Bernd Nidetzky

List of Publications by Year
in descending order

320 papers	9,674 citations	41344 49 h-index	82547 72 g-index
329 all docs	329 docs citations	329 times ranked	8204 citing authors

#	Article	IF	Citations
1	Precision synthesis of reducing-end thiol-modified cellulose enabled by enzyme selection. Polymer Journal, 2022, 54, 551-560.	2.7	6
2	Kombination einer genetisch engineerten Oxidase mit wasserstoffbrÃ¼ckengebundenen organischen GerÃ¼sten (HOFs) fÃ¼r hocheffiziente Biokomposite. Angewandte Chemie, 2022, 134, .	2.0	3
3	Biocatalytic Production of 2-Î±-d-Glucosyl-glycerol for Functional Ingredient Use: Integrated Process Design and Techno-Economic Assessment. ACS Sustainable Chemistry and Engineering, 2022, 10, 1246-1255.	6.7	6
4	Combining a Genetically Engineered Oxidase with Hydrogenâ€Bonded Organic Frameworks (HOFs) for Highly Efficient Biocomposites. Angewandte Chemie - International Edition, 2022, 61, .	13.8	46
5	Essential Functional Interplay of the Catalytic Groups in Acid Phosphatase. ACS Catalysis, 2022, 12, 3357-3370.	11.2	5
6	Immobilization of CMPâ€Sialic Acid Synthetase and Î±2,3â€Sialyltransferase for Cascade Synthesis of 3â€²â€Sialyl Î²â€Dâ€Galactoside with Enzyme Reuse. ChemCatChem, 2022, 14, .	3.7	8
7	Engineering cascade biocatalysis in whole cells for bottom-up synthesis of cello-oligosaccharides: flux control over three enzymatic steps enables soluble production. Microbial Cell Factories, 2022, 21, 61.	4.0	7
8	Monitoring and control of the release of soluble O ₂ from H ₂ O ₂ inside porous enzyme carrier for O ₂ supply to an immobilized Dâ€amino acid oxidase. Biotechnology and Bioengineering, 2022, , .	3.3	4
9	Hydride Transfer Mechanism of Enzymatic Sugar Nucleotide C2 Epimerization Probed with a Loose-Fit CDP-Glucose Substrate. ACS Catalysis, 2022, 12, 6816-6830.	11.2	4
10	Ionic liquid as dual-function catalyst and solvent for efficient synthesis of sucrose fatty acid esters. Molecular Catalysis, 2022, 526, 112371.	2.0	4
11	Phosphorylase-catalyzed bottom-up synthesis of short-chain soluble cello-oligosaccharides and property-tunable cellulosic materials. Biotechnology Advances, 2021, 51, 107633.	11.7	32
12	Mechanistic characterization of UDPâ€glucuronic acid 4â€epimerase. FEBS Journal, 2021, 288, 1163-1178.	4.7	16
13	Expanding the Enzyme Repertoire for Sugar Nucleotide Epimerization: the CDP-Tyvelose 2-Epimerase from Thermodesulfatator atlanticus for Glucose/Mannose Interconversion. Applied and Environmental Microbiology, 2021, 87, .	3.1	5
14	Stereo-electronic control of reaction selectivity in short-chain dehydrogenases: Decarboxylation, epimerization, and dehydration. Current Opinion in Chemical Biology, 2021, 61, 43-52.	6.1	14
15	Pushing the limits: Cyclodextrin-based intensification of bioreductions. Journal of Biotechnology, 2021, 325, 57-64.	3.8	5
16	Optimal parameters in variableâ€velocity scanning luminescence lifetime microscopy. Microscopy Research and Technique, 2021, 84, 71-78.	2.2	1
17	Metalâ€“Organic Framework-Based Enzyme Biocomposites. Chemical Reviews, 2021, 121, 1077-1129.	47.7	372
18	Glycosyltransferase Coâ€Immobilization for Natural Product Glycosylation: Cascade Biosynthesis of the <i>C</i>â€Glucoside Nothofagin with Efficient Reuse of Enzymes. Advanced Synthesis and Catalysis, 2021, 363, 2157-2169.	4.3	22

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19	Whole cell-based catalyst for enzymatic production of the osmolyte 2-O-Î±-glucosylglycerol. Microbial Cell Factories, 2021, 20, 79.	4.0	16
20	Editorial: Biocatalytic opportunities to harness the structural diversity of carbohydrates. Current Opinion in Chemical Biology, 2021, 61, A1-A3.	6.1	0
21	Reducing end thiol-modified nanocellulose: Bottom-up enzymatic synthesis and use for templated assembly of silver nanoparticles into biocidal composite material. Carbohydrate Polymers, 2021, 260, 117772.	10.2	14
22	Selective Î²-Mono-Glycosylation of a C15-Hydroxylated Metabolite of the Agricultural Herbicide Cinmethylin Using Leloir Glycosyltransferases. Journal of Agricultural and Food Chemistry, 2021, 69, 5491-5499.	5.2	4
23	Kinetic modeling of phosphorylase-catalyzed iterative Î²-1,4-glycosylation for degree of polymerization-controlled synthesis of soluble cello-oligosaccharides. Biotechnology for Biofuels, 2021, 14, 134.	6.2	5
24	Continuous process technology for glucoside production from sucrose using a whole cell-derived solid catalyst of sucrose phosphorylase. Applied Microbiology and Biotechnology, 2021, 105, 5383-5394.	3.6	8
25	Threeâ€level hybrid modeling for systematic optimization of biocatalytic synthesis: Î±â€glucosyl glycerol production by enzymatic transâ€glycosylation from sucrose. Biotechnology and Bioengineering, 2021, 118, 4028-4040.	3.3	4
26	Leloir glycosyltransferases enabled to flow synthesis: Continuous production of the natural <i>C</i>â€glycoside nothofagin. Biotechnology and Bioengineering, 2021, 118, 4402-4413.	3.3	20
27	Engineering analysis of multienzyme cascade reactions for 3Ê¹â€sialyllactose synthesis. Biotechnology and Bioengineering, 2021, 118, 4290-4304.	3.3	10
28	Nanoporous gold electrodes modified with self-assembled monolayers for electrochemical control of the surface charge. Physical Chemistry Chemical Physics, 2021, 23, 14457-14464.	2.8	4
29	Reductive enzymatic dynamic kinetic resolution affording 115 g/LÂ (S)-2-phenylpropanol. BMC Biotechnology, 2021, 21, 58.	3.3	2
30	Processive Enzymes Kept on a Leash: How Cellulase Activity in Multienzyme Complexes Directs Nanoscale Deconstruction of Cellulose. ACS Catalysis, 2021, 11, 13530-13542.	11.2	14
31	Controllable Iterative Î²-Glucosylation from UDP-Glucose by Bacillus cereus Glycosyltransferase GT1: Application for the Synthesis of Disaccharide-Modified Xenobiotics. Journal of Agricultural and Food Chemistry, 2021, 69, 14630-14642.	5.2	2
32	Threeâ€Enzyme Phosphorylase Cascade for Integrated Production of Shortâ€Chain Cellodextrins. Biotechnology Journal, 2020, 15, e1900349.	3.5	21
33	Threeâ€Enzyme Phosphorylase Cascade Immobilized on Solid Support for Biocatalytic Synthesis of Celloâˆ’oligosaccharides. ChemCatChem, 2020, 12, 1350-1358.	3.7	27
34	Unexpected NADPH Hydratase Activity in the Nitrile Reductase QueF from <i>Escherichia coli</i>. ChemBioChem, 2020, 21, 1534-1543.	2.6	2
35	On the relationship between structure and catalytic effectiveness in solid surface-immobilized enzymes: Advances in methodology and the quest for a single-molecule perspective. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2020, 1868, 140333.	2.3	38
36	Bacterial sialyltransferases and their use in biocatalytic cascades for sialo-oligosaccharide production. Biotechnology Advances, 2020, 44, 107613.	11.7	24

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37	Crystallographic snapshots of UDP-glucuronic acid 4-epimerase ligand binding, rotation, and reduction. Journal of Biological Chemistry, 2020, 295, 12461-12473.	3.4	7
38	Plasmid Design for Tunable Twoâ€Enzyme Coâ€Expression Promotes Wholeâ€Cell Production of Cellobiose. Biotechnology Journal, 2020, 15, e2000063.	3.5	13
39	Design of the Enzymeâ€“Carrier Interface to Overcome the O₂ and NADH Mass Transfer Limitations of an Immobilized Flavin Oxidase. ACS Applied Materials & Interfaces, 2020, 12, 56027-56038.	8.0	23
40	Efficient enzyme formulation promotes Leloir glycosyltransferases for glycoside synthesis. Journal of Biotechnology, 2020, 322, 74-78.	3.8	8
41	Short-Chain Cello-oligosaccharides: Intensification and Scale-up of Their Enzymatic Production and Selective Growth Promotion among Probiotic Bacteria. Journal of Agricultural and Food Chemistry, 2020, 68, 8557-8567.	5.2	41
42	Reverse C-glycosidase reaction provides C-nucleotide building blocks of xenobiotic nucleic acids. Nature Communications, 2020, 11, 6270.	12.8	12
43	Separation behavior and microstructure of emulsified, two-phasic E. coli bioreaction mixtures. Colloids and Interface Science Communications, 2020, 35, 100248.	4.1	2
44	Process intensification for cytochrome P450 BM3â€catalyzed oxyâ€functionalization of dodecanoic acid. Biotechnology and Bioengineering, 2020, 117, 2377-2388.	3.3	17
45	A Biological Nanomachine at Work: Watching the Cellulosome Degrade Crystalline Cellulose. ACS Central Science, 2020, 6, 739-746.	11.3	24
46	On the donor substrate dependence of groupâ€transfer reactions by hydrolytic enzymes: Insight from kinetic analysis of sucrose phosphorylaseâ€catalyzed transglycosylation. Biotechnology and Bioengineering, 2020, 117, 2933-2943.	3.3	13
47	Removal of glycerol from enzymatically produced 2-Î±-d-glucosyl-glycerol by discontinuous diafiltration. Separation and Purification Technology, 2020, 241, 116749.	7.9	13
48	Reactive extraction of fructose for efficient separation of sucrose-derived glucosides produced by enzymatic glycosylation. Green Chemistry, 2020, 22, 4985-4994.	9.0	8
49	Glycosynthase reaction meets the flow: Continuous synthesis of lactoâ€<i>N</i>â€triose II by engineered Î²â€hexosaminidase immobilized on solid support. Biotechnology and Bioengineering, 2020, 117, 1597-1602.	3.3	33
50	Magnetically responsive horseradish peroxidase@ZIF-8 for biocatalysis. Chemical Communications, 2020, 56, 5775-5778.	4.1	41
51	Enzyme Immobilization in Wall-Coated Flow Microreactors. Methods in Molecular Biology, 2020, 2100, 243-257.	0.9	4
52	Downstream processing technologies in the biocatalytic production of oligosaccharides. Biotechnology Advances, 2020, 43, 107568.	11.7	53
53	Leloir glycosyltransferases of natural product <i>C</i>-glycosylation: structure, mechanism and specificity. Biochemical Society Transactions, 2020, 48, 1583-1598.	3.4	27
54	Intraparticle pH Sensing Within Immobilized Enzymes: Immobilized Yellow Fluorescent Protein as Optical Sensor for Spatiotemporal Mapping of pH Inside Porous Particles. Methods in Molecular Biology, 2020, 2100, 319-333.	0.9	1

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55	P450_{JÎ±}: A New, Robust and Î±â€Selective Fatty Acid Hydroxylase Displaying Unexpected 1â€Alkene Formation. Chemistry - A European Journal, 2020, 26, 15910-15921.	3.3	8
56	Pharmaceutical use of nanocellulose produced by enzymes. Makedonsko Farmacevtski Bilten, 2020, 66, 125-126.	0.0	0
57	Demystifying the Flow: Biocatalytic Reaction Intensification in Microstructured Enzyme Reactors. Biotechnology Journal, 2019, 14, 1800244.	3.5	18
58	The influence of feedstock characteristics on enzyme production in Trichoderma reesei: a review on productivity, gene regulation and secretion profiles. Biotechnology for Biofuels, 2019, 12, 238.	6.2	68
59	The Microenvironment in Immobilized Enzymes: Methods of Characterization and Its Role in Determining Enzyme Performance. Molecules, 2019, 24, 3460.	3.8	48
60	Decoupling of recombinant protein production from <i>Escherichia coli</i> cell growth enhances functional expression of plant Leloir glycosyltransferases. Biotechnology and Bioengineering, 2019, 116, 1259-1268.	3.3	22
61	Interplay of nucleophilic catalysis with proton transfer in the nitrile reductase QueF from <i>Escherichia coli</i>. Catalysis Science and Technology, 2019, 9, 842-853.	4.1	3
62	Lacto-N-tetraose synthesis by wild-type and glycosynthase variants of the Î²-N-hexosaminidase from Bifidobacterium bifidum. Organic and Biomolecular Chemistry, 2019, 17, 5661-5665.	2.8	21
63	Product solubility control in cellooligosaccharide production by coupled cellobiose and cellodextrin phosphorylase. Biotechnology and Bioengineering, 2019, 116, 2146-2155.	3.3	33
64	Glycosynthase Principle Transformed into Biocatalytic Process Technology: Lacto-<i>N</i>-triose II Production with Engineered <i>exo</i>-Hexosaminidase. ACS Catalysis, 2019, 9, 5503-5514.	11.2	43
65	A Parsimonious Mechanism of Sugar Dehydration by Human GDP-Mannose-4,6-dehydratase. ACS Catalysis, 2019, 9, 2962-2968.	11.2	18
66	Deciphering the enzymatic mechanism of sugar ring contraction in UDP-apiose biosynthesis. Nature Catalysis, 2019, 2, 1115-1123.	34.4	16
67	Adsorption and desorption of self-assembled L-cysteine monolayers on nanoporous gold monitored by in situ resistometry. Beilstein Journal of Nanotechnology, 2019, 10, 2275-2279.	2.8	2
68	Preparative Asymmetric Synthesis of Canonical and Nonâ€canonical Î±â€amino Acids Through Formal Enantioselective Biocatalytic Amination of Carboxylic Acids. Advanced Synthesis and Catalysis, 2019, 361, 1348-1358.	4.3	22
69	Process intensification for O₂â€dependent enzymatic transformations in continuous singleâ€phase pressurized flow. Biotechnology and Bioengineering, 2019, 116, 503-514.	3.3	37
70	Modeling the activity burst in the initial phase of cellulose hydrolysis by the processive cellobiohydrolase Cel7A. Biotechnology and Bioengineering, 2019, 116, 515-525.	3.3	6
71	Biobased, Internally pH-Sensitive Materials: Immobilized Yellow Fluorescent Protein as an Optical Sensor for Spatiotemporal Mapping of pH Inside Porous Matrices. ACS Applied Materials & Interfaces, 2018, 10, 6858-6868.	8.0	18
72	Evidence of a sequestered imine intermediate during reduction of nitrile to amine by the nitrile reductase QueF from Escherichia coli. Journal of Biological Chemistry, 2018, 293, 3720-3733.	3.4	5

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73	Biochemical Characterization and Mechanistic Analysis of the Levoglucosan Kinase from <i>Lipomyces starkeyi</i>. ChemBioChem, 2018, 19, 596-603.	2.6	14
74	l-Lactic acid production from glucose and xylose with engineered strains of Saccharomyces cerevisiae: aeration and carbon source influence yields and productivities. Microbial Cell Factories, 2018, 17, 59.	4.0	27
75	Humane Enzyme fÃ¼r die organische Synthese. Angewandte Chemie, 2018, 130, 13592-13610.	2.0	6
76	Understanding the silica-based sol-gel encapsulation mechanism of Thermomyces lanuginosus lipase: The role of polyethylenimine. Molecular Catalysis, 2018, 449, 106-113.	2.0	8
77	Human Enzymes for Organic Synthesis. Angewandte Chemie - International Edition, 2018, 57, 13406-13423.	13.8	40
78	Singleâ€Particle Studies to Advance the Characterization of Heterogeneous Biocatalysts. ChemCatChem, 2018, 10, 654-665.	3.7	20
79	Bioâ€based Î±,Ï‰â€Functionalized Hydrocarbons from Multiâ€step Reaction Sequences with Bioâ€•and Metalloâ€catalysts Based on the Fatty Acid Decarboxylase OleT_{JE}. ChemCatChem, 2018, 10, 1192-1201.	3.7	34
80	Glycosyltransferase cascades made fit for chemical production: Integrated biocatalytic process for the natural polyphenol <i>C</i>â€glucoside nothofagin. Biotechnology and Bioengineering, 2018, 115, 545-556.	3.3	36
81	Î²-Glucosyl Fluoride as Reverse Reaction Donor Substrate and Mechanistic Probe of Inverting Sugar Nucleotide-Dependent Glycosyltransferases. ACS Catalysis, 2018, 8, 9148-9153.	11.2	10
82	Leloir Glycosyltransferases as Biocatalysts for Chemical Production. ACS Catalysis, 2018, 8, 6283-6300.	11.2	133
83	A tailorâ€made, selfâ€sufficient and recyclable monooxygenase catalyst based on coimmobilized cytochrome P450 BM3 and glucose dehydrogenase. Biotechnology and Bioengineering, 2018, 115, 2416-2425.	3.3	27
84	New flavanol O-glycosides in grape and wine. Food Chemistry, 2018, 266, 441-448.	8.2	30
85	Sequence determinants of nucleotide binding in Sucrose Synthase: improving the affinity of a bacterial Sucrose Synthase for UDP by introducing plant residues. Protein Engineering, Design and Selection, 2017, 30, 141-148.	2.1	8
86	Isotope Probing of the UDPâ€Apiose/UDPâ€Xylose Synthase Reaction: Evidence of a Mechanism via a Coupled Oxidation and Aldol Cleavage. Angewandte Chemie - International Edition, 2017, 56, 2503-2507.	13.8	13
87	Integration of whole-cell reaction and product isolation: Highly hydrophobic solvents promote in situ substrate supply and simplify extractive product isolation. Journal of Biotechnology, 2017, 257, 110-117.	3.8	13
88	Biocatalytic Cascade of Polyphosphate Kinase and Sucrose Synthase for Synthesis of Nucleotideâ€Activated Derivatives of Glucose. Advanced Synthesis and Catalysis, 2017, 359, 292-301.	4.3	30
89	Production of glucosyl glycerol by immobilized sucrose phosphorylase: Options for enzyme fixation on a solid support and application in microscale flow format. Journal of Biotechnology, 2017, 257, 131-138.	3.8	40
90	Glycosyltransferase cascades for natural product glycosylation: Use of plant instead of bacterial sucrose synthases improves the UDPâ€glucose recycling from sucrose and UDP. Biotechnology Journal, 2017, 12, 1600557.	3.5	36

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91	Walking a Fine Line with Sucrose Phosphorylase: Efficient Singleâ€Step Biocatalytic Production of <scp>l</scp>â€Ascorbic Acid 2â€Glucoside from Sucrose. ChemBioChem, 2017, 18, 1387-1390.	2.6	19
92	Tailor-made resealable micro(bio)reactors providing easy integration of <i>in situ</i> sensors. Journal of Micromechanics and Microengineering, 2017, 27, 065012.	2.6	10
93	Activeâ€Site His85 of <i>Pasteurella dagmatis</i> Sialyltransferase Facilitates Productive Sialyl Transfer and So Prevents Futile Hydrolysis of CMPâ€Neu5Ac. ChemBioChem, 2017, 18, 1544-1550.	2.6	11
94	Oriented Coimmobilization of Oxidase and Catalase on Tailor-Made Ordered Mesoporous Silica. Langmuir, 2017, 33, 5065-5076.	3.5	39
95	Binding pattern of intermediate UDP-4-keto-xylose to human UDP-xylose synthase: Synthesis and STD NMR of model keto-saccharides. Carbohydrate Research, 2017, 437, 50-58.	2.3	5
96	Single-molecule study of oxidative enzymatic deconstruction of cellulose. Nature Communications, 2017, 8, 894.	12.8	86
97	A Spring in Performance: Silica Nanosprings Boost Enzyme Immobilization in Microfluidic Channels. ACS Applied Materials & Interfaces, 2017, 9, 34641-34649.	8.0	46
98	An ortho C-methylation/O-glycosylation motif on a hydroxy-coumarin scaffold, selectively installed by biocatalysis. Organic and Biomolecular Chemistry, 2017, 15, 7917-7924.	2.8	11
99	Reaktion von UDPâ€Apiose/UDPâ€Xyloseâ€Synthase mit isotopenmarkierten Substraten: Hinweise auf einen Mechanismus mit gekoppelter Oxidation und Aldolspaltung. Angewandte Chemie, 2017, 129, 2544-2548.	2.0	0
100	Integrated process design for biocatalytic synthesis by a Leloir Glycosyltransferase: UDPâ€glucose production with sucrose synthase. Biotechnology and Bioengineering, 2017, 114, 924-928.	3.3	43
101	Multivalency Effects on the Immobilization of Sucrose Phosphorylase in Flow Microchannels and Their Use in the Development of a Highâ€Performance Biocatalytic Microreactor. ChemCatChem, 2017, 9, 161-166.	3.7	35
102	Toward â€œhomolacticâ€• fermentation of glucose and xylose by engineered <i>Saccharomyces cerevisiae</i> harboring a kinetically efficient <scp>l</scp>â€lactate dehydrogenase within <i>pdc1</i>â€<i>pdc5</i> deletion background. Biotechnology and Bioengineering, 2017, 114, 163-171.	3.3	16
103	Saccharomyces cerevisiae strain comparison in glucoseâ€“xylose fermentations on defined substrates and in high-gravity SSCF: convergence in strain performance despite differences in genetic and evolutionary engineering history. Biotechnology for Biofuels, 2017, 10, 205.	6.2	13
104	CorNet: Assigning function to networks of co-evolving residues by automated literature mining. PLoS ONE, 2017, 12, e0176427.	2.5	12
105	The micromorphology of Trichoderma reesei analyzed in cultivations on lactose and solid lignocellulosic substrate, and its relationship with cellulase production. Biotechnology for Biofuels, 2016, 9, 169.	6.2	15
106	Development of a fully integrated falling film microreactor for gasâ€“liquidâ€“solid biotransformation with surface immobilized O₂â€dependent enzyme. Biotechnology and Bioengineering, 2016, 113, 1862-1872.	3.3	25
107	Screening of recombinant glycosyltransferases reveals the broad acceptor specificity of stevia UGT-76G1. Journal of Biotechnology, 2016, 233, 49-55.	3.8	43
108	Let the substrate flow, not the enzyme: Practical immobilization of <scp>d</scp>â€amino acid oxidase in a glass microreactor for effective biocatalytic conversions. Biotechnology and Bioengineering, 2016, 113, 2342-2349.	3.3	33

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109	Î²â€Cyclodextrin Improves Solubility and Enzymatic <i>C</i>â€Glucosylation of the Flavonoid Phloretin. Advanced Synthesis and Catalysis, 2016, 358, 486-493.	4.3	27
110	A Kinaseâ€Independent Oneâ€Pot Multienzyme Cascade for an Expedient Synthesis of Guanosine 5â€²â€Diphosphoâ€<scp>d</scp>â€mannose. Advanced Synthesis and Catalysis, 2016, 358, 3809-3816.	4.3	16
111	Combining expression and process engineering for high-quality production of human sialyltransferase in Pichia pastoris. Journal of Biotechnology, 2016, 235, 54-60.	3.8	9
112	Biotechnological production of fucosylated human milk oligosaccharides: Prokaryotic fucosyltransferases and their use in biocatalytic cascades or whole cell conversion systems. Journal of Biotechnology, 2016, 235, 61-83.	3.8	91
113	Two N-terminally truncated variants of human Î²-galactoside Î±2,6 sialyltransferase I with distinct properties for inÂvitro protein glycosylation. Glycobiology, 2016, 26, 1097-1106.	2.5	7
114	Downstream Processing of Nucleosideâ€Diphosphoâ€Sugars from Sucrose Synthase Reaction Mixtures at Decreased Solvent Consumption. Advanced Synthesis and Catalysis, 2016, 358, 3113-3122.	4.3	17
115	Confocal Luminescence Lifetime Imaging with Variable Scan Velocity and Its Application to Oxygen Sensing. Analytical Chemistry, 2016, 88, 10736-10743.	6.5	11
116	Special Issue on acib, dedicated to the occasion of Prof. Dr. Helmut Schwabâ€™s 65th birthday. Journal of Biotechnology, 2016, 235, 1-2.	3.8	0
117	Functional characterization of the native swollenin from Trichoderma reesei: study of its possible role as C1 factor of enzymatic lignocellulose conversion. Biotechnology for Biofuels, 2016, 9, 178.	6.2	51
118	Unlocking the Potential of Leloir Glycosyltransferases for Applied Biocatalysis: Efficient Synthesis of Uridine 5â€²â€Diphosphateâ€Glucose by Sucrose Synthase. Advanced Synthesis and Catalysis, 2016, 358, 3600-3609.	4.3	41
119	Intensifying the O2-dependent heterogeneous biocatalysis: Superoxygenation of solid support from H2O2 by a catalase tailor-made for effective immobilization. Journal of Molecular Catalysis B: Enzymatic, 2016, 134, 302-309.	1.8	25
120	Direct-Write Fabrication of Cellulose Nano-Structures via Focused Electron Beam Induced Nanosynthesis. Scientific Reports, 2016, 6, 32451.	3.3	7
121	Kinetic Analysis and Probing with Substrate Analogues of the Reaction Pathway of the Nitrile Reductase QueF from Escherichia coli. Journal of Biological Chemistry, 2016, 291, 25411-25426.	3.4	7
122	Cellular automata modeling depicts degradation of cellulosic material by a cellulase system with single-molecule resolution. Biotechnology for Biofuels, 2016, 9, 56.	6.2	20
123	Advanced characterization of immobilized enzymes as heterogeneous biocatalysts. Catalysis Today, 2016, 259, 66-80.	4.4	152
124	Enhanced Synthesis of 2-<i>O</i>-Î±-<scp>d</scp>-Glucopyranosyl-<scp>l</scp>-ascorbic Acid from Î±-Cyclodextrin by a Highly Disproportionating CGTase. ACS Catalysis, 2016, 6, 1606-1615.	11.2	25
125	Sucrose synthase: A unique glycosyltransferase for biocatalytic glycosylation process development. Biotechnology Advances, 2016, 34, 88-111.	11.7	141
126	Effect of pretreatment severity in continuous steam explosion on enzymatic conversion of wheat straw: Evidence from kinetic analysis of hydrolysis time courses. Bioresource Technology, 2016, 200, 287-296.	9.6	38

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127	Diastereoselective Synthesis of Glycosyl Phosphates by Using a Phosphorylase-Phosphatase Combination Catalyst. Angewandte Chemie - International Edition, 2015, 54, 15867-15871.	13.8	18
128	Interplay of catalytic subsite residues in the positioning of Î±-d-glucose 1-phosphate in sucrose phosphorylase. Biochemistry and Biophysics Reports, 2015, 2, 36-44.	1.3	2
129	Creating a Waterâ€Soluble Resveratrolâ€Based Antioxidant by Siteâ€Selective Enzymatic Glucosylation. ChemBioChem, 2015, 16, 1870-1874.	2.6	68
130	Speeding up the product release: a secondâ€sphere contribution from Tyr191 to the reactivity of <scp>lâ€</scp>lactate oxidase revealed in crystallographic and kinetic studies of siteâ€directed variants. FEBS Journal, 2015, 282, 4130-4140.	4.7	11
131	Protein freeze concentration and micro-segregation analysed in a temperature-controlled freeze container. Biotechnology Reports (Amsterdam, Netherlands), 2015, 6, 108-111.	4.4	21
132	Tunable Semicrystalline Thin Film Cellulose Substrate for High-Resolution, <i>In-Situ</i> AFM Characterization of Enzymatic Cellulose Degradation. ACS Applied Materials & Interfaces, 2015, 7, 27900-27909.	8.0	16
133	Complete switch from Î±-2,3- to Î±-2,6-regioselectivity in Pasteurella dagmatis Î²-<scp>d</scp>-galactoside sialyltransferase by active-site redesign. Chemical Communications, 2015, 51, 3083-3086.	4.1	41
134	All-in-one assay for Î²-d-galactoside sialyltransferases: Quantification of productive turnover, error hydrolysis, and site selectivity. Analytical Biochemistry, 2015, 483, 47-53.	2.4	9
135	Phosphoryl Transfer from Î±- <scp>d</scp> -Glucose 1-Phosphate Catalyzed by Escherichia coli Sugar-Phosphate Phosphatases of Two Protein Superfamily Types. Applied and Environmental Microbiology, 2015, 81, 1559-1572.	3.1	12
136	From wheat straw to bioethanol: integrative analysis of a separate hydrolysis and co-fermentation process with implemented enzyme production. Biotechnology for Biofuels, 2015, 8, 46.	6.2	41
137	Design of experiments reveals critical parameters for pilotâ€scale freezeâ€andâ€thaw processing of <scp>L</scp>â€lactic dehydrogenase. Biotechnology Journal, 2015, 10, 1390-1399.	3.5	15
138	Identification of novel metabolic interactions controlling carbon flux from xylose to ethanol in natural and recombinant yeasts. Biotechnology for Biofuels, 2015, 8, 157.	6.2	10
139	The Ala95â€toâ€Gly substitution in <i>AerococcusÂviridans</i><scp>l</scp>â€lactate oxidase revisitedÂâ€“Âstructural consequences at the catalytic site and effect on reactivity with O₂ and other electron acceptors. FEBS Journal, 2015, 282, 562-578.	4.7	13
140	Saturation transfer difference NMR to study substrate and product binding to human UDP-xylose synthase (hUXS1A) during catalytic event. RSC Advances, 2015, 5, 86919-86926.	3.6	2
141	Comparison of broad-scope assays of nucleotide sugar-dependent glycosyltransferases. Analytical Biochemistry, 2015, 490, 46-51.	2.4	6
142	Mesoporous Silica Materials Labeled for Optical Oxygen Sensing and Their Application to Development of a Silica-Supported Oxidoreductase Biocatalyst. ACS Catalysis, 2015, 5, 5984-5993.	11.2	46
143	Oxidation of Monolignols by Members of the Berberine Bridge Enzyme Family Suggests a Role in Plant Cell Wall Metabolism. Journal of Biological Chemistry, 2015, 290, 18770-18781.	3.4	83
144	Probing of the reaction pathway of human UDP-xylose synthase with site-directed mutagenesis. Carbohydrate Research, 2015, 416, 1-6.	2.3	2

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