

# Elias Klemm

## List of Publications by Year in descending order

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29  
papers

633  
citations

623734

14  
h-index

580821

25  
g-index

31  
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31  
docs citations

31  
times ranked

729  
citing authors

#	ARTICLE	IF	CITATIONS
1	Producing formic acid at low pH values by electrochemical CO <sub>2</sub> reduction. Journal of CO <sub>2</sub> Utilization, 2022, 56, 101823.	6.8	17
2	Coupling electrochemical CO <sub>2</sub> reduction to microbial product generation – identification of the gaps and opportunities. Current Opinion in Biotechnology, 2022, 74, 154-163.	6.6	28
3	Assembling Metal Organic Layer Composites for High-Performance Electrocatalytic CO <sub>2</sub> Reduction to Formate. Angewandte Chemie, 2022, 134, .	2.0	3
4	Assembling Metal Organic Layer Composites for High-Performance Electrocatalytic CO <sub>2</sub> Reduction to Formate. Angewandte Chemie - International Edition, 2022, 61, .	13.8	25
5	Selective oxidation of ethanol to ethylene oxide with a dual-layer concept. Catalysis Communications, 2022, 167, 106424.	3.3	6
6	Chemper: Technologies for sustainable chemical production with renewable electricity and CO <sub>2</sub> , N <sub>2</sub> , O <sub>2</sub> , and H <sub>2</sub> O. Canadian Journal of Chemical Engineering, 2022, 100, 2736-2761.	1.7	9
7	Electrochemical CO <sub>2</sub> reduction toward multicarbon alcohols - The microscopic world of catalysts & process conditions. IScience, 2022, 25, 104010.	4.1	32
8	Electrochemical CO <sub>2</sub> reduction - The macroscopic world of electrode design, reactor concepts & economic aspects. IScience, 2022, 25, 104011.	4.1	46
9	Identifying Monomeric Fe Species for Efficient Direct Methane Oxidation to C1 Oxygenates with H <sub>2</sub> O <sub>2</sub> over Fe/MOR Catalysts. Methane, 2022, 1, 107-124.	2.2	4
10	Light-Off Support for Mobile DeNO <sub>x</sub> Systems. Chemie-Ingenieur-Technik, 2021, 93, 814-818.	0.8	2
11	Optimizing Reaction Conditions and Gas Diffusion Electrodes Applied in the CO <sub>2</sub> Reduction Reaction to Formate to Reach Current Densities up to 1.8 A cm <sup>-2</sup> . ACS Sustainable Chemistry and Engineering, 2021, 9, 4213-4223.	6.7	33
12	Importance of Time-Dependent Wetting Behavior of Gas-Diffusion Electrodes for Reactivity Determination. Chemie-Ingenieur-Technik, 2021, 93, 1015-1019.	0.8	8
13	Degradation study on tin- and bismuth-based gas-diffusion electrodes during electrochemical CO <sub>2</sub> reduction in highly alkaline media. Journal of Energy Chemistry, 2021, 62, 367-376.	12.9	30
14	Improved ethanol dehydration catalysis by the superior acid properties of Cs-impregnated silicotungstic acid supported on silica. Catalysis Science and Technology, 2021, 11, 3098-3108.	4.1	8
15	Revealing Mechanistic Processes in Gas-Diffusion Electrodes During CO <sub>2</sub> Reduction via Impedance Spectroscopy. ACS Sustainable Chemistry and Engineering, 2020, 8, 13759-13768.	6.7	25
16	Influence of Temperature on the Performance of Gas Diffusion Electrodes in the CO <sub>2</sub> Reduction Reaction. ChemElectroChem, 2019, 6, 4497-4506.	3.4	72
17	Selective oxidation of methane with H <sub>2</sub> O <sub>2</sub> over Fe-silicalite-1: An investigation of the influence of crystal sizes, calcination temperatures and acidities. Applied Catalysis A: General, 2019, 583, 117121.	4.3	5
18	Is the CO <sub>2</sub> methanation on highly loaded Ni-Al <sub>2</sub> O <sub>3</sub> catalysts really structure-sensitive?. Applied Catalysis B: Environmental, 2019, 247, 200-219.	20.2	109

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19	Selective oxidation of o-xylene to phthalic anhydride on tungsten, tin, and potassium promoted VOx on TiO2 monolayer catalysts. <i>Catalysis Today</i> , 2019, 333, 120-126.	4.4	7
20	Experimental approach for identifying hotspots in lab-scale fixed-bed reactors exemplified by the Sabatier reaction. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2018, 125, 157-170.	1.7	5
21	Sensitivity of the selective oxidation of methane over Fe/ZSM-5 zeolites in a micro fixed-bed reactor for the catalyst preparation method. <i>Applied Catalysis A: General</i> , 2018, 566, 96-103.	4.3	9
22	Effect of Potassium on the Physiochemical and Catalytic Characteristics of V2O5/TiO2 Catalysts in o-Xylene Partial Oxidation to Phthalic Anhydride. <i>Catalysis Letters</i> , 2017, 147, 785-791.	2.6	15
23	Selective Oxidation of Methane with Hydrogen Peroxide Towards Formic Acid in a Micro Fixed-Bed Reactor. <i>Chemie-Ingenieur-Technik</i> , 2017, 89, 1759-1765.	0.8	4
24	Transferring Electrochemical CO <sub>2</sub> Reduction from Semi-Batch into Continuous Operation Mode Using Gas Diffusion Electrodes. <i>Chemical Engineering and Technology</i> , 2016, 39, 2042-2050.	1.5	52
25	True Catalytic Behavior of Lactic Acid Dehydration on Zeolite Na-Y in the Gas Phase Measured by Means of a Novel Apparatus Design. <i>Catalysis Letters</i> , 2014, 144, 1144-1150.	2.6	12
26	The Role of Pd <sup>2+</sup> /Pd <sup>0</sup> in Hydrogenation by [Pd(2- <i>py</i> ) <sub>2</sub> ] <sub>2</sub> : An X-ray Absorption and IR Spectroscopic Study. <i>Chemistry - A European Journal</i> , 2012, 18, 15831-15837.	3.3	24
27	Evaporation of hydrogen peroxide with a microstructured falling film. <i>Chemical Engineering and Processing: Process Intensification</i> , 2011, 50, 1010-1016.	3.6	14
28	Role of the Ti(IV)-Superoxide Species in the Selective Oxidation of Alkanes with Hydrogen Peroxide in the Gas Phase on Titanium Silicalite-1: An In Situ EPR Investigation. <i>Catalysis Letters</i> , 2011, 141, 251-258.	2.6	25
29	Rapid Aging as a Key to Understand Deactivation of Ni/Al <sub>2</sub> O <sub>3</sub> Catalysts Applied for the CO <sub>2</sub> Methanation. <i>Catalysis Letters</i> , 0, , 1.	2.6	2