

Thomas F Jaramillo

List of Publications by Year in descending order

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366
papers

88,731
citations

2137

100
h-index

296

292
g-index

389
all docs

389
docs citations

389
times ranked

59169
citing authors

#	ARTICLE	IF	CITATIONS
1	Calcium-mediated nitrogen reduction for electrochemical ammonia synthesis. <i>Nature Materials</i> , 2024, 23, 101-107.	26.6	33
2	Modeling diurnal and annual ethylene generation from solar-driven electrochemical CO ₂ reduction devices. <i>Energy and Environmental Science</i> , 2024, 17, 2453-2467.	32.2	1
3	Interpretable Machine Learning Models for Practical Antimonate Electrocatalyst Performance. <i>ChemPhysChem</i> , 2024, 25, .	2.3	0
4	Bias-free solar NH ₃ production by perovskite-based photocathode coupled to valorization of glycerol. <i>Nature Catalysis</i> , 2024, 7, 510-521.	28.3	4
5	Operando investigations of the solid electrolyte interphase in the lithium mediated nitrogen reduction reaction. <i>Energy and Environmental Science</i> , 2024, 17, 3482-3492.	32.2	1
6	Biogenic Manganese Oxide Synthesized by a Marine Bacterial Multicopper Oxidase MnxG Reveals Oxygen Evolution Activity. <i>ACS Catalysis</i> , 2024, 14, 7232-7242.	11.7	0
7	Tuning Two-Dimensional Phthalocyanine Dual Site Metal-Organic Framework Catalysts for the Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2024, 146, 13377-13390.	14.6	0
8	Alkali cation-induced cathodic corrosion in Cu electrocatalysts. <i>Nature Communications</i> , 2024, 15, .	13.2	1
9	Understanding the Effects of Anode Catalyst Conductivity and Loading on Catalyst Layer Utilization and Performance for Anion Exchange Membrane Water Electrolysis. <i>ACS Catalysis</i> , 2024, 14, 10806-10819.	11.7	0
10	Operando X-Ray Absorption Spectroscopy Characterization of Ir Catalyst Dynamics in a Realistic Proton Exchange Membrane Water Electrolyzer. <i>ECS Meeting Abstracts</i> , 2024, MA2024-01, 2599-2599.	0.0	0
11	Understanding Interfaces Using Neutron Reflectometry in Calcium-Mediated Nitrogen Reduction for Electrochemical Ammonia Synthesis. <i>ECS Meeting Abstracts</i> , 2024, MA2024-01, 2452-2452.	0.0	0
12	On-Site Electrochemical Oxygen Reduction to Hydroxide and Hydrogen Peroxide for Sulfuryl Fluoride Solution Hydrolysis. <i>ECS Meeting Abstracts</i> , 2024, MA2024-01, 3122-3122.	0.0	0
13	(Invited) Solar Fuels Systems: Interfacing Catalysts and Semiconductors for H ₂ Production, CO ₂ Reduction, and Related Chemistries. <i>ECS Meeting Abstracts</i> , 2024, MA2024-01, 1928-1928.	0.0	0
14	A Tandem Photovoltaic-Electrochemical Photothermal Process for CO ₂ Conversion to Butene. <i>ECS Meeting Abstracts</i> , 2024, MA2024-01, 2866-2866.	0.0	0
15	Developing Methods to Interrogate Nanomaterials in Action for Electrochemical Energy Conversion Reactions. <i>ECS Meeting Abstracts</i> , 2024, MA2024-01, 1173-1173.	0.0	0
16	Insights into the Activity and Stability of Dual-Site Single Atom Catalysts for Oxygen Reduction Reaction Using a 2D Phthalocyanine-MOF. <i>ECS Meeting Abstracts</i> , 2024, MA2024-01, 1125-1125.	0.0	0
17	Modeling Bicarbonate Kinetics on Silver Catalysts for CO ₂ Electrolysis. <i>ECS Meeting Abstracts</i> , 2024, MA2024-01, 2173-2173.	0.0	0
18	Efficient Exploration of Electrochemical Pre-Treatment on the Performance of Nanocrystal Electrocatalysts By Design of Experiments. <i>ECS Meeting Abstracts</i> , 2024, MA2024-01, 2635-2635.	0.0	0

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19	Modeling Diurnal and Annual Ethylene Generation from Solar-Driven Electrochemical CO ₂ Reduction Devices. ECS Meeting Abstracts, 2024, MA2024-01, 2005-2005.	0.0	0
20	Material Dynamics of Nickel (oxy)Hydroxide As an Alcohol Oxidation Electrocatalyst. ECS Meeting Abstracts, 2024, MA2024-01, 2973-2973.	0.0	0
21	Effect of Temperature on Faradaic Efficiency and SEI Formation in Lithium Mediated Nitrogen Reduction. ECS Meeting Abstracts, 2024, MA2024-01, 2860-2860.	0.0	0
22	Investigating the pH-Dependent Activity, Selectivity, and Dynamics of Metal Nitride Electrocatalysts for Fuel Cells and Electrolyzers. ECS Meeting Abstracts, 2024, MA2024-01, 2025-2025.	0.0	0
23	Integrated Experiment-Theory Framework for Studying Mass Transport Effects in Electrochemical CO ₂ Reduction on Copper. ECS Meeting Abstracts, 2024, MA2024-01, 2150-2150.	0.0	0
24	Fabrication of Bipolar Membrane Electrolyzers for Seawater Electrolysis: Proof-of-Concept, Operando Design, and Fundamental Studies. ECS Meeting Abstracts, 2024, MA2024-01, 2843-2843.	0.0	0
25	Developing Online ICP-MS Methodology for Examining Catalyst Degradation Dynamics during Electrochemical CO ₂ Reduction. ECS Meeting Abstracts, 2024, MA2024-01, 1216-1216.	0.0	0
26	Composition-Dependent Dynamics of Nickel-Iron-Cobalt Metal Catalysts for Oxygen Evolution Reaction. ECS Meeting Abstracts, 2024, MA2024-01, 2031-2031.	0.0	0
27	Temperature Dependence of SEI Formation and Faradaic Efficiency in Electrochemical Lithium Mediated Nitrogen Reduction to Ammonia. ECS Meeting Abstracts, 2024, MA2024-01, 772-772.	0.0	0
28	Material Changes of Bimetallic Ag-Cr, Fe, Co, Ni, Cu, Sn Electrocatalysts during Alkaline Oxygen Reduction in Fundamental Versus Alkaline Membrane Exchange Fuel Cell Conditions. ECS Meeting Abstracts, 2024, MA2024-01, 3081-3081.	0.0	0
29	Investigating Cobalt Degradation in Acidic Environments for Oxygen and Hydrogen Electrocatalysis with Time-Resolved Mass Spectrometry Techniques. ECS Meeting Abstracts, 2024, MA2024-01, 1245-1245.	0.0	0
30	Experience of Adapting the Premises in Special Economic Zone for Use as Innovative Biotechnology Facility. Lecture Notes in Civil Engineering, 2023, , 277-282.	0.0	0
31	A Versatile Li _{0.5} FePO ₄ Reference Electrode for Nonaqueous Electrochemical Conversion Technologies. ACS Energy Letters, 2023, 8, 230-235.	18.4	10
32	Insights into Active Sites and Mechanisms of Benzyl Alcohol Oxidation on Nickel-Iron Oxyhydroxide Electrodes. ACS Catalysis, 2023, 13, 4272-4282.	11.7	8
33	Co-designing Electrocatalytic Systems with Separations To Improve the Sustainability of Reactive Nitrogen Management. ACS Catalysis, 2023, 13, 6268-6279.	11.7	9
34	Electrochemical Flow Reactor Design Allows Tunable Mass Transport Conditions for Operando Surface Enhanced Infrared Absorption Spectroscopy. ChemCatChem, 2023, 15, .	3.8	5
35	Combined, time-resolved, in situ neutron reflectometry and X-ray diffraction analysis of dynamic SEI formation during electrochemical N ₂ reduction. Energy and Environmental Science, 2023, 16, 3391-3406.	32.2	12
36	Mechanistic Insights into Aldehyde Production from Electrochemical CO ₂ Reduction on CuAg Alloy via Operando X-ray Measurements. ACS Catalysis, 2023, 13, 9379-9391.	11.7	12

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37	Development of a versatile electrochemical cell for <i>in situ</i> grazing-incidence X-ray diffraction during non-aqueous electrochemical nitrogen reduction. <i>Journal of Synchrotron Radiation</i> , 2023, 30, 917-922.	2.4	1
38	Quantifying Influence of the Solid-Electrolyte Interphase in Ammonia Electrosynthesis. <i>ACS Energy Letters</i> , 2023, 8, 4024-4032.	18.4	7
39	(Invited) Photoelectrochemical CO ₂ Reduction (CO ₂ R) with Si- and III-V Based Systems. <i>ECS Meeting Abstracts</i> , 2023, MA2023-01, 2159-2159.	0.0	0
40	Electrocatalytic Nitrate Reduction to Ammonia at Atomically Dispersed Titanium Sites on Carbon Nanoflowers. <i>ECS Meeting Abstracts</i> , 2023, MA2023-01, 2299-2299.	0.0	0
41	(Invited) Catalysts and Interfaces for Low-Temperature Water Electrolysis. <i>ECS Meeting Abstracts</i> , 2023, MA2023-01, 2021-2021.	0.0	0
42	High-performance ionomerless cathode anion-exchange membrane fuel cells with ultra-low-loading Ag ⁺ Pd alloy electrocatalysts. <i>Nature Energy</i> , 2023, 8, 1262-1272.	29.7	10
43	Controlling Mass Transport in Direct Carbon Dioxide Zero-Gap Electrolyzers via Cell Compression. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 16661-16668.	6.9	3
44	Determining the Composition and Structure of a High-Performing SEI Layer for Lithium-Mediated Nitrogen Reduction to Ammonia. <i>ECS Meeting Abstracts</i> , 2023, MA2023-02, 2902-2902.	0.0	0
45	Investigating Solid Electrolyte Interphase Layer Dynamics in the Electrochemical Li-Mediated Ammonia Synthesis. <i>ECS Meeting Abstracts</i> , 2023, MA2023-02, 2712-2712.	0.0	0
46	(Invited) Developing Catalysts and Interfaces for Hydrogen Production By Water Electrolysis and Solar Photoelectrochemistry. <i>ECS Meeting Abstracts</i> , 2023, MA2023-02, 2422-2422.	0.0	0
47	Mechanisms of Stabilization and Degradation of Transition Metal Oxygen Electroreduction Catalysts with in-Situ Electrochemical Flow Cell ICP-MS. <i>ECS Meeting Abstracts</i> , 2023, MA2023-02, 2682-2682.	0.0	0
48	Hydrogen Production with Seawater-Resilient Bipolar-Membrane Electrolyzers. <i>ECS Meeting Abstracts</i> , 2023, MA2023-02, 1908-1908.	0.0	0
49	(Invited) Enhanced Material Durability of Transition Metal-Antimony X-Ide Nanoparticles in Oxygen Reduction Electrocatalysis. <i>ECS Meeting Abstracts</i> , 2023, MA2023-02, 2427-2427.	0.0	0
50	Improving intrinsic oxygen reduction activity and stability: Atomic layer deposition preparation of platinum-titanium alloy catalysts. <i>Applied Catalysis B: Environmental</i> , 2022, 300, 120741.	20.7	16
51	Designing a Zn ⁺ Ag Catalyst Matrix and Electrolyzer System for CO ₂ Conversion to CO and Beyond. <i>Advanced Materials</i> , 2022, 34, e2103963.	24.3	49
52	Evaluating the Case for Reduced Precious Metal Catalysts in Proton Exchange Membrane Electrolyzers. <i>ACS Energy Letters</i> , 2022, 7, 17-23.	18.4	66
53	Engineering Surface Architectures for Improved Durability in III ⁺ V Photocathodes. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 20385-20392.	8.3	7
54	Demonstration of photoreactor platform for on-sun unassisted photoelectrochemical hydrogen generation with tandem III ⁺ V photoelectrodes. <i>Chem Catalysis</i> , 2022, 2, 195-209.	6.4	15

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55	Characterization of a Dynamic $\text{Y}_{2}\text{Ir}_{2}\text{O}_{7}$ Catalyst during the Oxygen Evolution Reaction in Acid. <i>Journal of Physical Chemistry C</i> , 2022, 126, 1751-1760.	3.3	17
56	Assessment of ammonia sensors and photoacoustic measurement systems using a gas calibration unit. <i>Computers and Electronics in Agriculture</i> , 2022, 194, 106744.	7.9	4
57	Engineering metal-metal oxide surfaces for high-performance oxygen reduction on Ag-Mn electrocatalysts. <i>Energy and Environmental Science</i> , 2022, 15, 1611-1629.	32.2	25
58	Acid anion electrolyte effects on platinum for oxygen and hydrogen electrocatalysis. <i>Communications Chemistry</i> , 2022, 5, .	4.9	62
59	Gas diffusion electrodes, reactor designs and key metrics of low-temperature CO_2 electrolyzers. <i>Nature Energy</i> , 2022, 7, 130-143.	29.7	316
60	In Situ Studies of the Formation of MoP Catalysts and Their Structure under Reaction Conditions for Higher Alcohol Synthesis: The Role of Promoters and Mesoporous Supports. <i>Journal of Physical Chemistry C</i> , 2022, 126, 5575-5583.	3.3	3
61	Using pH Dependence to Understand Mechanisms in Electrochemical CO Reduction. <i>ACS Catalysis</i> , 2022, 12, 4344-4357.	11.7	70
62	First-Row Transition Metal Antimonates for the Oxygen Reduction Reaction. <i>ACS Nano</i> , 2022, 16, 6334-6348.	15.3	28
63	Lithium-Mediated Electrochemical Nitrogen Reduction: Tracking Electrode-Electrolyte Interfaces via Time-Resolved Neutron Reflectometry. <i>ACS Energy Letters</i> , 2022, 7, 1939-1946.	18.4	27
64	Vapor-Phase Electrolyzers for Carbon Dioxide Reduction Using Tandem Electrocatalysts: Cuprous Oxide Coupled with Nickel-Coordinated Nitrogen-Doped Carbon. <i>Advanced Functional Materials</i> , 2022, 32, .	16.5	24
65	Enhancing the connection between computation and experiments in electrocatalysis. <i>Nature Catalysis</i> , 2022, 5, 374-381.	28.3	62
66	Methods-A Practical Approach to the Reversible Hydrogen Electrode Scale. <i>Journal of the Electrochemical Society</i> , 2022, 169, 066505.	2.9	14
67	New challenges in oxygen reduction catalysis: a consortium retrospective to inform future research. <i>Energy and Environmental Science</i> , 2022, 15, 3775-3794.	32.2	24
68	Incorporating ALD Based Pt Alloy Catalysts into Gas Diffusion Electrodes for Proton Exchange Membrane Fuel Cells. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 1423-1423.	0.0	0
69	Alloyed Pt-Zn Oxygen Reduction Catalysts for Proton Exchange Membrane Fuel Cells. <i>ACS Applied Energy Materials</i> , 2022, 5, 8282-8291.	5.3	6
70	Evaluating Bipolar Membrane Electrolyzers for Green Hydrogen Production from Impure Water Sources. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2461-2461.	0.0	0
71	Acid Anion Electrolyte Effects on Platinum for Oxygen and Hydrogen Electrocatalysis. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2056-2056.	0.0	0
72	Strategies for Modulating the Catalytic Activity and Selectivity of Manganese Antimonates for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2022, 12, 10826-10840.	11.7	10

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73	Bridging knowledge gaps in liquid- and vapor-fed CO ₂ electrolysis through active electrode area. Chem Catalysis, 2022, 2, 3239-3253.	6.4	8
74	Investigation of the Structure of Atomically Dispersed NiN _x Sites in Ni and N-Doped Carbon Electrocatalysts by ⁶¹ Ni Mössbauer Spectroscopy and Simulations. Journal of the American Chemical Society, 2022, 144, 21741-21750.	14.6	8
75	Developing First Row Transition Metal Antimonate Oxynitride and Oxysulfide Nanoparticles As Oxygen Reduction Electrocatalysts. ECS Meeting Abstracts, 2022, MA2022-02, 1725-1725.	0.0	0
76	Durability Assessment of Transition Metal Oxygen Electroreduction Catalysts with on-Line Flow Cell Trace Elemental Analysis. ECS Meeting Abstracts, 2022, MA2022-02, 1603-1603.	0.0	0
77	Using 2D-Phthalocyanine Metal Organic Framework-Based Catalysts for Oxygen Reduction Reaction in Alkaline Media. ECS Meeting Abstracts, 2022, MA2022-02, 1618-1618.	0.0	0
78	Understanding the Stability of Manganese Chromium Antimonate Electrocatalysts through Multimodal In Situ and Operando Measurements. Journal of the American Chemical Society, 2022, 144, 22549-22561.	14.6	13
79	CO as a Probe Molecule to Study Surface Adsorbates during Electrochemical Oxidation of Propene. ChemElectroChem, 2021, 8, 250-256.	3.5	11
80	Tungsten oxide-coated copper gallium selenide sustains long-term solar hydrogen evolution. Sustainable Energy and Fuels, 2021, 5, 384-390.	4.8	9
81	Cobalt porphyrin intercalation into zirconium phosphate layers for electrochemical water oxidation. Sustainable Energy and Fuels, 2021, 5, 430-437.	4.8	14
82	High-Efficiency FRET Processes in BODIPY-Functionalized Quantum Dot Architectures. Chemistry - A European Journal, 2021, 27, 2371-2380.	3.9	19
83	Advanced manufacturing for electrosynthesis of fuels and chemicals from CO ₂ . Energy and Environmental Science, 2021, 14, 3064-3074.	32.2	62
84	A refraction correction for buried interfaces applied to <i>in situ</i> grazing-incidence X-ray diffraction studies on Pd electrodes. Journal of Synchrotron Radiation, 2021, 28, 919-923.	2.4	6
85	Isolating the Electrocatalytic Activity of a Confined NiFe Motif within Zirconium Phosphate. Advanced Energy Materials, 2021, 11, 2003545.	22.2	24
86	Earth-Abundant Electrocatalysts for the Oxygen Evolution Reaction of Water Splitting Using Nanostructured Layered Inorganic Materials. ECS Meeting Abstracts, 2021, MA2021-01, 1827-1827.	0.0	0
87	Bridging Thermal Catalysis and Electrocatalysis: Catalyzing CO ₂ Conversion with Carbon-Based Materials. Angewandte Chemie - International Edition, 2021, 60, 17472-17480.	14.8	30
88	Direct Integration of Strained Pt Catalysts into Proton-Exchange Membrane Fuel Cells with Atomic Layer Deposition. Advanced Materials, 2021, 33, e2007885.	24.3	12
89	Bridging Thermal Catalysis and Electrocatalysis: Catalyzing CO ₂ Conversion with Carbon-Based Materials. Angewandte Chemie, 2021, 133, 17613-17621.	2.1	1
90	Understanding Degradation Mechanisms in SrIrO ₃ Oxygen Evolution Electrocatalysts: Chemical and Structural Microscopy at the Nanoscale. Advanced Functional Materials, 2021, 31, 2101542.	16.5	21

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91	Dynamics and Hysteresis of Hydrogen Intercalation and Deintercalation in Palladium Electrodes: A Multimodal <i>In Situ</i> X-ray Diffraction, Coulometry, and Computational Study. <i>Chemistry of Materials</i> , 2021, 33, 5872-5884.	7.1	11
92	Prospects for In Situ TEM on Electrocatalyst Materials for Sustainable Energy Technologies. <i>Microscopy and Microanalysis</i> , 2021, 27, 44-45.	0.4	0
93	Probing the Effects of Acid Electrolyte Anions on Electrocatalyst Activity and Selectivity for the Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2021, 8, 2467-2478.	3.5	31
94	Phosphate-passivated mordenite for tandem-catalytic conversion of syngas to ethanol or acetic acid. <i>Journal of Catalysis</i> , 2021, 399, 132-141.	6.5	10
95	Hippocampal microglia CD40 mediates NPSLE cognitive dysfunction in mice. <i>Journal of Neuroimmunology</i> , 2021, 357, 577620.	2.4	15
96	Bimetallic effects on Zn-Cu electrocatalysts enhance activity and selectivity for the conversion of CO ₂ to CO. <i>Chem Catalysis</i> , 2021, 1, 663-680.	6.4	51
97	Guiding the Catalytic Properties of Copper for Electrochemical CO ₂ Reduction by Metal Atom Decoration. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52044-52054.	8.3	19
98	Electrolyte-Guided Design of Electroreductive CO Coupling on Copper Surfaces. <i>ACS Applied Energy Materials</i> , 2021, 4, 8201-8210.	5.3	9
99	Chemical Modifications of Ag Catalyst Surfaces with Imidazolium Ionomers Modulate H ₂ Evolution Rates during Electrochemical CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2021, 143, 14712-14725.	14.6	46
100	Understanding Selectivity in CO ₂ Hydrogenation to Methanol for MoP Nanoparticle Catalysts Using In Situ Techniques. <i>Catalysts</i> , 2021, 11, 143.	3.6	14
101	Bottom-Up Fabrication of Oxygen Reduction Electrodes with Atomic Layer Deposition for High-Power-Density PEMFCs. <i>Cell Reports Physical Science</i> , 2021, 2, 100297.	5.8	10
102	Tuning the electronic structure of Ag-Pd alloys to enhance performance for alkaline oxygen reduction. <i>Nature Communications</i> , 2021, 12, 620.	13.2	123
103	Oxidation State and Surface Reconstruction of Cu under CO ₂ Reduction Conditions from <i>In Situ</i> X-ray Characterization. <i>Journal of the American Chemical Society</i> , 2021, 143, 588-592.	14.6	202
104	Microenvironment Effects on Electrocatalytic Oxygen Reduction: The Role of Acid Electrolyte Anions. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1422-1422.	0.0	0
105	Advanced Manufacturing for Electrosynthesis of Fuels and Chemicals from CO ₂ . <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 815-815.	0.0	1
106	(Invited) Electrocatalysts for Water-Splitting: Design, Development, and Integration Into Devices for Water Electrolysis and Solar Photoelectrochemical (PEC) Hydrogen Production. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1325-1325.	0.0	0
107	Ta-Free Nb-Dominant Ixiolite Analogue from the Eifel Paleovolcanic Region, Germany, and Its Crystal Structure. <i>On the Problem of "Ashanite": Geology of Ore Deposits</i> , 2021, 63, 805-811.	0.7	1
108	Ni ₅ Ga ₃ catalysts for CO ₂ reduction to methanol: Exploring the role of Ga surface oxidation/reduction on catalytic activity. <i>Applied Catalysis B: Environmental</i> , 2020, 267, 118369.	20.7	76

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109	Striatal dopamine transporter changes after glucose loading in humans. <i>Diabetes, Obesity and Metabolism</i> , 2020, 22, 116-122.	4.5	12
110	Understanding the Origin of Highly Selective CO ₂ Electroreduction to CO on Ni,N-doped Carbon Catalysts. <i>Angewandte Chemie</i> , 2020, 132, 4072-4079.	2.1	48
111	Understanding the Origin of Highly Selective CO ₂ Electroreduction to CO on Ni,N-doped Carbon Catalysts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 4043-4050.	14.8	165
112	A Combined Theory-Experiment Analysis of the Surface Species in Lithium-Mediated NH ₃ Electrosynthesis. <i>ChemElectroChem</i> , 2020, 7, 1542-1549.	3.5	73
113	Double layer charging driven carbon dioxide adsorption limits the rate of electrochemical carbon dioxide reduction on Gold. <i>Nature Communications</i> , 2020, 11, 33.	13.2	217
114	Morphology control of metal-modified zirconium phosphate support structures for the oxygen evolution reaction. <i>Dalton Transactions</i> , 2020, 49, 3892-3900.	3.4	24
115	3D NiO nanowires@NiO nanosheets core-shell structures grown on nickel foam for high performance supercapacitor electrode. <i>Journal of Electroanalytical Chemistry</i> , 2020, 857, 113710.	3.9	49
116	Acidic Oxygen Evolution Reaction Activity-Stability Relationships in Ru-Based Pyrochlores. <i>ACS Catalysis</i> , 2020, 10, 12182-12196.	11.7	137
117	Readily Constructed Glass Piston Pump for Gas Recirculation. <i>ACS Omega</i> , 2020, 5, 16455-16459.	3.6	5
118	Modified atomic layer deposition of MoS ₂ thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, .	2.2	16
119	Nanosized Zirconium Porphyrinic Metal-Organic Frameworks that Catalyze the Oxygen Reduction Reaction in Acid. <i>Small Methods</i> , 2020, 4, 2000085.	9.6	21
120	Addressing the Stability Gap in Photoelectrochemistry: Molybdenum Disulfide Protective Catalysts for Tandem III-V Unassisted Solar Water Splitting. <i>ACS Energy Letters</i> , 2020, 5, 2631-2640.	18.4	53
121	Two-Dimensional Conductive Ni-HAB as a Catalyst for the Electrochemical Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 39074-39081.	8.3	48
122	Direct Characterization of Atomically Dispersed Catalysts: Nitrogen-Coordinated Ni Sites in Carbon-Based Materials for CO ₂ Electroreduction. <i>Advanced Energy Materials</i> , 2020, 10, 2001836.	22.2	51
123	Marked Difference in the Conformational Transition of DNA Caused by Propanol Isomer. <i>Polymers</i> , 2020, 12, 1607.	4.6	1
124	Identifying and Tuning the In Situ Oxygen-Rich Surface of Molybdenum Nitride Electrocatalysts for Oxygen Reduction. <i>ACS Applied Energy Materials</i> , 2020, 3, 12433-12446.	5.3	20
125	High Resolution Transmission Electron Microscopy Study on the Degradation of IrO _x /IrO ₃ as an Oxygen Evolution Catalyst. <i>Microscopy and Microanalysis</i> , 2020, 26, 3168-3169.	0.4	2
126	Low-pressure methanol synthesis from CO ₂ over metal-promoted Ni-Ga intermetallic catalysts. <i>Journal of CO₂ Utilization</i> , 2020, 39, 101151.	7.0	29

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127	Nitride or Oxynitride? Elucidating the Composition-Activity Relationships in Molybdenum Nitride Electrocatalysts for the Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , 2020, 32, 2946-2960.	7.1	62
128	Hierarchical response of littoral macroinvertebrates to altered hydromorphology and eutrophication. <i>Science of the Total Environment</i> , 2020, 743, 140582.	8.2	9
129	Using Microenvironments to Control Reactivity in CO ₂ Electrocatalysis. <i>Joule</i> , 2020, 4, 292-294.	24.7	42
130	In Situ X-Ray Absorption Spectroscopy Disentangles the Roles of Copper and Silver in a Bimetallic Catalyst for the Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , 2020, 32, 1819-1827.	7.1	34
131	Electrolyte Engineering for Efficient Electrochemical Nitrate Reduction to Ammonia on a Titanium Electrode. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 2672-2681.	6.9	255
132	A Spin Coating Method To Deposit Iridium-Based Catalysts onto Silicon for Water Oxidation Photoanodes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 5901-5908.	8.3	14
133	Selective reduction of CO to acetaldehyde with CuAg electrocatalysts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 12572-12575.	7.6	98
134	A cyclic electrochemical strategy to produce acetylene from CO ₂ , CH ₄ , or alternative carbon sources. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2752-2759.	4.8	9
135	What do Programmers Discuss about Deep Learning Frameworks. <i>Empirical Software Engineering</i> , 2020, 25, 2694-2747.	4.1	57
136	A Study on PKL Electrochemical Cell for Three Different Conditions. <i>Lecture Notes in Electrical Engineering</i> , 2020, , 391-400.	0.0	0
137	Development of Reliable Methods and Protocols for Electrocatalytic N ₂ Reduction. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 2860-2860.	0.0	0
138	Design and on-Sun Testing of Tandem III-V Photoelectrochemical Water-Splitting Systems. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 3051-3051.	0.0	0
139	Enhanced Oxygen Reduction Activity on Silver-Palladium Alloyed Thin Film Electrocatalysts in Alkaline Media. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 2397-2397.	0.0	0
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