Feng Jiao

List of Publications by Year
in descending order

#	Article	IF	Citations
1	A selective and efficient electrocatalyst for carbon dioxide reduction. Nature Communications, 2014, 5, 3242.	5.8	1,111
2	General Techno-Economic Analysis of CO₂ Electrolysis Systems. Industrial & Engineering Chemistry Research, 2018, 57, 2165-2177.	1.8	928
3	Nanostructured Cobalt Oxide Clusters in Mesoporous Silica as Efficient Oxygenâ€Evolving Catalysts. Angewandte Chemie - International Edition, 2009, 48, 1841-1844.	7.2	720
4	Electrochemical CO2 reduction: Electrocatalyst, reaction mechanism, and process engineering. Nano Energy, 2016, 29, 439-456.	8.2	623
5	Nanostructured cobalt and manganese oxide clusters as efficient water oxidation catalysts. Energy and Environmental Science, 2010, 3, 1018.	15.6	488
6	The Central Role of Bicarbonate in the Electrochemical Reduction of Carbon Dioxide on Gold. Journal of the American Chemical Society, 2017, 139, 3774-3783.	6.6	479
7	Mechanistic Insights into the Electrochemical Reduction of CO₂ to CO on Nanostructured Ag Surfaces. ACS Catalysis, 2015, 5, 4293-4299.	5.5	476
8	Agâ€“Sn Bimetallic Catalyst with a Coreâ€“Shell Structure for CO₂ Reduction. Journal of the American Chemical Society, 2017, 139, 1885-1893.	6.6	455
9	Highly porous non-precious bimetallic electrocatalysts for efficient hydrogen evolution. Nature Communications, 2015, 6, 6567.	5.8	440
10	High-rate electroreduction of carbon monoxide to multi-carbon products. Nature Catalysis, 2018, 1, 748-755.	16.1	400
11	Ordered Mesoporous Fe2O3with Crystalline Walls. Journal of the American Chemical Society, 2006, 128, 5468-5474.	6.6	380
12	Ordered Mesoporous Cobalt Oxide as Highly Efficient Oxygen Evolution Catalyst. Journal of the American Chemical Society, 2013, 135, 4516-4521.	6.6	378
13	Mesoporous and nanowire Co3O4as negative electrodes for rechargeable lithium batteries. Physical Chemistry Chemical Physics, 2007, 9, 1837-1842.	1.3	376
14	Electrodeposited Zn Dendrites with Enhanced CO Selectivity for Electrocatalytic CO₂ Reduction. ACS Catalysis, 2015, 5, 4586-4591.	5.5	370
15	Two-dimensional copper nanosheets for electrochemical reduction of carbon monoxide to acetate. Nature Catalysis, 2019, 2, 423-430.	16.1	368
16	A Highly Porous Copper Electrocatalyst for Carbon Dioxide Reduction. Advanced Materials, 2018, 30, e1803111.	11.1	356
17	Synthesis of Ordered Mesoporous Fe3O4and Î³-Fe2O3with Crystalline Walls Using Post-Template Reduction/Oxidation. Journal of the American Chemical Society, 2006, 128, 12905-12909.	6.6	306
18	Nanostructured manganese oxide clusters supported on mesoporous silica as efficient oxygen-evolving catalysts. Chemical Communications, 2010, 46, 2920.	2.2	304

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19	Synthesis of Ordered Mesoporous NiO with Crystalline Walls and a Bimodal Pore Size Distribution. Journal of the American Chemical Society, 2008, 130, 5262-5266.	6.6	281
20	Influence of Size on the Rate of Mesoporous Electrodes for Lithium Batteries. Journal of the American Chemical Society, 2010, 132, 996-1004.	6.6	271
21	Synthesis of Nanowire and Mesoporous Low-Temperature LiCoO2 by a Post-Templating Reaction. Angewandte Chemie - International Edition, 2005, 44, 6550-6553.	7.2	263
22	Copper-coordinated cellulose ion conductors for solid-state batteries. Nature, 2021, 598, 590-596.	13.7	262
23	Carbon monoxide electroreduction as an emerging platform for carbon utilization. Nature Catalysis, 2019, 2, 1062-1070.	16.1	260
24	Techno-economic assessment of low-temperature carbon dioxide electrolysis. Nature Sustainability, 2021, 4, 911-919.	11.5	242
25	Nanostructured Metallic Electrocatalysts for Carbon Dioxide Reduction. ChemCatChem, 2015, 7, 38-47.	1.8	233
26	Formation of carbonâ€“nitrogen bonds in carbon monoxide electrolysis. Nature Chemistry, 2019, 11, 846-851.	6.6	223
27	<i>In Situ</i> Formation of Cobalt Oxide Nanocubanes as Efficient Oxygen Evolution Catalysts. Journal of the American Chemical Society, 2015, 137, 4223-4229.	6.6	212
28	Electrochemical Ammonia Synthesis and Ammonia Fuel Cells. Advanced Materials, 2019, 31, e1805173.	11.1	207
29	Synthesis of Ordered Mesoporous Liâ€“Mnâ€“O Spinel as a Positive Electrode for Rechargeable Lithium Batteries. Angewandte Chemie - International Edition, 2008, 47, 9711-9716.	7.2	201
30	Understanding Surface-Mediated Electrochemical Reactions: CO₂ Reduction and Beyond. ACS Catalysis, 2018, 8, 8121-8129.	5.5	194
31	Nanostructured MnO2: an efficient and robust water oxidation catalyst. Chemical Communications, 2011, 47, 8973.	2.2	188
32	Shapeâ€Controlled CO₂ Electrochemical Reduction on Nanosized Pd Hydride Cubes and Octahedra. Advanced Energy Materials, 2019, 9, 1802840.	10.2	132
33	Speciation of Cu Surfaces During the Electrochemical CO Reduction Reaction. Journal of the American Chemical Society, 2020, 142, 9735-9743.	6.6	123
34	Electrochemical Reduction of Gaseous Nitrogen Oxides on Transition Metals at Ambient Conditions. Journal of the American Chemical Society, 2022, 144, 1258-1266.	6.6	110
35	Electrochemical Approaches for CO₂ Conversion to Chemicals: A Journey toward Practical Applications. Accounts of Chemical Research, 2022, 55, 638-648.	7.6	108
36	Overcoming immiscibility toward bimetallic catalyst library. Science Advances, 2020, 6, eaaz6844.	4.7	105

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37	SO₂-Induced Selectivity Change in CO₂ Electroreduction. Journal of the American Chemical Society, 2019, 141, 9902-9909.	6.6	102
38	Ordered mesoporous nickel cobaltite spinel with ultra-high supercapacitance. Journal of Materials Chemistry A, 2013, 1, 2331.	5.2	99
39	A General Synthetic Approach for Ordered Mesoporous Metal Sulfides. Journal of the American Chemical Society, 2014, 136, 8895-8898.	6.6	96
40	Effect of the Support on the Photocatalytic Water Oxidation Activity of Cobalt Oxide Nanoclusters. ACS Catalysis, 2012, 2, 2753-2760.	5.5	91
41	Ordered Mesoporous Metal Carbides with Enhanced Anisole Hydrodeoxygenation Selectivity. ACS Catalysis, 2016, 6, 3506-3514.	5.5	91
42	Nanoporous Metals as Electrocatalysts: State-of-the-Art, Opportunities, and Challenges. ACS Catalysis, 2017, 7, 5856-5861.	5.5	90
43	Carbonâ€Supported Highâ€Entropy Oxide Nanoparticles as Stable Electrocatalysts for Oxygen Reduction Reactions. Advanced Functional Materials, 2021, 31, 2010561.	7.8	86
44	A solid with a hierarchical tetramodal micro-meso-macro pore size distribution. Nature Communications, 2013, 4, 2015.	5.8	85
45	Investigation of CO₂ single-pass conversion in a flow electrolyzer. Reaction Chemistry and Engineering, 2020, 5, 1768-1775.	1.9	84
46	The impact of nitrogen oxides on electrochemical carbon dioxide reduction. Nature Communications, 2020, 11, 5856.	5.8	83
47	Nanostructured Alkalineâ€Cationâ€Containing Î´â€MnO₂ for Photocatalytic Water Oxidation. Advanced Functional Materials, 2013, 23, 878-884.	7.8	82
48	Activating Layered Perovskite Compound Sr₂TiO₄ via La/N Codoping for Visible Light Photocatalytic Water Splitting. ACS Catalysis, 2018, 8, 3209-3221.	5.5	82
49	Factors Influencing the Rate of Fe[sub 2]O[sub 3] Conversion Reaction. Electrochemical and Solid-State Letters, 2007, 10, A264.	2.2	79
50	Synthesis of Nanoporous Metals, Oxides, Carbides, and Sulfides: Beyond Nanocasting. Accounts of Chemical Research, 2016, 49, 1351-1358.	7.6	72
51	Two- and Three-Dimensional Mesoporous Iron Oxides with Microporous Walls. Angewandte Chemie - International Edition, 2004, 43, 5958-5961.	7.2	71
52	Synthesis, structure, and photocatalytic properties of ordered mesoporous metal-doped Co3O4. Journal of Catalysis, 2014, 310, 2-9.	3.1	70
53	Oxygen Reduction at Very Low Overpotential on Nanoporous Ag Catalysts. Advanced Energy Materials, 2015, 5, 1500149.	10.2	68
54	A hybrid inorganicâ€“biological artificial photosynthesis system for energy-efficient food production. Nature Food, 2022, 3, 461-471.	6.2	65

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55	Emerging Electrochemical Processes to Decarbonize the Chemical Industry. Jacs Au, 2022, 2, 1054-1070.	3.6	59
56	Bimetallic Electrocatalysts for CO2 Reduction. Topics in Current Chemistry, 2018, 376, 41.	3.0	57
57	An Ir-based anode for a practical CO2 electrolyzer. Catalysis Today, 2017, 288, 79-84.	2.2	56
58	Surface-functionalized palladium catalysts for electrochemical CO₂ reduction. Journal of Materials Chemistry A, 2020, 8, 15884-15890.	5.2	55
59	Tandem and Hybrid Processes for Carbon Dioxide Utilization. Joule, 2021, 5, 8-13.	11.7	52
60	Multi-principal elemental intermetallic nanoparticles synthesized via a disorder-to-order transition. Science Advances, 2022, 8, eabm4322.	4.7	49
61	Nanostructured flexible Mg-modified LiMnPO₄ matrix as high-rate cathode materials for Li-ion batteries. Journal of Materials Chemistry A, 2014, 2, 6368-6373.	5.2	47
62	Electrochemical reduction of acetonitrile to ethylamine. Nature Communications, 2021, 12, 1949.	5.8	47
63	Role of Surface Oxophilicity in Copper-Catalyzed Water Dissociation. ACS Catalysis, 2018, 8, 9327-9333.	5.5	46
64	Flow Electrolyzer Mass Spectrometry with a Gasâ€Diffusion Electrode Design. Angewandte Chemie - International Edition, 2021, 60, 3277-3282.	7.2	43
65	Î±-Fe2O3Nanowires. Confined Synthesis and Catalytic Hydroxylation of Phenol. Chemistry Letters, 2003, 32, 770-771.	0.7	40
66	Tailoring the pore size/wall thickness of mesoporous transition metal oxides. Microporous and Mesoporous Materials, 2009, 121, 90-94.	2.2	39
67	Nanoporous Cuâ€"Alâ€"Co Alloys for Selective Furfural Hydrodeoxygenation to 2-Methylfuran. Industrial & Engineering Chemistry Research, 2017, 56, 3866-3872.	1.8	34
68	Ordered Three-Dimensional Arrays of Monodispersed Mn3O4 Nanoparticles with a Coreâ€"Shell Structure and Spin-Glass Behavior. Angewandte Chemie - International Edition, 2007, 46, 3946-3950.	7.2	32
69	Toward a Practical Solar-Driven CO₂ Flow Cell Electrolyzer: Design and Optimization. ACS Sustainable Chemistry and Engineering, 2017, 5, 10959-10966.	3.2	32
70	Enhanced multi-carbon selectivity via CO electroreduction approach. Journal of Catalysis, 2021, 398, 185-191.	3.1	25
71	Enhancing photocatalytic oxygen evolution activity of cobalt-based spinel nanoparticles. Catalysis Today, 2014, 225, 171-176.	2.2	24
72	Synthesis, structural characterization, and electrochemical performance of nanocast mesoporous Cu-/Fe-based oxides. Journal of Materials Chemistry A, 2014, 2, 3065.	5.2	24

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73	Hydrophobicity of CO2 gas diffusion electrodes. Joule, 2021, 5, 754-757.	11.7	24
74	Carbon dioxide splitting using an electro-thermochemical hybrid looping strategy. Energy and Environmental Science, 2018, 11, 2928-2934.	15.6	23
75	Photoelectrochemical Carbon Dioxide Reduction Using a Nanoporous Ag Cathode. ACS Applied Materials & Interfaces, 2016, 8, 24652-24658.	4.0	22
76	Scalable Gas Diffusion Electrode Fabrication for Electrochemical CO₂ Reduction Using Physical Vapor Deposition Methods. ACS Applied Materials & Interfaces, 2022, 14, 7731-7740.	4.0	21
77	A general synthetic method for MPO4 (M = Co, Fe, Mn) frameworks using deep-eutectic solvents. Chemical Communications, 2012, 48, 9132.	2.2	19
78	A platelet-like CeO2 mesocrystal enclosed by {100} facets: synthesis and catalytic properties. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	14
79	Structure Analysis and Photocatalytic Properties of Spinel Zinc Gallium Oxonitrides. Chemistry - A European Journal, 2011, 17, 12417-12428.	1.7	13
80	Analysis of visible-light-active Sn(ii)â€“TiO2 photocatalysts. Physical Chemistry Chemical Physics, 2013, 15, 6185.	1.3	13
81	Computation and assessment of solar electrolyzer field performance: comparing coupling strategies. Sustainable Energy and Fuels, 2019, 3, 422-430.	2.5	12
82	Structural evolution in ordered mesoporous TiO₂anatase electrodes. Chemical Communications, 2014, 50, 8997.	2.2	10
83	Environmental In Situ X-ray Absorption Spectroscopy Evaluation of Electrode Materials for Rechargeable Lithiumâ€“Oxygen Batteries. Journal of Physical Chemistry C, 2014, 118, 12617-12624.	1.5	10
84	Creating the right environment. Nature Energy, 2021, 6, 1005-1006.	19.8	8
85	Bimetallic Electrocatalysts for CO2 Reduction. Topics in Current Chemistry Collections, 2020, , 105-125.	0.2	7
86	Magnetic properties of nano-scale hematite, Î±-Fe2O3, studied by time-of-flight inelastic neutron spectroscopy. Journal of Chemical Physics, 2014, 140, 044709.	1.2	6
87	NGenE 2021: Electrochemistry Is Everywhere. ACS Energy Letters, 2022, 7, 368-374.	8.8	6
88	Renewable Energy: Electrochemical Ammonia Synthesis and Ammonia Fuel Cells (Adv. Mater. 31/2019). Advanced Materials, 2019, 31, 1970221.	11.1	2
89	Well-Defined Model CO2 Electroreduction Catalyst. CheM, 2020, 6, 1506-1507.	5.8	2
90	Design and Implementation of High Voltage Photovoltaic Electrolysis System for Solar Fuel Production from CO2. MRS Advances, 2017, 2, 3359-3364.	0.5	1

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91	Flow Electrolyzer Mass Spectrometry with a Gasâ€Diffusion Electrode Design. Angewandte Chemie, 2021, 133, 3314-3319.	1.6	1
92	Synthesis of Nanowire and Mesoporous Low-Temperature LiCoO2 by a Post-Templating Reaction.. ChemInform, 2005, 36, no.	0.1	0
93	Deconvoluting CO₂ Electroreduction Membrane-Electrode-Assembly Performance Via Five-Electrode Setup. ECS Meeting Abstracts, 2022, MA2022-01, 1768-1768.	0.0	0