A Jeremy Kropf

List of Publications by Year
in descending order

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Version: 2024-02-01

50 papers	3,673 citations	304743 22 h-index	214800 47 g-index
51 all docs	51 docs citations	51 times ranked	4458 citing authors

#	Article	IF	Citations
1	Highly active atomically dispersed CoN₄ fuel cell cathode catalysts derived from surfactant-assisted MOFs: carbon-shell confinement strategy. Energy and Environmental Science, 2019, 12, 250-260.	30.8	691
2	Performance enhancement and degradation mechanism identification of a single-atom Coâ€“Nâ€“C catalyst for proton exchange membrane fuel cells. Nature Catalysis, 2020, 3, 1044-1054.	34.4	443
3	A stable low-temperature H2-production catalyst by crowding Pt on Î±-MoC. Nature, 2021, 589, 396-401.	27.8	290
4	Atomically dispersed iron sites with a nitrogenâ€“carbon coating as highly active and durable oxygen reduction catalysts for fuel cells. Nature Energy, 2022, 7, 652-663.	39.5	258
5	Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. Nature Communications, 2014, 5, 5693.	12.8	255
6	Evolution Pathway from Iron Compounds to Fe₁(II)â€“N₄ Sites through Gas-Phase Iron during Pyrolysis. Journal of the American Chemical Society, 2020, 142, 1417-1423.	13.7	185
7	Zinc Promotion of Platinum for Catalytic Light Alkane Dehydrogenation: Insights into Geometric and Electronic Effects. ACS Catalysis, 2017, 7, 4173-4181.	11.2	168
8	Atomically dispersed single iron sites for promoting Pt and Pt₃Co fuel cell catalysts: performance and durability improvements. Energy and Environmental Science, 2021, 14, 4948-4960.	30.8	168
9	Single-Atom Alloy Pdâ€“Ag Catalyst for Selective Hydrogenation of Acrolein. Journal of Physical Chemistry C, 2015, 119, 18140-18148.	3.1	150
10	Fischerâˆ’Tropsch Synthesis: An In-Situ TPR-EXAFS/XANES Investigation of the Influence of Group I Alkali Promoters on the Local Atomic and Electronic Structure of Carburized Iron/Silica Catalysts. Journal of Physical Chemistry C, 2010, 114, 7895-7903.	3.1	138
11	Stability of iron species in heat-treated polyanilineâ€“ironâ€“carbon polymer electrolyte fuel cell cathode catalysts. Electrochimica Acta, 2013, 110, 282-291.	5.2	138
12	Dynamically Unveiling Metalâ€“Nitrogen Coordination during Thermal Activation to Design Highâ€Efficient Atomically Dispersed CoN₄ Active Sites. Angewandte Chemie - International Edition, 2021, 60, 9516-9526.	13.8	119
13	Atomically Precise Strategy to a PtZn Alloy Nanocluster Catalyst for the Deep Dehydrogenation of n-Butane to 1,3-Butadiene. ACS Catalysis, 2018, 8, 10058-10063.	11.2	67
14	Fischerâˆ’Tropsch Synthesis: Influence of Mn on the Carburization Rates and Activities of Fe-Based Catalysts by TPR-EXAFS/XANES and Catalyst Testing. Journal of Physical Chemistry C, 2011, 115, 4783-4792.	3.1	56
15	Intermetallic Compounds as an Alternative to Singleâ€atom Alloy Catalysts: Geometric and Electronic Structures from Advanced Xâ€ray Spectroscopies and Computational Studies. ChemCatChem, 2020, 12, 1325-1333.	3.7	50
16	Promotion of Pd nanoparticles by Fe and formation of a Pd3Fe intermetallic alloy for propane dehydrogenation. Catalysis Today, 2019, 323, 123-128.	4.4	42
17	Origin of Electronic Modification of Platinum in a Pt₃V Alloy and Its Consequences for Propane Dehydrogenation Catalysis. ACS Applied Energy Materials, 2020, 3, 1410-1422.	5.1	41
18	Insight into the Catalytic Mechanism of Bimetallic Platinumâ€“Copper Coreâ€“Shell Nanostructures for Nonaqueous Oxygen Evolution Reactions. Nano Letters, 2016, 16, 781-785.	9.1	39

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19	Evidence for Redox Mechanisms in Organometallic Chemisorption and Reactivity on Sulfated Metal Oxides. Journal of the American Chemical Society, 2018, 140, 6308-6316.	13.7	34
20	Surface Organometallic Chemistry of Supported Iridium(III) as a Probe for Organotransition Metalâ€“Support Interactions in Câ€“H Activation. ACS Catalysis, 2018, 8, 5363-5373.	11.2	29
21	In situ intermediate-energy X-ray catalysis research at the advanced photon source beamline 9-BM. Catalysis Today, 2013, 205, 141-147.	4.4	27
22	Effect of sodium loading on Pt/ZrO2 during ethanol steam reforming. Applied Catalysis A: General, 2021, 610, 117947.	4.3	27
23	Water-gas shift: Characterization and testing of nanoscale YSZ supported Pt catalysts. Applied Catalysis A: General, 2015, 497, 184-197.	4.3	21
24	Dynamically Unveiling Metalâ€“Nitrogen Coordination during Thermal Activation to Design Highâ€Efficient Atomically Dispersed CoN₄ Active Sites. Angewandte Chemie, 2021, 133, 9602-9612.	2.0	21
25	The effect of strong metalâ€“support interaction (SMSI) on Ptâ€“Ti/SiO2 and Ptâ€“Nb/SiO2 catalysts for propane dehydrogenation. Catalysis Science and Technology, 2020, 10, 5973-5982.	4.1	19
26	Low-Temperature Waterâ€“Gas Shift: Doping Ceria Improves Reducibility and Mobility of O-Bound Species and Catalyst Activity. Catalysis Letters, 2011, 141, 1723-1731.	2.6	15
27	Low temperature water-gas shift: Optimization of K loading on Pt/m-ZrO2 for enhancing CO conversion. Applied Catalysis A: General, 2020, 598, 117572.	4.3	15
28	Structural and Catalytic Properties of Isolated Pt²⁺ Sites in Platinum Phosphide (PtP₂). ACS Catalysis, 2021, 11, 13496-13509.	11.2	15
29	Selective Butene Formation in Direct Ethanol-to-C₃₊-Olefin Valorization over Znâ€“Y/Beta and Single-Atom Alloy Composite Catalysts Using In Situ-Generated Hydrogen. ACS Catalysis, 2021, 11, 7193-7209.	11.2	13
30	Design and synthesis of model and practical palladium catalysts using atomic layer deposition. Catalysis Science and Technology, 2016, 6, 6845-6852.	4.1	11
31	Revealing the Configuration and Conformation of Surface Organometallic Catalysts with DNP-Enhanced NMR. Journal of Physical Chemistry C, 2021, 125, 13433-13442.	3.1	11
32	Single Atomic Iron Site Catalysts via Benign Aqueous Synthesis for Durability Improvement in Proton Exchange Membrane Fuel Cells. Journal of the Electrochemical Society, 2021, 168, 044501.	2.9	10
33	CO2 hydrogenation: Selectivity control of CO versus CH4 achieved using Na doping over Ru/m-ZrO2 at low pressure. Applied Catalysis B: Environmental, 2022, 315, 121533.	20.2	9
34	Activation of Low-Valent, Multiply Mâ€“M Bonded Group VI Dimers toward Catalytic Olefin Metathesis via Surface Organometallic Chemistry. Organometallics, 2020, 39, 1035-1045.	2.3	8
35	Low Temperature Water-Gas Shift: Enhancing Stability through Optimizing Rb Loading on Pt/ZrO2. Catalysts, 2021, 11, 210.	3.5	8
36	Low temperature ethanol steam reforming: Selectivity control with lithium doping of Pt/m-ZrO2. Catalysis Today, 2022, 402, 335-349.	4.4	8

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37	Synergetic effect on catalytic activity and charge transfer in Pt-Pd bimetallic model catalysts prepared by atomic layer deposition. Journal of Chemical Physics, 2020, 152, 024710.	3.0	7
38	Influence of Cs Loading on Pt/m-ZrO2 Waterâ€“Gas Shift Catalysts. Catalysts, 2021, 11, 570.	3.5	7
39	Integrated Experimental and Computational K-Edge X-ray Absorption Near-Edge Structure Analysis of Vanadium Catalysts. Journal of Physical Chemistry C, 2022, 126, 11949-11962.	3.1	7
40	Aromatic Câ€“H bond cleavage by using a Cu(i) ate-complex. Organic Chemistry Frontiers, 2016, 3, 975-978.	4.5	6
41	Promoting the Selectivity of Pt/m-ZrO2 Ethanol Steam Reforming Catalysts with K and Rb Dopants. Nanomaterials, 2021, 11, 2233.	4.1	6
42	Influence of Cs Promoter on Ethanol Steam-Reforming Selectivity of Pt/m-ZrO2 Catalysts at Low Temperature. Catalysts, 2021, 11, 1104.	3.5	6
43	Lithium promotion of Pt/m-ZrO2 catalysts for low temperature water-gas shift. International Journal of Hydrogen Energy, 2022, 47, 30872-30895.	7.1	6
44	Lithium-Ion Battery Materials as Tunable, â€œRedox Non-Innocentâ€•Catalyst Supports. ACS Catalysis, 0, , 7233-7242.	11.2	6
45	In situ S/TEM Reactions of Ag/ZrO₂/SBA-16 Catalysts for Single-Step Conversion of Ethanol to Butadiene. Microscopy and Microanalysis, 2019, 25, 1460-1461.	0.4	4
46	Phosphorusâ€Atom Transfer from Phosphaethynolate to an Alkylidyne. Angewandte Chemie - International Edition, 2021, 60, 24411-24417.	13.8	4
47	In Situ S/TEM Reduction Reaction of Ni-Mo2C Catalyst for Biomass Conversion. Microscopy and Microanalysis, 2018, 24, 322-323.	0.4	1
48	Pâ€Atom Transfer from Phosphaethynolate to an Alkylidyne.. Angewandte Chemie, 0, , .	2.0	1
49	Chemical Effects at the Reaction Front in Corroding Spent Nuclear Fuel. Materials Research Society Symposia Proceedings, 2006, 985, 1.	0.1	0
50	(Invited) In Situ and Operando Synchrotron X-Ray Spectroscopy and Scattering Characterization of PEFC Cathode Catalysts. ECS Meeting Abstracts, 2021, MA2021-01, 1962-1962.	0.0	0