# Volker Sieber

## List of Publications by Citations



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|---|---|---|---|
| 142 papers | 4,357 citations | 33 h-index | 61 g-index |
| 160 ext. papers | 5,276 ext. citations | 6.8 avg, IF | 6.1 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 142 | Bacterial exopolysaccharides: biosynthesis pathways and engineering strategies. *Frontiers in Microbiology*, **2015**, 6, 496 | 5.7 | 272 |
| 141 | Functional expression of a fungal laccase in Saccharomyces cerevisiae by directed evolution. *Applied and Environmental Microbiology*, **2003**, 69, 987-95 | 4.8 | 238 |
| 140 | Electrochemical synthesis of hydrogen peroxide from water and oxygen. *Nature Reviews Chemistry*, **2019**, 3, 442-458 | 34.6 | 235 |
| 139 | Libraries of hybrid proteins from distantly related sequences. *Nature Biotechnology*, **2001**, 19, 456-60 | 44.5 | 212 |
| 138 | The genome of Xanthomonas campestris pv. campestris B100 and its use for the reconstruction of metabolic pathways involved in xanthan biosynthesis. *Journal of Biotechnology*, **2008**, 134, 33-45 | 3.7 | 202 |
| 137 | Cell-free metabolic engineering: production of chemicals by minimized reaction cascades. *ChemSusChem*, **2012**, 5, 2165-72 | 8.3 | 184 |
| 136 | Multienzyme Cascade Reactions□tatus and Recent Advances. *ACS Catalysis*, **2018**, 8, 2385-2396 | 13.1 | 176 |
| 135 | Selecting proteins with improved stability by a phage-based method. *Nature Biotechnology*, **1998**, 16, 955-60 | 44.5 | 176 |
| 134 | In-vitro selection of highly stabilized protein variants with optimized surface. *Journal of Molecular Biology*, **2001**, 309, 717-26 | 6.5 | 90 |
| 133 | Photobiocatalytic decarboxylation for olefin synthesis. *Chemical Communications*, **2015**, 51, 1918-21 | 5.8 | 85 |
| 132 | Enzymatic cleavage of lignin □O-4 aryl ether bonds via net internal hydrogen transfer. *Green Chemistry*, **2013**, 15, 1373 | 10 | 84 |
| 131 | Enhanced fed-batch fermentation of 2,3-butanediol by Paenibacillus polymyxa DSM 365. *Bioresource Technology*, **2012**, 124, 237-44 | 11 | 81 |
| 130 | Scleroglucan: biosynthesis, production and application of a versatile hydrocolloid. *Applied Microbiology and Biotechnology*, **2011**, 91, 937-47 | 5.7 | 70 |
| 129 | Solubilization of hemicellulose and lignin from wheat straw through microwave-assisted alkali treatment. *Industrial Crops and Products*, **2012**, 39, 198-203 | 5.9 | 69 |
| 128 | Systematics and genetic variation in commercial shape Kappaphycus and shape Eucheuma (Solieriaceae, Rhodophyta). *Journal of Applied Phycology*, **2006**, 18, 643-651 | 3.2 | 66 |
| 127 | A Modular Toolkit for Generating Pichia pastoris Secretion Libraries. *ACS Synthetic Biology*, **2017**, 6, 1016-1025 | 5.1 | 55 |
| 126 | Interactions contributing to the formation of a beta-hairpin-like structure in a small peptide. *Biochemistry*, **1996**, 35, 181-8 | 3.2 | 55 |

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| 125 | A water-forming NADH oxidase from Lactobacillus pentosus suitable for the regeneration of synthetic biomimetic cofactors. *Frontiers in Microbiology*, **2015**, 6, 957 | 5.7 | 52 |
| 124 | Recent Advances in the Direct Synthesis of Hydrogen Peroxide Using Chemical Catalysis□A Review. *Catalysts*, **2018**, 8, 379 | 4 | 52 |
| 123 | Removal of monomer delignification products by laccase from Trametes versicolor. *Bioresource Technology*, **2012**, 104, 298-304 | 11 | 51 |
| 122 | Enzymatic Reduction of Nicotinamide Biomimetic Cofactors Using an Engineered Glucose Dehydrogenase: Providing a Regeneration System for Artificial Cofactors. *ACS Catalysis*, **2017**, 7, 5202-5208 | 11.1 | 50 |
| 121 | Bacterial Glycosyltransferases: Challenges and Opportunities of a Highly Diverse Enzyme Class Toward Tailoring Natural Products. *Frontiers in Microbiology*, **2016**, 7, 182 | 5.7 | 49 |
| 120 | In vitro metabolic engineering for the production of □ketoglutarate. *Metabolic Engineering*, **2017**, 40, 5-13 | 9.7 | 45 |
| 119 | Biosynthesis □ebugged□Novel bioproduction strategies. *Engineering in Life Sciences*, **2013**, 13, 4-18 | 3.4 | 45 |
| 118 | Fast carbohydrate analysis via liquid chromatography coupled with ultra violet and electrospray ionization ion trap detection in 96-well format. *Journal of Chromatography A*, **2014**, 1350, 44-50 | 4.5 | 45 |
| 117 | Surface-exposed phenylalanines in the RNP1/RNP2 motif stabilize the cold-shock protein CspB from Bacillus subtilis. *Proteins: Structure, Function and Bioinformatics*, **1998**, 30, 401-6 | 4.2 | 43 |
| 116 | Identification of amino acid networks governing catalysis in the closed complex of class I terpene synthases. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E958-67 | 11.5 | 41 |
| 115 | Enzymatic Decarboxylation□An Emerging Reaction for Chemicals Production from Renewable Resources. *ChemCatChem*, **2014**, 6, 689-701 | 5.2 | 41 |
| 114 | Methods to identify the unexplored diversity of microbial exopolysaccharides. *Frontiers in Microbiology*, **2015**, 6, 565 | 5.7 | 41 |
| 113 | Controlled production of polysaccharides-exploiting nutrient supply for levan and heteropolysaccharide formation in Paenibacillus sp. *Carbohydrate Polymers*, **2016**, 148, 326-34 | 10.3 | 40 |
| 112 | Development of a lipase-mediated epoxidation process for monoterpenes in choline chloride-based deep eutectic solvents. *Green Chemistry*, **2017**, 19, 2576-2586 | 10 | 38 |
| 111 | Sequence profile of the parallel beta helix in the pectate lyase superfamily. *Journal of Structural Biology*, **1998**, 122, 223-35 | 3.4 | 38 |
| 110 | A comparison of genes involved in sphingan biosynthesis brought up to date. *Applied Microbiology and Biotechnology*, **2014**, 98, 7719-33 | 5.7 | 37 |
| 109 | Reaction Design for the Compartmented Combination of Heterogeneous and Enzyme Catalysis. *ACS Catalysis*, **2016**, 6, 6329-6334 | 13.1 | 33 |
| 108 | High throughput exopolysaccharide screening platform: from strain cultivation to monosaccharide composition and carbohydrate fingerprinting in one day. *Carbohydrate Polymers*, **2015**, 122, 212-20 | 10.3 | 33 |

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| 107 | Epoxidation of □pinene catalyzed by methyltrioxorhenium(VII): Influence of additives, oxidants and solvents. *Journal of Molecular Catalysis A*, **2011**, 340, 9-14 | | 32 |
| 106 | Tailor-made exopolysaccharides-CRISPR-Cas9 mediated genome editing in. *Synthetic Biology*, **2017**, 2, ysx007 | 3.3 | 30 |
| 105 | Production of dodecanedioic acid via biotransformation of low cost plant-oil derivatives using Candida tropicalis. *Journal of Industrial Microbiology and Biotechnology*, **2017**, 44, 1491-1502 | 4.2 | 30 |
| 104 | Encapsulation of living E. coli cells in hollow polymer microspheres of highly defined size. *Biomacromolecules*, **2013**, 14, 207-14 | 6.9 | 29 |
| 103 | Novel CAD-like enzymes from Escherichia coli K-12 as additional tools in chemical production. *Applied Microbiology and Biotechnology*, **2013**, 97, 5815-24 | 5.7 | 29 |
| 102 | Enzymatic transformations involved in the biosynthesis of microbial exo-polysaccharides based on the assembly of repeat units. *ChemBioChem*, **2015**, 16, 1141-7 | 3.8 | 29 |
| 101 | Circular dichroism of the parallel beta helical proteins pectate lyase C and E. *Proteins: Structure, Function and Bioinformatics*, **1995**, 23, 32-7 | 4.2 | 29 |
| 100 | Electrochemical CO2 reduction to formate on indium catalysts prepared by electrodeposition in deep eutectic solvents. *Electrochemistry Communications*, **2020**, 110, 106597 | 5.1 | 29 |
| 99 | Transcriptome sequencing and comparative transcriptome analysis of the scleroglucan producer Sclerotium rolfsii. *BMC Genomics*, **2010**, 11, 329 | 4.5 | 28 |
| 98 | Revealing the diversity of algal monosaccharides: Fast carbohydrate fingerprinting of microalgae using crude biomass and showcasing sugar distribution in Chlorella vulgaris by biomass fractionation. *Algal Research*, **2016**, 17, 227-235 | 5 | 28 |
| 97 | Activated carbon as catalyst support: precursors, preparation, modification and characterization. *Beilstein Journal of Organic Chemistry*, **2020**, 16, 1188-1202 | 2.5 | 27 |
| 96 | Improvement of thermostable aldehyde dehydrogenase by directed evolution for application in Synthetic Cascade Biomanufacturing. *Enzyme and Microbial Technology*, **2013**, 53, 307-14 | 3.8 | 27 |
| 95 | Biomimetic cofactors and methods for their recycling. *Current Opinion in Chemical Biology*, **2019**, 49, 59-66 | 9.7 | 27 |
| 94 | Biobased chiral semi-crystalline or amorphous high-performance polyamides and their scalable stereoselective synthesis. *Nature Communications*, **2020**, 11, 509 | 17.4 | 24 |
| 93 | Effects of high-lignin-loading on thermal, mechanical, and morphological properties of bioplastic composites. *Composite Structures*, **2018**, 189, 349-356 | 5.3 | 23 |
| 92 | Selective epoxidation of (+)-limonene employing methyltrioxorhenium as catalyst. *Journal of Molecular Catalysis A*, **2012**, 358, 159-165 | | 22 |
| 91 | Proside: a phage-based method for selecting thermostable proteins. *Methods in Molecular Biology*, **2003**, 230, 57-70 | 1.4 | 22 |
| 90 | Metal Ions Play an Essential Catalytic Role in the Mechanism of Ketol-Acid Reductoisomerase. *Chemistry - A European Journal*, **2016**, 22, 7427-36 | 4.8 | 22 |

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| 89 | New Bio-Polyamides from Terpenes: -Pinene and (+)-3-Carene as Valuable Resources for Lactam Production. *Macromolecular Rapid Communications*, **2019**, 40, e1800903 | 4.8 | 21 |
| 88 | Characterization of recombinantly expressed dihydroxy-acid dehydratase from Sulfobus solfataricus-A key enzyme for the conversion of carbohydrates into chemicals. *Journal of Biotechnology*, **2015**, 211, 31-41 | 3.7 | 21 |
| 87 | Lipase-catalyzed synthesis of sucrose monoester: Increased productivity by combining enzyme pretreatment and non-aqueous biphasic medium. *Journal of Biotechnology*, **2017**, 259, 182-190 | 3.7 | 20 |
| 86 | Characterization of Biomimetic Cofactors According to Stability, Redox Potentials, and Enzymatic Conversion by NADH Oxidase from Lactobacillus pentosus. *ChemBioChem*, **2017**, 18, 1944-1949 | 3.8 | 20 |
| 85 | In-depth rheological characterization of genetically modified xanthan-variants. *Carbohydrate Polymers*, **2019**, 213, 236-246 | 10.3 | 20 |
| 84 | Optimization of the lipase mediated epoxidation of monoterpenes using the design of experiments-Taguchi method. *Process Biochemistry*, **2016**, 51, 1479-1485 | 4.8 | 19 |
| 83 | Mediated electron transfer with monooxygenases-Insight in interactions between reduced mediators and the co-substrate oxygen. *Journal of Molecular Catalysis B: Enzymatic*, **2014**, 108, 51-58 | | 19 |
| 82 | Lipase-catalyzed interfacial polymerization of -pentadecalactone in aqueous biphasic medium: A mechanistic study. *Journal of Molecular Catalysis B: Enzymatic*, **2013**, 88, 69-76 | | 18 |
| 81 | Biocatalytic Synthesis of a Diketobornane as a Building Block for Bifunctional Camphor Derivatives. *ChemCatChem*, **2013**, 5, 3351-3357 | 5.2 | 17 |
| 80 | Characterization of uronate dehydrogenases catalysing the initial step in an oxidative pathway. *Microbial Biotechnology*, **2015**, 8, 633-43 | 6.3 | 17 |
| 79 | Bioconversion of Pyruvate to -Butanol with Minimized Cofactor Utilization. *Frontiers in Bioengineering and Biotechnology*, **2016**, 4, 74 | 5.8 | 17 |
| 78 | Colorimetric Determination of Sulfate via an Enzyme Cascade for High-Throughput Detection of Sulfatase Activity. *Analytical Chemistry*, **2018**, 90, 2526-2533 | 7.8 | 15 |
| 77 | A one pot reaction cascade of in situ hydrogen peroxide production and lipase mediated in situ production of peracids for the epoxidation of monoterpenes. *Journal of Molecular Catalysis B: Enzymatic*, **2015**, 114, 72-76 | | 15 |
| 76 | Rheological characterization of the exopolysaccharide Paenan in surfactant systems. *Carbohydrate Polymers*, **2018**, 181, 719-726 | 10.3 | 15 |
| 75 | Metabolic engineering for production of functional polysaccharides. *Current Opinion in Biotechnology*, **2020**, 66, 44-51 | 11.4 | 15 |
| 74 | Integrated biorefinery concept for grass silage using a combination of adapted pulping methods for advanced saccharification and extraction of lignin. *Bioresource Technology*, **2016**, 216, 462-70 | 11 | 14 |
| 73 | Toward one-pot lipase-catalyzed synthesis of poly(-caprolactone) particles in aqueous dispersion. *Colloids and Surfaces B: Biointerfaces*, **2014**, 113, 254-60 | 6 | 14 |
| 72 | Enzymatic synthesis of amino sugar fatty acid esters. *European Journal of Lipid Science and Technology*, **2014**, 116, 423-428 | 3 | 14 |

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|---|---|---|---|
| 71 | Preparation of Supported Palladium Catalysts using Deep Eutectic Solvents. *Chemistry - A European Journal*, **2017**, 23, 12467-12470 | 4.8 | 14 |
| 70 | Lipase-mediated Epoxidation of the Cyclic Monoterpene Limonene to Limonene Oxide and Limonene Dioxide. *Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences*, **2012**, 67, 1056-1060 | 1 | 14 |
| 69 | Probing the adhesion properties of alginate hydrogels: a new approach towards the preparation of soft colloidal probes for direct force measurements. *Soft Matter*, **2017**, 13, 578-589 | 3.6 | 13 |
| 68 | Characterization and comparison of Porphyridium sordidum and Porphyridium purpureum concerning growth characteristics and polysaccharide production. *Algal Research*, **2020**, 49, 101931 | 5 | 13 |
| 67 | Improving the NADH-cofactor specificity of the highly active AdhZ3 and AdhZ2 from Escherichia coli K-12. *Journal of Biotechnology*, **2014**, 189, 157-65 | 3.7 | 13 |
| 66 | Chemoenzymatic Synthesis of a Novel Borneol-Based Polyester. *ChemSusChem*, **2017**, 10, 3574-3580 | 8.3 | 12 |
| 65 | Engineering of the 2,3-butanediol pathway of Paenibacillus polymyxa DSM 365. *Metabolic Engineering*, **2020**, 61, 381-388 | 9.7 | 12 |
| 64 | Effects of glucose concentration on 1,18-cis-octadec-9-enedioic acid biotransformation efficiency and lipid body formation in Candida tropicalis. *Scientific Reports*, **2017**, 7, 13842 | 4.9 | 11 |
| 63 | A Bifunctional UDP-Sugar 4-Epimerase Supports Biosynthesis of Multiple Cell Surface Polysaccharides in Sinorhizobium meliloti. *Journal of Bacteriology*, **2019**, 201, | 3.5 | 11 |
| 62 | A one-stage cultivation process for lipid- and carbohydrate-rich biomass of Scenedesmus obtusiusculus based on artificial and natural water sources. *Bioresource Technology*, **2016**, 218, 498-504 | 11 | 11 |
| 61 | Optimization of a reduced enzymatic reaction cascade for the production of L-alanine. *Scientific Reports*, **2019**, 9, 11754 | 4.9 | 11 |
| 60 | Sequence homology-independent protein recombination (SHIPREC). *Methods in Molecular Biology*, **2003**, 231, 153-63 | 1.4 | 11 |
| 59 | ChiBio: An Integrated Bio-refinery for Processing Chitin-Rich Bio-waste to Specialty Chemicals. *Grand Challenges in Biology and Biotechnology*, **2018**, 555-578 | 2.4 | 11 |
| 58 | Enabling the Direct Enzymatic Dehydration of d-Glycerate to Pyruvate as the Key Step in Synthetic Enzyme Cascades Used in the Cell-Free Production of Fine Chemicals. *ACS Catalysis*, **2020**, 10, 3110-3118 | 13.1 | 10 |
| 57 | Thermostabilization of the uronate dehydrogenase from Agrobacterium tumefaciens by semi-rational design. *AMB Express*, **2017**, 7, 103 | 4.1 | 10 |
| 56 | Refolding of a thermostable glyceraldehyde dehydrogenase for application in synthetic cascade biomanufacturing. *PLoS ONE*, **2013**, 8, e70592 | 3.7 | 10 |
| 55 | Analysis of lignocellulose derived phenolic monomers by headspace solid-phase microextraction and gas chromatography. *Journal of Chromatography A*, **2013**, 1307, 144-57 | 4.5 | 9 |
| 54 | Functional Expression of a Fungal Laccase in Saccharomyces cerevisiae by Directed Evolution. *Applied and Environmental Microbiology*, **2003**, 69, 5037-5037 | 4.8 | 9 |

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| 53 | Synthetic Methylotrophy in Yeasts: Towards a Circular Bioeconomy. *Trends in Biotechnology*, **2021**, 39, 348-358 | 15.1 | 9 |
| 52 | Structure-Guided Engineering of Keto Acid Decarboxylase for the Production of Higher Alcohols at Elevated Temperature. *ChemSusChem*, **2018**, 11, 3335-3344 | 8.3 | 9 |
| 51 | Development of semi-continuous chemo-enzymatic terpene epoxidation: combination of anthraquinone autooxidation and the lipase-mediated epoxidation process. *Reaction Chemistry and Engineering*, **2017**, 2, 885-895 | 4.9 | 8 |
| 50 | Biosynthesis of poly-3-hydroxybutyrate from grass silage by a two-stage fermentation process based on an integrated biorefinery concept. *Bioresource Technology*, **2018**, 269, 237-245 | 11 | 8 |
| 49 | Overall Nutritional and Sensory Profile of Different Species of Australian Wattle Seeds ( spp.): Potential Food Sources in the Arid Semi-Arid Regions. *Foods*, **2019**, 8, | 4.9 | 8 |
| 48 | Automated Modular High Throughput Exopolysaccharide Screening Platform Coupled with Highly Sensitive Carbohydrate Fingerprint Analysis. *Journal of Visualized Experiments*, **2016**, | 1.6 | 7 |
| 47 | Deacidification of grass silage press juice by continuous production of acetoin from its lactate via an immobilized enzymatic reaction cascade. *Bioresource Technology*, **2017**, 245, 1084-1092 | 11 | 7 |
| 46 | Molecular cloning and functional characterization of a two highly stereoselective borneol dehydrogenases from Salvia officinalis L. *Phytochemistry*, **2020**, 172, 112227 | 4 | 7 |
| 45 | Bioelectrocatalytic Cofactor Regeneration Coupled to CO Fixation in a Redox-Active Hydrogel for Stereoselective C-C Bond Formation. *Angewandte Chemie - International Edition*, **2021**, 60, 21056-21061 | 16.4 | 7 |
| 44 | Quantitative assay of (1,3)-(1,6)-glucans from fermentation broth using aniline blue. *Carbohydrate Polymers*, **2017**, 174, 57-64 | 10.3 | 6 |
| 43 | Molecular Dynamics Analysis of a Rationally Designed Aldehyde Dehydrogenase Gives Insights into Improved Activity for the Non-Native Cofactor NAD. *ACS Synthetic Biology*, **2020**, 9, 920-929 | 5.7 | 6 |
| 42 | Identification and characterization of two new 5-keto-4-deoxy-D-Glucarate Dehydratases/Decarboxylases. *BMC Biotechnology*, **2016**, 16, 80 | 3.5 | 6 |
| 41 | carba Nicotinamide Adenine Dinucleotide Phosphate: Robust Cofactor for Redox Biocatalysis. *Angewandte Chemie - International Edition*, **2021**, 60, 14701-14706 | 16.4 | 6 |
| 40 | Production of Propene from n-Butanol: A Three-Step Cascade Utilizing the Cytochrome P450 Fatty Acid Decarboxylase OleT. *ChemBioChem*, **2020**, 21, 3273-3281 | 3.8 | 5 |
| 39 | Screening of c-di-GMP-Regulated Exopolysaccharides in Host Interacting Bacteria. *Methods in Molecular Biology*, **2018**, 1734, 263-275 | 1.4 | 5 |
| 38 | Substrate scope of a dehydrogenase from Sphingomonas species A1 and its potential application in the synthesis of rare sugars and sugar derivatives. *Microbial Biotechnology*, **2018**, 11, 747-758 | 6.3 | 5 |
| 37 | Mechanical and Thermal Properties of Mixed-Tacticity Polyhydroxybutyrates and Their Association with Iso- and Atactic Chain Segment Length Distributions. *Macromolecules*, **2019**, 52, 5407-5418 | 5.5 | 5 |
| 36 | Novel Prokaryotic CRISPR-Cas12a-Based Tool for Programmable Transcriptional Activation and Repression. *ACS Synthetic Biology*, **2020**, 9, 3353-3363 | 5.7 | 5 |

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| 35 | Structures of Mixed-Tacticity Polyhydroxybutyrates. *Macromolecules*, **2018**, 51, 5001-5010 | 5.5 | 5 |
| 34 | Optimization of growth and EPS production in two Porphyridum strains. *Bioresource Technology Reports*, **2020**, 11, 100486 | 4.1 | 4 |
| 33 | Biosynthese und Genomik mikrobieller Polysaccharide. *BioSpektrum*, **2014**, 20, 288-290 | 0.1 | 4 |
| 32 | Development of an Improved Peroxidase-Based High-Throughput Screening for the Optimization of D-Glycerate Dehydratase Activity. *International Journal of Molecular Sciences*, **2020**, 21, | 6.3 | 4 |
| 31 | Rheology of sphingans in EPS-surfactant systems. *Carbohydrate Polymers*, **2020**, 248, 116778 | 10.3 | 4 |
| 30 | To beat the heat - engineering of the most thermostable pyruvate decarboxylase to date.. *RSC Advances*, **2019**, 9, 29743-29746 | 3.7 | 4 |
| 29 | Rheological characterization of Porphyridium sordidum and Porphyridium purpureum exopolysaccharides. *Carbohydrate Polymers*, **2021**, 253, 117237 | 10.3 | 4 |
| 28 | Dataset on the structural characterization of organosolv lignin obtained from ensiled grass and load-dependent molecular weight changes during thermoplastic processing. *Data in Brief*, **2018**, 17, 647-652 | 1.2 | 3 |
| 27 | Nucleic and Protein Extraction Methods for Fungal Exopolysaccharide Producers **2013**, 427-434 | | 3 |
| 26 | Selection for soluble proteins via fusion with chloramphenicol acetyltransferase. *Methods in Molecular Biology*, **2003**, 230, 45-55 | 1.4 | 3 |
| 25 | Structural elucidation of the fucose containing polysaccharide of Paenibacillus polymyxa DSM 365.. *Carbohydrate Polymers*, **2022**, 278, 118951 | 10.3 | 3 |
| 24 | A Structural View on the Stereospecificity of Plant Borneol-Type Dehydrogenases. *ChemCatChem*, **2021**, 13, 2262-2277 | 5.2 | 3 |
| 23 | Simple Plug-In Synthetic Step for the Synthesis of (-)-Camphor from Renewable Starting Materials. *ChemBioChem*, **2021**, 22, 2951-2956 | 3.8 | 3 |
| 22 | Bioelektrokatalytische Cofaktor-Regeneration und CO2-Fixierung in einem redoxaktiven Hydrogel durch stereoselektive C-C-Bindungsknüpfung. *Angewandte Chemie*, **2021**, 133, 21224-21230 | 3.6 | 3 |
| 21 | Converging conversion using promiscuous biocatalysts for the cell-free synthesis of chemicals from heterogeneous biomass. *Green Chemistry*, **2021**, 23, 3656-3663 | 10 | 3 |
| 20 | Fermentative Production of Microbial Exopolysaccharides **2019**, 145-166 | | 2 |
| 19 | Draft Genome Sequence of Kozakia baliensis SR-745, the First Sequenced Kozakia Strain from the Family Acetobacteraceae. *Genome Announcements*, **2014**, 2, | | 2 |
| 18 | Development of a Cofactor Balanced, Multi Enzymatic Cascade Reaction for the Simultaneous Production of L-Alanine and L-Serine from 2-Keto-3-deoxy-gluconate. *Catalysts*, **2021**, 11, 31 | 4 | 2 |

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| 17 | Characterization of highly active 2-keto-3-deoxy-L-arabinonate and 2-keto-3-deoxy-D-xylonate dehydratases in terms of the biotransformation of hemicellulose sugars to chemicals. *Applied Microbiology and Biotechnology*, **2020**, 104, 7023-7035 | 5.7 | 2 |
| 16 | Sustainable Chemistry - An Interdisciplinary Matrix Approach. *ChemSusChem*, **2021**, 14, 251-265 | 8.3 | 2 |
| 15 | Hot Flows: Evolving an Archaeal Glucose Dehydrogenase for Ultrastable Carba-NADP+ Using Microfluidics at Elevated Temperatures. *ACS Catalysis*, **2022**, 12, 1841-1846 | 13.1 | 1 |
| 14 | Systematic optimization of exopolysaccharide production by Gluconacetobacter sp. and use of (crude) glycerol as carbon source. *Carbohydrate Polymers*, **2022**, 276, 118769 | 10.3 | 1 |
| 13 | Anodic production of hydrogen peroxide using commercial carbon materials. *Applied Catalysis B: Environmental*, **2021**, 120848 | 21.8 | 1 |
| 12 | Pyrolysis of Deep Eutectic Solvents for the Preparation of Supported Copper Electrocatalysts. *ChemistrySelect*, **2020**, 5, 11714-11720 | 1.8 | 1 |
| 11 | Engineering of a borneol dehydrogenase from P. putida for the enzymatic resolution of camphor. *Applied Microbiology and Biotechnology*, **2021**, 105, 3159-3167 | 5.7 | 1 |
| 10 | Enhanced C2 and C3 Product Selectivity in Electrochemical CO2 Reduction on Carbon-Doped Copper Oxide Catalysts Prepared by Deep Eutectic Solvent Calcination. *Catalysts*, **2021**, 11, 542 | 4 | 1 |
| 9 | Design of a synthetic enzyme cascade for the in vitro fixation of a C1 carbon source to a functional C4 sugar. *Green Chemistry*, **2021**, 23, 6583-6590 | 10 | 1 |
| 8 | Land and sea: Addressing the challenges facing inter-regional ecosystems in developing a sustainable bioeconomy. *EFB Bioeconomy Journal*, **2021**, 1, 100017 | | 1 |
| 7 | carba-Nicotinamid-Adenin-Dinukleotid-Phosphat: Robuster Cofaktor f□ die Redox-Biokatalyse. *Angewandte Chemie*, **2021**, 133, 14822-14828 | 3.6 | 0 |
| 6 | Design of enzymatic cascade reactors through multi-objective dynamic optimization. *Biochemical Engineering Journal*, **2022**, 181, 108384 | 4.2 | 0 |
| 5 | Towards a cyanobacterial biorefinery: Carbohydrate fingerprint, biocomposition and enzymatic hydrolysis of Nostoc biomass. *Algal Research*, **2022**, 65, 102744 | 5 | 0 |
| 4 | Crystallization behaviour of glyceraldehyde dehydrogenase from Thermoplasma acidophilum. *Acta Crystallographica Section F, Structural Biology Communications*, **2015**, 71, 1475-80 | 1.1 | |
| 3 | Biochemie 2009. *Nachrichten Aus Der Chemie*, **2010**, 58, 300-313 | 0.1 | |
| 2 | Titelbild: Bioelektrokatalytische Cofaktor-Regeneration und CO2-Fixierung in einem redoxaktiven Hydrogel durch stereoselektive C-C-Bindungskn□fung (Angew. Chem. 38/2021). *Angewandte Chemie*, **2021**, 133, 20733-20733 | 3.6 | |
| 1 | A novel approach to study cellulose digestion kinetics in biogas fermentation applying feed-stop method and artificial medium to investigate effects of saccharides. *Bioresource Technology Reports*, **2021**, 15, 100757 | 4.1 | |