# Michael KÃ¶pke

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7488194/publications.pdf

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|---|---|---|---|
| 46 papers | 4,510 citations | 201674 27 h-index | 233421 45 g-index |
| 60 all docs | 60 docs citations | 60 times ranked | 2575 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Agr Quorum Sensing influences the Wood-Ljungdahl pathway in Clostridium autoethanogenum. Scientific Reports, 2022, 12, 411. | 3.3 | 8 |
| 2 | Advances in systems metabolic engineering of autotrophic carbon oxide-fixing biocatalysts towards a circular economy. Metabolic Engineering, 2022, 71, 117-141. | 7.0 | 41 |
| 3 | Carbon-negative production of acetone and isopropanol by gas fermentation at industrial pilot scale. Nature Biotechnology, 2022, 40, 335-344. | 17.5 | 195 |
| 4 | Reverse Î²-oxidation pathways for efficient chemical production. Journal of Industrial Microbiology and Biotechnology, 2022, 49, . | 3.0 | 14 |
| 5 | Spacer2PAM: A computational framework to guide experimental determination of functional CRISPR-Cas system PAM sequences. Nucleic Acids Research, 2022, 50, 3523-3534. | 14.5 | 8 |
| 6 | Required Gene Set for Autotrophic Growth of Clostridium autoethanogenum. Applied and Environmental Microbiology, 2022, 88, e0247921. | 3.1 | 9 |
| 7 | Absolute Proteome Quantification in the Gas-Fermenting Acetogen Clostridium autoethanogenum. MSystems, 2022, 7, e0002622. | 3.8 | 10 |
| 8 | Faster Growth Enhances Low Carbon Fuel and Chemical Production Through Gas Fermentation. Frontiers in Bioengineering and Biotechnology, 2022, 10, 879578. | 4.1 | 11 |
| 9 | Cell-free prototyping enables implementation of optimized reverse Î²-oxidation pathways in heterotrophic and autotrophic bacteria. Nature Communications, 2022, 13, . | 12.8 | 27 |
| 10 | Transcriptional control of Clostridium autoethanogenum using CRISPRi. Synthetic Biology, 2021, 6, ysab008. | 2.2 | 16 |
| 11 | Stepping on the Gas to a Circular Economy: Accelerating Development of Carbon-Negative Chemical Production from Gas Fermentation. Annual Review of Chemical and Biomolecular Engineering, 2021, 12, 439-470. | 6.8 | 69 |
| 12 | Redox controls metabolic robustness in the gas-fermenting acetogen Clostridium autoethanogenum. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 13168-13175. | 7.1 | 54 |
| 13 | Development of a clostridia-based cell-free system for prototyping genetic parts and metabolic pathways. Metabolic Engineering, 2020, 62, 95-105. | 7.0 | 27 |
| 14 | In vitro prototyping and rapid optimization of biosynthetic enzymes for cell design. Nature Chemical Biology, 2020, 16, 912-919. | 8.0 | 142 |
| 15 | Enhancing CO2-Valorization Using Clostridium autoethanogenum for Sustainable Fuel and Chemicals Production. Frontiers in Bioengineering and Biotechnology, 2020, 8, 204. | 4.1 | 79 |
| 16 | Pollution to products: recycling of â€˜above groundâ€™ carbon by gas fermentation. Current Opinion in Biotechnology, 2020, 65, 180-189. | 6.6 | 119 |
| 17 | Modular cell-free expression plasmids to accelerate biological design in cells. Synthetic Biology, 2020, 5, ysaa019. | 2.2 | 10 |
| 18 | The carbonic anhydrase of Clostridium autoethanogenum represents a new subclass of Î²-carbonic anhydrases. Applied Microbiology and Biotechnology, 2019, 103, 7275-7286. | 3.6 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | A novel conjugal donor strain for improved DNA transfer into Clostridium spp.. Anaerobe, 2019, 59, 184-191. | 2.1 | 32 |
| 20 | A TetR-Family Protein (CAETHG_0459) Activates Transcription From a New Promoter Motif Associated With Essential Genes for Autotrophic Growth in Acetogens. Frontiers in Microbiology, 2019, 10, 2549. | 3.5 | 12 |
| 21 | Kinetic ensemble model of gas fermenting Clostridium autoethanogenum for improved ethanol production. Biochemical Engineering Journal, 2019, 148, 46-56. | 3.6 | 27 |
| 22 | Engineering of vitamin prototrophy in Clostridium ljungdahlii and Clostridium autoethanogenum. Applied Microbiology and Biotechnology, 2019, 103, 4633-4648. | 3.6 | 25 |
| 23 | Systems-level engineering and characterisation of Clostridium autoethanogenum through heterologous production of poly-3-hydroxybutyrate (PHB). Metabolic Engineering, 2019, 53, 14-23. | 7.0 | 57 |
| 24 | Quantitative analysis of tetrahydrofolate metabolites from clostridium autoethanogenum. Metabolomics, 2018, 14, 35. | 3.0 | 5 |
| 25 | H2 drives metabolic rearrangements in gas-fermenting Clostridium autoethanogenum. Biotechnology for Biofuels, 2018, 11, 55. | 6.2 | 103 |
| 26 | Metabolic engineering of Clostridium autoethanogenum for selective alcohol production. Metabolic Engineering, 2017, 40, 104-114. | 7.0 | 178 |
| 27 | Arginine deiminase pathway provides ATP and boosts growth of the gas-fermenting acetogen Clostridium autoethanogenum. Metabolic Engineering, 2017, 41, 202-211. | 7.0 | 96 |
| 28 | Maintenance of ATP Homeostasis Triggers Metabolic Shifts in Gas-Fermenting Acetogens. Cell Systems, 2017, 4, 505-515.e5. | 6.2 | 128 |
| 29 | Syngas Biorefinery and Syngas Utilization. Advances in Biochemical Engineering/Biotechnology, 2017, 166, 247-280. | 1.1 | 31 |
| 30 | Gas Fermentationâ€"A Flexible Platform for Commercial Scale Production of Low-Carbon-Fuels and Chemicals from Waste and Renewable Feedstocks. Frontiers in Microbiology, 2016, 7, 694. | 3.5 | 343 |
| 31 | Genome editing of Clostridium autoethanogenum using CRISPR/Cas9. Biotechnology for Biofuels, 2016, 9, 219. | 6.2 | 96 |
| 32 | Insights into CO <sub>2</sub> Fixation Pathway of Clostridium autoethanogenum by Targeted Mutagenesis. MBio, 2016, 7, . | 4.1 | 83 |
| 33 | Low carbon fuels and commodity chemicals from waste gases â€“ systematic approach to understand energy metabolism in a model acetogen. Green Chemistry, 2016, 18, 3020-3028. | 9.0 | 143 |
| 34 | Sequence data for Clostridium autoethanogenum using three generations of sequencing technologies. Scientific Data, 2015, 2, 150014. | 5.3 | 40 |
| 35 | Low-Carbon Fuel and Chemical Production by Anaerobic Gas Fermentation. Advances in Biochemical Engineering/Biotechnology, 2015, 156, 293-321. | 1.1 | 13 |
| 36 | Energy Conservation Associated with Ethanol Formation from H <sub>2</sub> and CO <sub>2</sub> in Clostridium autoethanogenum Involving Electron Bifurcation. Journal of Bacteriology, 2015, 197, 2965-2980. | 2.2 | 198 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 37 | Reconstruction of an Acetogenic 2,3-Butanediol Pathway Involving a Novel NADPH-Dependent Primary-Secondary Alcohol Dehydrogenase. Applied and Environmental Microbiology, 2014, 80, 3394-3403. | 3.1 | 89 |
| 38 | Comparison of single-molecule sequencing and hybrid approaches for finishing the genome of Clostridium autoethanogenum and analysis of CRISPR systems in industrial relevant Clostridia. Biotechnology for Biofuels, 2014, 7, 40. | 6.2 | 135 |
| 39 | NADP-Specific Electron-Bifurcating [FeFe]-Hydrogenase in a Functional Complex with Formate Dehydrogenase in Clostridium autoethanogenum Grown on CO. Journal of Bacteriology, 2013, 195, 4373-4386. | 2.2 | 208 |
| 40 | Clostridium difficile Is an Autotrophic Bacterial Pathogen. PLoS ONE, 2013, 8, e62157. | 2.5 | 70 |
| 41 | Commercial Biomass Syngas Fermentation. Energies, 2012, 5, 5372-5417. | 3.1 | 352 |
| 42 | Fermentative production of ethanol from carbon monoxide. Current Opinion in Biotechnology, 2011, 22, 320-325. | 6.6 | 186 |
| 43 | Biochemical production of biobutanol. , 2011, , 221-257. | | 11 |
| 44 | 2,3-Butanediol Production by Acetogenic Bacteria, an Alternative Route to Chemical Synthesis, Using Industrial Waste Gas. Applied and Environmental Microbiology, 2011, 77, 5467-5475. | 3.1 | 362 |
| 45 | Clostridium ljungdahlii represents a microbial production platform based on syngas. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13087-13092. | 7.1 | 594 |
| 46 | Gas Fermentation for Commercial Biofuels Production. , 0, , . | | 24 |