# Jakob Albert

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4274082/publications.pdf

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| 48 | 1,366 | 448610 | 388640 |
|---|---|---|---|
| papers | citations | 19 h-index | 36 g-index |

| 48 | 48 | 48 | 1273 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Valorization of secondary feedstocks from the agroindustry by selective catalytic oxidation to formic and acetic acid using the OxFA process. Biomass Conversion and Biorefinery, 2023, 13, 7199-7206. | 2.9 | 6 |
| 2 | Spectroscopic, Crystallographic, and Electrochemical Study of Different Manganese(II)â€Substituted Keggināˆ’Type Phosphomolybdates. Chemistry - A European Journal, 2022, 28, . | 1.7 | 10 |
| 3 | Sensitivity Analysis and Parameter Optimization for the Fractionative Catalytic Conversion of Lignocellulosic Biomass in the Polyoxometalateâ€“Ionosolv Concept. ACS Sustainable Chemistry and Engineering, 2022, 10, 8474-8483. | 3.2 | 3 |
| 4 | Development of an efficient downstream process for product separation and catalyst recycling of a homogeneous polyoxometalate catalyst by means of nanofiltration membranes and design of experiments. Chemical Engineering Research and Design, 2022, 185, 37-50. | 2.7 | 11 |
| 5 | Superior CNT-supported bimetallic RuCu catalyst for the highly selective hydrogenolysis of glycerol to 1,2-propanediol. Catalysis Science and Technology, 2021, 11, 6649-6653. | 2.1 | 12 |
| 6 | Alcoholâ€Activated Vanadiumâ€Containing Polyoxometalate Complexes in Homogeneous Glucose Oxidation Identified with <sup>51</sup>Vâ€NMR and EPR Spectroscopy. ChemCatChem, 2021, 13, 3662-3670. | 1.8 | 12 |
| 7 | Selective catalytic hydrogenation of biomass derived furans to secondary alcohols using <scp>Pt</scp>/polyoxometalate catalysts under mild reaction conditions. Biofuels, Bioproducts and Biorefining, 2021, 15, 1431-1446. | 1.9 | 4 |
| 8 | Laser-Generated InO<sub>x</sub>/ZrO<sub>2</sub> Catalysts for CO<sub>2</sub> Hydrogenation: Role of In Situ Fragmentation and Ripening Control. ACS Applied Energy Materials, 2021, 4, 9206-9215. | 2.5 | 8 |
| 9 | Modeling and optimization of bio-2-hexanol production from biomass derived dimethylfuran using Pt/K3PW12O40 by response surface methodology. Computers and Chemical Engineering, 2021, 155, 107546. | 2.0 | 3 |
| 10 | Slurry Phase Hydrogenation of CO<sub>2</sub> to Methanol Using Supported In<sub>2</sub>O<sub>3</sub> Catalysts as Promising Approach for Chemical Energy Storage. Chemie-Ingenieur-Technik, 2021, 93, 585-593. | 0.4 | 11 |
| 11 | Additively manufactured RANEYÂ®-type copper catalyst for methanol synthesis. Catalysis Science and Technology, 2020, 10, 164-168. | 2.1 | 8 |
| 12 | Kinetics of Triphase Extractive Oxidative Desulfurization of Benzothiophene with Molecular Oxygen Catalyzed by HPAâ€5. Chemical Engineering and Technology, 2020, 43, 465-475. | 0.9 | 14 |
| 13 | Switchable Catalytic Polyoxometalate-Based Systems for Biomass Conversion to Carboxylic Acids. ACS Omega, 2020, 5, 19082-19091. | 1.6 | 7 |
| 14 | Influence of gas impurities on the hydrogenation of CO<sub>2</sub> to methanol using indium-based catalysts. Catalysis Science and Technology, 2020, 10, 7309-7322. | 2.1 | 12 |
| 15 | Glucose oxidation to formic acid and methyl formate in perfect selectivity. Green Chemistry, 2020, 22, 4311-4320. | 4.6 | 38 |
| 16 | Continuous Production of Formic Acid from Biomass in a Three-Phase Liquidâ€“Liquidâ€“Gas Reaction Process. ACS Sustainable Chemistry and Engineering, 2020, 8, 10444-10453. | 3.2 | 16 |
| 17 | Extractive Catalytic Oxidative Denitrogenation of Fuels and Their Promoting Effect for Desulfurization Catalyzed by Vanadium Substituted Heteropolyacids and Molecular Oxygen. Energy & Fuels, 2020, 34, 8099-8109. | 2.5 | 24 |
| 18 | Combining Costâ€Efficient Cellulose and Shortâ€Chain Carboxylic Acid Production: The Polyoxometalate (POM)â€Ionosolv Concept. ChemPlusChem, 2020, 85, 373-386. | 1.3 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Periodic Open Cellular Raneyâ€Copper Catalysts Fabricated via Selective Electron Beam Melting. Advanced Engineering Materials, 2020, 22, 1901524. | 1.6 | 5 |
| 20 | NH<sub>3</sub>-SCR of NO with novel active, supported vanadium-containing Keggin-type heteropolyacid catalysts. Reaction Chemistry and Engineering, 2020, 5, 935-948. | 1.9 | 12 |
| 21 | Ru-Doped Wellsâ€“Dawson Polyoxometalate as Efficient Catalyst for Glycerol Hydrogenolysis to Propanediols. Materials, 2019, 12, 2175. | 1.3 | 15 |
| 22 | Catalytic Low-Temperature Dehydration of Fructose to 5-Hydroxymethylfurfural Using Acidic Deep Eutectic Solvents and Polyoxometalate Catalysts. Frontiers in Chemistry, 2019, 7, 661. | 1.8 | 44 |
| 23 | Shifting the equilibrium of methanol synthesis from CO<sub>2</sub> by in situ absorption using ionic liquid media. Sustainable Energy and Fuels, 2019, 3, 3399-3405. | 2.5 | 18 |
| 24 | Improving the Fractionated Catalytic Oxidation of Lignocellulosic Biomass to Formic Acid and Cellulose by Using Design of Experiments. ACS Sustainable Chemistry and Engineering, 2019, 7, 9754-9762. | 3.2 | 37 |
| 25 | Development of a Structured Reactor System for CO<sub>2</sub> Methanation under Dynamic Operating Conditions. Energy Technology, 2019, 7, 1900047. | 1.8 | 25 |
| 26 | Insights into the redox kinetics of vanadium substituted heteropoly acids through liquid core waveguide membrane microreactor studies. Chemical Engineering Journal, 2019, 369, 443-450. | 6.6 | 19 |
| 27 | Acrylic Acid Synthesis from Lactide in a Continuous Liquid-Phase Process. ACS Sustainable Chemistry and Engineering, 2019, 7, 7140-7147. | 3.2 | 12 |
| 28 | Combining autoclave and LCWM reactor studies to shed light on the kinetics of glucose oxidation catalyzed by doped molybdenum-based heteropoly acids. RSC Advances, 2019, 9, 29347-29356. | 1.7 | 11 |
| 29 | Economic comparison of different electric fuels for energy scenarios in 2035. Applied Energy, 2019, 233-234, 1078-1093. | 5.1 | 50 |
| 30 | Explaining the role of vanadium in homogeneous glucose transformation reactions using NMR and EPR spectroscopy. Applied Catalysis A: General, 2019, 570, 262-270. | 2.2 | 25 |
| 31 | LCA in Process Development: Case Study of the OxFA-Process. Sustainable Production, Life Cycle Engineering and Management, 2019, , 105-113. | 0.2 | 4 |
| 32 | Zwitterionic Hydrobromic Acid Carriers for the Synthesis of 2â€Bromopropionic Acid from Lactide. ChemSusChem, 2018, 11, 1063-1072. | 3.6 | 5 |
| 33 | Biogenic Formic Acid as a Green Hydrogen Carrier. Energy Technology, 2018, 6, 501-509. | 1.8 | 57 |
| 34 | Catalyst Activation and Influence of the Oil Matrix on Extractive Oxidative Desulfurization Using Aqueous Polyoxometalate Solutions and Molecular Oxygen. Energy & Fuels, 2018, 32, 8683-8688. | 2.5 | 28 |
| 35 | Investigations on Catalyst Stability and Product Isolation in the Extractive Oxidative Desulfurization of Fuels Using Polyoxometalates and Molecular Oxygen. ChemCatChem, 2018, 10, 4602-4609. | 1.8 | 23 |
| 36 | Highly Selective Synthesis of Acrylic Acid from Lactide in the Liquid Phase. ChemSusChem, 2018, 11, 2936-2943. | 3.6 | 18 |

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|---|---|---|---|
| 37 | Selective oxidation of lignocellulosic biomass to formic acid and high-grade cellulose using tailor-made polyoxometalate catalysts. Faraday Discussions, 2017, 202, 99-109. | 1.6 | 40 |
| 38 | Extraction Coupled Oxidative Desulfurization of Fuels to Sulfate and Water-Soluble Sulfur Compounds Using Polyoxometalate Catalysts and Molecular Oxygen. ACS Sustainable Chemistry and Engineering, 2017, 5, 4110-4118. | 3.2 | 84 |
| 39 | Selective Catalytic Oxidation of Humins to Lowâ€Chain Carboxylic Acids with Tailorâ€Made Polyoxometalate Catalysts. ChemistrySelect, 2017, 2, 7296-7302. | 0.7 | 17 |
| 40 | Bio-based materials: general discussion. Faraday Discussions, 2017, 202, 121-139. | 1.6 | 3 |
| 41 | Detailed Kinetic Investigations on the Selective Oxidation of Biomass to Formic Acid (OxFA Process) Using Model Substrates and Real Biomass. ACS Sustainable Chemistry and Engineering, 2017, 5, 7383-7392. | 3.2 | 41 |
| 42 | Measuring and Predicting the Extraction Behavior of Biogenic Formic Acid in Biphasic Aqueous/Organic Reaction Mixtures. ACS Omega, 2017, 2, 8982-8989. | 1.6 | 12 |
| 43 | Formic Acid-Based Fischerâ€“Tropsch Synthesis for Green Fuel Production from Wet Waste Biomass and Renewable Excess Energy. ACS Sustainable Chemistry and Engineering, 2016, 4, 5078-5086. | 3.2 | 51 |
| 44 | One-step Synthesizable Lindqvistâ^'isopolyoxometalates as Promising New Catalysts for Selective Conversion of Glucose as a Model Substrate for Lignocellulosic Biomass to Formic Acid. ChemistrySelect, 2016, 1, 2889-2894. | 0.7 | 18 |
| 45 | Expanding the scope of biogenic substrates for the selective production of formic acid from water-insoluble and wet waste biomass. Green Chemistry, 2015, 17, 5164-5171. | 4.6 | 70 |
| 46 | Biomass oxidation to formic acid in aqueous media using polyoxometalate catalysts â€“ boosting FA selectivity by in-situ extraction. Energy and Environmental Science, 2015, 8, 2985-2990. | 15.6 | 131 |
| 47 | Spectroscopic and electrochemical characterization of heteropoly acids for their optimized application in selective biomass oxidation to formic acid. Green Chemistry, 2014, 16, 226-237. | 4.6 | 120 |
| 48 | Selective oxidation of complex, water-insoluble biomass to formic acid using additives as reaction accelerators. Energy and Environmental Science, 2012, 5, 7956. | 15.6 | 163 |