# Marco Oldiges

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7518100/publications.pdf

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|---|---|---|---|
| 94 papers | 3,662 citations | 126901 33 h-index | 144002 57 g-index |
| 104 all docs | 104 docs citations | 104 times ranked | 3647 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Bayesian calibration, process modeling and uncertainty quantification in biotechnology. PLoS Computational Biology, 2022, 18, e1009223. | 3.2 | 10 |
| 2 | bletl â€•A Python package for integrating BioLector microcultivation devices in the Designâ€Buildâ€Testâ€Learn cycle. Engineering in Life Sciences, 2022, 22, 242-259. | 3.6 | 18 |
| 3 | Metabolic Footprinting of Microbial Systems Based on Comprehensive In Silico Predictions of MS/MS Relevant Data. Metabolites, 2022, 12, 257. | 2.9 | 3 |
| 4 | Catalytically Active Inclusion Bodiesâ”€Benchmarking and Application in Flow Chemistry. ACS Synthetic Biology, 2022, 11, 1881-1896. | 3.8 | 5 |
| 5 | Construction and characterization of BsGDH-CatIB variants and application as robust and highly active redox cofactor regeneration module for biocatalysis. Microbial Cell Factories, 2022, 21, . | 4.0 | 3 |
| 6 | Construction and comprehensive characterization of an EcLDCc-CatIB setâ€”varying linkers and aggregation inducing tags. Microbial Cell Factories, 2021, 20, 49. | 4.0 | 12 |
| 7 | A fully automated pipeline for the dynamic atâ€line morphology analysis of microscale Aspergillus cultivation. Fungal Biology and Biotechnology, 2021, 8, 2. | 5.1 | 6 |
| 8 | Microbioreactorâ€assisted cultivation workflows for timeâ€efficient phenotyping of protein producing Aspergillus niger in batch and fedâ€batch mode. Biotechnology Progress, 2021, 37, e3144. | 2.6 | 0 |
| 9 | Need for speed: evaluation of dilute and shoot-mass spectrometry for accelerated metabolic phenotyping in bioprocess development. Analytical and Bioanalytical Chemistry, 2021, 413, 3253-3268. | 3.7 | 6 |
| 10 | Robotic integration enables autonomous operation of laboratory scale stirred tank bioreactors with modelâ€driven process analysis. Biotechnology and Bioengineering, 2021, 118, 2759-2769. | 3.3 | 10 |
| 11 | Metabolic engineering of Pseudomonas putida for production of the natural sweetener 5â€ketofructose from fructose or sucrose by periplasmic oxidation with a heterologous fructose dehydrogenase. Microbial Biotechnology, 2021, 14, 2592-2604. | 4.2 | 4 |
| 12 | Scaling production of GFP1-10 detector protein in E.Âcoli for secretion screening by split GFP assay. Microbial Cell Factories, 2021, 20, 191. | 4.0 | 5 |
| 13 | Biosensor-Based Optimization of Cutinase Secretion by Corynebacterium glutamicum. Frontiers in Microbiology, 2021, 12, 750150. | 3.5 | 7 |
| 14 | Parallelized microscale fed-batch cultivation in online-monitored microtiter plates: implications of media composition and feed strategies for process design and performance. Journal of Industrial Microbiology and Biotechnology, 2020, 47, 35-47. | 3.0 | 8 |
| 15 | Comprehensive analysis of metabolic sensitivity of 1,4â€butanediol producing Escherichia coli toward substrate and oxygen availability. Biotechnology Progress, 2020, 36, e2917. | 2.6 | 8 |
| 16 | Parallelized disruption of prokaryotic and eukaryotic cells via miniaturized and automated bead mill. Engineering in Life Sciences, 2020, 20, 350-356. | 3.6 | 0 |
| 17 | Screening of a genomeâ€reduced Corynebacterium glutamicum strain library for improved heterologous cutinase secretion. Microbial Biotechnology, 2020, 13, 2020-2031. | 4.2 | 17 |
| 18 | Catalytically-active inclusion bodies for biotechnologyâ€”general concepts, optimization, and application. Applied Microbiology and Biotechnology, 2020, 104, 7313-7329. | 3.6 | 46 |

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|---|---|---|---|
| 19 | FeedER: a feedback-regulated enzyme-based slow-release system for fed-batch cultivation in microtiter plates. Bioprocess and Biosystems Engineering, 2019, 42, 1843-1852. | 3.4 | 15 |
| 20 | Direct Analysis of Underivatized Amino Acids in Plant Extracts by LC-MS/MS (Improved Method). Methods in Molecular Biology, 2019, 2030, 403-414. | 0.9 | 7 |
| 21 | A FRET-based biosensor for the quantification of glucose in culture supernatants of mL scale microbial cultivations. Microbial Cell Factories, 2019, 18, 143. | 4.0 | 20 |
| 22 | Rapid and comprehensive evaluation of microalgal fatty acids via untargeted gas chromatography and timeâ€ofâ€flight mass spectrometry. Engineering in Life Sciences, 2019, 19, 1006-1011. | 3.6 | 1 |
| 23 | A closer look at Aspergillus: online monitoring via scattered light enables reproducible phenotyping. Fungal Biology and Biotechnology, 2019, 6, 11. | 5.1 | 6 |
| 24 | Carboxylic acid consumption and production by Corynebacterium glutamicum. Biotechnology Progress, 2019, 35, e2804. | 2.6 | 6 |
| 25 | Combinatorial impact of Sec signal peptides from Bacillus subtilis and bioprocess conditions on heterologous cutinase secretion by Corynebacterium glutamicum. Biotechnology and Bioengineering, 2019, 116, 644-655. | 3.3 | 22 |
| 26 | Less Sacrifice, More Insight: Repeated Lowâ€Volume Sampling of Microbioreactor Cultivations Enables Accelerated Deep Phenotyping of Microbial Strain Libraries. Biotechnology Journal, 2019, 14, e1800428. | 3.5 | 31 |
| 27 | Secretome Dynamics in a Gram-Positive Bacterial Model. Molecular and Cellular Proteomics, 2019, 18, 423-436. | 3.8 | 12 |
| 28 | Catalytically active inclusion bodies of L-lysine decarboxylase from E. coli for 1,5-diaminopentane production. Scientific Reports, 2018, 8, 5856. | 3.3 | 45 |
| 29 | Microbioreactor Systems for Accelerated Bioprocess Development. Biotechnology Journal, 2018, 13, e1700141. | 3.5 | 117 |
| 30 | Laboratory-scale photobiotechnologyâ€"current trends and future perspectives. FEMS Microbiology Letters, 2018, 365, . | 1.8 | 6 |
| 31 | Differential transcriptomic analysis reveals hidden light response in Streptomyces lividans. Biotechnology Progress, 2018, 34, 287-292. | 2.6 | 3 |
| 32 | Monitoring Protein Secretion in Streptomyces Using Fluorescent Proteins. Frontiers in Microbiology, 2018, 9, 3019. | 3.5 | 11 |
| 33 | Characterization of Sigma Factor Genes in Streptomyces lividans TK24 Using a Genomic Library-Based Approach for Multiple Gene Deletions. Frontiers in Microbiology, 2018, 9, 3033. | 3.5 | 23 |
| 34 | Germination and Growth Analysis of Streptomyces lividans at the Single-Cell Level Under Varying Medium Compositions. Frontiers in Microbiology, 2018, 9, 2680. | 3.5 | 10 |
| 35 | Multi-Omics and Targeted Approaches to Determine the Role of Cellular Proteases in Streptomyces Protein Secretion. Frontiers in Microbiology, 2018, 9, 1174. | 3.5 | 29 |
| 36 | Improved microscale cultivation of Pichia pastoris for clonal screening. Fungal Biology and Biotechnology, 2018, 5, 8. | 5.1 | 12 |

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| 37 | Comparative evaluation of phototrophic microtiter plate cultivation against laboratory-scale photobioreactors. Bioprocess and Biosystems Engineering, 2017, 40, 663-673. | 3.4 | 9 |
| 38 | Fast and reliable strain characterization of Streptomyces lividans through microâ€scale cultivation. Biotechnology and Bioengineering, 2017, 114, 2011-2022. | 3.3 | 37 |
| 39 | pH fluctuations imperil the robustness of C. glutamicum to short term oxygen limitation. Journal of Biotechnology, 2017, 259, 248-260. | 3.8 | 16 |
| 40 | A framework for accelerated phototrophic bioprocess development: integration of parallelized microscale cultivation, laboratory automation and Kriging-assisted experimental design. Biotechnology for Biofuels, 2017, 10, 26. | 6.2 | 13 |
| 41 | Design and validation of a parallelized microâ€photobioreactor enabling phototrophic bioprocess development at elevated throughput. Biotechnology and Bioengineering, 2017, 114, 122-131. | 3.3 | 16 |
| 42 | Metabolic profile of 1,5â€diaminopentane producing Corynebacterium glutamicum under scaleâ€down conditions: Blueprint for robustness to bioreactor inhomogeneities. Biotechnology and Bioengineering, 2017, 114, 560-575. | 3.3 | 41 |
| 43 | Generic Protocol for Optimization of Heterologous Protein Production Using Automated Microbioreactor Technology. Journal of Visualized Experiments, 2017, , . | 0.3 | 5 |
| 44 | Automated growth rate determination in high-throughput microbioreactor systems. BMC Research Notes, 2017, 10, 617. | 1.4 | 15 |
| 45 | Performance loss of Corynebacterium glutamicum cultivations under scaleâ€down conditions using complex media. Engineering in Life Sciences, 2016, 16, 620-632. | 3.6 | 18 |
| 46 | Use of a Sec signal peptide library from Bacillus subtilis for the optimization of cutinase secretion in Corynebacterium glutamicum. Microbial Cell Factories, 2016, 15, 208. | 4.0 | 49 |
| 47 | Current state and challenges for dynamic metabolic modeling. Current Opinion in Microbiology, 2016, 33, 97-104. | 5.1 | 40 |
| 48 | Simplified cryopreservation of the microalga Chlorella vulgaris integrating a novel concept for cell viability estimation. Engineering in Life Sciences, 2016, 16, 36-44. | 3.6 | 14 |
| 49 | Distinct purinergic signaling pathways in prepubescent mouse spermatogonia. Journal of General Physiology, 2016, 148, 253-271. | 1.9 | 14 |
| 50 | Plug flow versus stirred tank reactor flow characteristics in twoâ€compartment scaleâ€down bioreactor: Setupâ€specific influence on the metabolic phenotype and bioprocess performance of Corynebacterium glutamicum. Engineering in Life Sciences, 2016, 16, 610-619. | 3.6 | 33 |
| 51 | Framework for Kriginâ€based iterative experimental analysis and design: Optimization of secretory protein production in Corynebacterium glutamicum. Engineering in Life Sciences, 2016, 16, 538-549. | 3.6 | 27 |
| 52 | Automation of a Nile red staining assay enables high throughput quantification of microalgal lipid production. Microbial Cell Factories, 2016, 15, 34. | 4.0 | 26 |
| 53 | 13C Tracers for Glucose Degrading Pathway Discrimination in Gluconobacter oxydans 621H. Metabolites, 2015, 5, 455-474. | 2.9 | 0 |
| 54 | Bioprocess automation on a Mini Pilot Plant enables fast quantitative microbial phenotyping. Microbial Cell Factories, 2015, 14, 32. | 4.0 | 62 |

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| 55 | InÂvivo assessment by Machâ€“Zehnder doubleâ€beam interferometry of the invasive force exerted by the Asian soybean rust fungus ( Phakopsora pachyrhizi ). New Phytologist, 2014, 203, 620-631. | 7.3 | 34 |
| 56 | Process inhomogeneity leads to rapid side product turnover in cultivation of Corynebacterium glutamicum. Microbial Cell Factories, 2014, 13, 6. | 4.0 | 56 |
| 57 | Assessment of robustness against dissolved oxygen/substrate oscillations for C. glutamicum DM1933 in two-compartment bioreactor. Bioprocess and Biosystems Engineering, 2014, 37, 1151-1162. | 3.4 | 49 |
| 58 | Rapid assessment of oxygen transfer impact for Corynebacterium glutamicum. Bioprocess and Biosystems Engineering, 2014, 37, 2567-2577. | 3.4 | 19 |
| 59 | Application of metabolic engineering for the biotechnological production of l-valine. Applied Microbiology and Biotechnology, 2014, 98, 5859-5870. | 3.6 | 59 |
| 60 | Conversion of Corynebacterium glutamicum from an aerobic respiring to an aerobic fermenting bacterium by inactivation of the respiratory chain. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 699-708. | 1.0 | 36 |
| 61 | An automated workflow for enhancing microbial bioprocess optimization on a novel microbioreactor platform. Microbial Cell Factories, 2012, 11, 144. | 4.0 | 96 |
| 62 | Direct Analysis of Underivatized Amino Acids in Plant Extracts by LC-MS-MS. Methods in Molecular Biology, 2012, 828, 317-328. | 0.9 | 24 |
| 63 | Polyketide Proofreading by an Acyltransferase-like Enzyme. Chemistry and Biology, 2012, 19, 329-339. | 6.0 | 52 |
| 64 | Stationary versus non-stationary 13C-MFA: A comparison using a consistent dataset. Journal of Biotechnology, 2011, 154, 179-190. | 3.8 | 62 |
| 65 | Comparative<sup>13</sup>C Metabolic Flux Analysis of Pyruvate Dehydrogenase Complex-Deficient,<scp>l</scp>-Valine-Producing Corynebacterium glutamicum. Applied and Environmental Microbiology, 2011, 77, 6644-6652. | 3.1 | 70 |
| 66 | Importance of NADPH supply for improved <scp>L</scp>â€valine formation in Corynebacterium glutamicum. Biotechnology Progress, 2010, 26, 361-371. | 2.6 | 67 |
| 67 | Analysing overexpression of l-valine biosynthesis genes in pyruvate-dehydrogenase-deficient Corynebacterium glutamicum. Journal of Industrial Microbiology and Biotechnology, 2010, 37, 263-270. | 3.0 | 13 |
| 68 | Studies on substrate utilisation in l-valine-producing Corynebacterium glutamicum strains deficient in pyruvate dehydrogenase complex. Bioprocess and Biosystems Engineering, 2010, 33, 873-883. | 3.4 | 9 |
| 69 | Metabolic and Transcriptional Response to Cofactor Perturbations in Escherichia coli. Journal of Biological Chemistry, 2010, 285, 17498-17506. | 3.4 | 115 |
| 70 | Metabolic Impact of Increased NADH Availability in Saccharomyces cerevisiae. Applied and Environmental Microbiology, 2010, 76, 851-859. | 3.1 | 47 |
| 71 | A 2-oxoacid dehydrogenase complex of Haloferax volcanii is essential for growth on isoleucine but not on other branched-chain amino acids. Microbiology (United Kingdom), 2010, 156, 521-529. | 1.8 | 16 |
| 72 | Technische Chemie 2009. Nachrichten Aus Der Chemie, 2010, 58, 350-361. | 0.0 | 0 |

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|---|---|---|---|
| 73 | Modeling metabolic networks in C. glutamicum: a comparison of rate laws in combination with various parameter optimization strategies. BMC Systems Biology, 2009, 3, 5. | 3.0 | 59 |
| 74 | Metabolomics for biotransformations: Intracellular redox cofactor analysis and enzyme kinetics offer insight into whole cell processes. Biotechnology and Bioengineering, 2009, 104, 251-260. | 3.3 | 22 |
| 75 | The identification of enzyme targets for the optimization of a valine producing Corynebacterium glutamicum strain using a kinetic model. Biotechnology Progress, 2009, 25, 754-762. | 2.6 | 23 |
| 76 | Metabolic quenching of Corynebacterium glutamicum: efficiency of methods and impact of cold shock. Bioprocess and Biosystems Engineering, 2009, 32, 581-592. | 3.4 | 43 |
| 77 | Metabolic impact of redox cofactor perturbations in Saccharomyces cerevisiae. Metabolic Engineering, 2009, 11, 253-261. | 7.0 | 100 |
| 78 | Application of immobilized bovine enterokinase in repetitive fusion protein cleavage for the production of mucin 1. Biotechnology Journal, 2009, 4, 1610-1618. | 3.5 | 7 |
| 79 | Analysis of amino acids without derivatization in barley extracts by LC-MS-MS. Analytical and Bioanalytical Chemistry, 2008, 391, 2663-2672. | 3.7 | 95 |
| 80 | Corynebacterium glutamicum tailored for high-yield L-valine production. Applied Microbiology and Biotechnology, 2008, 79, 471-479. | 3.6 | 131 |
| 81 | Influence of l-isoleucine and pantothenate auxotrophy for l-valine formation in Corynebacterium glutamicum revisited by metabolome analyses. Bioprocess and Biosystems Engineering, 2008, 31, 217-225. | 3.4 | 32 |
| 82 | Metabolic flux analysis at ultra short time scale: Isotopically non-stationary 13C labeling experiments. Journal of Biotechnology, 2007, 129, 249-267. | 3.8 | 194 |
| 83 | Benchmarking evolutionary algorithms on convenience kinetics models of the valine and leucine biosynthesis in C. glutamicum. , 2007, , . | | 2 |
| 84 | Comparing various evolutionary algorithms on the parameter optimization of the valine and leucine biosynthesis in corynebacterium glutamicum. , 2007, , . | | 2 |
| 85 | l-Valine Production with Pyruvate Dehydrogenase Complex-Deficient Corynebacterium glutamicum. Applied and Environmental Microbiology, 2007, 73, 2079-2084. | 3.1 | 135 |
| 86 | A Microstructure Heat Exchanger for Quenching the Metabolism of Mammalian Cells. Chemical Engineering and Technology, 2007, 30, 322-328. | 1.5 | 19 |
| 87 | Simultaneous determination of multiple intracellular metabolites in glycolysis, pentose phosphate pathway and tricarboxylic acid cycle by liquid chromatographyâ€“mass spectrometry. Journal of Chromatography A, 2007, 1147, 153-164. | 3.7 | 430 |
| 88 | Effect of pyruvate dehydrogenase complex deficiency on l-lysine production with Corynebacterium glutamicum. Applied Microbiology and Biotechnology, 2007, 76, 615-623. | 3.6 | 60 |
| 89 | Metabolomics: current state and evolving methodologies and tools. Applied Microbiology and Biotechnology, 2007, 76, 495-511. | 3.6 | 206 |
| 90 | Standard reporting requirements for biological samples in metabolomics experiments: microbial and inÂvitro biology experiments. Metabolomics, 2007, 3, 189-194. | 3.0 | 50 |

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|---|---|---|---|
| 91 | Emerging Corynebacterium glutamicum systems biology. Journal of Biotechnology, 2006, 124, 74-92. | 3.8 | 103 |
| 92 | Monitoring and Modeling of the Reaction Dynamics in the Valine/Leucine Synthesis Pathway in Corynebacterium glutamicum. Biotechnology Progress, 2006, 22, 1071-1083. | 2.6 | 45 |
| 93 | From Enzyme Kinetics to Metabolic Network Modeling â€“ Visualization Tool for Enhanced Kinetic Analysis of Biochemical Network Models. Engineering in Life Sciences, 2006, 6, 155-162. | 3.6 | 7 |
| 94 | Stimulation, Monitoring, and Analysis of Pathway Dynamics by Metabolic Profiling in the Aromatic Amino Acid Pathway. Biotechnology Progress, 2004, 20, 1623-1633. | 2.6 | 65 |