Fengwang Li

List of Publications by Year
in descending order

82 papers	11,403 citations	34016 52 h-index	60497 81 g-index
84 all docs	84 docs citations	84 times ranked	8669 citing authors

#	Article	IF	Citations
1	CO ₂ electrolysis to multicarbon products at activities greater than 1 A cm ^{â¯2}. Science, 2020, 367, 661-666.	6.0	860
2	Molecular tuning of CO2-to-ethylene conversion. Nature, 2020, 577, 509-513.	13.7	682
3	Enhanced Nitrate-to-Ammonia Activity on Copperâ€“Nickel Alloys via Tuning of Intermediate Adsorption. Journal of the American Chemical Society, 2020, 142, 5702-5708.	6.6	638
4	CO ₂ electrolysis to multicarbon products in strong acid. Science, 2021, 372, 1074-1078.	6.0	541
5	Hierarchical Mesoporous SnO₂ Nanosheets on Carbon Cloth: A Robust and Flexible Electrocatalyst for CO₂ Reduction with High Efficiency and Selectivity. Angewandte Chemie - International Edition, 2017, 56, 505-509.	7.2	526
6	Molecular enhancement of heterogeneous CO2 reduction. Nature Materials, 2020, 19, 266-276.	13.3	416
7	Cooperative CO2-to-ethanol conversion via enriched intermediates at moleculeâ€“metal catalyst interfaces. Nature Catalysis, 2020, 3, 75-82.	16.1	390
8	Efficient electrically powered CO2-to-ethanol via suppression of deoxygenation. Nature Energy, 2020, 5, 478-486.	19.8	363
9	Copper nanocavities confine intermediates for efficient electrosynthesis of C3 alcohol fuels from carbon monoxide. Nature Catalysis, 2018, 1, 946-951.	16.1	354
10	Binding Site Diversity Promotes CO₂ Electroreduction to Ethanol. Journal of the American Chemical Society, 2019, 141, 8584-8591.	6.6	338
11	Catalyst synthesis under CO2 electroreduction favours faceting and promotes renewable fuels electrosynthesis. Nature Catalysis, 2020, 3, 98-106.	16.1	325
12	Copper-on-nitride enhances the stable electrosynthesis of multi-carbon products from CO2. Nature Communications, 2018, 9, 3828.	5.8	279
13	Towards a better Sn: Efficient electrocatalytic reduction of CO 2 to formate by Sn/SnS 2 derived from SnS 2 nanosheets. Nano Energy, 2017, 31, 270-277.	8.2	261
14	Structureâ€Based Enhanced Capacitance: In Situ Growth of Highly Ordered Polyaniline Nanorods on Reduced Graphene Oxide Patterns. Advanced Functional Materials, 2012, 22, 1284-1290.	7.8	241
15	Constraining CO coverage on copper promotes high-efficiency ethylene electroproduction. Nature Catalysis, 2019, 2, 1124-1131.	16.1	214
16	Hydroxide promotes carbon dioxide electroreduction to ethanol on copper via tuning of adsorbed hydrogen. Nature Communications, 2019, 10, 5814.	5.8	201
17	Chloride-mediated selective electrosynthesis of ethylene and propylene oxides at high current density. Science, 2020, 368, 1228-1233.	6.0	196
18	Electrochemical, spectroscopic and theoretical studies of a simple bifunctional cobalt corrole catalyst for oxygen evolution and hydrogen production. Physical Chemistry Chemical Physics, 2014, 16, 1883-1893.	1.3	188

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19	Efficient electrocatalytic conversion of carbon monoxide to propanol using fragmented copper. Nature Catalysis, 2019, 2, 251-258.	16.1	188
20	Unlocking the Electrocatalytic Activity of Antimony for CO₂ Reduction by Twoâ€Dimensional Engineering of the Bulk Material. Angewandte Chemie - International Edition, 2017, 56, 14718-14722.	7.2	164
21	Electrochemical maps and movies of the hydrogen evolution reaction on natural crystals of molybdenite (MoS₂): basal vs. edge plane activity. Chemical Science, 2017, 8, 6583-6593.	3.7	159
22	Cascade CO2 electroreduction enables efficient carbonate-free production of ethylene. Joule, 2021, 5, 706-719.	11.7	158
23	Polyethylenimine promoted electrocatalytic reduction of CO₂to CO in aqueous medium by graphene-supported amorphous molybdenum sulphide. Energy and Environmental Science, 2016, 9, 216-223.	15.6	156
24	Superconductivity above 30 K in alkali-metal-doped hydrocarbon. Scientific Reports, 2012, 2, 389.	1.6	155
25	Efficient Methane Electrosynthesis Enabled by Tuning Local CO₂ Availability. Journal of the American Chemical Society, 2020, 142, 3525-3531.	6.6	154
26	Copper adparticle enabled selective electrosynthesis of n-propanol. Nature Communications, 2018, 9, 4614.	5.8	153
27	Electrochemical reduction of CO₂on defect-rich Bi derived from Bi₂S₃with enhanced formate selectivity. Journal of Materials Chemistry A, 2018, 6, 4714-4720.	5.2	144
28	Controllable Synthesis of Fewâ€Layer Bismuth Subcarbonate by Electrochemical Exfoliation for Enhanced CO₂ Reduction Performance. Angewandte Chemie - International Edition, 2018, 57, 13283-13287.	7.2	141
29	Recent advances in the nanoengineering of electrocatalysts for CO₂reduction. Nanoscale, 2018, 10, 6235-6260.	2.8	139
30	Hierarchical Mesoporous SnO₂ Nanosheets on Carbon Cloth: A Robust and Flexible Electrocatalyst for CO₂ Reduction with High Efficiency and Selectivity. Angewandte Chemie, 2017, 129, 520-524.	1.6	136
31	Intermediate Binding Control Using Metalâ€“Organic Frameworks Enhances Electrochemical CO₂ Reduction. Journal of the American Chemical Society, 2020, 142, 21513-21521.	6.6	133
32	Electrochemical upgrade of CO2 from amine capture solution. Nature Energy, 2021, 6, 46-53.	19.8	129
33	Highâ€Oriented Polypyrrole Nanotubes for Nextâ€Generation Gas Sensor. Advanced Materials, 2016, 28, 8265-8270.	11.1	128
34	Efficient upgrading of CO to C3 fuel using asymmetric C-C coupling active sites. Nature Communications, 2019, 10, 5186.	5.8	127
35	Tuning OH binding energy enables selective electrochemical oxidation of ethylene to ethylene glycol. Nature Catalysis, 2020, 3, 14-22.	16.1	120
36	High-Rate and Efficient Ethylene Electrosynthesis Using a Catalyst/Promoter/Transport Layer. ACS Energy Letters, 2020, 5, 2811-2818.	8.8	106

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37	Low coordination number copper catalysts for electrochemical CO2 methanation in a membrane electrode assembly. Nature Communications, 2021, 12, 2932.	5.8	97
38	Promoting CO2 methanation via ligand-stabilized metal oxide clusters as hydrogen-donating motifs. Nature Communications, 2020, 11, 6190.	5.8	93
39	Silica-copper catalyst interfaces enable carbon-carbon coupling towards ethylene electrosynthesis. Nature Communications, 2021, 12, 2808.	5.8	91
40	A metal-supported single-atom catalytic site enables carbon dioxide hydrogenation. Nature Communications, 2022, 13, 819.	5.8	83
41	Facile regrowth of Mg-Fe₂O₃/P-Fe₂O₃ homojunction photoelectrode for efficient solar water oxidation. Journal of Materials Chemistry A, 2018, 6, 13412-13418.	5.2	80
42	Stretchable Supercapacitor with Adjustable Volumetric Capacitance Based on 3D Interdigital Electrodes. Advanced Functional Materials, 2015, 25, 4601-4606.	7.8	79
43	Quenching of the Electrochemiluminescence of Tris(2,2â€²-bipyridine)ruthenium(II)/Tri-n-propylamine by Pristine Carbon Nanotube and Its Application to Quantitative Detection of DNA. Analytical Chemistry, 2013, 85, 1711-1718.	3.2	77
44	Porous nitrogenâ€“doped carbon derived from biomass for electrocatalytic reduction of CO2 to CO. Electrochimica Acta, 2017, 245, 561-568.	2.6	76
45	Electrochemical Reduction of Carbon Dioxide in a Monoethanolamine Capture Medium. ChemSusChem, 2017, 10, 4109-4118.	3.6	75
46	Enhanced multi-carbon alcohol electroproduction from CO via modulated hydrogen adsorption. Nature Communications, 2020, 11, 3685.	5.8	72
47	Facile Patterning of Reduced Graphene Oxide Film into Microelectrode Array for Highly Sensitive Sensing. Analytical Chemistry, 2011, 83, 6426-6430.	3.2	63
48	Polyoxometalate-Promoted Electrocatalytic CO₂ Reduction at Nanostructured Silver in Dimethylformamide. ACS Applied Materials & Interfaces, 2018, 10, 12690-12697.	4.0	63
49	Stannate derived bimetallic nanoparticles for electrocatalytic CO₂ reduction. Journal of Materials Chemistry A, 2018, 6, 7851-7858.	5.2	61
50	Direct Detection of Electron Transfer Reactions Underpinning the Tin-Catalyzed Electrochemical Reduction of CO₂ using Fourier-Transformed ac Voltammetry. ACS Catalysis, 2017, 7, 4846-4853.	5.5	60
51	Unlocking the Electrocatalytic Activity of Antimony for CO₂ Reduction by Twoâ€Dimensional Engineering of the Bulk Material. Angewandte Chemie, 2017, 129, 14910-14914.	1.6	58
52	Facile electrochemical co-deposition of metal (Cu, Pd, Pt, Rh) nanoparticles on reduced graphene oxide for electrocatalytic reduction of nitrate/nitrite. Electrochimica Acta, 2018, 269, 733-741.	2.6	56
53	Controllable Synthesis of Fewâ€Layer Bismuth Subcarbonate by Electrochemical Exfoliation for Enhanced CO₂ Reduction Performance. Angewandte Chemie, 2018, 130, 13467-13471.	1.6	42
54	Ultralow-limit gas detection in nano-dumbbell polymer sensor via electrospinning. Nanoscale, 2013, 5, 1803.	2.8	41

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55	Advanced Composite 2D Energy Materials by Simultaneous Anodic and Cathodic Exfoliation. Advanced Energy Materials, 2018, 8, 1702794.	10.2	41
56	CO₂ Electroreduction to Methane at Production Rates Exceeding 100 mA/cm². ACS Sustainable Chemistry and Engineering, 2020, 8, 14668-14673.	3.2	41
57	Electrochemical Reduction of CO₂ at Metal Electrodes in a Distillable Ionic Liquid. ChemSusChem, 2016, 9, 1271-1278.	3.6	37
58	Electrochemical CO₂reduction to ethanol: from mechanistic understanding to catalyst design. Journal of Materials Chemistry A, 2021, 9, 12474-12494.	5.2	36
59	Twoâ€Dimensional Electrocatalysts for Efficient Reduction of Carbon Dioxide. ChemSusChem, 2020, 13, 59-77.	3.6	31
60	Reactor design for electrochemical CO2 conversion towardÂlarge-scale applications. Current Opinion in Green and Sustainable Chemistry, 2021, 27, 100419.	3.2	28
61	Materials and system design for direct electrochemical CO₂ conversion in capture media. Journal of Materials Chemistry A, 2021, 9, 18785-18792.	5.2	28
62	Dopant-tuned stabilization of intermediates promotes electrosynthesis of valuable C3 products. Nature Communications, 2019, 10, 4807.	5.8	26
63	CO₂ Electroreduction to Formate at a Partial Current Density up to 590ÂmA mg^{â”1} via Micrometerâ€Scale Lateral Structuring of Bismuth Nanosheets. Small, 2021, 17, e2100602.	5.2	25
64	Electrochemical Reduction of CO₂ with an Oxideâ€Derived Lead Nanoâ€Coralline Electrode in Dimcarb. ChemElectroChem, 2017, 4, 1402-1410.	1.7	22
65	Fabrication of ultra-fine nanostructures using edge transfer printing. Nanoscale, 2012, 4, 1939.	2.8	21
66	Sustainable Ammonia Synthesis from Nitrogen and Water by Oneâ€Step Plasma Catalysis. Energy and Environmental Materials, 2023, 6, .	7.3	20
67	Gradual-order enhanced stability: a frozen section of electrospun nanofibers for energy storage. Nanoscale, 2015, 7, 8715-8719.	2.8	19
68	Ultra-small Cu nanoparticles embedded in N-doped carbon arrays for electrocatalytic CO2 reduction reaction in dimethylformamide. Nano Research, 2018, 11, 3678-3690.	5.8	17
69	Towards Carbonâ€Neutral Methanol Production from Carbon Dioxide Electroreduction. ChemNanoMat, 2021, 7, 728-736.	1.5	17
70	Electrohydrogenation of Carbon Dioxide using a Ternary Pd/Cu₂Oâ€“Cu Catalyst. ChemSusChem, 2019, 12, 4471-4479.	3.6	15
71	Oxomolybdate anchored on copper for electrocatalytic hydrogen production over the entire pH range. Applied Catalysis B: Environmental, 2019, 249, 227-234.	10.8	14
72	Bias-Adaptable CO₂-to-CO Conversion via Tuning the Binding of Competing Intermediates. Nano Letters, 2021, 21, 8924-8932.	4.5	13

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73	Assessing the economic potential of large-scale carbonate-formation-free CO₂ electrolysis. Catalysis Science and Technology, 2022, 12, 2912-2919.	2.1	13
74	Size-tunable, highly sensitive microelectrode arrays enabled by polymer pen lithography. Soft Matter, 2017, 13, 3685-3689.	1.2	12
75	Molecular Stabilization of Subâ€Nanometer Cu Clusters for Selective CO₂ Electromethanation. ChemSusChem, 2022, 15, .	3.6	11
76	Tunable metallic-like transport in polypyrrole. Materials Futures, 2022, 1, 011001.	3.1	11
77	Efficient Enzymatic Oxidation of Glucose Mediated by Ferrocene Covalently Attached to Polyethylenimine Stabilized Gold Nanoparticles. Electroanalysis, 2016, 28, 2728-2736.	1.5	10
78	Facile fabrication of regular Au microband electrode arrays for voltammetric detection down to submicromolar level by hydrogel etching. Electrochemistry Communications, 2013, 30, 67-70.	2.3	7
79	Seeing is believing: In-situ visualising dynamic evolution in CO2 electrolysis. Current Opinion in Electrochemistry, 2022, 31, 100846.	2.5	5
80	Supercapacitors: Stretchable Supercapacitor with Adjustable Volumetric Capacitance Based on 3D Interdigital Electrodes (Adv. Funct. Mater. 29/2015). Advanced Functional Materials, 2015, 25, 4562-4562.	7.8	3
81	Twoâ€Ðimensional Transition Metal Dichalcogenides for Electrocatalytic Energy Conversion Applications. , 0, , .		2
82	Electrocatalytic Reduction of CO2 in Ionic Liquid-Based Electrolytes. , 2019, , 1-15.		0