3. Chemical Communications, 2005, , 2597.	2.2	56
46	Laboratory Evolved Biocatalysts for Stereoselective Syntheses of Substituted Benzaldehyde Cyanohydrins. ChemBioChem, 2008, 9, 58-61.	1.3	56
47	Old Yellow Enzymeâ€Catalyzed Dehydrogenation of Saturated Ketones. Advanced Synthesis and Catalysis, 2011, 353, 268-274.	2.1	54
48	An Exceptionally DMSOâ€Tolerant Alcohol Dehydrogenase for the Stereoselective Reduction of Ketones. ChemSusChem, 2008, 1, 431-436.	3.6	51
49	Carving the Active Site of AlmondR-HNL for Increased Enantioselectivity. Angewandte Chemie - International Edition, 2005, 44, 4700-4704.	7.2	47
50	Stepwise engineering of a Pichia pastoris D-amino acid oxidase whole cell catalyst. Microbial Cell Factories, 2010, 9, 24.	1.9	47
51	A Diversified Library of Bacterial and Fungal Bifunctional Cytochrome P450 Enzymes for Drug Metabolite Synthesis. Advanced Synthesis and Catalysis, 2009, 351, 2140-2146.	2.1	46
52	COFACTOR SPECIFICITY ENGINEERING OF STREPTOCOCCUS MUTANS NADH OXIDASE 2 FOR NAD(P) + REGENERATION IN BIOCATALYTIC OXIDATIONS. Computational and Structural Biotechnology Journal, 2014, 9, e201402005.	1.9	46
53	Pichia pastoris â€˜just in timeâ€™ alternative respiration. Microbiology (United Kingdom), 2007, 153, 1250-1260.	0.7	44
54	Steroid biotransformations in biphasic systems with Yarrowia lipolytica expressing human liver cytochrome P450 genes. Microbial Cell Factories, 2012, 11, 106.	1.9	44

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55	Production of human cytochrome P450 2D6 drug metabolites with recombinant microbes â€“ a comparative study. Biotechnology Journal, 2012, 7, 1346-1358.	1.8	41
56	Synergistic modular promoter and gene optimization to push cellulase secretion by Pichia pastoris beyond existing benchmarks. Journal of Biotechnology, 2014, 191, 187-195.	1.9	41
57	Purification and basic biochemical characterization of 19 recombinant plant peroxidase isoenzymes produced in Pichia pastoris. Protein Expression and Purification, 2014, 95, 104-112.	0.6	40
58	Human Enzymes for Organic Synthesis. Angewandte Chemie - International Edition, 2018, 57, 13406-13423.	7.2	40
59	Pichia pastoris Alcohol Oxidase 1 (AOX1) Core Promoter Engineering by High Resolution Systematic Mutagenesis. Biotechnology Journal, 2018, 13, e1700340.	1.8	39
60	Structural and Biochemical Studies Enlighten the Unspecific Peroxygenase from Hypoxylon sp. EC38 as an Efficient Oxidative Biocatalyst. ACS Catalysis, 2021, 11, 11511-11525.	5.5	39
61	Directed evolution of Alcaligenes faecalis nitrilase. Enzyme and Microbial Technology, 2010, 47, 140-146.	1.6	38
62	Expression of recombinant human flavin monooxygenase and moclobemide-N-oxide synthesis on multi-mg scale. Chemical Communications, 2012, 48, 6001.	2.2	37
63	Towards improved membrane protein production in Pichia pastoris: General and specific transcriptional response to membrane protein overexpression. New Biotechnology, 2014, 31, 538-552.	2.4	37
64	Variable production windows for porcine trypsinogen employing synthetic inducible promoter variants in Pichia pastoris. Systems and Synthetic Biology, 2010, 4, 181-191.	1.0	35
65	Efficient Biocatalytic Synthesis of (R)â€Pantolactone. Advanced Synthesis and Catalysis, 2008, 350, 1943-1948.	2.1	34
66	Substrate Binding in the FAD-Dependent Hydroxynitrile Lyase from Almond Provides Insight into the Mechanism of Cyanohydrin Formation and Explains the Absence of Dehydrogenation Activity,. Biochemistry, 2009, 48, 3370-3377.	1.2	34
67	Optimizing cofactor availability for the production of recombinant heme peroxidase in Pichia pastoris. Microbial Cell Factories, 2015, 14, 4.	1.9	33
68	Evolved Peroxygenaseâ€“Aryl Alcohol Oxidase Fusions for Self-Sufficient Oxyfunctionalization Reactions. ACS Catalysis, 2020, 10, 13524-13534.	5.5	32
69	Nitrile Reductase from Geobacillus kaustophilus: A Potential Catalyst for a New Nitrile Biotransformation Reaction. Advanced Synthesis and Catalysis, 2012, 354, 2191-2198.	2.1	31
70	Biocatalytic conversion of unnatural substrates by recombinant almond R-HNL isoenzyme 5. Journal of Molecular Catalysis B: Enzymatic, 2004, 29, 211-218.	1.8	30
71	Combined Use of Fluorescent Dyes and Flow Cytometry To Quantify the Physiological State ofPichia pastorisduring the Production of Heterologous Proteins in High-Cell-Density Fed-Batch Cultures. Applied and Environmental Microbiology, 2010, 76, 4486-4496.	1.4	30
72	Simple and efficient expression of Agaricus meleagris pyranose dehydrogenase in Pichia pastoris. Applied Microbiology and Biotechnology, 2012, 94, 695-704.	1.7	29

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73	Mini-Review: Recent Developments in Hydroxynitrile Lyases for Industrial Biotechnology. Recent Patents on Biotechnology, 2013, 7, 197-206.	0.4	29
74	Cloning and characterization of EstC from Burkholderia gladioli , a novel-type esterase related to plant enzymes. Applied Microbiology and Biotechnology, 2000, 54, 778-785.	1.7	26
75	Serine scanningâ€"A tool to prove the consequences of N-glycosylation of proteins. Journal of Biotechnology, 2007, 129, 50-61.	1.9	26
76	Restriction site free cloning (RSFC) plasmid family for seamless, sequence independent cloning in Pichia pastoris. Microbial Cell Factories, 2015, 14, 103.	1.9	25
77	Esterase EstE from Xanthomonas vesicatoria (Xv_EstE) is an outer membrane protein capable of hydrolyzing long-chain polar esters. Applied Microbiology and Biotechnology, 2003, 61, 479-487.	1.7	23
78	Biotechnological advances towards an enhanced peroxidase production in Pichia pastoris. Journal of Biotechnology, 2016, 233, 181-189.	1.9	23
79	Orthologous promoters from related methylotrophic yeasts surpass expression of endogenous promoters of Pichia pastoris. AMB Express, 2020, 10, 38.	1.4	23
80	Peroxidase gene discovery from the horseradish transcriptome. BMC Genomics, 2014, 15, 227.	1.2	22
81	Asymmetric anti-Prelog reduction of ketones catalysed by Paracoccus pantotrophus and Comamonas sp. cells via hydrogen transfer. Tetrahedron: Asymmetry, 2008, 19, 1954-1958.	1.8	21
82	A toolbox of endogenous and heterologous nuclear localization sequences for the methylotrophic yeastPichia pastoris. FEMS Yeast Research, 2015, 15, fov082.	1.1	21
83	Enzyme discovery beyond homology: a unique hydroxynitrile lyase in the Bet v1 superfamily. Scientific Reports, 2017, 7, 46738.	1.6	21
84	Screening hydroxynitrile lyases for (R)-pantolactone synthesis. Journal of Molecular Catalysis B: Enzymatic, 2008, 52-53, 183-188.	1.8	20
85	Double site saturation mutagenesis of the human cytochrome P450 2D6 results in regioselective steroid hydroxylation. FEBS Journal, 2013, 280, 3094-3108.	2.2	20
86	Sensitive highâ€throughput screening for the detection of reducing sugars. Biotechnology Journal, 2012, 7, 155-162.	1.8	19
87	Enzyme stabilizer DTT catalyzes nitrilase analogue hydrolysis of nitriles. Chemical Communications, 2006, , 1298.	2.2	18
88	Engineering Pichia pastoris for improved NADH regeneration: A novel chassis strain for whole-cell catalysis. Beilstein Journal of Organic Chemistry, 2015, 11, 1741-1748.	1.3	18
89	A novel multi-enzymatic high throughput assay for transaminase activity. Tetrahedron, 2012, 68, 7586-7590.	1.0	17
90	Preparativeâ€Scale Production of Testosterone Metabolites by Human Liver Cytochrome P450 Enzyme 3A4. Advanced Synthesis and Catalysis, 2020, 362, 2725-2738.	2.1	17

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91	Counteracting expression deficiencies by anticipating posttranslational modification of PaHNL5-L1Q-A111G by genetic engineering. Journal of Biotechnology, 2007, 129, 30-38.	1.9	16
92	Bioprocess performance analysis of novel methanol-independent promoters for recombinant protein production with Pichia pastoris. Microbial Cell Factories, 2021, 20, 74.	1.9	16
93	Perspectives on Synthetic Promoters for Biocatalysis and Biotransformation. ChemBioChem, 2010, 11, 761-765.	1.3	15
94	The Extreme Structural Plasticity in the CYP153 Subfamily of P450s Directs Development of Designer Hydroxylases. Biochemistry, 2018, 57, 6701-6714.	1.2	14
95	Synergism of proteomics and mRNA sequencing for enzyme discovery. Journal of Biotechnology, 2016, 235, 132-138.	1.9	13
96	High-level expression of Rhodotorula gracilis d-amino acid oxidase in Pichia pastoris. Biotechnology Letters, 2011, 33, 557-563.	1.1	12
97	Screening for cytochrome P450 expression in Pichia pastoris whole cells by P450â€carbon monoxide complex determination. Biotechnology Journal, 2013, 8, 146-152.	1.8	12
98	Recombinant production of a peroxidase-protein G fusion protein in Pichia pastoris. Journal of Biotechnology, 2016, 219, 24-27.	1.9	12
99	Construction of a cellulose-metabolizing Komagataella phaffii (Pichia pastoris) by co-expressing glucanases and Î²-glucosidase. Applied Microbiology and Biotechnology, 2018, 102, 1297-1306.	1.7	12
100	Production of Hydroxynitrile Lyase from Davallia tyermannii (DtHNL) in Komagataella phaffii and Its Immobilization as a CLEA to Generate a Robust Biocatalyst. ChemBioChem, 2018, 19, 312-316.	1.3	12
101	Random tag insertions by Transposon Integration mediated Mutagenesis (TIM). Journal of Microbiological Methods, 2008, 75, 251-257.	0.7	11
102	Parallelized biocatalytic scanning probe lithography for the additive fabrication of conjugated polymer structures. Nanoscale, 2018, 10, 7185-7193.	2.8	11
103	Single-Cell Approach to Monitor the Unfolded Protein Response During Biotechnological Processes With Pichia pastoris. Frontiers in Microbiology, 2019, 10, 335.	1.5	11
104	Evolution and enrichment of CYP5035 in Polyporales: functionality of an understudied P450 family. Applied Microbiology and Biotechnology, 2021, 105, 6779-6792.	1.7	11
105	Thermostability improvement of endoglucanase Cel7B from Hypocrea pseudokoningii. Journal of Molecular Catalysis B: Enzymatic, 2014, 103, 16-23.	1.8	10
106	Production of Recombinant Human Aldehyde Oxidase in Escherichia coli and Optimization of Its Application for the Preparative Synthesis of Oxidized Drug Metabolites. ChemCatChem, 2014, 6, 1028-1042.	1.8	10
107	Novel molecular biological tools for the efficient expression of fungal lytic polysaccharide monooxygenases in Pichia pastoris. Biotechnology for Biofuels, 2021, 14, 122.	6.2	10
108	Improved Fitness of Arabidopsis thaliana Nitrilaseâ€...2. ChemCatChem, 2010, 2, 263-267.	1.8	9

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109	Aliphatic hydroxylation and epoxidation of capsaicin by cytochrome P450 CYP505X. Tetrahedron, 2018, 74, 6199-6204.	1.0	9
110	Cytochrome P450 mediated hydroxylation of ibuprofen using Pichia pastoris as biocatalyst. Biocatalysis and Agricultural Biotechnology, 2019, 17, 525-528.	1.5	9
111	High-Throughput Screens Based on NAD(P)H Depletion. , 2003, 230, 157-170.		8
112	MuteinDB: the mutein database linking substrates, products and enzymatic reactions directly with genetic variants of enzymes. Database: the Journal of Biological Databases and Curation, 2012, 2012, bas028-bas028.	1.4	8
113	Pichia pastoris mutants as host strains for efficient secretion of recombinant branched chain aminotransferase (BCAT). Journal of Biotechnology, 2016, 235, 84-91.	1.9	8
114	Methanol Independent Expression by Pichia Pastoris Employing De-repression Technologies. Journal of Visualized Experiments, 2019, , .	0.2	8
115	Scalable production and application of Pichia pastoris whole cell catalysts expressing human cytochrome P450 2C9. Microbial Cell Factories, 2021, 20, 90.	1.9	8
116	Bioengineering a glucose oxidase nanosensor for near-infrared continuous glucose monitoring. Nanoscale Advances, 2022, 4, 2420-2427.	2.2	8
117	Natural Product Diversification by Oneâ€Step Biocatalysis using Human P450 3A4. ChemCatChem, 2022, 14, .	1.8	7
118	Cloning, expression and characterization of a new 2-Cl-propionic acid ester hydrolase from B. subtilis. Journal of Molecular Catalysis B: Enzymatic, 2002, 19-20, 237-245.	1.8	6
119	Humane Enzyme fÃ¼r die organische Synthese. Angewandte Chemie, 2018, 130, 13592-13610.	1.6	6
120	Random strand transfer recombination (RSTR) for homology-independent nucleic acid recombination. Journal of Biotechnology, 2007, 129, 39-49.	1.9	5
121	Cloning and upscale production of monoamine oxidase N (MAO-N D5) by Pichia pastoris. Biotechnology Letters, 2018, 40, 127-133.	1.1	5
122	Bioprospecting for Hydroxynitrile Lyases by Blue Native PAGE Coupled HCN Detection. Current Biotechnology, 2015, 4, 111-117.	0.2	4
123	Directed Evolution of a Cytochrome P450 Monooxygenase for Alkane Oxidation. , 2001, 343, 601.		3
124	Combinatorial pathway assembly in yeast. AIMS Bioengineering, 2015, 2, 423-436.	0.6	3
125	Late-Stage Functionalisation of Polycyclic (N-Hetero-) Aromatic Hydrocarbons by Detoxifying CYP5035S7 Monooxygenase of the White-Rot Fungus Polyporus arcularius. Biomolecules, 2021, 11, 1708.	1.8	3
126	Enrichment of new alkane oxidizing bacterial strains for human drug metabolite production. Journal of Molecular Catalysis B: Enzymatic, 2009, 57, 72-77.	1.8	2

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127	Racemization-free and scalable amidation of <scp>l</scp>-proline in organic media using ammonia and a biocatalyst only. Green Chemistry, 2022, 24, 5171-5180.	4.6	2
128	Hydroxylation of polypropylene using the monooxygenase mutant 139-3 fromBacillus megaterium BM3. Biocatalysis and Biotransformation, 2012, 30, 57-62.	1.1	1
129	Novel DNA and RNA Elements. , 2016, , 65-99.		1
130	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
131	Regiospecific 7-hydroxylation of ten-carbon monoterpenes by detoxifying CYP5035S7 monooxygenase of the white-rot fungus Polyporus arcularius. Biochemical and Biophysical Research Communications, 2022, 595, 35-40.	1.0	1
132	Regioselective Hydroxylation of Stilbenes by Whiteâ€Rot Fungal P450s Enables Preparativeâ€Scale Synthesis of Stilbenoids. European Journal of Organic Chemistry, 0, , .	1.2	1
133	Targeting Posttranslational Modifications â€“ Perspectives for Biocatalyst Engineering. Chimia, 2005, 59, 727-731.	0.3	0
134	Stereoselective Hydroxylation of an Achiral Cyclopentanecarboxylic Acid Derivative Using Engineered P450s BM-3.. ChemInform, 2005, 36, no.	0.1	0
135	Recombinant Protein Production in Yeast. , 2005, , 1620-1625.		0
136	Extracellular transaminases for biocatalysis. New Biotechnology, 2014, 31, S198.	2.4	0
137	Human flavin monooxygenase 2: Heterologous expression in E. coli and API modification. New Biotechnology, 2014, 31, S82.	2.4	0
138	Chapter 14. Synthetic Biology for Organic Syntheses. RSC Green Chemistry, 2016, , 165-179.	0.0	0