

Elias Frei

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8887609/publications.pdf>

Version: 2024-02-01

29
papers

1,519
citations

471509

17
h-index

454955

30
g-index

32
all docs

32
docs citations

32
times ranked

2267
citing authors

#	ARTICLE	IF	CITATIONS
1	The Mechanism of CO and CO ₂ Hydrogenation to Methanol over Cu-Based Catalysts. ChemCatChem, 2015, 7, 1105-1111.	3.7	424
2	Ni Single Atom Catalysts for CO ₂ Activation. Journal of the American Chemical Society, 2019, 141, 2451-2461.	13.7	291
3	Reverse water-gas shift reaction at the Cu/ZnO interface: Influence of the Cu/Zn ratio on structure-activity correlations. Applied Catalysis B: Environmental, 2016, 195, 104-111.	20.2	113
4	Bridging the Time Gap: A Copper/Zinc Oxide/Aluminum Oxide Catalyst for Methanol Synthesis Studied under Industrially Relevant Conditions and Time Scales. Angewandte Chemie - International Edition, 2016, 55, 12708-12712.	13.8	109
5	IR-Spectroscopic Study on the Interface of Cu-Based Methanol Synthesis Catalysts: Evidence for the Formation of a ZnO Overlay. Topics in Catalysis, 2017, 60, 1735-1743.	2.8	89
6	The Influence of the Precipitation/Ageing Temperature on a Cu/ZnO/ZrO ₂ Catalyst for Methanol Synthesis from H ₂ and CO ₂ . ChemCatChem, 2014, 6, 1721-1730.	3.7	54
7	Supported Ag Nanoparticles and Clusters for CO Oxidation: Size Effects and Influence of the Silver-Oxygen Interactions. ACS Applied Nano Materials, 2019, 2, 2909-2920.	5.0	40
8	Highly Dispersed Ni ⁰ /Ni _x Mg _{1-x} O Catalysts Derived from Solid Solutions: How Metal and Support Control the CO ₂ Hydrogenation. ACS Catalysis, 2019, 9, 8534-8546.	11.2	39
9	Activating a Cu/ZnO-Al Catalyst " Much More than Reduction: Decomposition, Self-Doping and Polymorphism. ChemCatChem, 2019, 11, 1587-1592.	3.7	39
10	Cu~Zn Alloy Formation as Unfavored State for Efficient Methanol Catalysts. ChemCatChem, 2020, 12, 4029-4033.	3.7	39
11	Evolution of zincian malachite synthesis by low temperature co-precipitation and its catalytic impact on the methanol synthesis. Applied Catalysis B: Environmental, 2019, 249, 218-226.	20.2	38
12	Bridging the Time Gap: A Copper/Zinc Oxide/Aluminum Oxide Catalyst for Methanol Synthesis Studied under Industrially Relevant Conditions and Time Scales. Angewandte Chemie, 2016, 128, 12900-12904.	2.0	36
13	In Situ Quantification of Reaction Adsorbates in Low-Temperature Methanol Synthesis on a High-Performance Cu/ZnO:Al Catalyst. ACS Catalysis, 2019, 9, 5537-5544.	11.2	32
14	Electrochemical Surface Oxidation of Copper Studied by in Situ Grazing Incidence X-ray Diffraction. Journal of Physical Chemistry C, 2019, 123, 13253-13262.	3.1	32
15	The Electro-Deposition/Dissolution of CuSO ₄ Aqueous Electrolyte Investigated by In Situ Soft X-ray Absorption Spectroscopy. Journal of Physical Chemistry B, 2018, 122, 780-787.	2.6	26
16	The Mechanism of Interfacial CO ₂ Activation on Al Doped Cu/ZnO. ACS Catalysis, 2020, 10, 5672-5680.	11.2	21
17	In-Situ Formation of Fe Nanoparticles from FeOOH Nanosheets on Î ³ -Al ₂ O ₃ as Efficient Catalysts for Ammonia Synthesis. ACS Sustainable Chemistry and Engineering, 2017, 5, 10900-10909.	6.7	20
18	Oxidative Fluorination of Cu/ZnO Methanol Catalysts. Angewandte Chemie - International Edition, 2019, 58, 12935-12939.	13.8	13

#	ARTICLE	IF	CITATIONS
19	F-doping of nanostructured ZnO: a way to modify structural, electronic, and surface properties. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 11273-11285.	2.8	10
20	Engineered High Aspect Ratio Vertical Nanotubes as a Model System for the Investigation of Catalytic Methanol Synthesis Over Cu/ZnO. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 1576-1582.	8.0	9
21	Nanocatalysts Unravel the Selective State of Ag. <i>ChemCatChem</i> , 2020, 12, 2977-2988.	3.7	9
22	Surface titration of supported Ni catalysts by O ₂ -pulse thermal analysis. <i>Applied Catalysis A: General</i> , 2018, 566, 155-163.	4.3	8
23	Synthesis and Characterization of Ag ⁺ -Delafoxites Ag ₂ O (<i>B</i>: Al, Ga, In) from a Rapid Hydrothermal Process. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 2333-2345.	2.0	7
24	Investigations of Cu/Zn Oxalates from Aqueous Solution: Single-Phase Precursors and Beyond. <i>Chemistry - A European Journal</i> , 2018, 24, 15080-15088.	3.3	5
25	Transition from 2D to 3D SBA-15 by High-Temperature Fluoride Addition and its Impact on the Surface Reactivity Probed by Isopropanol Conversion. <i>Chemistry - A European Journal</i> , 2020, 26, 11571-11583.	3.3	5
26	Oxidative Fluorination of Cu/ZnO Methanol Catalysts. <i>Angewandte Chemie</i> , 2019, 131, 13069-13073.	2.0	4
27	Ultrathin 2D Fe-Nanosheets Stabilized by 2D Mesoporous Silica: Synthesis and Application in Ammonia Synthesis. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 30187-30197.	8.0	3
28	Oxygen diffusion in Cu-based catalysts: A probe for metal support interactions. <i>Applied Catalysis A: General</i> , 2020, 594, 117460.	4.3	2
29	Synthesis and Characterization of Ag ⁺ -Delafoxites Ag ₂ O (<i>B</i>: Al, Ga, In) from a Rapid Hydrothermal Process. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 2319-2319.	2.0	1