Elias Klemm

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9998992/publications.pdf

Version: 2024-02-01

29	633	623734	580821
papers	citations	14 h-index	25 g-index

31	31	31	729
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Is the CO2 methanation on highly loaded Ni-Al2O3 catalysts really structure-sensitive?. Applied Catalysis B: Environmental, 2019, 247, 200-219.	20.2	109
2	Influence of Temperature on the Performance of Gas Diffusion Electrodes in the CO₂ Reduction Reaction. ChemElectroChem, 2019, 6, 4497-4506.	3.4	72
3	Transferring Electrochemical CO₂ Reduction from Semiâ€Batch into Continuous Operation Mode Using Gas Diffusion Electrodes. Chemical Engineering and Technology, 2016, 39, 2042-2050.	1.5	52
4	Electrochemical CO2 reduction - The macroscopic world of electrode design, reactor concepts & economic aspects. IScience, 2022, 25, 104011.	4.1	46
5	Optimizing Reaction Conditions and Gas Diffusion Electrodes Applied in the CO₂ Reduction Reaction to Formate to Reach Current Densities up to 1.8 A cm^{â€“2}. ACS Sustainable Chemistry and Engineering, 2021, 9, 4213-4223.	6.7	33
6	Electrochemical CO2 reduction toward multicarbon alcohols - The microscopic world of catalysts & process conditions. IScience, 2022, 25, 104010.	4.1	32
7	Degradation study on tin- and bismuth-based gas-diffusion electrodes during electrochemical CO2 reduction in highly alkaline media. Journal of Energy Chemistry, 2021, 62, 367-376.	12.9	30
8	Coupling electrochemical CO2 reduction to microbial product generation â€“ identification of the gaps and opportunities. Current Opinion in Biotechnology, 2022, 74, 154-163.	6.6	28
9	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. Catalysis Letters, 2011, 141, 251-258.	2.6	25
10	Revealing Mechanistic Processes in Gas-Diffusion Electrodes During CO₂ Reduction via Impedance Spectroscopy. ACS Sustainable Chemistry and Engineering, 2020, 8, 13759-13768.	6.7	25
11	Assembling Metal Organic Layer Composites for Highâ€Performance Electrocatalytic CO₂ Reduction to Formate. Angewandte Chemie - International Edition, 2022, 61, .	13.8	25
12	The Role of Pd²⁺/Pd⁰ in Hydrogenation by [Pd(2â€pymo)₂]_n: An Xâ€ray Absorption and IR Spectroscopic Study. Chemistry - A European Journal, 2012, 18, 15831-15837.	3.3	24
13	Producing formic acid at low pH values by electrochemical CO2 reduction. Journal of CO2 Utilization, 2022, 56, 101823.	6.8	17
14	Effect of Potassium on the Physiochemical and Catalytic Characteristics of V2O5/TiO2 Catalysts in o-Xylene Partial Oxidation to Phthalic Anhydride. Catalysis Letters, 2017, 147, 785-791.	2.6	15
15	Evaporation of hydrogen peroxide with a microstructured falling film. Chemical Engineering and Processing: Process Intensification, 2011, 50, 1010-1016.	3.6	14
16	True Catalytic Behavior of Lactic Acid Dehydration on Zeolite Na-Y in the Gas Phase Measured by Means of a Novel Apparatus Design. Catalysis Letters, 2014, 144, 1144-1150.	2.6	12
17	Sensitivity of the selective oxidation of methane over Fe/ZSM-5 zeolites in a micro fixed-bed reactor for the catalyst preparation method. Applied Catalysis A: General, 2018, 566, 96-103.	4.3	9
18	<scp>CHEMampere</scp>: Technologies for sustainable chemical production with renewable electricity and <scp>CO₂</scp>, <scp>N₂</scp>, <scp>O₂</scp>, and <scp>H₂O</scp>. Canadian Journal of Chemical Engineering, 2022, 100, 2736-2761.	1.7	9

#	Article	IF	Citations
19	Importance of Timeâ€Dependent Wetting Behavior of Gasâ€Diffusion Electrodes for Reactivity Determination. Chemie-Ingenieur-Technik, 2021, 93, 1015-1019.	0.8	8
20	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
21	Selective oxidation of o-xylene to phthalic anhydride on tungsten, tin, and potassium promoted VOx on TiO2 monolayer catalysts. Catalysis Today, 2019, 333, 120-126.	4.4	7
22	Selective oxidation of ethanol to ethylene oxide with a dual-layer concept. Catalysis Communications, 2022, 167, 106424.	3.3	6
23	Experimental approach for identifying hotspots in lab-scale fixed-bed reactors exemplified by the Sabatier reaction. Reaction Kinetics, Mechanisms and Catalysis, 2018, 125, 157-170.	1.7	5
24	Selective oxidation of methane with H2O2 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
25	Selective Oxidation of Methane with Hydrogen Peroxide Towards Formic Acid in a Micro Fixedâ€BedÂReactor. Chemie-Ingenieur-Technik, 2017, 89, 1759-1765.	0.8	4
26	Identifying Monomeric Fe Species for Efficient Direct Methane Oxidation to C1 Oxygenates with H2O2 over Fe/MOR Catalysts. Methane, 2022, 1, 107-124.	2.2	4
27	Assembling Metal Organic Layer Composites for Highâ€Performance Electrocatalytic CO₂ Reduction to Formate. Angewandte Chemie, 2022, 134, .	2.0	3
28	Lightâ€Off Support for Mobile DeNO x Systems. Chemie-Ingenieur-Technik, 2021, 93, 814-818.	0.8	2
29	Rapid Aging as a Key to Understand Deactivation of Ni/Al2O3 Catalysts Applied for the CO2 Methanation. Catalysis Letters, 0, , 1.	2.6	2